

**GEORGE MASON UNIVERSITY
BOARD OF VISITORS MEETING
Thursday, November 30, 2023**

**Hazel Conference Room
Merten Hall 1201**

AGENDA

7:30 a.m. – 8:00 a.m.	<i>Continental Breakfast</i>
8:00 a.m. – 8:20 a.m.	Executive Committee Meeting
8:35 a.m. – 9:35 a.m.	Academic Programs, Diversity, and University Community Committee
9:50 a.m. – 10:40 a.m.	Finance and Land Use Committee Meeting
10:55 a.m. – 11:45 a.m.	Development Committee Meeting
12:00 p.m. – 12:40 p.m.	Research Committee Meeting
12:40 p.m. – 1:10 p.m.	<i>Lunch Break</i>
1:10 p.m. – 2:00 p.m.	Audit, Risk, and Compliance Committee Meeting

BOARD OF VISITORS MEETING AGENDA

2:15 p.m.	I. Call to Order
2:15 p.m. – 2:25 p.m.	II. Approval of the Minutes A. Full Board Meeting on September 28, 2023 (ACTION ITEM)
2:25 p.m. – 2:35 p.m.	III. Rector’s Report A. SCHEV Orientation Attendance (ACTION ITEM)
2:35 p.m. – 3:20 p.m.	IV. President’s Report A. University Update B. Cricket Overview (Ken Walsh & Sanjay Govil) C. Diversity, Equity and Inclusion University Committee Report (Sharnnia Artis & Rose Pascarell)
	V. Committee Reports
3:20 p.m. – 3:25 p.m.	A. Academic Programs, Diversity and University Community Committee 1. Program Actions a. New Degree Programs i. Master of Education (MEd) in Literacy Education (ACTION ITEM) ii. Master of Education (MEd) in Inclusive Early Childhood Education (ACTION ITEM) iii. Bachelor of Science in Education (BSEd) in Secondary Education (ACTION ITEM)

2. Faculty Actions
 - a. Conferral of Emeritus/Emerita Status (**ACTION ITEM**)
 - b. Elections of New Tenured Faculty (**ACTION ITEM**)

3:25 p.m. – 3:30 p.m.

B. Finance and Land Use Committee

1. Financial Matters
 - a. State Six-Year Operating Plan (**ACTION ITEM**)
2. Capital Matters
 - a. Schematic Design for Activities Building (**ACTION ITEM**)

3:30 p.m. – 3:35 p.m.

C. Development Committee

3:35 p.m. – 3:40 p.m.

D. Research Committee

3:40 p.m. – 3:45 p.m.

E. Audit, Risk, and Compliance Committee

3:45 p.m. – 4:50 p.m.

VI. Closed Session

- A. Honorary Degrees and Special Awards (Code of VA: §2.2-3711.A.11)
- B. Public Contract (Code of VA: §2.2-3711.A.29)
- C. Consultation with Legal Counsel pertaining to actual or probable litigation (Code of VA: §2.2-3711.A.7)
- D. Consultation with Legal Counsel regarding specific legal matters requiring the provision of legal advice (Code of VA: §2.2-3711.A.8)

4:50 p.m. – 5:10 p.m.

VII. Public Comments

5:10 p.m.

VIII. Adjournment

The November 30, 2023, Meeting of the Board of Visitors will be in-person. Members of the public are welcome to observe in person or may view the meeting live at the following link: <https://bov.gmu.edu/live/>. Overflow gallery seating in Merten 1204.

Twenty minutes will be allotted for oral public comments. Both written and oral comments will be entered into the public record. To register to provide oral public comment in person, or to submit a written public comment, please complete the form at the following link: <https://forms.office.com/r/rBwA6TDGDA>.

Please be aware that the full board agenda timing is for planning purposes only, the formal meeting could conclude before the time noted so participants should plan accordingly. A time limit of two minutes for each oral comment registrant has been established at the discretion of the Rector. Speakers are also encouraged to submit their comments in writing at the time of registration, in the event time constraints do not allow all registrants the opportunity to speak. Registration for oral comments will be accepted until 9:30 a.m. on November 27, 2023, and written comments will be accepted until the full board meeting adjourns on November 30, 2023.

**GEORGE MASON UNIVERSITY
BOARD OF VISITORS**

**Executive Committee Meeting
Thursday, November 30, 2023
Merten Hall, Hazel Conference Room (1201)**

AGENDA

- I. Call to Order**
- II. Approval of Minutes**
 - A. Executive Committee Meeting Minutes for September 28, 2023
(ACTION ITEM)**
- III. Rector's Comments**
- IV. President's Comments**
- V. Closed Session**
 - A. Honorary Degrees and Special Awards (Code of VA: §2.2-3711.A.11)**
 - B. Public Contract (Code of VA: §2.2-3711.A.29)**
 - C. Consultation with Legal Counsel pertaining to actual or probable litigation (Code of VA: §2.2-3711.A.7)**
 - D. Consultation with Legal Counsel regarding specific legal matters requiring the provision of legal advice (Code of VA: §2.2-3711.A.8)**
- VI. Adjournment**

**EXECUTIVE COMMITTEE OF THE BOARD OF VISITORS
GEORGE MASON UNIVERSITY**

**Meeting of
Thursday, September 28, 2023
Merten Hall, Hazel Conference Room (1201)**

MINUTES

PRESENT: Rector Horace Blackman, Vice Rector Jon Peterson, Visitors Reginald Brown and Wendy Marquez.

ABSENT: Secretary Michael Meese

ALSO, PRESENT: Visitors James Hazel, Robert Pence and Charles Stimson; Melissa Broeckelman-Post, Faculty Representative; Will Gautney, Staff Liaison; Paul Wyche, Undergraduate Student Representative; Gregory Washington, President; Ken Walsh, Executive Vice President for Strategic Initiatives and Chief of Staff; Mark Ginsberg, Provost and Executive Vice President; Deb Dickenson, Executive Vice President for Administration and Finance; Anne Gentry, University Counsel; and Sarah Hanbury, Secretary pro tem.

I. Call to Order

Rector Blackman called the meeting to order at 8:03 a.m.

II. Approval of Minutes

A. Executive Committee Meeting Minutes for July 29, 2023 (**ACTION ITEM**)

Rector Blackman **MOVED** that the committee approve the Executive Committee Meeting Minutes for July 29, 2023. The motion was **SECONDED** by Vice Rector Peterson. The **MINUTES STOOD APPROVED AS WRITTEN**.

III. Rector's Comments

Rector Blackman was pleased to relay that Foster's Grille is serving lunch today in light of the gift from the namesake of the Donald G. Costello College of Business who also owned Foster's. Rector Blackman encouraged participation in the Mason Now: Power the Possible Faculty and Staff Reception following the conclusion of the full board meeting on the Merten Hall lawn.

IV. President's Comments

Dr. Washington reserved his comments for the full board meeting.

V. Closed Session

- A. Honorary Degrees and Special Awards (Code of VA: §2.2-3711.A.11)
- B. Personnel Matter (Code of VA: §2.2-3711.A.1)
- C. Consultation with Legal Counsel pertaining to actual or probable litigation (Code of VA: §2.2-3711.A.7)
- D. Consultation with Legal Counsel regarding specific legal matters requiring the provision of legal advice (Code of VA: §2.2-3711.A.8)

Vice Rector Peterson **MOVED** that the committee go into Closed Session under the provisions of Section 2.2-3711.A.11, for Honorary Degrees and Special Awards; Section 2.2-3711.A.1 to discuss President Washington's contract and a university investigation; Section 2.2-3711.A.7, for Consultation with legal counsel pertaining to actual or probable litigation including briefings on:

Agrawal v. GMU
Amison v. GMU et al
Ganley and Surber v. GMU et al.
Jeong v. GMU et al
Kinuani v. GMU
Morrison v. GMU et al.
Ukor v. GMU

and Section 2.2-3711.A.8 for Consultation with Legal Counsel regarding specific legal matters requiring the provision of legal advice concerning the aforementioned items, a university review and admissions policies. The motion was **SECONDED** by Visitor Brown. **MOTION CARRIED UNANIMOUSLY.**

Following the closed session, Vice Rector Peterson **MOVED** that the Executive Committee go back into public session and further moved that by roll call vote the committee certify that only public business matters lawfully exempted from open meeting requirements and only such public business matters as were identified in the motion by which the closed meeting was convened were heard, discussed or considered in the meeting by the committee. Any member of the committee who believes that there was a departure from the requirements as stated above, shall so state prior to the vote, indicating the substance of the departure that, in his or her judgment, has taken place.

ALL PRESENT COMMITTEE MEMBERS RESPONDED IN THE AFFIRMATIVE BY ROLL CALL.

VI. Adjournment

Rector Blackman adjourned the meeting at 8:14 a.m.

Prepared by:

Sarah Hanbury
Secretary pro tem

GEORGE MASON UNIVERSITY

BOARD OF VISITORS

Academic Programs, Diversity, and University Community Committee Meeting

Thursday, November 30, 2023

AGENDA

I. Call to Order

II. Approval of Academic Programs, Diversity and University Community Committee Minutes from September 28, 2023 (Action Item)

III. New Business

A. Provost's Update (K. Walsh)

B. Admission Process Review (D. Burge, A. Byrd)

C. Program Actions (**Action Item**)

1. New Degree Programs

a. Master of Education (MEd) in Literacy Education

b. Master of Education (MEd) in Inclusive Early Childhood Education

c. Bachelor of Science in Education (BSEd) in Secondary Education

D. Faculty Actions (**Action Item**)

1. Conferral of Emeritus/Emerita Status

2. Elections of New Tenured Faculty

E. Undergraduate Student Success at Mason (R. Braun, S. Lorentson)

F. College Spotlight: College of Education and Human Development (I. Guerra-Lopez)

G. Announcements

1. Appointment of Faculty

2. Appointment of Administrative and Professional Faculty

3. Appointments/Reappointments of Deans/Directors and Department
Chairs/School Directors

4. Renewals and Reappointments

5. Separations

6. Other Announcements

7. BOV Summary Sheet

IV. Adjournment

**GEORGE MASON UNIVERSITY
BOARD OF VISITORS
Academic Programs, Diversity & University Community Committee**

MINUTES
Thursday, September 28, 2023

COMMITTEE MEMBERS PRESENT: Chair: Lindsey Burke; Vice Chair Nancy Prowitt; Visitors: Jimmy Hazel, Mike Meese, Jeff Rosen, Bob Witeck; Staff Representatives: Provost Mark Ginsberg, Sharnnia Artis; Rose Pascarell; Faculty Senate President: Melissa Brockelman-Post; Staff Senate Chair: William Gautney; Faculty Representative: Cameron Harris; Student Representatives: Paul Wyche, Vikas Velegapudi

ABSENT: Visitors: Anjan Chimaladinne, Wendy Marquez, Faculty Representative: Cesar Rebellion

ALSO PRESENT: President Washington, Rector Horace Blackman; Visitors: Armand Alacbay, Dorothy Gray, Dolly Oberoi, Bob Pence, Jon Peterson, Cully Stimson

I. The meeting was called to order by Chair Lindsey Burke at 10:45 a.m.

II. Approval of Minutes (Action Item)

It was **MOVED** by Visitor Burke to approve the minutes from the May 4, 2023 APDUC Committee Meeting. Approval of the meeting minutes was unanimously approved with no changes or discussion.

III. New Business

A. Provost's Update and Medical Education at Mason Update

Mark R. Ginsberg – Provost and Executive Vice President

Provost Mark Ginsberg provided an update for the fall 2023 semester and a retrospective of his time as provost as he departs Mason this fall to become president of Towson University. He gave an overview of the Provost's office and its efforts to enhance access to excellence and opportunity for Mason students. In Fall 2023, Mason enrolled over 40,000 students and welcomed new students during move-in and convocation. Provost Ginsberg gave a review of the modality of instruction, detailed that Mason's rankings have seen an upward trajectory, and highlighted faculty honors. He discussed faculty promotion and tenure policies and then reflected on accomplishments during his tenure as provost across many critical domains, including students, faculty, and administrative leadership.

B. Resolution to Appoint Board of Trustee Member for Online Virginia Network Authority

Visitor Hazel outlined the need of the Board of Visitors to appoint a member to serve on the Online Virginia Network Authority (OVN). The OVN is governed by a Board of Trustees that has a total membership of 15 members. One non-legislative citizen member is appointed by the Board of Visitors of George Mason University. Visitor Hazel has served as George Mason University's appointed member for the past 4 years. Visitor Meese has agreed to serve as the new appointed member from George Mason University.

Chairperson Burke called for a **MOTION** to approve the Resolution to appoint Mike Meese to as the

Board of Trustees member for the Online Virginia Network Authority of George Mason University; Visitor Hazel **MOVED**; and Visitor Witeck **SECONDED**.
The motion **PASSED**.

C. Admissions and Enrollment Update

David Burge – Vice President, Enrollment Management

Alan Byrd – Dean, Admissions

David Burge, Vice President for Enrollment Management, and Alan Byrd, Dean of Admissions, reported on Admissions and Enrollment for the Fall 2023 semester. At the time of their report, Mason's overall enrollment reached over 40,000 students. They also provided a brief overview of Mason's admissions processes. Those processes are race-neutral and efforts are made to find reasons to include someone in the Mason community, welcoming everyone who is academically prepared for the rigors of study. When students apply to Mason, they are evaluated on their high school academic performance, extracurricular and community activities, and personal essays. Mason reports an admission rate of approximately 90 percent for undergraduates.

D. Undergraduate Student Success at Mason

Ryan Braun, Director of Undergraduate Academic Success

Sally Lorentson, Assistant Vice President, University Life

In the interest of time, the presentation was delayed until the November Board Meeting.

E. Faculty Actions

Chairperson Burke called for a **MOTION** to approve the actions; Visitor Hazel **MOVED**; Visitor Prowitt **SECONDED** the following program actions:

1. Conferral of Emeritus/Emerita Status

The motion **PASSED**.

F. Faculty Announcements and Reports

Faculty announcements and reports were acknowledged for the Committee's benefit. No further discussion was held.

IV. Adjournment

Chairperson Moss adjourned the meeting at 11:42 a.m.

Respectfully submitted,

Sarah Parnell
Secretary Pro Tem



Academic Programs, Diversity and University Community Committee

Board of Visitors

Thursday, November 30, 2023

Agenda

- I. Call to Order
- II. Approval of Minutes (**Action Item**)
- III. New Business
 - A. Provost's Update
 - B. Admissions Process Review
 - C. Program Actions (**Action Item**)
 - D. Faculty Actions (**Action Item**)
 - E. Undergraduate Student Success at Mason
 - F. College Spotlight: College of Education and Human Development
 - G. Announcements
- IV. Adjournment

Action Item

Approval of Minutes

September 28, 2023



Provost's Update

Kenneth Walsh, PhD
Interim Provost and Executive Vice President

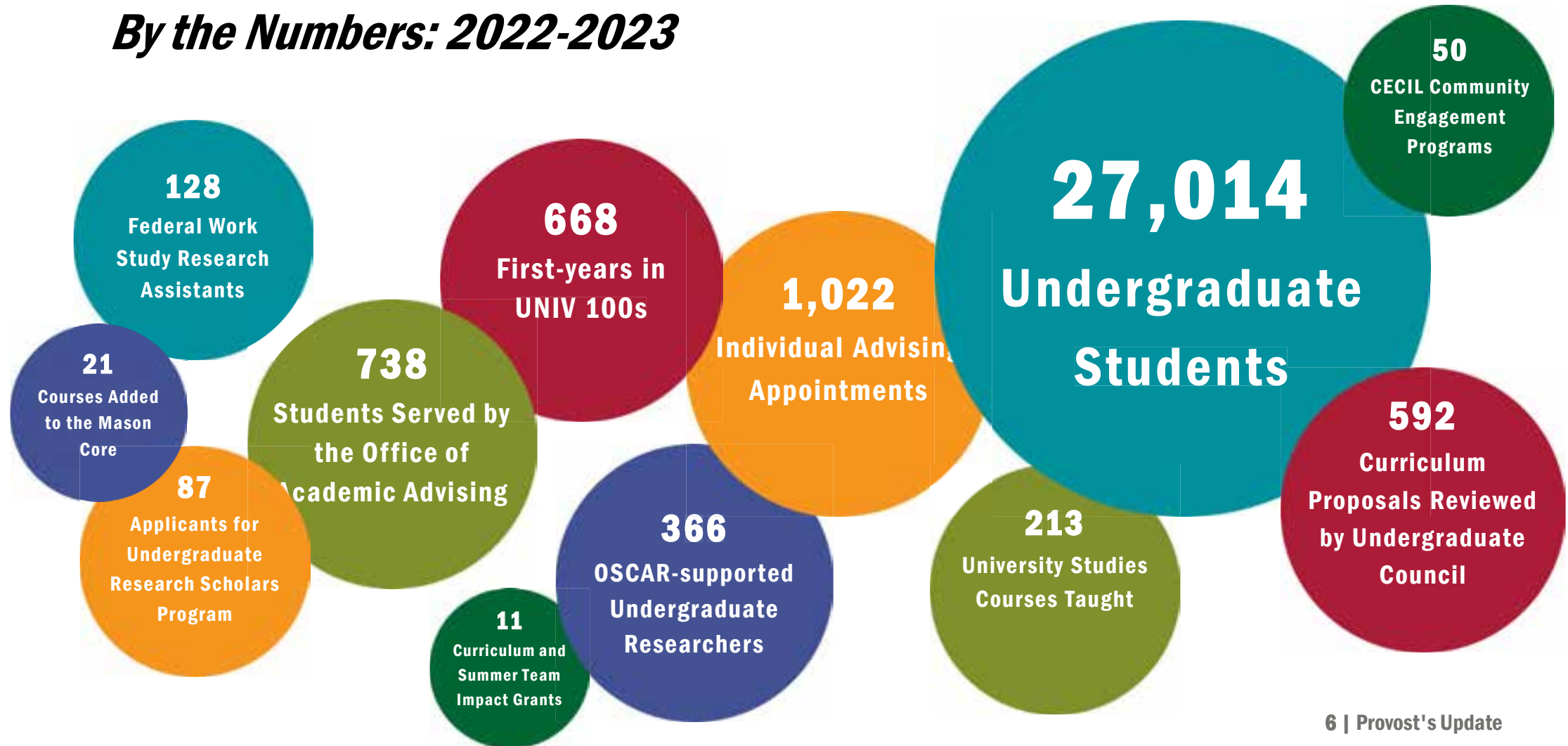
Kenneth Walsh, PhD

Interim Provost and Executive Vice President



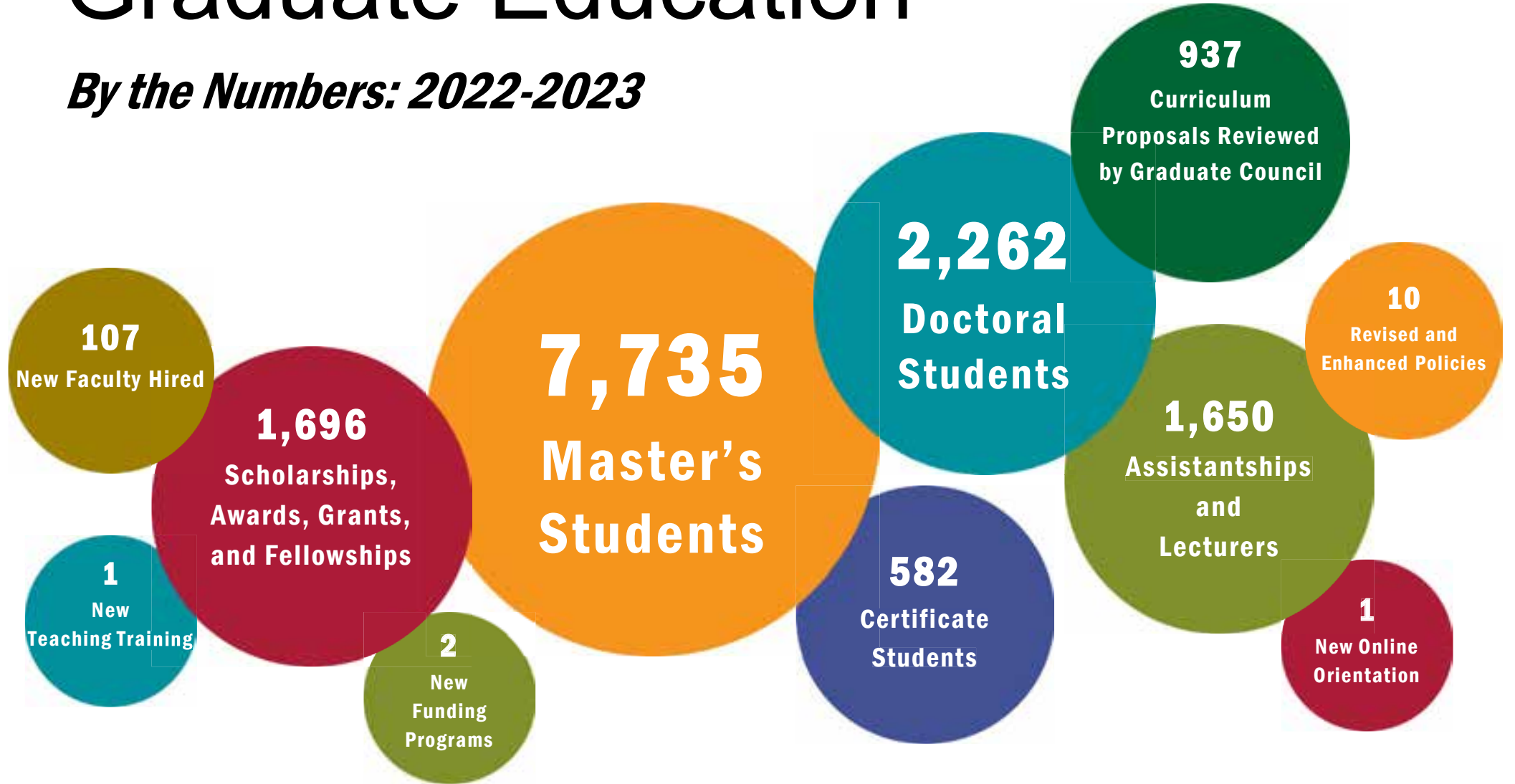
Undergraduate Education

By the Numbers: 2022-2023



Graduate Education

By the Numbers: 2022-2023



Winter Graduation



Commencement Ceremony

Thursday, December 14:

- 9:30 a.m. at EagleBank Arena
- Formal faculty procession, music, keynote speaker, etc.
- Regalia required



Degree Celebrations

Thursday, December 14:

- 1:30 p.m. for CHSS, COS, SCHAR, CARTER, CVPA, CEHD
- 5:30 p.m. for CEC, BUS, CPH

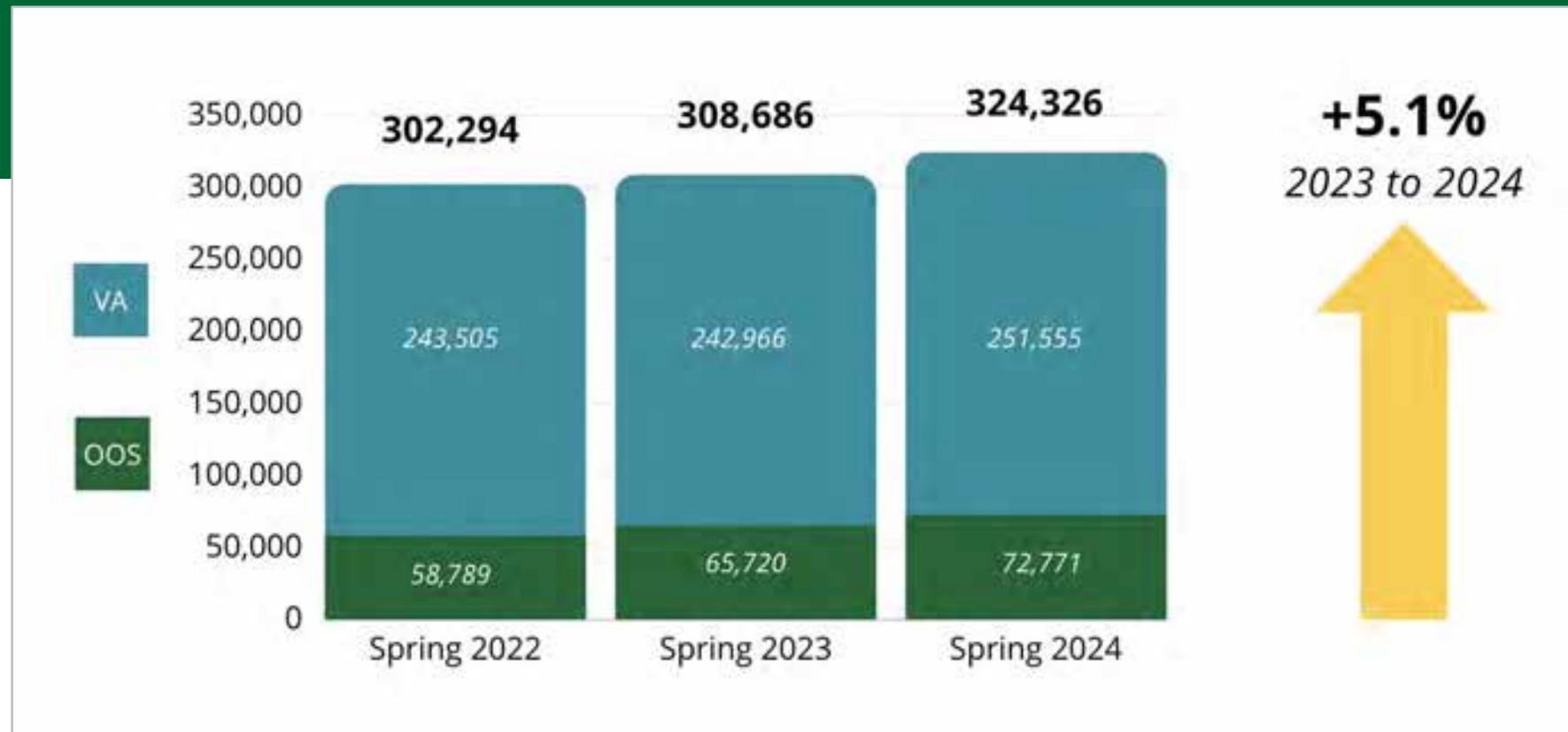


2024 Graduates

- 102 Doctoral Students
- 1075 Graduate Students
- 1878 Undergraduate Students

Student Credit Hours

Spring 2024



*as of 11/27/23 compared to this time 2022

Historical Spring Sections by Level



Spring Schedule



Spring Semester

Tuesday, January 16 –
Monday, April 29



Spring Break

Monday, March 4 –
Sunday, March 10

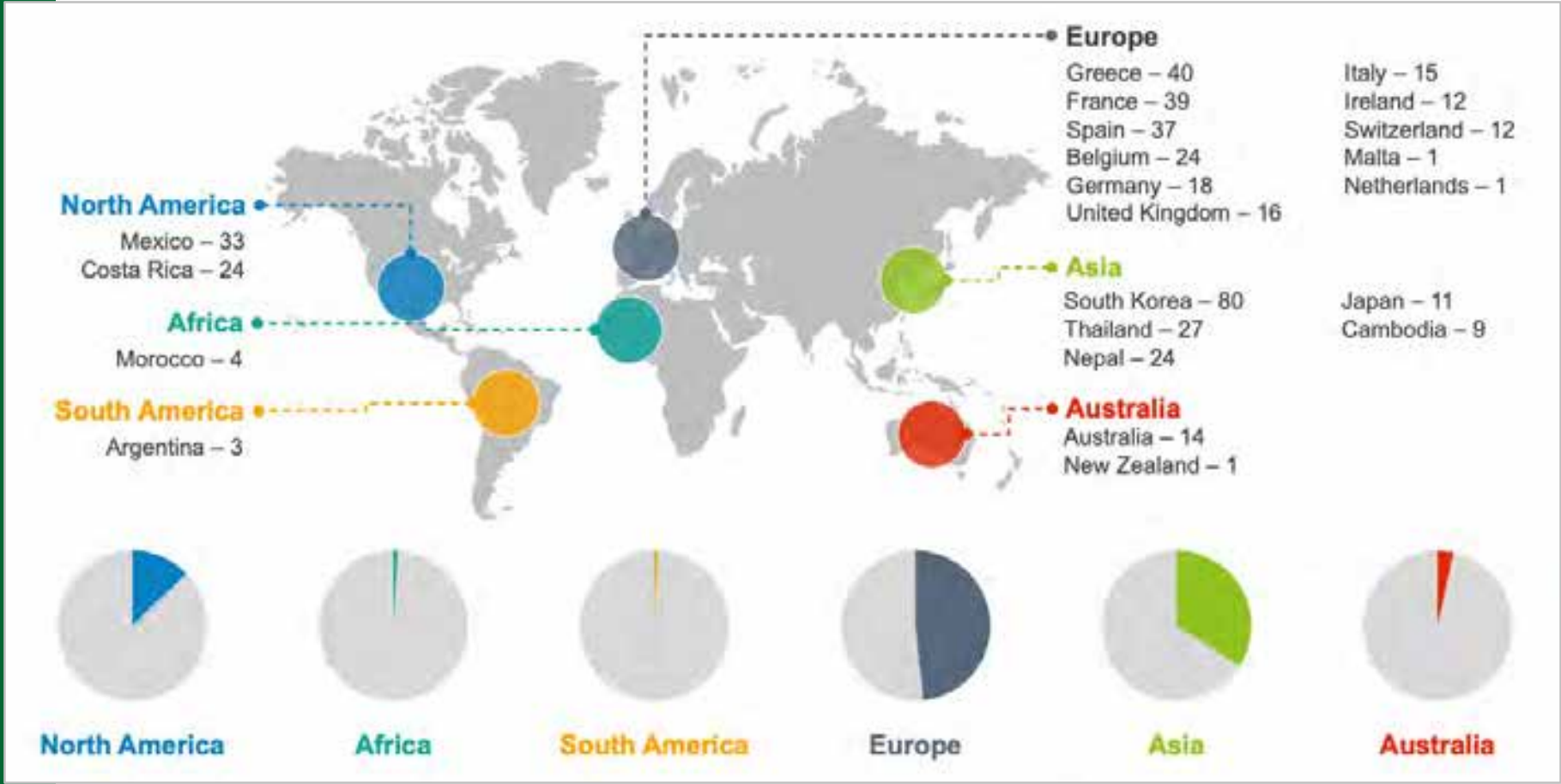


Spring Commencement

Thursday, May 9

Spring 2024 Study Abroad

445
Total
Students
Abroad

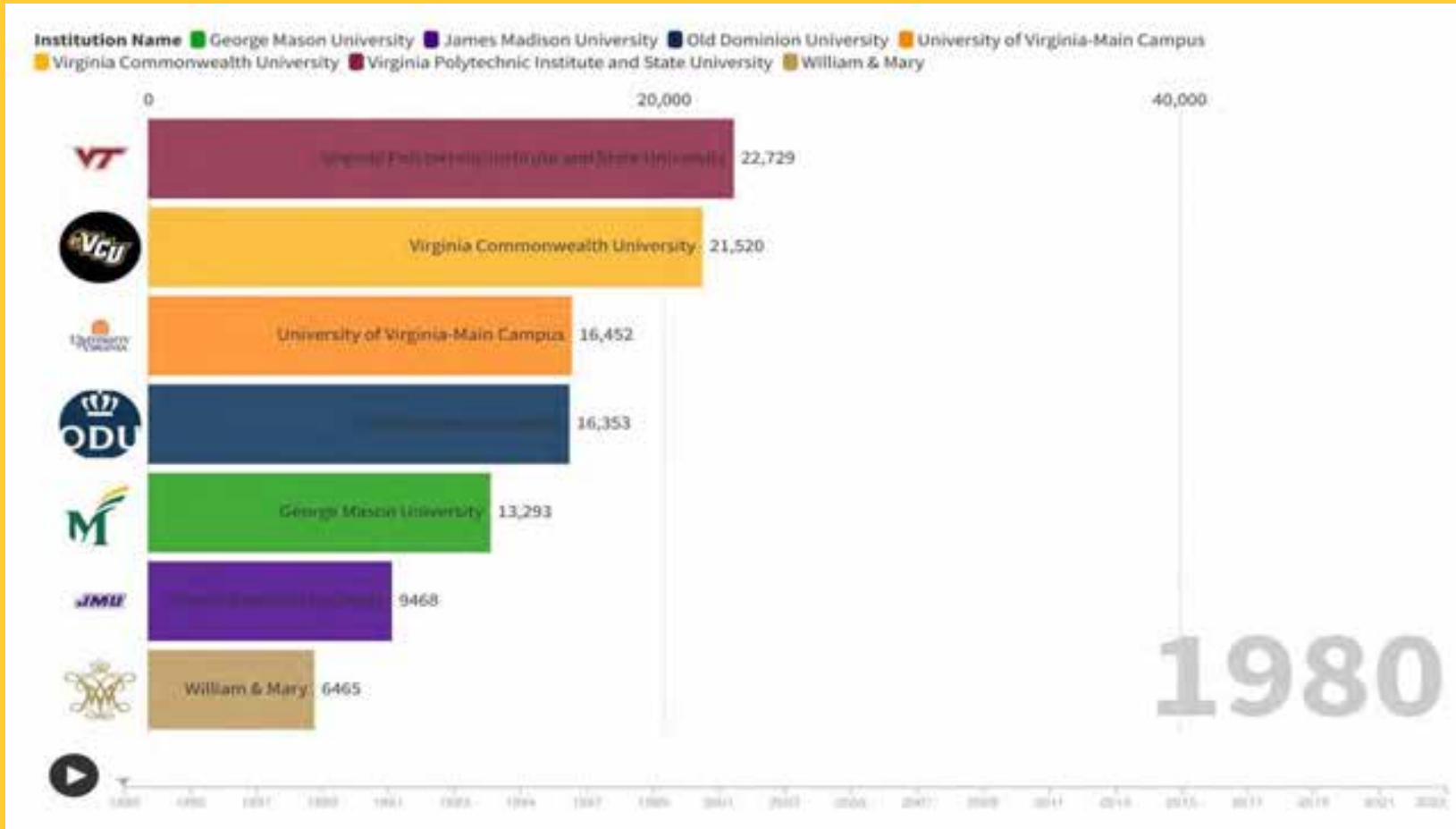


Freshman Application Comparison

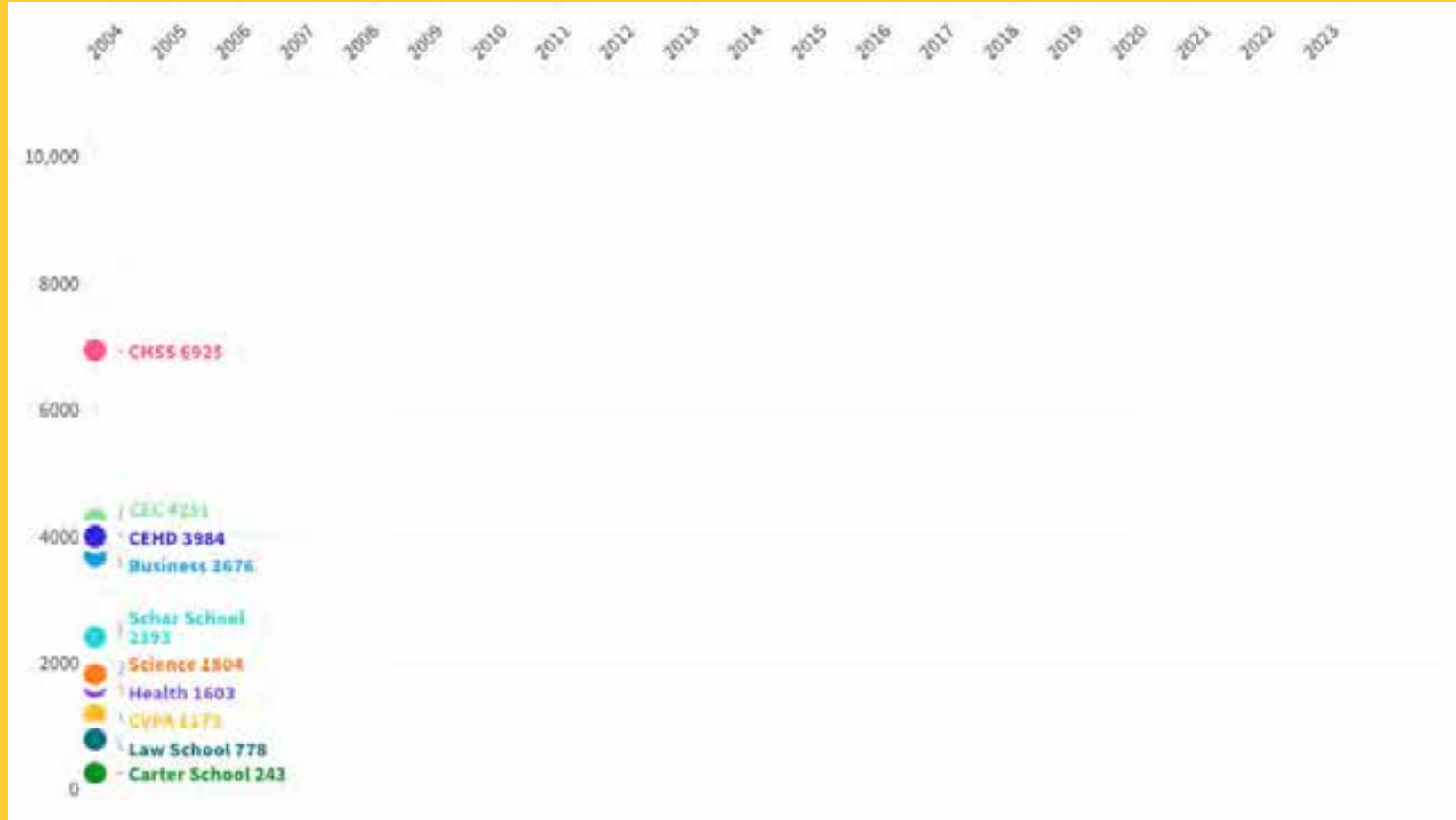
	FRESHMAN APPLICATIONS		
	Fall 2022	Fall 2023	Fall 2024
VA	6,851	9,062	10,383
OOS	3,881	4,857	5,514
Total	10,732	13,919	15,897

**applications received by Early Action deadline*

Virginia University Growth

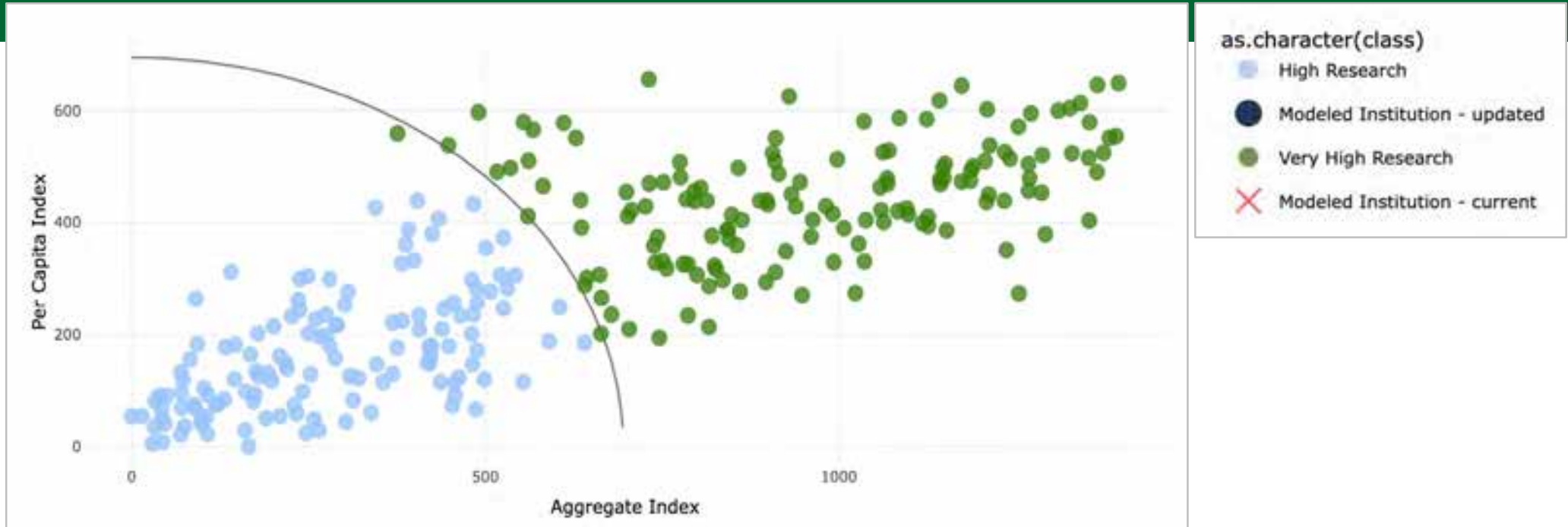


Mason College/School Growth



Carnegie Classification – 2021

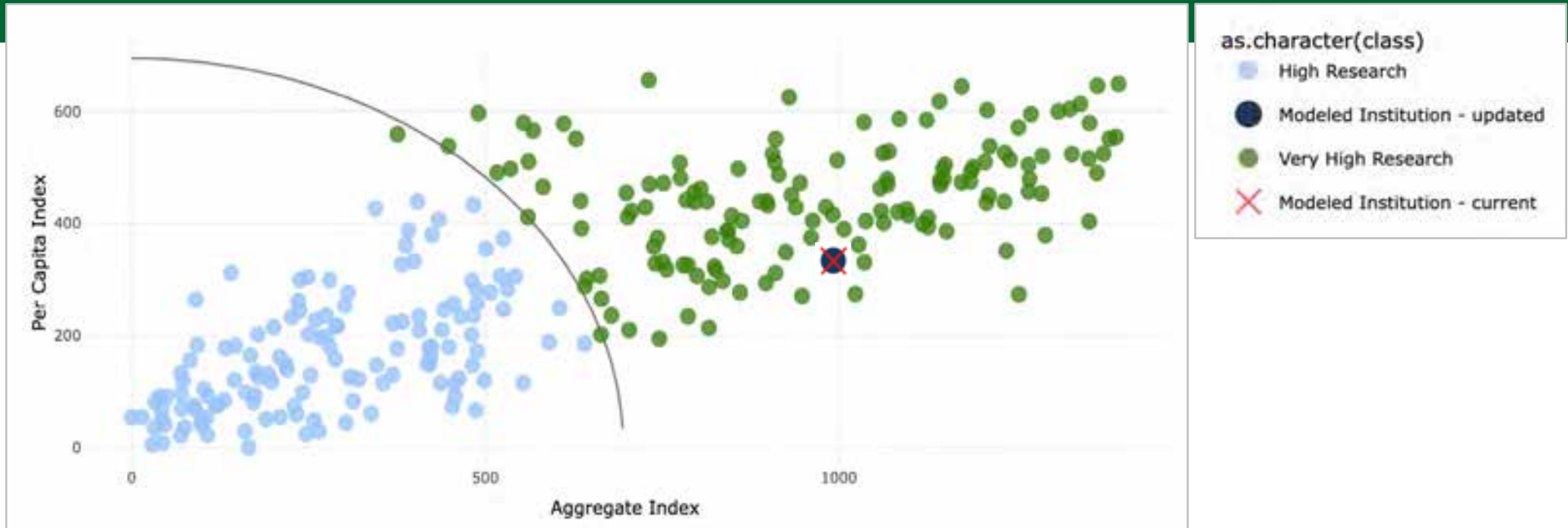
Higher education institutions plotted per capita against aggregate scores on Carnegie Classification criteria including research expenditures, research staff, and doctoral degrees awarded.



Source: https://jstring.shinyapps.io/deployed/?_qa=2.30486975.1273675596.1650381322-1241448669.1650381322

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School of Business Renaming

Donald G. Costello College of Business

SCHEV Approval: September 22, 2023

Effective: November 1, 2023

Degrees and Certificates:

- 1 PhD degree program
- 5 MS degree programs
- 1 MBA program
- 7 graduate and 1 undergraduate certificates
- 1 BS degree program (8 concentrations)
- 14 minor programs



Mason and University of Mary Washington Collaboration

Unified Library System

Mason and UMW are creating a unified library system, enhancing resources and services for students, faculty, and staff across both institutions.

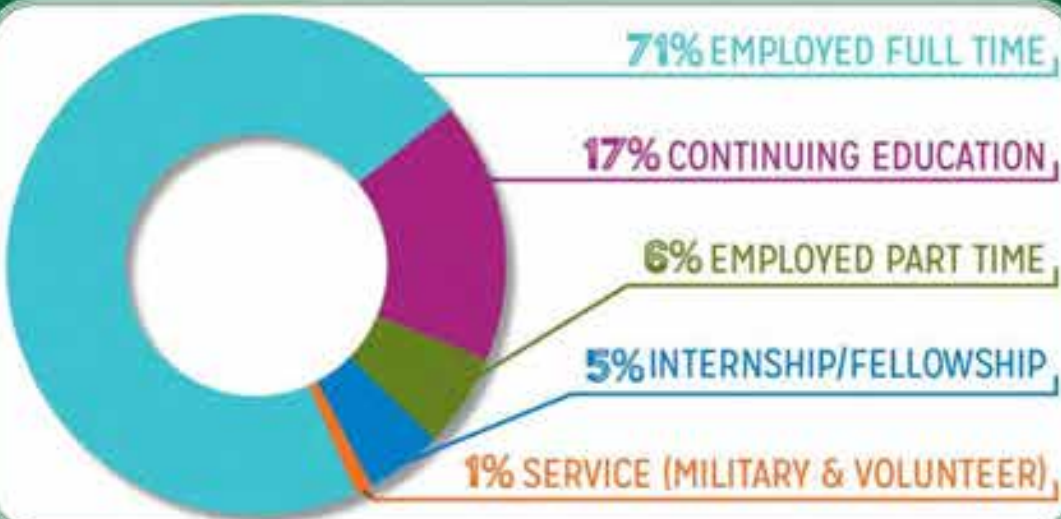
Expanding BAM to UMW Students

Mason and UMW are working together to facilitate UMW student enrollment in Mason's Bachelor's/Accelerated Master's (BAM) programs.

THE MASON IMPACT

87% POSITIVE CAREER OUTCOME

89% IN POSITIONS RELATED TO CAREER GOALS



SUPPORTING A DIVERSE WORKFORCE MASON GRADS ARE*

46% STUDENTS OF COLOR **55%** FEMALE
18% FIRST GEN STUDENTS **9%** INTERNATIONAL

FILLING CRITICAL ROLES ACROSS THE REGION

86% EMPLOYED IN VA/MD/DC
\$72,000 MEDIAN SALARY PLUS BONUS

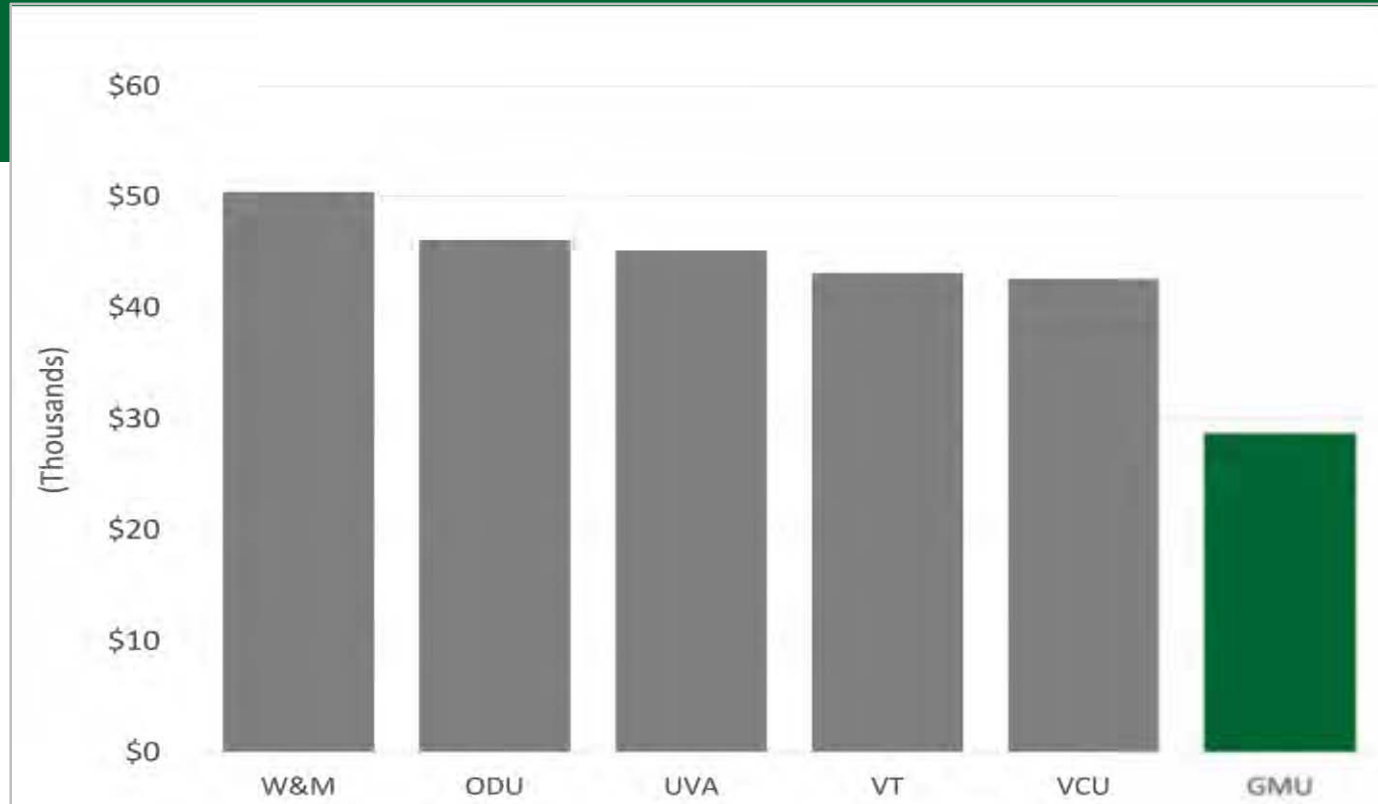
TOP EMPLOYERS



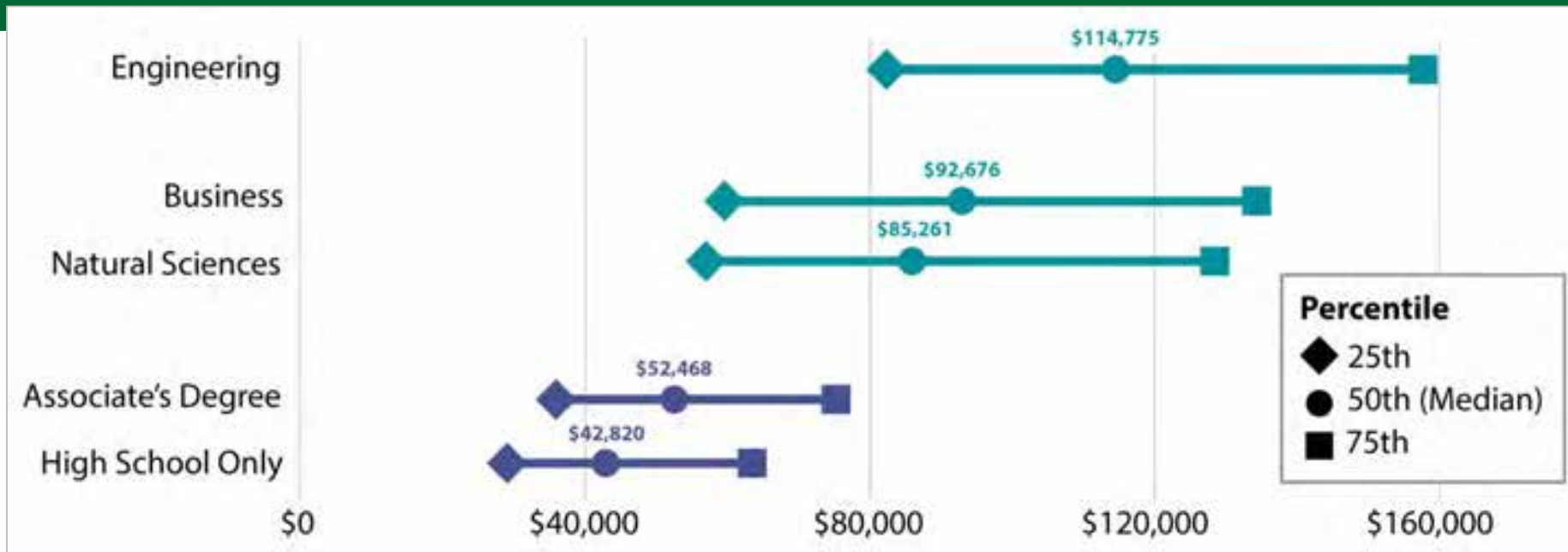
TOP INDUSTRIES



Appropriations per Graduate Residing in VA—FY22



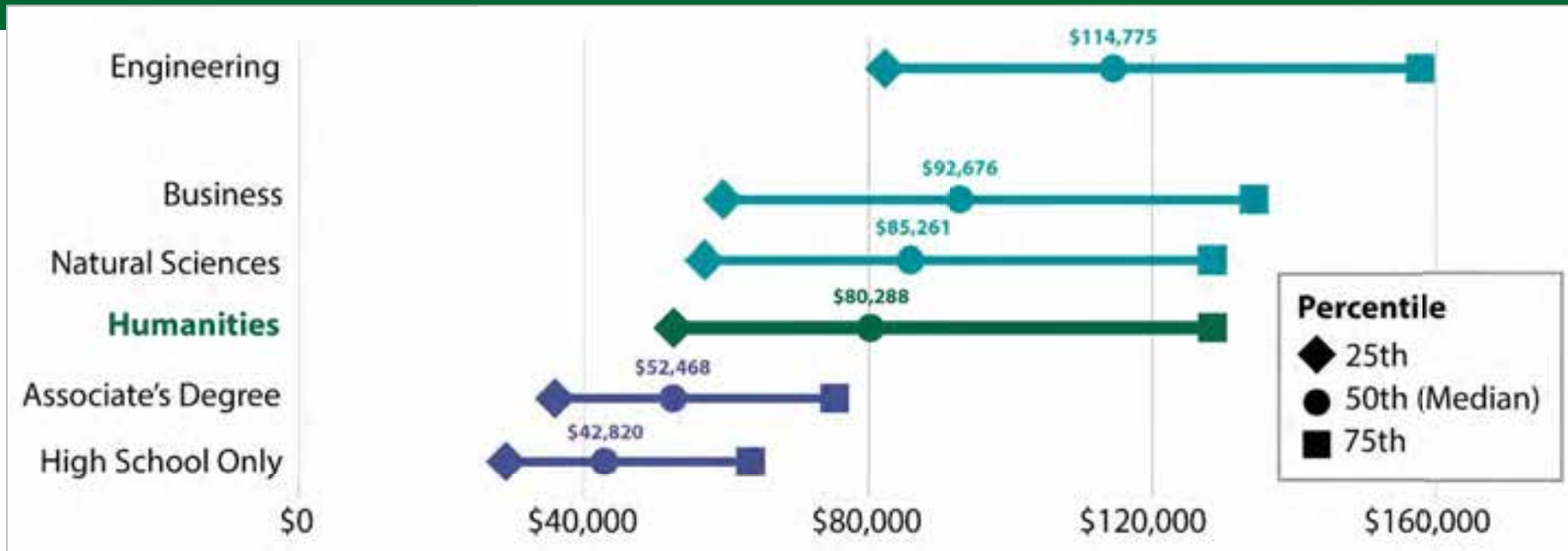
Annual Earnings of Virginia College-Educated Workers



Source: <https://www.amacad.org/publication/employment-outcomes-humanities-majors-state-profiles>

Annual Earnings of Virginia College-Educated Workers

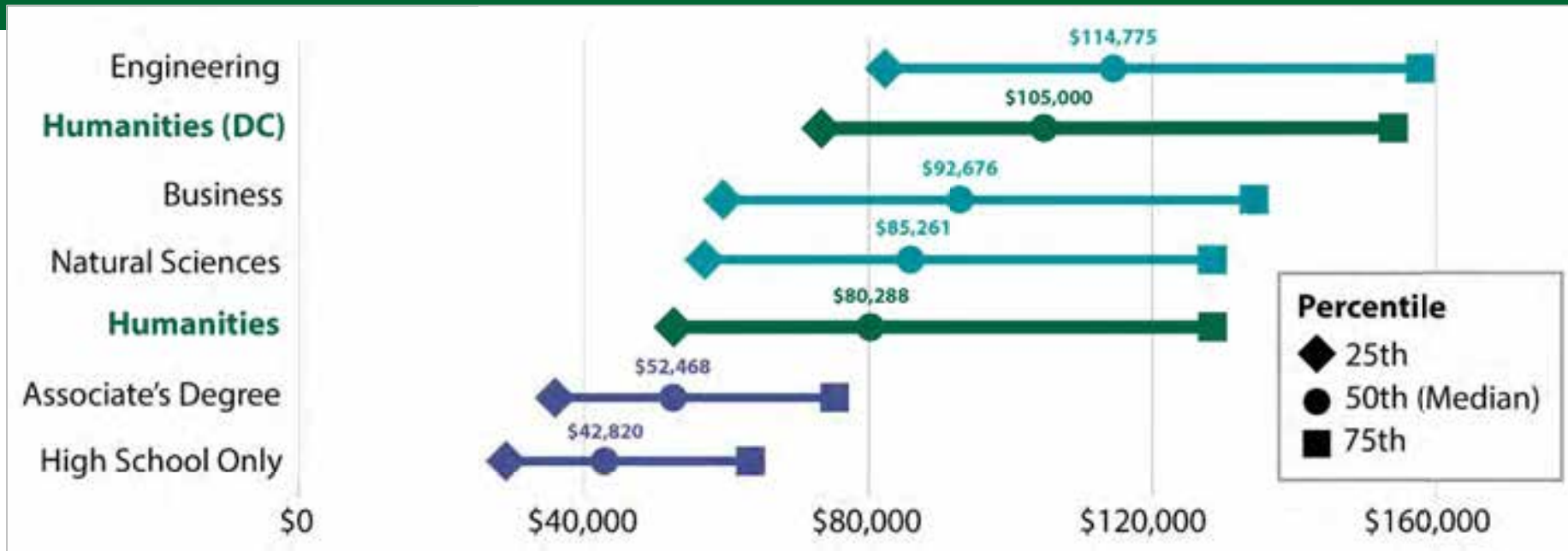
191,074 humanities majors reside in Virginia and work full-time.



Source: <https://www.amacad.org/publication/employment-outcomes-humanities-majors-state-profiles>

Annual Earnings of Virginia College-Educated Workers

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Celebrating Service



- James Lawrey**
College of Science
- Joe Scimecca**
College of Humanities and Social Sciences



- Wally Grotophorst**
University Libraries
- David Levy**
College of Humanities and Social Sciences
- Lay Lim**
University Libraries
- Jeanne Medford**
Intercollegiate Athletics



- 35-YEAR:** 5
- 30-YEAR:** 21
- 25-YEAR:** 38
- 20-YEAR:** 53
- 15-YEAR:** 114
- 10-YEAR:** 133
- 5-YEAR:** 255

It's Mason's Time





Admissions Process Review

David Burge
Vice President for Enrollment Management

Alan Byrd
Dean of Admissions

Admission Process Review – Summary

**Admissions
Process –
Undergraduate
Application
Requirements**

**New Student
Enrollment
Processes
Post-Admission**

**Fee Waivers
and
Pell Student
Recruitment**

The Application Phase

Step 1

Prospective students **apply** by submitting the following materials:

- Common Application or Mason Online Application
- Cumulative high school GPA
 - Secondary school report
- English proficiency test scores for non-native English speakers
- Optional elements, including:
 - SAT or ACT scores
 - A personal statement
 - Activity sheet or resume
- Counselor recommendations

Step 2

Prospective students **submit** materials by the following deadlines:

November 1, Early Action

Priority consideration for the Honors College, University Scholars program, and Mason merit-based scholarships

February 1, Regular Decision

Step 3

Admissions counselors **review** materials and release decisions:

Early Action Applicants:
Mid-December

Regular Decision Applicants:
March

The Pre-Enrollment Phase

Before/When Decisions Release

Submit their Enrollment Deposit

Submitting this \$250 deposit confirms their intent to enroll and allows them to complete further steps.

Submit their FAFSA or VASA

Completable during the application phase, prospective freshmen should submit their FAFSA by February 15 for the 24-25 aid year. The usual freshman deadline is February 1.

After Depositing

Activate Patriot Pass and @GMU Email Account

Instructions for activating Patriot Pass send several days after students submit their deposits. Activating Patriot Pass allows students to access their @GMU email.

Submit a Housing Application or Exemption

All prospective freshmen must submit a housing application or exemption request. The priority application deadline is May 1.

Register for Orientation

Registration for students arriving in the fall opens in April.

Before Arriving on Campus

Submit Immunization Records*

All students must submit records of their immunizations to Student Health Services.

Submit Final Transcripts*

School counselors must submit a student's final transcripts to the Office of Admissions.

**Students who do not complete these steps by their associated deadlines will have a hold placed on their account.*

Fee Waiver Eligibility

- Eligible for ACT, NACAC, SAT, Free and Reduced Lunch Program (FRLP), or Fairfax College Partnership (FCPP) fee waivers.
- ADVANCE students
- Applications received during the Virginia College Application Week
- High school scholars and who have earned Mason college credit through attendance at Mason's [The Washington Journalism and Media Conference \(WJMC\)](#) or [The Washington Youth Summit on the Environment \(WYSE\)](#).
- Participation in the Governor's School at Innovation Park.
- Members of Mason's Early Identification Program (EIP).
- Participants of the Mason Dream Catchers program.
- Transfer applicants who are currently receiving a full PELL award at their current institution.
- McNair Scholars.
- Mason faculty, non-student wage or classified staff (full or part-time).
- Eligible Virginia residents, 60 years or older with a taxable income of less than \$23,850.


Freshmen Admit by GPA

HS GPA Bin	Fall 2020	Fall 2021	Fall 2022	Fall 2023
3.8+	99.2%	99.2%	99.3%	99.2%
3.6-3.79	98.9%	98.8%	98.8%	98.7%
3.4-3.59	97.6%	98.4%	98.4%	97.5%
3.2-3.39	91.1%	97.0%	93.7%	95.8%
3.0-3.19	75.7%	82.8%	69.5%	69.6%
<3.0	21.3%	21.7%	13.1%	13.3%

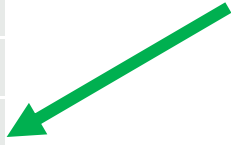
Mason relies on Pell students in Northern Virginia to make enrollment targets

NORTHERN VA	Total Enrollment % Pell	Total Pell Students	Mason Pell Students	Mason Pell % of Total Pell	% Mason Pell From Total Enrollment
Alexandria City	32%	1,582	218	14%	46%
Arlington County	22%	1,147	270	24%	38%
Fairfax City	24%	423	108	26%	32%
Fairfax County	22%	9,770	3,198	33%	33%
Falls Church City	24%	299	10	3%	16%
Loudoun County	13%	3,096	845	27%	26%
Manassas City	27%	689	114	16%	41%
Manassas Park City	27%	177	68	38%	39%
Prince William County	27%	5,608	1,306	23%	35%
Stafford County	23%	1,472	130	9%	28%
TOTAL:	22%	24,263	6,267	26%	33%

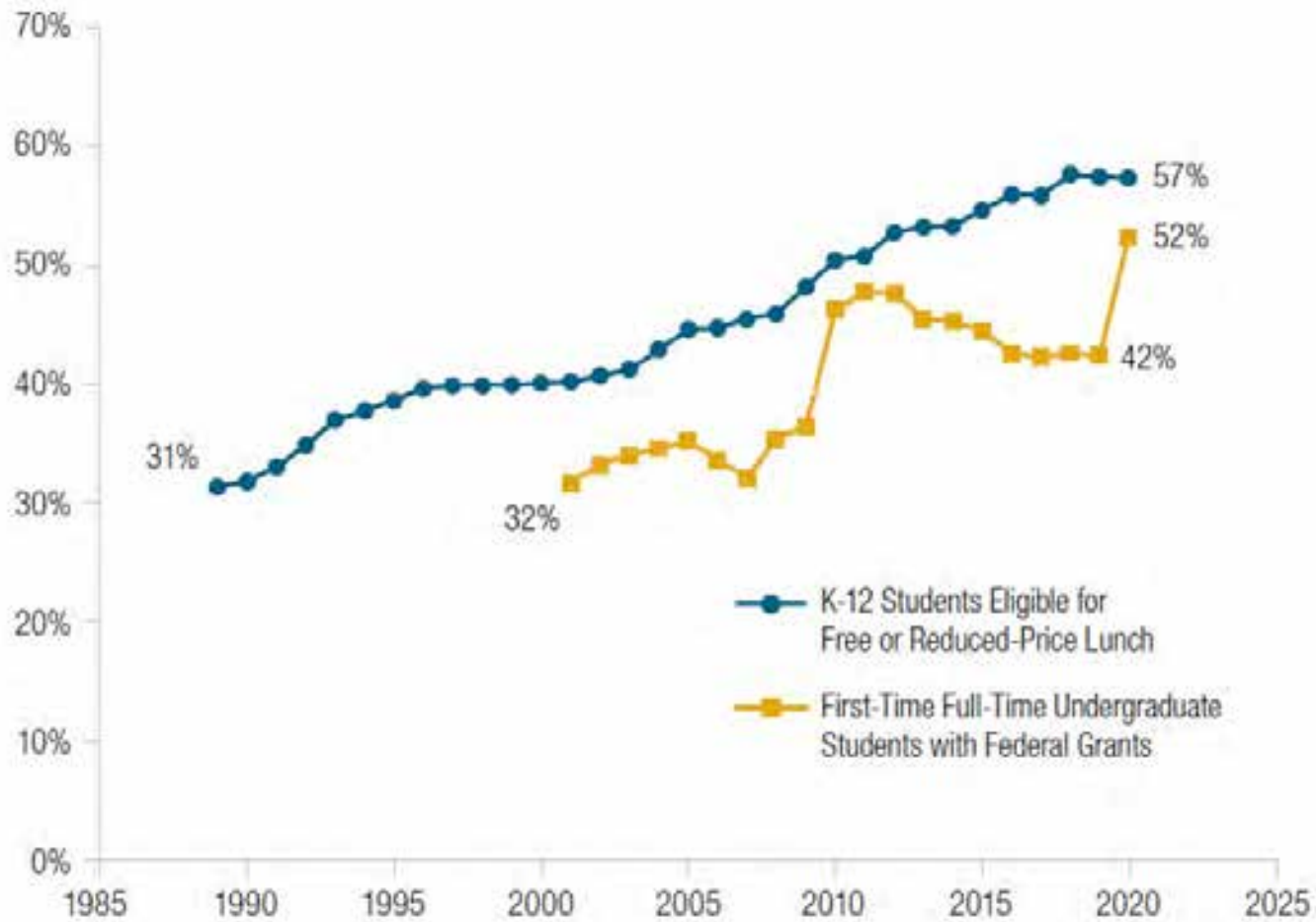
Northern Virginia Pell Students don't just go to Mason.



Mason enrollment relies on a high % of Pell students

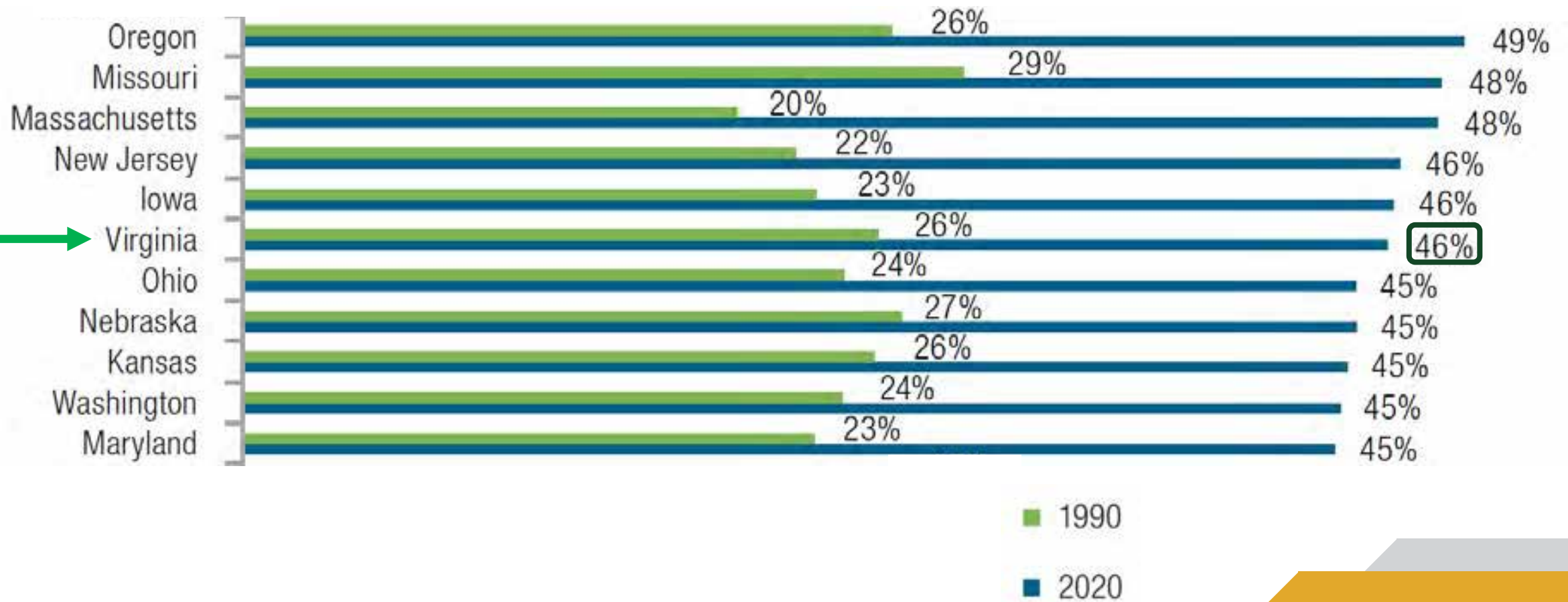


Pell Pipeline: Free and Reduced Lunch as predictor of Need



*Indicators of Higher Education Equity in the US, 2022, The Pell Institute

Free and Reduced Lunch – by state



Applications with/without fees

		Applications	% Admitted	Yield Rate	Fee Summary	Net Tuition Revenue
Freshman	Fee Waiver	9,255	70.3%	20.2%	(\$657,790)	\$20,174,469
	Paid Fee	15,838	85.8%	23.0%	\$1,107,400	\$44,016,667
	Total	25,093	80.1%	22.1%	\$1,107,400	\$64,191,136
Transfer	Fee Waiver	349	71.1%	72.1%	(\$27,170)	\$1,564,108
	ADVANCE	550	100.0%	93.7%	(\$38,290)	\$3,841,502
	Paid Fee	5,525	71.9%	65.6%	\$348,390	\$25,902,559
	Total	6,424	71.8%	68.9%	\$348,390	\$31,308,169
Grand Total		31,517	78.5%	30.2%	\$1,452,790	\$95,499,305

Application Fee Waivers are Prevalent in the Market

College/University	Application Fee	Virginia College Application Week	ACT/SAT, NACAC, Free/Reduced Lunch
Christopher Newport		Fee Waiver	
James Madison		Fee Waiver	
Longwood		Fee Waiver	
Norfolk State		Fee Waiver	Fee Waiver
Old Dominion		Fee Waiver	
Radford	No Fees		
Mary Washington	No Fees		
UVA		Fee Waiver	Fee Waiver
UVA Wise	No Fees		
VCU		Fee Waiver	Fee Waiver
VA Military Institute	No Fees		
VSU	No Fees		
VT		Fee Waiver	Fee Waiver
William & Mary		Fee Waiver	Fee Waiver

Action Items

New Degree Programs

As part of SCHEV's special initiative for Virginia public higher education institutions, the proposed fall 2024 degree programs aim to help alleviate shortages of licensed personnel in Virginia's school districts.



**Master of Education (MEd)
Literacy Education**



**Master of Education (MEd)
Inclusive Early Childhood Education**



**Bachelor of Science (BS)
Secondary Education**

Action Item

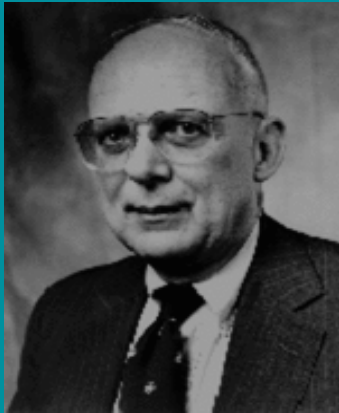
MOTION

To approve the following Program Actions, en bloc, as they are outlined in the meeting materials:

New Degree Programs

- Master of Education (MEd) in Literacy Education
- Master of Education (MEd) in Inclusive Early Childhood Education
- Bachelor of Science in Education (BSEd) in Secondary Education

Conferral of Emeritus/Emerita Status



James Bennett
College of Humanities
and Social Sciences



Elizabeth DeMulder
College of Education and
Human Development



Richard Klimoski
Costello College of
Business



Harold Linton
College of Visual and
Performing Arts



Peter Winant
College of Visual and
Performing Arts



ns of New Tenured Faculty

Ethan C. Ahn

College of Engineering and Computing

Ketul C. Popat

College of Engineering and Computing

Action Item

MOTION

To approve the following Faculty Actions, en bloc, as they are outlined in the meeting materials:

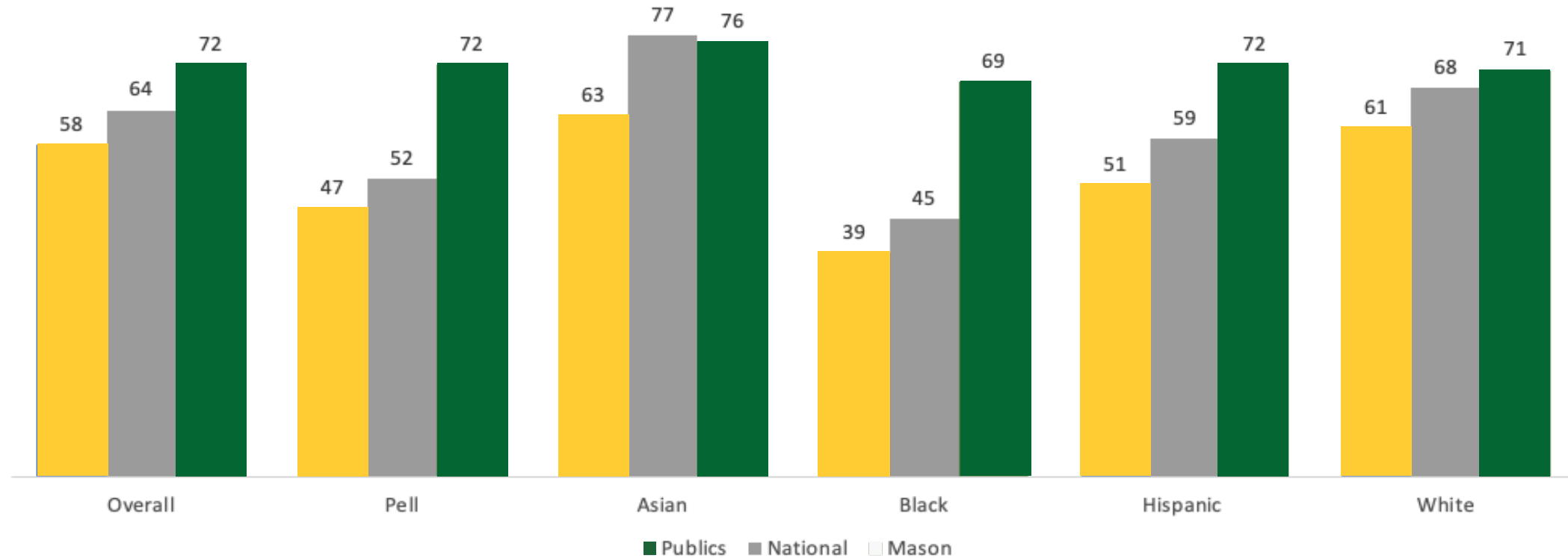
- Conferral of Emeritus/Emerita Status
- Elections of New Tenured Faculty

Undergraduate Student Success at Mason

- Ryan Braun, Ph.D. Director of Undergraduate Academic Success
- Sally Lorentson, Ed.D. Assistant Vice President, University Life

Mason Students Succeed

Six-year Graduation Rates



NCES 2014 Cohort

Mason Network Drives Student Success



Coach



Career



Advisor



Faculty

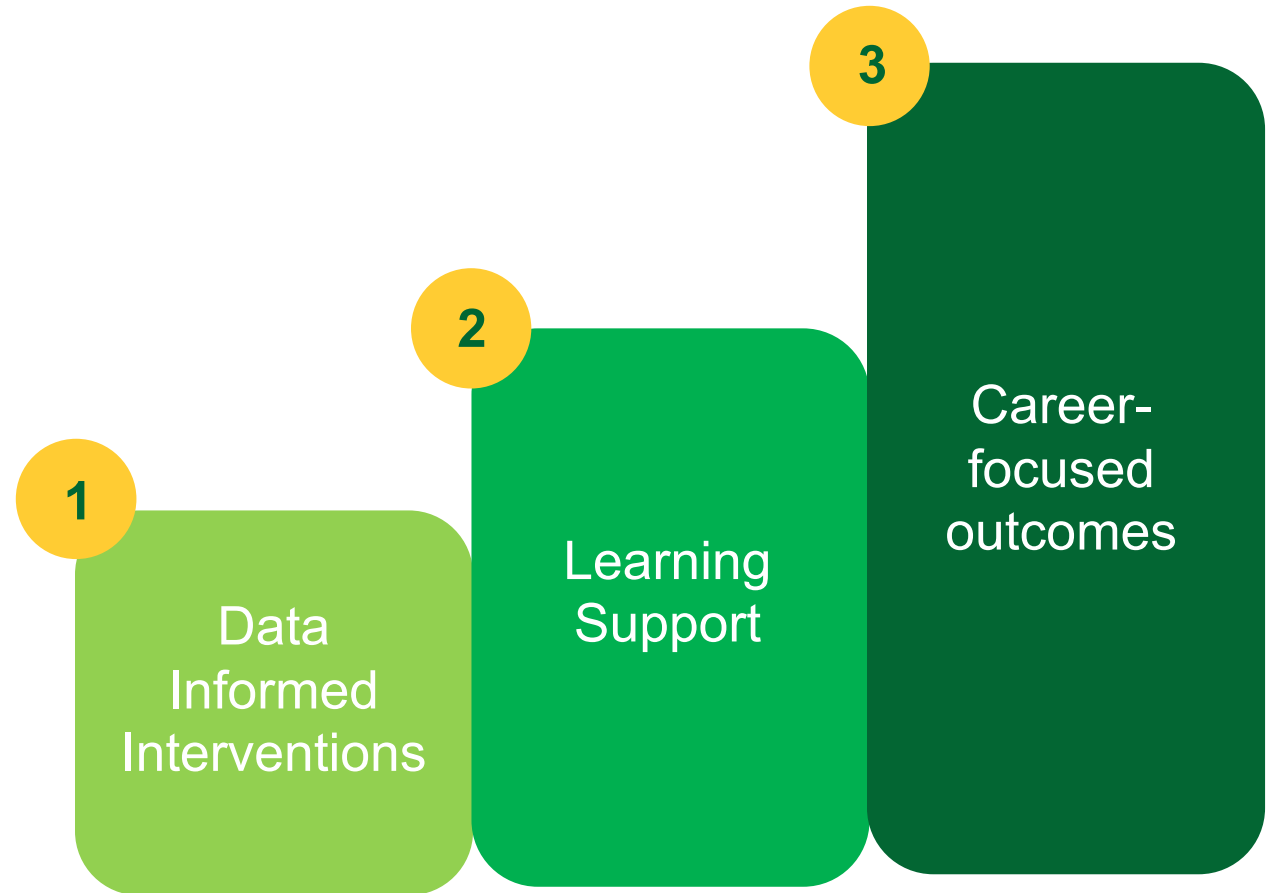
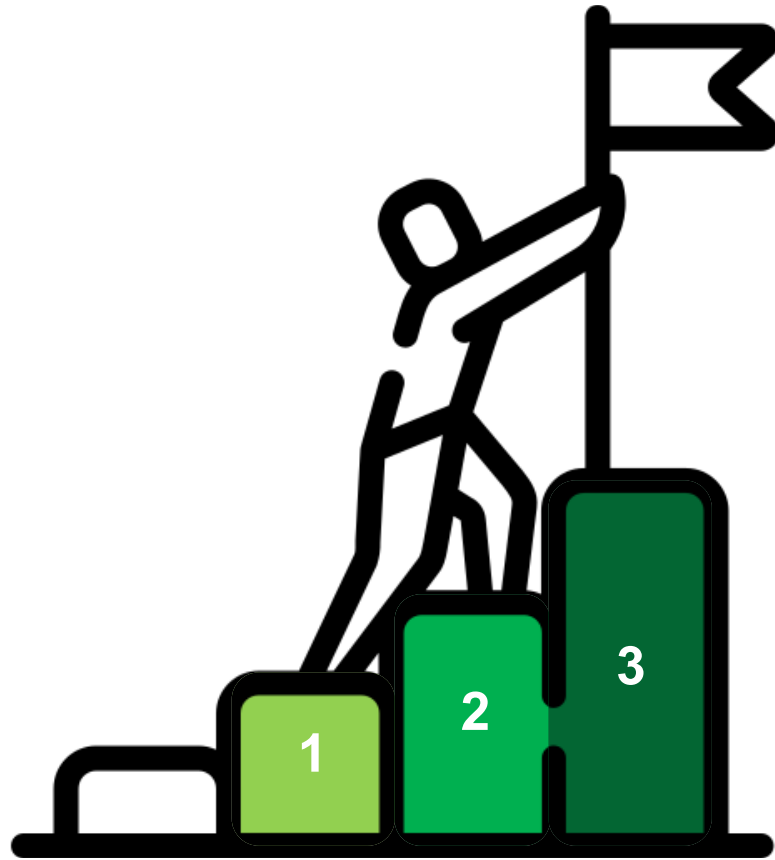
- Global Education Office
- Learning Support and Tutoring
- Experiential Learning
- Diversity, Equity, and Inclusion
- Undergraduate Research
- Student Engagement
- Student Libraries
- Student Support Services
- Mason Student Services Center

Technology Connects the Network

Investments in Technology to Optimize the Success Network



Leveraging the Success Network Today...



...And **Scaling Success** for Mason's Future





Thank You! Questions?



College of Education and Human Development

Ingrid Guerra-López, PhD
Dean, College of Education and Human Development

College of Education and Human Development

School of Education

School of Sports,
Recreation & Tourism
Management

School Kinesiology

Promoting Learning, Development, and Well-being Across the Lifespan

- Among the top graduate schools of education in the U.S. (#59 U.S. News & World Report)
- Among the largest colleges of education in Virginia
 - Nearly 4,000 students
 - 130+ full time instructional faculty
 - 17 nationally recognized programs
- Approximately 100% placement post-graduation
 - More than 1/3 of all Northern Virginia Public School teachers and 50% of school leaders are CEHD graduates
- \$10+ Million in research expenditures

CEHD Mission

The College of Education and Human Development is an inclusive community of scholars, educators, and practitioners dedicated to the lifelong pursuit of learning, development, and well-being. Through transdisciplinary collaboration, we innovate and produce research that positively impacts the Commonwealth, the nation, and the world.

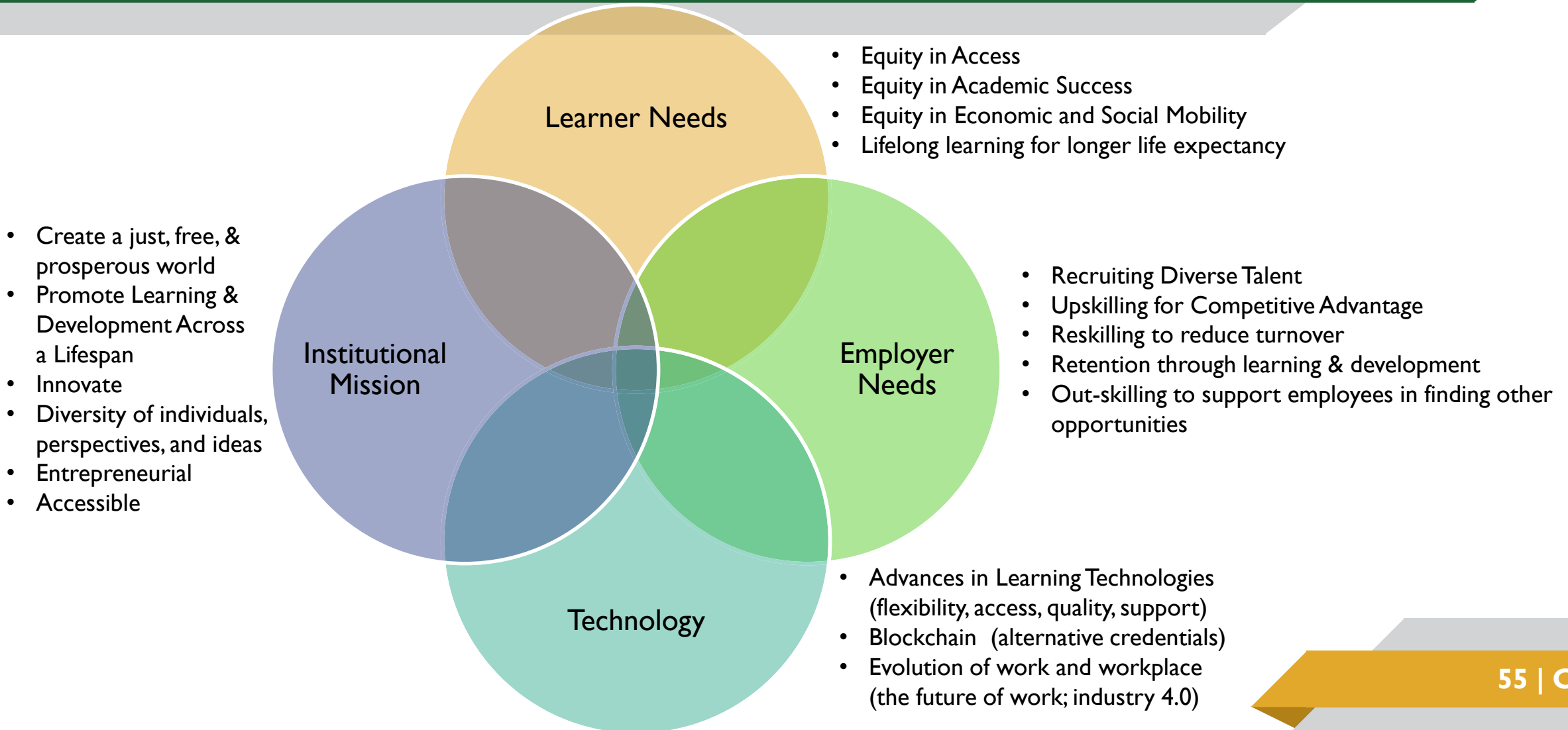


SUSTAINABLE DEVELOPMENT GOALS

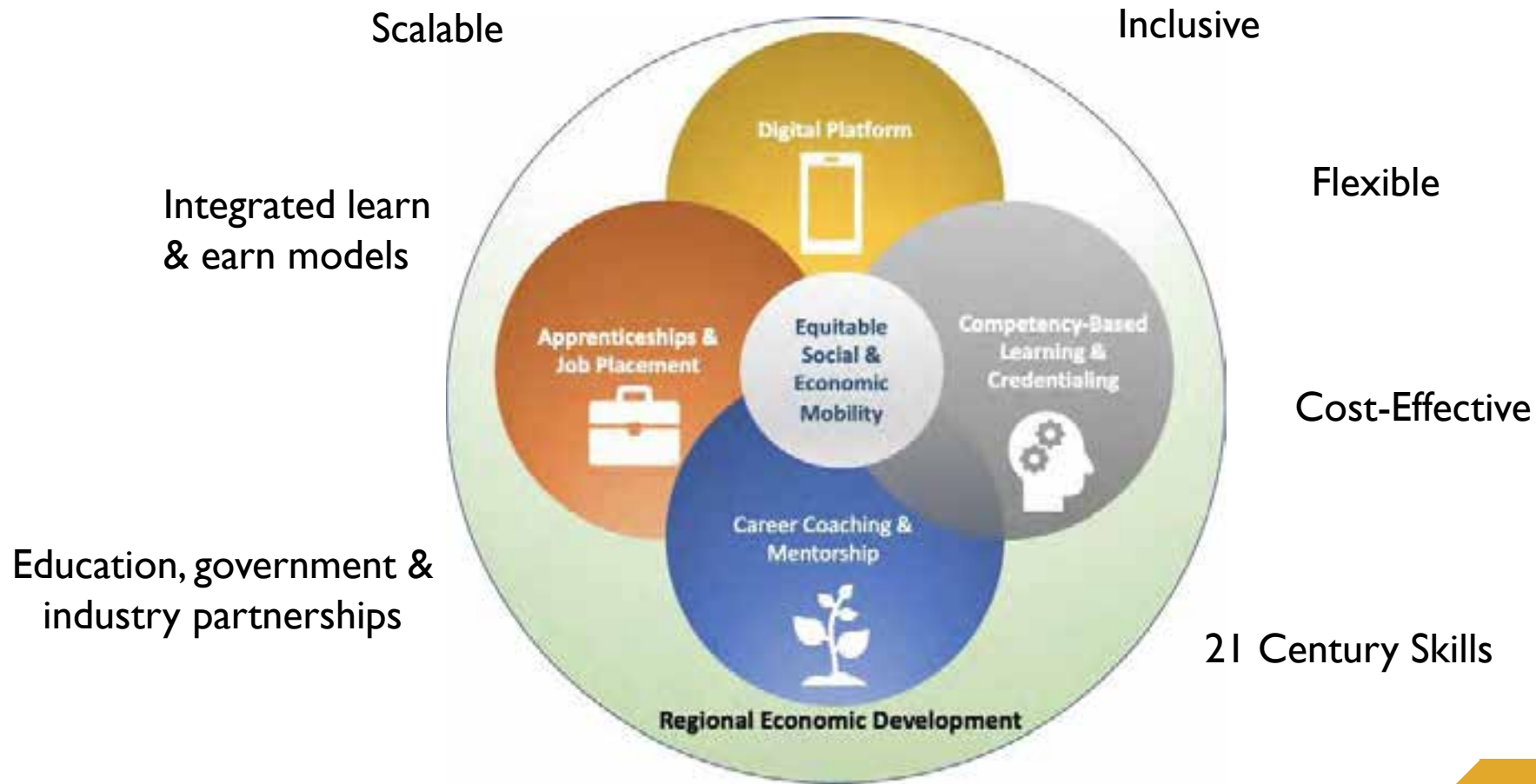
17 GOALS TO TRANSFORM OUR WORLD

1 NO POVERTY 	2 ZERO HUNGER 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION 	14 LIFE BELOW WATER 	15 LIFE ON LAND 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	17 PARTNERSHIPS FOR THE GOALS 	

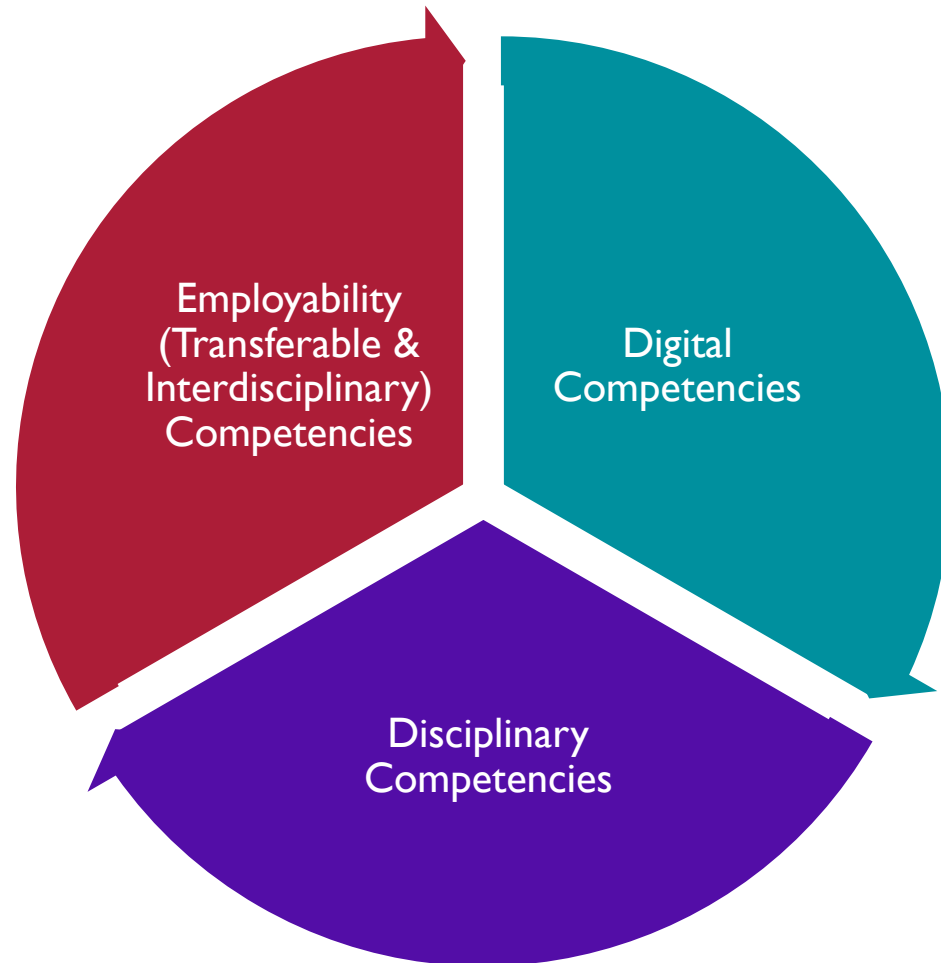
Convergence of Core Social Factors



Lifelong Learning, Development, Employability and Well-being



Addressing Complex Social Problems & Opportunities Requires Competence across multiple domains



Top 15 Skills for 2025

1. Analytical thinking and innovation
2. Active learning & learning strategies
3. Complex problem-solving
4. Critical thinking and analysis
5. Creativity, originality, and initiative
6. Leadership and social influence
7. Technology use, monitoring, and control
8. Technology design and programming
9. Resilience, stress tolerance, and flexibility
10. Reasoning, problem-solving and ideation
11. Emotional intelligence
12. Troubleshooting and user experience
13. Service orientation
14. Systems analysis and evaluation
15. Persuasion and negotiation



Accelerated College and Employability Skills (ACCESS) Academy



Accelerated College and Employability Skills: (ACCESS) Academy

- A lab school that provides an innovative educational experience to high school students, who have not historically had access to opportunities and pathways that meet their needs and lead to high-demand and well compensated career opportunities, as they simultaneously work toward two- and four-year college degrees.
- A partnership among three of the largest educational institutions in the region:
 - ▶ George Mason University (Mason)
 - ▶ Northern Virginia Community College (NOVA)
 - ▶ Fairfax County Public Schools (FCPS)

Vision and Mission

Vision

To prepare adaptable lifelong learners that collaboratively and creatively solve complex problems in any setting, as technologies, the nature of work, workers, and the workplace evolve over time.

Mission

To provide new innovative pathways for traditionally underserved students toward high demand, well compensated careers, while simultaneously working toward two- and four-year degrees to maximize their earning potential over their work life.

Innovative Teaching and Learning Methods



PBL-IT Curriculum Design:
IT curriculum designed within a problem-based learning approach, with increasing levels of complexity each year



Employability Skills:
Systems Thinking, Critical Thinking, Collaboration, Flexibility, Communication, etc.



Competency-Based Education:
Learning outcomes aligned to on-the-job competencies;
Performance-based assessments



Learn-and-Earn Model:
Paid internships with industry partners

Learning Innovation Lab FUSE at Mason Square

- ACCESS Academy will be an immersive experience in a state-of-the-art infrastructure with Public-Private partners.
 - On-the-job paid internships (Learn-and-Earn model)
 - Research experiences
- The Academy will become a training ground of innovative teaching practices for current and future educators.
 - Teacher candidates, in-service teachers, and IT faculty will develop skills in PBL pedagogy
 - Active learning and development of learning strategies
 - On-site observations and field experiences



Transdisciplinary Collaborations



Industry:

Authentic Problems & Case Studies
Internships
Mentors
Site Visits
Guest Presenters



CEHD and IT:

PBL IT Curriculum
Research & Innovations in Teaching & Learning



Mason, NOVA, FCPS:

Learning Ecosystem
Dual Enrollment
Wrap Around Services

ACCELERATED COLLEGE AND EMPLOYABILITY SKILLS ACADEMY (ACCESS)

Inputs

VA Dept of Education resources

GMU, NOVA, and schools faculty and staff time & expertise

- faculty and teachers
- school counselors
- instructional designers
- coaches

Stakeholder Input

- Industry Partners & Employers
- School Divisions
- Business Development Organizations
- Parents
- Students
- Educational Administrators

Program Elements

Freshman Year On Ramp

TA for integrating employability skills across the curriculum

Teacher PD on PBL

Integration with EIP Programming

Alignment to other STEM programs in school division

Sophomore Year On Ramp

TA for integrating employability skills across the curriculum

Teacher PD on PBL

Integration with EIP Programming/peer mentoring

Alignment to other STEM programs in base school

School visits/presentations from Industry Partners

Junior Year On Ramp

Teacher PD on PBL; TA for integration of employability skills

Dual Enrollment

Experiential PBL-IT Curriculum

Wrap Around Services (EIP, NOVA, MASON)

Peer Mentoring (EIP/GMU/NOVA students)

Immersive Fuse Research & Innovation Campus Experience

Unpaid internship

Senior Year On Ramp

Teacher PD on PBL; TA for integration of employability skills

Summer Bridge Program

Dual enrollment

Experiential PBL-IT Curriculum

Wrap Around Services (EIP, NOVA, MASON)

Intensive Employability Skills Development

Peer Mentoring (GMU students)

Immersive Fuse Research & Innovation Campus Experience

On-the-job paid senior internship

Outcomes

Multiple pathways into the workforce, undergraduate and advanced graduate work to fill critical demand in key industries

Teachers competent & applying innovative instructional methods

Reduction in administrative & financial barriers for traditionally underrepresented students in technology related career fields

Diversified IT Talent pool for our region

Increased earning potential and quality of life for program completers

Scalable model that can be replicated regionally and nationally

Sustainability





Mason Research Practice Partnership



A Purposeful Collaboration

FROM:
Traditionally University Centric Partnerships

TO:
Research-Practice Partnerships

- Typically, university-led research, where schools are sites for research to be conducted, or the consumers of the research
 - The primary purpose of research is to further knowledge to *eventually* inform practice
 - Research problems are articulated at the university by researchers

A more equitable and productive partnership between university and school systems

Consequential research is driven by **problems of practice** - i.e., actionable and timely research that the school systems can use

School systems are **co-creators and collaborators** of action research with university researchers

RESEARCH PRACTICE PARTNERSHIP (RPP)

- CEHD is partnering with Virginia Region 4 schools to create a collaborative approach to leveraging our unique strengths and addressing shared challenges.
- The RPP is intentionally organized to engage diverse forms of expertise, perspectives, disciplines, and methods.
- The RPP aligns well with the College's mission to generate research of consequence which positively impacts the Commonwealth, the nation, and the world.



Alexandria
Arlington County
Clarke County
Culpeper County
Fairfax County
Falls Church
Fauquier County
Frederick County
Loudoun County
Madison County
Manassas
Manassas Park
Orange County
Page County
Prince William County
Rappahannock County
Shenandoah County
Warren County
Winchester

RPP Strategic Framework – Developed in Partnership

Strategic Initiatives

Building Teacher and Leader Capacity

- Work Stream 1: Leadership development
- Work Stream 2: Recruitment and retention
- Work Stream 3: Science of reading/science of math

Education Community Well-Being

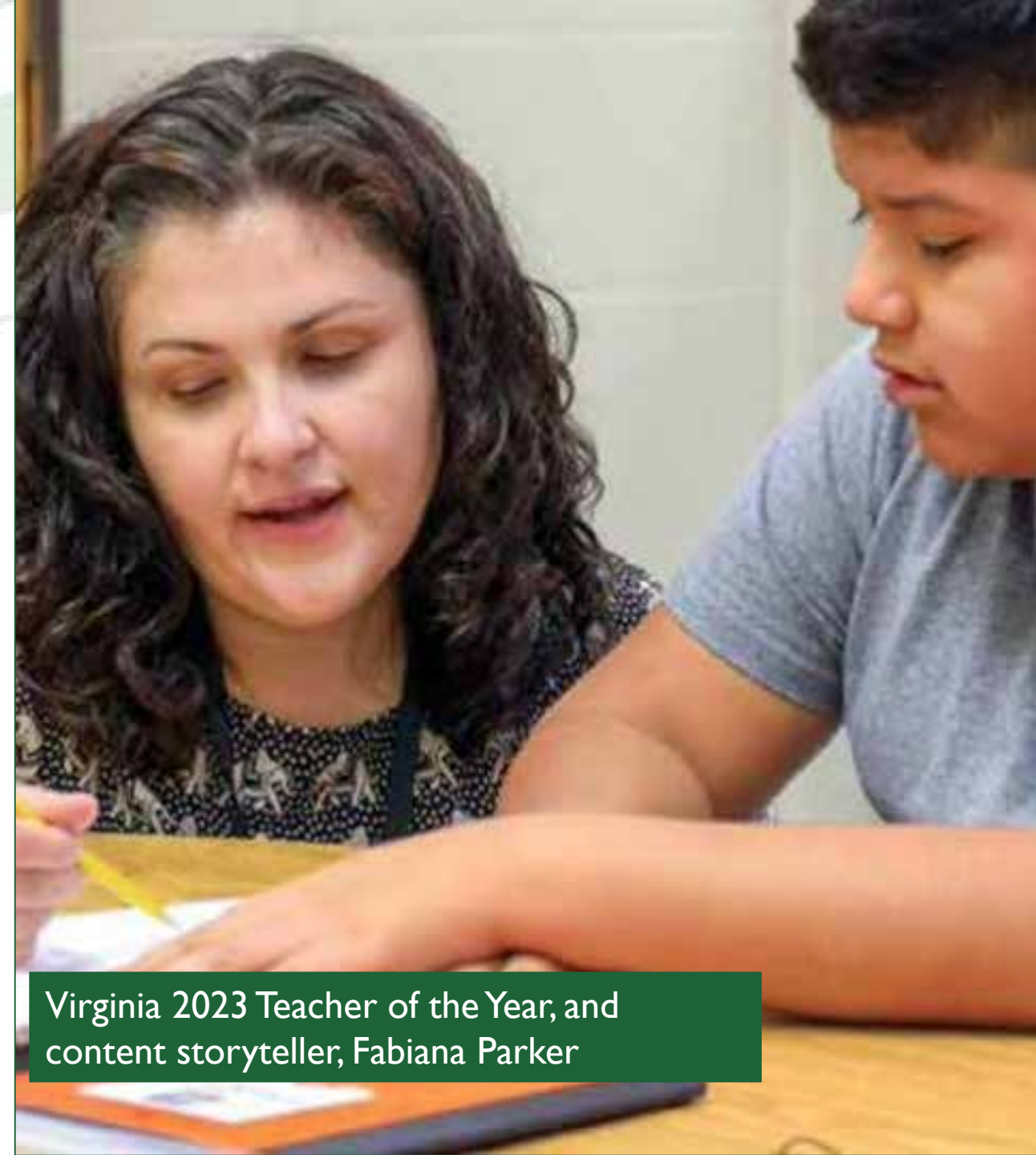
- Work Stream 4: Educator and staff well-being
- Work Stream 5: Student well-being

Creating a New Narrative

- Work Stream 6: Creating narrative impact by focusing on educators to reshape opinion and perception

Ongoing measurement and equitable lens are integral to all strategic efforts and work streams

- Three Region 4 divisions collaborating with CEHD on Spencer Foundation grant application to study the implementation of the Virginia Literacy Act
- Teacher and student wellness activity in partnership with Frederick County Public Schools
- Narrative content project to reshape perceptions through storytelling about teaching and teachers



Virginia 2023 Teacher of the Year, and content storyteller, Fabiana Parker



SCHOOL OF EDUCATION

**Addressing Teacher Shortage and Retention in NOVA:
Multiple Pathways toward Teacher Licensure and Professional Development**

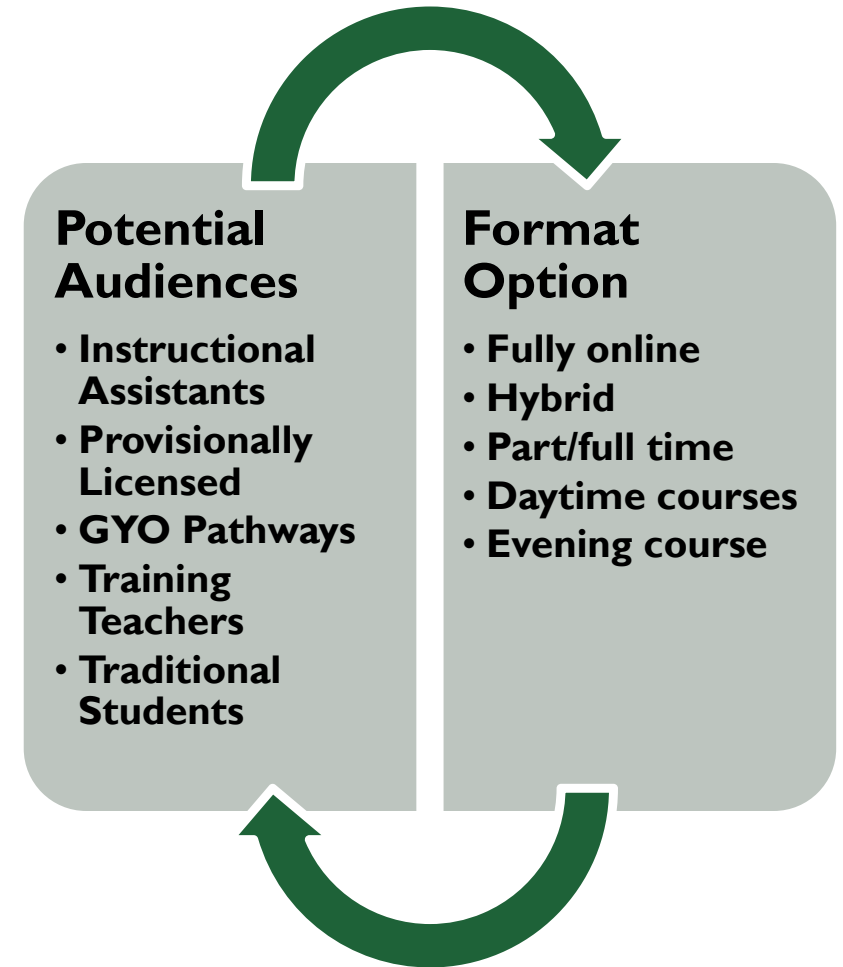


Alternative Structures Supporting Licensure

- Professional Studies Courses
 - ECE, ELED, SEED, PK-12 Licensure areas, SpecEd)
 - Fully online, graduate/non-degree
 - Meets six course professional studies requirement for provisionally licensed teachers
- Contract Courses/Cost-Sharing Cohorts
 - Licensure-area specific contract courses and cohorts for TESOL, SpecEd, ECE, ELED
 - Content area endorsement courses for teachers on pathways to provisional licensure
- Alternative Pathways/Structures
 - IA Cohorts (contract courses)
 - Grow Your Own
 - Building residency/apprenticeship partnerships

Licensure Certificate & Degree Options

- BSEd Degrees
 - Early Childhood (Pre-K-3)
 - Early Childhood Special Ed
 - Elementary
 - Health & Physical Ed
 - Special Education
- Licensure Certificates (15-26)
 - Secondary Education
 - Early Childhood (Pre-K-3)
 - Early Childhood Special Ed
 - SpecEd (multiple options)



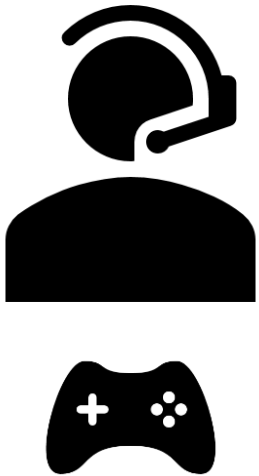


SCHOOL OF SPORTS, RECREATION, AND TOURISM MANAGEMENT (SRTM)

E-Sports



eSports at SRTM



- Leading a collaborative eSports initiative across Mason to advance the development of eSports program, related curriculum, and broad recognition.
- Engaging Sports Management students, the GMU eSports Departmental Student organization, leadership, instructors, coaches, and others to:
 - Maximize opportunities for students to pursue eSports courses and degrees
 - Engage with eSports teams and events to maximize student sense of belonging and career readiness.



SCHOOL OF KINESIOLOGY

Virginia Concussion Initiative





Virginia Concussion Initiative



The child is at the center of the home, school, and community.
A proactive and coordinated team approach is critical to ensuring optimal health and learning outcomes for children with concussions.

Announcements

- Appointment of Faculty
- Appointment of Administrative and Professional Faculty
- Appointments/Reappointments of Deans/Directors and Department Chairs/School Directors
- Renewals and Reappointments
- Separations
- Other Announcements
- BOV Summary Sheet

Adjournment

[PROVOST.GMU.EDU](https://provost.gmu.edu)



ITEM NUMBER:

Master of Education (MEd) in Literacy Education Degree Program Proposal

PURPOSE OF ITEM:

The MEd in Literacy Education degree program proposal is in development for submission to the State Council of Higher Education for Virginia (SCHEV) for initiation in Fall 2024. Prior to SCHEV submission, Board action is required.

APPROPRIATE COMMITTEE:

Academic Programs, Diversity and University Community Committee

BRIEF NARRATIVE:

The proposed MEd in Literacy Education degree program will prepare practicing teachers to better support the literacy learning of K-12 students throughout Virginia. The proposed program provides advanced coursework that will allow K-12 educators to use research-based instructional and assessment practices in literacy, bolstering the literacy learning of Virginia's K-12 students. The proposed degree program also provides opportunities for teachers to become eligible for the Reading Specialist endorsement in Virginia. Newly enacted legislation in Virginia will lead to an increase in the number of reading specialists required in public schools. Currently, school divisions in Virginia are required to employ one full-time reading specialist in each elementary school. When the Virginia Literacy Act (VLA) takes effect in the 2024-2025 school year, this will increase to one reading specialist for every 550 students in grades K-5 and one reading specialist for every 1,100 students in grades 6-8. The VLA also provides funding for reading intervention services, often provided by licensed reading specialists.

The MEd in Literacy Education will provide students with a strong foundation of competencies and proficiencies (knowledge, skills, and dispositions) as established by the Commonwealth of Virginia and the International Literacy Association (ILA). Students completing the program will be prepared to seek the advanced K-12 Reading Specialist licensure endorsement in Virginia. The MEd in Literacy Education will also allow educators who do not wish to seek an advanced endorsement to deepen their understanding of research-based instructional and assessment practices in literacy, leading to more effective classroom practice.

REVENUE IMPLICATIONS:

The MEd in Literacy Education degree program will be revenue neutral. All courses required for the degree currently exist as part of George Mason University's MEd in Curriculum and Instruction, concentration in Literacy Leadership for Diverse Schools.

STAFF RECOMMENDATION:

Staff recommends Board approval.

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Description of Proposed Program

Program Background

George Mason University seeks approval for a Master of Education (MEd) degree program in Literacy Education. The proposed degree program will be administered by the College of Education and Human Development, School of Education. The anticipated initiation date is Fall 2024.

First opening in 1957 as the Northern Virginia branch of the University of Virginia, George Mason University was established as an independent four-year, degree-granting institution in 1972. Since its inception the University has offered teacher preparation degree programs. Currently, the College of Education and Human Development's School of Education has more than 2,500 students enrolled. Degree offerings in teacher preparation include undergraduate and graduate pathways to more than 30 different licensure and endorsement areas in Virginia.

To identify the proposed MEd degree program as appropriate for submission, the College of Education and Human Development examined degree programs that would address critical shortages in teaching endorsement areas and problems of educational concern for the Virginia. The U.S. Department of Education (VDOE) has consistently identified "reading specialist" as a high-needs field, especially in schools that serve low-income students, both nationwide and at times in Virginia since 1998.¹ The proposed MEd in Literacy Education degree program, designed to prepare reading specialists, addresses this need.

In addition, the Coronavirus disease (COVID-19) pandemic negatively impacted reading achievement across the nation as "sizable drops in reading achievement occurred between fall 2020 and fall 2021."² This impact is apparent in Virginia, where reading achievement has declined in recent years. Results from Virginia's 2022-2023 Standards of Learning assessments demonstrate "significant and persistent learning loss in reading and math for Virginia students in grades 3-8. More than half of 3rd-8th graders either failed or are at risk of failing their reading SOL exam, and nearly two-thirds of 3rd-8th graders either failed, or are at risk of failing, their math SOL exam." In addition, persistent achievement gaps continue to exist for certain subgroups of students.³ These results mirror the trends seen in the National Assessment of Education Progress (NAEP). In 2022, only 31% of fourth- and eighth-grade students completing the NAEP in Virginia reached at least a proficient level of performance.⁴ "Since 2017, fourth graders in Virginia suffered the largest declines in reading and math in the nation...For the first

¹ Cross, F. (2016). *Teacher shortage areas nationwide listing, 1990-1991 through 2016-2017*. U.S. Department of Education, Office of Postsecondary Education. <https://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf>

² Kuhfeld, M., Lewis, K., & Peltier, T. (2022). Reading achievement declines during the COVID-19 pandemic: Evidence from 5 million U.S. students in grades 3-8. *Reading and Writing*, 36, 245-261. <https://doi.org/10.1007/s11145-022-10345-8>

³ Virginia Department of Education. (2023). *2022-2023 test results show Virginia students continue to struggle with COVID-related learning loss in reading and math*. <https://www.doe.virginia.gov/Home/Components/News/News/314/227>

⁴ U.S. Department of Education. Institute of Education Science, National Center for Education Statistics, National Assessment of Education Progress (NAEP), 2022 Reading Assessment. <https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=MAT&sj=&sfj=NP&st=MN&year=2022R3>

time in 30 years, Virginia’s 4th grade students have fallen below the national average in reading.... The average scores of the Commonwealth’s eight graders also dropped, with statistically significant declines” in reading.⁵ The proposed degree program will prepare practicing teachers to better support the literacy learning of K-12 students throughout Virginia, helping to address these declines.

In response to reading achievement declines, legislators in Virginia passed the Virginia Literacy Act (VLA)⁶ in 2022 and its expansion in 2023.⁷ The proposed degree program will help prepare the increased number of reading specialists required by the legislation. Currently, schools in Virginia are required to employ “one full-time in each elementary school at the discretion of the local school board.”⁸ When the VLA takes effect in the 2024-2025 school year, “each local school board shall employ one reading specialist for each 550 students in kindergarten through grade five and one reading specialist for each 1,100 students in grades six through eight.” In addition, “to provide reading intervention services required by § 22.1-253.13:1, school divisions may employ reading specialists to provide the required reading intervention services.”⁷ The decision to propose a new MEd in Literacy Education addresses this increased need for reading specialists.

Delivery Format

The proposed MEd degree program in Literacy Education will be offered in the traditional, face-to-face format and fully online. Both physical space and software to facilitate asynchronous online sessions are required and will be available. George Mason University possesses the resources, support, and technology necessary for online degree programs. The online courses are supported by a personal support center through the university’s primary learning management system, Blackboard. Blackboard is centrally supported by the university’s Information Technology Services (ITS), which provides technical assistance, training, and system administration 24 hours a day every day. ITS also supports a portfolio of academic technology applications for use in online courses. The ITS Learning Support Center and the Stearns Center for Teaching and Learning provide training to faculty in both the use of the Blackboard software and in the design of courses.

All students will have access to online resources through security-protected access credentials. Support services for students will include access to online systems such as electronic mail, online library resources, PatriotWeb (a self-service site for students to manage their administrative records and accounts), financial aid, academic services, career services, disability services, and the University Bookstore. Computer support is available 24 hours a day every day. Phone support is available every day at hours posted on the ITS Support Center website. For the face-

⁵ Virginia Department of Education. (2022). *Dismal NAEP results confirm urgency of education reforms in Virginia: “Nation’s Report Card” shows Virginia fourth graders recorded the largest declines in reading and math in the nation.* <https://www.doe.virginia.gov/Home/Components/News/News/184/227?arch=1&npage=2>

⁶ Virginia Literacy Act, Code of Virginia §22.1-299.7:1, chapters 549 & 550. <https://lis.virginia.gov/cgi-bin/legp604.exe?221+ful+CHAP0549>

⁷ Student Literacy Measures, Code of Virginia §22.1-299.7:1, chapters 645 & 646. <https://lis.virginia.gov/cgi-bin/legp604.exe?231+ful+CHAP0646>

⁸ Instructional, administrative, and support personnel, Code of Virginia §22.1-253.13:2. <https://law.lis.virginia.gov/vacode/title22.1/chapter13.2/section22.1-253.13:2/>

to-face delivery of courses, George Mason University has adequate classroom space and associated equipment to successfully deliver the proposed degree program.

Accreditation

The proposed MEd degree program in Literacy Education will need to be accredited by the Council for the Accreditation of Educator Preparation (CAEP). CAEP is a professional accreditor for educator preparation providers. The CAEP accreditation process ensures educator preparation providers whose programs lead to certification, licensure, or endorsement meet demanding standards for the preparation of educators and other professional school personnel. Through standards that focus on systematic assessment of candidate learning, CAEP encourages accredited institutions to engage in continuous improvement based on accurate and consistent data.

George Mason University’s existing Master of Education in Curriculum and Instruction degree program with a concentration in Literacy Leadership for Diverse Schools is presently accredited by CAEP through Spring 2026. George Mason University will comply with the following re-accreditation timeline:

February 2025	Submit self-study document
October 2025	Site Visit by Accreditation Team
Spring 2026	Decision rendered about accreditation status

State Licensing Agency Virginia Department of Education

The proposed MEd in Literacy Education would be required to meet the biennial measures prescribed by the Virginia State Board of Education. The Virginia Department of Education provides detailed and specific information for meeting the standards and competencies expected of Virginia's educators in their respective disciplines. The requirements are extensive, and all educator preparation programs must meet all the licensure regulations, professional studies, and endorsement requirements for each discipline/teaching area to be approved to offer Educator Preparation Programs.

The existing Master of Education in Curriculum and Instruction, concentration in Literacy Leadership for Diverse Schools is designed to meet the Virginia Department of Education standards and regulations. In 2021, George Mason University submitted its biennial report for 2019-2021, which evaluates all educator preparation programs offered by the University. The Virginia Department of Education approved the Literacy Leadership for Diverse Schools concentration in this report. The next biennial report will cover 2021-2023 and will be submitted to the Virginia Department of Education in Fall 2023.

Admission Criteria

All students will be required to fulfill the graduate admission requirements of the University. Applicants must:

- Complete an online Application for Graduate Study.
- Pay a nonrefundable application fee or receive a fee waiver.
- Have earned a baccalaureate degree from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency, or international equivalent, with verified official transcripts.
- Have a minimum 3.00 GPA on a 4.00 scale in baccalaureate study.
- Submit official transcripts from all institutions attended for each program applied to unless the programs are in the same college or school.
- Submit a goals statement.
- Submit two letters of recommendation as required by the program.
- Submit an application for Virginia In-State Tuition Rates, if claiming entitlement to these rates.

The College of Education and Human Development will require applicants to the proposed degree program to satisfy additional requirements. Applicants must:

- have at least one year of teaching experience.

Applicants who have not earned a baccalaureate or graduate degree in the U.S. must submit:

- Official English translations of all diplomas, certificates, and transcripts that are not already in English. Also, documents from foreign institutions must meet the university's guidelines for international transcript submission.
- Proof of English proficiency: either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) academic exam, the Duolingo English test, or the Pearson Tests of English (PTE) meeting the minimum requirements:
 - TOEFL: 88 points total and a minimum of 20 points in each section
 - IELTS: 7.0 total band score and 6.5 score for each subsection
 - Duolingo English Test: minimum score of 120
 - PTE: 67 overall score.

Curriculum

The proposed MEd degree program in Literacy Education will require 30 credit hours. A practicum course is required.

The curriculum for the proposed degree program has been designed to align with the standards for Reading/Literacy Specialists from the International Literacy Association's 2017 *Standards for the Preparation of Literacy Professionals*. "Developed by literacy experts across the United States, the standards focus on the knowledge, skills, and dispositions necessary for effective educational practice in a specific role and highlight contemporary research and evidence-based practices in curriculum, instruction, assessment, and leadership."⁹

⁹ International Literacy Association. (2018). *Standards for the preparation of literacy professionals 2017*. <https://www.literacyworldwide.org/get-resources/standards/standards-2017>

Coursework will also address Virginia’s endorsement standards for Reading Specialists which include competencies in assessment and diagnostic teaching, communication, reading, writing, technology, and leadership, coaching, and specialization.¹⁰

The curriculum provides all students with an understanding of the theories and historical trends that inform literacy research, development, and instruction. Students will learn to locate empirical research addressing literacy-related topics and analyze its quality and applicability in school settings. Coursework also emphasizes the impact of K-12 students’ cultural, linguistic, and exceptional diversity on literacy learning. The curriculum will prepare students to design and implement research-based literacy instruction to support the literacy learning of K-12 students. All students will be prepared to select and administer appropriate literacy assessments and to analyze and interpret student assessment data to inform instructional decisions. In addition, students seeking endorsement as a reading specialist will develop leadership and facilitation skills as they learn to design professional development activities and support the professional learning of other teachers.

All students will complete a practicum course. The practicum allows students and supervisors the opportunity to evaluate the students’ knowledge and skills in a controlled, applied setting.

Program Requirements

Core Courses: 16 credits

EDRD 640: Trajectory of Literacy Research (2 credits)

EDRD 641: Trends and Issues in Literacy (2 credits)

EDRD 642: Foundations of Literacy Instruction: Code-Based Skills (3 credits)

EDRD 643: Foundations of Literacy Instruction: Meaning-Based Skills (3 credits)

EDRD 644: Literacy Assessment and Intervention (3 credits)

EDRD 645: Supervised Literacy Practicum (3 credits)

Concentration Areas: 14 credits

Literacy Leadership for Diverse Schools

This concentration focuses on the knowledge and leadership skills needed to serve as a K-12 Reading Specialist. Students who complete this concentration are eligible for the K-12 Reading Specialist endorsement.

Required Courses: 5 credits

EDRD 646: School-Based Leadership in Literacy (3 credits)

EDRD 647: Introduction to Literacy Coaching (2 credits)

Restricted Electives: 9 credits

Students select from the list of courses. Other relevant courses may be selected with advisor approval.

EDAT 510: Introduction to Assistive Technology (3 credits)

¹⁰ Reading specialist, Virginia Administrative Code §8VAC20-534-600.
<https://law.lis.virginia.gov/admincode/title8/agency20/chapter543/section600/>

EDAT 524: Universal Design for Learning (3 credits)
EDCI 516: Bilingualism and Language Acquisition Research (3 credits)
EDCI 621: Introduction to Gifted and Talented Learners (3 credits)
EDCI 622: Curriculum and Instructional Strategies for Gifted Learners (3 credits)
EDCI 630: Supporting English Learners in PK-12 Schools (3 credits)
EDRD 625: Integrating Literacy and Technology for K-12 Learners (3 credits)
EDRD 626: Writing Development and Instruction for K-12 Learners (3 credits)
EDRD 627: Comprehension and Vocabulary Development for K-12 Learners (3 credits)
EDRD 628: Word Analysis: Phonics, Vocabulary, and Spelling for K-12 Learners (3 credits)
EDRD 680: Foundations of Coaching and Fostering Professional Learning (3 credits)
EDRD 681: Collaboration and Communication in Literacy Coaching (3 credits)
EDRD 682: Creating Change through Data-Oriented Coaching (3 credits)
EDRD 683: Trends & Issues in Literacy Instruction & Literacy Coaching (3 credits)
EDSE 540: Characteristics of Students with Disabilities who Access the General Curriculum (3 credits)
EDUC 537: Introduction to Culturally Linguistically Diverse Learners (3 credits)
SEED 502: Young Adult Literature in Multicultural Settings (3 credits)

K-12 Literacy Instruction (non-licensure)

This concentration develops additional knowledge of classroom literacy instruction along with an understanding of the learning needs of K-12 students.

Restricted Electives: 14 credits

Students select from the list of courses, including at least 9 credits of EDRD courses.

EDAT 510: Introduction to Assistive Technology (3 credits)
EDAT 524: Universal Design for Learning (3 credits)
EDCI 516: Bilingualism and Language Acquisition Research (3 credits)
EDCI 621: Introduction to Gifted and Talented Learners (3 credits)
EDCI 622: Curriculum and Instructional Strategies for Gifted Learners (3) credits
EDCI 630: Supporting English Learners in PK-12 Schools (3 credits)
EDRD 625: Integrating Literacy and Technology for K-12 Learners (3 credits)
EDRD 626: Writing Development and Instruction for K-12 Learners (3 credits)
EDRD 627: Comprehension and Vocabulary Development for K-12 Learners (3 credits)
EDRD 628: Word Analysis: Phonics, Vocabulary, and Spelling for K-12 Learners (3 credits)
EDRD 647: Introduction to Literacy Coaching (2 credits)
EDSE 540: Characteristics of Students with Disabilities who Access the General Curriculum (3 credits)
EDUC 537: Introduction to Culturally Linguistically Diverse Learners (3 credits)
SEED 502: Young Adult Literature in Multicultural Settings (3 credits)

Total credit hours: 30 credits.

Practicum Requirement

The supervised literacy practicum course requires students to complete a minimum of 20 clock hours of direct assessment and teaching experience with a K-12 student experiencing difficulties

with literacy. Throughout the practicum, the students' plans for assessment and intervention instruction along with their reflections on their practice will be assessed using standardized rubrics by the course instructor who serves as their practicum supervisor. Students will also be evaluated based on observations of instruction and completion of online modules. If students do not successfully complete all hours or assignments, they may be required to repeat the practicum. If a student fails the practicum course, they may be given an opportunity to retake the course at an alternative location or with an alternative K-12 student.

See Appendix A for a Sample Plan of Study.

See Appendix B for Course Descriptions.

Time to Complete

The proposed degree program will be offered on a part-time basis only due to the course sequence necessary to complete the degree. Summer enrollment is required in the first year and is optional in the second year. Students will participate in a cohort model. All students within a cohort will complete core and required classes at the same time. For students taking 5 to 6 credits per semester (with the exception of the final semester when only 2 to 3 credits are required), the proposed degree program will take two academic years to complete. No adjunct faculty will be utilized to initiate the proposed degree program.

Student Learning Assessment

Students who complete the proposed MEd degree program in Literacy education will possess the required expertise to effectively support the literacy learning of all K-12 students. Students seeking endorsement as a reading specialist will be able to support the professional learning of other teachers and provide leadership in literacy. Students will develop competencies aligned with the standards for Reading/Literacy Specialists from the International Literacy Association's 2017 *Standards for the Preparation of Literacy Professional*.¹¹ Virginia's endorsement standards for Reading Specialists are also addressed.¹²

Assessment of student learning in the proposed degree program will be conducted through analysis of systematic metrics specifically designed to measure student performance. Student learning will be assessed throughout the program through a variety of formative and summative measures. Assessment measures will include but not be limited to course assignments/activities, quizzes and exams, and an array of applied projects designed to facilitate the achievement of learning outcomes.

During the practicum course, students are expected to demonstrate their ability to select and administer appropriate literacy assessments with a K-12 student experiencing difficulties in literacy. They will then analyze the data and use it to design and implement data-based literacy intervention instruction, drawing on their knowledge of research-based instructional practices in

¹¹ International Literacy Association. (2018). *Standards for the preparation of literacy professionals 2017*. <https://www.literacyworldwide.org/get-resources/standards/standards-2017>

¹² Reading specialist, Virginia Administrative Code §8VAC20-534-600. <https://law.lis.virginia.gov/admincode/title8/agency20/chapter543/section600/>

literacy. Students will also be expected to establish a literacy-rich learning environment and integrate culturally sustaining approaches to literacy instruction.

Learning Outcomes

Students will be able to:

- Explain and analyze major theories, empirical research, and historical trends in literacy development and instruction.
- Describe evidence-based components of reading, writing, and language development and their relationship with other aspects of literacy.
- Describe the unique developmental, cognitive, cultural, and linguistic needs of all students and identify approaches to literacy instruction which acknowledge this diversity.
- Design and implement research-based literacy instruction and intervention to meet the needs of all students.
- Administer and analyze literacy assessment methods and data in order to identify students' literacy-related strengths and needs and to develop effective instruction and intervention.
- Foster an engaging, literacy-rich learning environment.

Students completing required courses for the Reading Specialist endorsement will be able to:

- Design and implement professional learning activities that reflect knowledge of adult learning theory and effective professional development.
- Demonstrate leadership and facilitation skills when working with individuals and groups of educators.

Relation to Existing Degree Programs (Degree, Certificate, Sub-area)

George Mason University offers a Master of Education (MEd) degree program in Curriculum and Instruction with a concentration in Literacy Leadership for Diverse Schools. Currently, all students needing to earn a master's degree while seeking endorsement as a K-12 Reading Specialist in Virginia complete this concentration. If the proposed MEd in Literacy Education degree program is approved, prospective students seeking endorsement as a Reading Specialist in Virginia while earning a master's degree will be admitted directly into the MEd in Literacy Education rather than the MEd in Curriculum and Instruction degree program. The Literacy Leadership in Diverse Schools concentration of the MEd in Curriculum and Instruction will be discontinued.

George Mason University also offers a Graduate Certificate in Literacy/Reading Instruction with a K-12 Reading Specialist concentration. This certificate is designed to meet the needs of educators who already hold a master's degree but would like to become eligible for Virginia's K-12 Reading Specialist endorsement. If the proposed MEd in Literacy Education degree program is approved, this certificate will continue as it draws from a different pool of prospective students.

Because the proposed degree program will draw from the same pool of prospective students as the current degree programs, there is no anticipated overall negative impact on student enrollment. Resources currently used to support the operation of the MEd in Curriculum and

Instruction, concentration in Literacy Leadership for Diverse Schools will be reallocated to support the initiation and operation of the proposed MEd in Literacy Education.

Justification for the Proposed Program

Response to Current Needs (Specific Demand)

From 2019 to 2022, K-12 students across the nation experienced learning loss in reading due in part to the impact of the Coronavirus disease (COVID-19) pandemic.¹³ “In every elementary grade, there are still more students at risk of not learning to read than there were...before the pandemic disruptions began.”¹⁴ These declines are evident in Virginia. An analysis of National Assessment of Education Progress (NAEP) results provided by the Education Recovery Scorecard, created in collaboration with researchers at Harvard University and Stanford University, indicates during this time period students in Virginia lost an average of more than five months of literacy learning, with students in some school divisions in the commonwealth averaging more than a year’s worth of learning loss in reading.¹⁵

Virginia’s youngest learners are at particular risk. From the fall of 2019 to the fall of 2020, in Virginia “there was a 10% increase in the proportion of [K-1] students considerably behind in early literacy skills....The increase in kindergarten and first grade students considerably behind in early literacy in Fall 2020 raises a warning about long-term challenges in literacy achievement in the coming years.”¹⁶ In an analysis of early literacy assessment data in the spring of 2023, the authors note “these data showcase recent improvement in Spring PALS below-benchmark rates for Virginia’s young learners. Still, lingering effects of the pandemic-related learning disruptions are apparent. Many students, particularly those in first and second grade from historically marginalized groups, continue to face challenges developing the literacy skills they need to help them be successful readers and learners across academic subjects. A critical step in supporting the literacy and reading development of Virginia’s K-2 students is supporting the teachers, specialists, coaches, and interventionists that work most closely with these learners.”¹⁷ The proposed degree program provides advanced coursework that will allow K-12 educators to deepen their understanding of research-based instructional and assessment practices in literacy, thus shoring up the literacy learning of Virginia’s K-12 students.

¹³ Kuhfeld, M., Lewis, K., & Peltier, T. (2022). Reading achievement declines during the COVID-19 pandemic: Evidence from 5 million U.S. students in grades 3-8. *Reading and Writing*, 36, 245-261. <https://doi.org/10.1007/s11145-022-10345-8>

¹⁴ Amplify. (2022). *Amid academic recovery in classrooms nationwide, risks remain for youngest students with least instructional time during critical early years*. https://amplify.com/pdf/uploads/2022/02/mCLASS_MOY-Results_February-2022-Report.pdf

¹⁵ Education Recovery Scorecard. (2023). *2019-2022 Change in average reading achievement in the U.S.* <https://edopportunity.org/recovery/#/map/none/districts/ela1922/fr/all/3.15/30.67/-78.85/>

¹⁶ McGinty, A., Gray, A., Partee, A., Herring, W., & Soland, J. (2021). *Examining early literacy skills in the wave of COVID-19 spring 2020 school disruptions: Virginia fall 2020 statewide screening findings and implications*. https://literacy.virginia.edu/sites/g/files/jsddwu1006/files/2022-03/PALS_Fall_2020_Data_Report_5_18_final.pdf

¹⁷ PALS. (2023). Trends in Virginia students identified as at-risk for reading difficulties: Spring literacy screening, 2019-2023. https://literacy.virginia.edu/sites/g/files/jsddwu1006/files/2023-09/PALS%20Virginia%20Report_Spring%202023.pdf

The proposed degree program also provides opportunities for teachers to become eligible for the Reading Specialist endorsement in Virginia. Since 1998, the U.S. Department of Education has consistently identified reading specialist as a high-needs field, especially in schools that serve low-income students.¹⁸ In addition, newly enacted legislation in Virginia will lead to an increase in the number of reading specialists required in public schools. Currently, school divisions in Virginia are required to employ one full-time reading specialist in each elementary school.¹⁹ When the Virginia Literacy Act (VLA) takes effect in the 2024-2025 school year, this will increase to one reading specialist for every 550 students in grades K-5 and one reading specialist for every 1,100 students in grades 6-8.²⁰ The VLA also provides funding for reading intervention services, often provided by licensed reading specialists.

As a result of instituting the proposed degree program, George Mason University anticipates producing a net increase of 30 practicing teachers with greater instructional expertise in literacy, including those prepared for endorsement as reading specialists annually by program maturity in academic year 2025-2026.

The proposed degree program will enable the asserted increased production of teachers with literacy expertise by providing expanded access and clarity for marketing. Currently, students graduating from an initial teacher licensure program housed within the university's MEd in Curriculum and Instruction degree program who wish to obtain a second master's degree and potentially become eligible for endorsement as a reading specialist face difficulties as both degrees are noted as a MEd in Curriculum and Instruction. The proposed MEd in Literacy Education will have increased relevance for potential students as the degree will clearly identify the specialized knowledge and skills they will obtain through their studies. In addition, the concentration in K-12 Literacy Instruction (non-licensure) of the proposed degree program will provide coursework designed to support the literacy knowledge and instruction for K-12 teachers who intend to remain in their classrooms but are not interested in literacy leadership. Currently, there is not a degree program within the college that clearly provides this opportunity, therefore expanding access to a new pool of prospective students. The ability to market a new degree and one with greater clarity and relevance for potential students will increase access to and visibility of the program.

Duplication

Nine (9) public institutions in Virginia offer degree programs similar to the proposed degree program. James Madison University, Longwood University, Old Dominion University, Radford University, University of Mary Washington, University of Virginia, Virginia Commonwealth University, and The College of William and Mary in Virginia offer degree programs similar to the proposed degree program.

¹⁸ Cross, F. (2016). *Teacher shortage areas nationwide listing, 1990-1991 through 2016-2017*. U.S. Department of Education, Office of Postsecondary Education. <https://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf>

¹⁹ Instructional, administrative, and support personnel, Code of Virginia §22.1-253.13:2. <https://law.lis.virginia.gov/vacode/title22.1/chapter13.2/section22.1-253.13:2/>

²⁰ Student Literacy Measures, Code of Virginia §22.1-299.7:1, chapters 645 & 646. <https://lis.virginia.gov/cgi-bin/legp604.exe?231+ful+CHAP0646>

James Madison University (JMU)

JMU offers a MEd degree program in Education, concentration in Literacy Education. The degree program is offered fully face-to-face and fully online.

Longwood University (Longwood)

Longwood offers a MEd degree program in Reading, Literacy, and Learning. The degree program is offered fully online.

Old Dominion University (ODU)

ODU offers a MEd degree program in Reading. The degree program is offered fully face-to-face and fully online.

Radford University (Radford)

Radford offers a MS degree program in Literacy Education. The degree program is offered fully face-to-face and fully online.

University of Mary Washington (UMW)

UMW offers a MEd degree program in Education, concentration in Professional Development or Added Endorsement - Reading Specialist. The degree program is offered fully face-to-face.

University of Virginia (UVA)

UVA offers a MEd degree program in Curriculum and Instruction, concentration in Reading Education. The degree program is offered in a fully online format.

Virginia Commonwealth University (VCU)

VCU offers a MEd degree program in Reading. The degree program is offered fully online.

Virginia Polytechnic Institute and State University (Virginia Tech)

Virginia Tech offers a MEd degree program in Curriculum and Instruction, concentration in Reading Specialist/Literacy. The degree program is offered fully online.

The College of William and Mary in Virginia (William & Mary)

William & Mary offers a MAEd degree program in Curriculum and Instruction, concentration in Literacy Leadership. The degree program is offered fully online.

Summary of Projected Student Enrollment

State Council of Higher Education for Virginia
Summary of Projected Enrollments in Proposed Program

Year 1		Year 2		Year 3		Year 4 Target Year (2-year institutions)			Year 5 Target Year (4-year institutions)		
2024- 2025		2025 - 2026		2026 - 2027		2027 - 2028			2028 - 2029		
HDCT	FTES	HDCT	FTES	HDCT	FTES	HDCT	FTES	GRAD	HDCT	FTES	GRAD
<u>18</u>	<u>9</u>	<u>36</u>	<u>18</u>	<u>57</u>	<u>29</u>	<u>68</u>	<u>34</u>		<u>74</u>	<u>37</u>	<u>20</u>

Assumptions:

80% Retention

100 % part-time students

Part-time students: 6 credit hours per semester

Full-time students graduate in 3 years

Projected Resource Needs for the Proposed Program

Resource Needs

George Mason University and the College of Education and Human Development have the resources needed to initiate and sustain the proposed MEd degree program in Literacy Education. The College will have the faculty, staff, equipment, space, and library resources to initiate and sustain the proposed program. The following categories detail the resources required to initiate and sustain the proposed program from its initiation in the fall 2024 semester through the target year 2028-2029. Assessments of need for full-time faculty and part-time faculty are based on a ratio of 1.0 FTE of instructional effort for every 10.0 FTE of enrollment. The proposed program will therefore require a total of approximately .90 FTE to initiate, increasing to approximately 3.70 FTE by the target enrollment year 2028-2029.

Full-time Faculty

A faculty member currently teaching in the School of Education will serve as program coordinator for the proposed program. The program coordinator will be responsible for curriculum oversight, scheduling, marketing and recruitment strategy, and student satisfaction. The program coordinator will devote .50 FTE to teach core and required courses in the proposed program in its initiation year, rising to 1.00 FTE in the target enrollment year.

The proposed program will require .50 FTE of full-time faculty effort to initiate, rising to 1.00 FTE in the target enrollment year.

Part-time Faculty

Two (2) existing faculty members in the School of Education will devote .20 FTE to teach core and required courses in the proposed degree program in the initiation year, rising to .85 FTE by the target enrollment year.

The proposed program will require .40 FTE of part-time faculty effort to initiate, rising to 1.70 FTE in the target enrollment year.

Adjunct Faculty

Four (4) existing adjunct faculty members teaching in the School of Education will devote .25 FTE each to the proposed program beginning in the second year of operation through the target enrollment year.

The proposed program will require 0.0 FTE of adjunct faculty effort to initiate, rising to 1.00 FTE in the target enrollment year.

Graduate Assistants

No graduate assistants will be utilized to initiate or sustain the proposed program.

Classified Positions

No additional classified support will be utilized to initiate or sustain the proposed program.

Equipment (including computers)

No new equipment (including computers) is required to initiate or maintain the proposed degree program.

Library

George Mason University Libraries has an extensive collection of journals and publications to support the proposed degree program. As a member of the Virtual Library of Virginia (VIVA), online access to journals is available.

Telecommunications

No new telecommunications will be required to initiate or sustain the proposed program.

Space

No additional space will be required to initiate or sustain the proposed program.

Targeted Financial Aid

No targeted financial aid is required or designated to initiate and sustain the proposed degree program.

Special Tuition or Fee Charges

No special tuition or fee charges will be utilized or instituted to initiate and sustain the proposed degree program.

Other Resources

No additional School of Education resources will be utilized to initiate or sustain the proposed program.

Funds to Initiate and Operate the Degree Program

Figures provided in the table below will be compared to SCHEV funding estimates using the current base adequacy model. This comparison will serve as a reference for the estimated costs. If there are large discrepancies, SCHEV may request additional clarification to ensure the institution’s assumptions are correct, or require modifications as a condition of approval.

Note: Institutions must use the recommended student-faculty ratio when estimating FTE enrollments and required faculty FTEs.

Cost and Funding Sources to Initiate and Operate the Program			
Informational Category		Program Initiation Year 2024- 2025	Program Full Enrollment Year¹ 2026 - 2027
1.	Projected Enrollment (Headcount)	18	57
2.	Projected Enrollment (FTE)	9	29
3.	Projected Enrollment Headcount of In-State Students	16	51
4.	Projected Enrollment Headcount of Out-of-State Students	2	6
5.	Estimated Annual Tuition and E&G Fees for In-state Students in the Proposed Program	\$10,746	\$10,746
6.	Estimated Annual Tuition and E&G Fees for Out-of-State Students in the Proposed Program	\$14,346	\$14,346
7.	Projected Total Revenue from Tuition and E&G Fees Due to the Proposed Program	\$199,908	\$633,042
8.	Other Funding Sources Dedicated to the Proposed Program (e.g., grant, business entity, private sources)	\$	\$

¹ For the “Full Enrollment Year” use: for associate degrees, initiation year plus 1; for baccalaureate degrees, initiation plus 3; for masters degrees, initiation plus 2; for doctoral degrees, initiation plus 3.

ITEM NUMBER:

Master of Education (MEd) in Inclusive Early Childhood Education Degree Program Proposal

PURPOSE OF ITEM:

The MEd in Inclusive Early Childhood Education degree program proposal is in development for submission to the State Council of Higher Education for Virginia (SCHEV) for initiation in Fall 2024. Prior to SCHEV submission, Board action is required.

APPROPRIATE COMMITTEE:

Academic Programs, Diversity and University Community Committee

BRIEF NARRATIVE:

The MEd in Inclusive Early Childhood Education degree program will enhance early childhood educators' professional and pedagogical knowledge and skills in creating inclusive classroom communities that support all learners birth through age eight (8). Students will learn to engage ability-diverse and culturally diverse learners in developmentally appropriate and disciplinary specific ways. Students will learn to support children's social-emotional, cognitive, linguistic, and physical development.

Through the proposed MEd, students will acquire a understanding of critical concepts and principles of their discipline. Students will learn to provide inclusive and equitable learning experiences for children in varied early childhood education contexts. The proposed program will emphasize the students' ethical responsibility to collaborate with families, learners, and other professionals.

The curriculum for the proposed degree program has been designed to meet Virginia Department of Education (VDOE) licensure standards for Early/Primary Education PreK-3² and Special Education Early Childhood (birth-age 5 years). The proposed program also fulfills accreditation standards for initial preparation programs outlined by the Council for the Accreditation of Educator Preparation (CAEP). Coursework meets the professional standards articulated by the Council for Exceptional Children, Division of Early Childhood (DEC/CEC) and National Association for the Education of Young Children (NAEYC).

REVENUE IMPLICATIONS:

The MEd in Inclusive Early Childhood Education degree program will be revenue neutral. All courses required for the degree currently exist as part of George Mason University's MEd in Curriculum and Instruction, concentration in Early Childhood Education for Diverse Learners, and the MEd in Special Education, concentration in Early Childhood Special Education.

STAFF RECOMMENDATION:

Staff recommends Board approval.

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Description of Proposed Program

Program Background

George Mason University seeks approval for a Master of Education degree program in Inclusive Early Childhood Education. The proposed degree program will be administered by the College of Education and Human Development, School of Education. The anticipated initiation date is Fall 2024.

First opening in 1957 as the Northern Virginia branch of the University of Virginia, George Mason University was established as an independent four-year, degree-granting institution in 1972. Since its inception the University has offered teacher preparation degree programs. Currently, the College of Education and Human Development's School of Education has more than 2,500 students enrolled. Degree offerings in teacher preparation include undergraduate and graduate pathways to more than 30 different licensure and endorsement areas in Virginia.

To identify the proposed MEd degree program as appropriate for submission, the College of Education and Human Development examined degree programs that would address critical shortages in teaching endorsement areas in Virginia as identified by the Virginia Department of Education (VDOE).¹ Data from market studies, professional organizations, and considerations of legislative changes were also used to determine new degree programs. The proposed MEd degree program in Inclusive Early Childhood Education provides pathways for licensure in Early Primary/PreK-Third Grade and Early Childhood Special Education (Birth through Age 5). The proposed degree program will address the top two 2023-2024 critical shortage teaching endorsement areas identified by the Virginia Department of Education: Special Education, PK-12 and Elementary Education, PK-6 areas.² Critical shortages have consistently been identified for these teaching endorsement areas since the 2003-2004 school year.

Currently, George Mason University offers two pathways to licensure for Early Childhood Education: 1) MEd in Curriculum and Instruction with a concentration in Early Childhood Education, and 2) an MEd in Special Education with a concentration in Early Childhood Special Education. The proposed program will pull the two existing concentrations into a discrete MEd degree program to address the demand for educators in inclusive settings.

Delivery Format

The proposed MEd in Inclusive Early Childhood Education will be offered in both the traditional, face-to-face and fully online delivery formats.

George Mason University possesses the resources, support, and technology necessary for online degree programs. The online courses are supported by a personal support center through the

¹ Virginia Department of Education. (n.d.) *Commonwealth of Virginia critical shortage teaching endorsement areas for 2023-2024 school year*. <https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/education-workforce-data-reports>. www.doe.virginia.gov.docx (live.com)

² Virginia Department of Education. (2023). Early Childhood Special Education (ECSE) approved program leads collaborative meeting. Virtual. www.doe.virginia.gov.docx (live.com)

university's primary learning management system, Blackboard. Blackboard is centrally supported by the university's Information Technology Services (ITS), which provides technical assistance, training, and system administration 24 hours a day every day. ITS also supports a portfolio of academic technology applications for use in online courses. The ITS Learning Support Center and the Stearns Center for Teaching and Learning provide training to faculty in both the use of the Blackboard software and in the design of courses.

All students will have access to online resources through security-protected access credentials. Support services for students will include access to online systems such as electronic mail, online library resources, PatriotWeb (a self-service site for students to manage their administrative records and accounts), financial aid, academic services, career services, disability services, and the University Bookstore. Computer support is available 24 hours a day every day. Phone support is available every day at hours posted on the ITS Support Center website. For the face-to-face delivery of courses, George Mason University has adequate classroom space and associated equipment to successfully deliver the proposed degree program.

Accreditation

The proposed MEd degree program in Inclusive Early Childhood Education will be accredited by the Council for the Accreditation of Educator Preparation (CAEP). CAEP is a professional accreditor for education preparation providers. The CAEP accreditation process ensures educator preparation providers whose programs lead to certification, licensure, or endorsement meet demanding standards for the preparation of educators and other professional school personnel. Through standards that focus on systematic assessment of candidate learning, CAEP encourages accredited institutions to engage in continuous improvement based on accurate and consistent data.

George Mason University's existing Master of Education (MEd) in Curriculum and Instruction degree program with a concentration in Early Childhood Education, and the existing Master of Education (MEd) in Special Education with a concentration in Early Childhood Special Education are presently accredited by CAEP through Spring 2026. George Mason University will comply with the following re-accreditation timeline:

February 2025	Submit self-study document
October 2025	Site visit by accreditation team
April 2026	Decision rendered about accreditation status

State Licensing Agency Virginia Department of Education

The proposed MEd in Inclusive Early Childhood Education is required to meet the biennial measures prescribed by the Virginia State Board of Education. The Virginia Department of Education provides detailed and specific information for meeting the standards and competencies expected of Virginia's educators in their respective disciplines. The requirements are extensive, and all educator preparation programs must meet all the licensure regulations, professional

studies, and endorsement requirements for each discipline/teaching area to be approved to offer Educator Preparation Programs.

The existing Master of Education in Curriculum and Instruction, concentration in Early Childhood Education for Diverse Learners (Licensure) and Master of Education in Special Education, concentration in Early Childhood Special Education (Licensure) are designed to meet the Virginia Department of Education standards and regulations. In 2021, George Mason University submitted its biennial report for 2021-2023, which evaluates all educator preparation programs offered by the University. The Virginia Department of Education approved the existing concentrations in Early Childhood Education for Diverse Learners (Licensure) and Early Childhood Special Education (Licensure) in this report. The next biennial report will cover 2023-2025 and will be submitted to the Virginia Department of Education in Fall 2025.

Admission Criteria

All students will be required to fulfill the graduate admission requirements of the University. Applicants must:

- Complete an online Application for Graduate Study.
- Pay a nonrefundable application fee or receive a fee waiver.
- Have earned a baccalaureate from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency, or international equivalent, with verified official transcripts.
- Have a minimum 3.00 GPA on a 4.00 scale in baccalaureate study.
- Submit official transcripts from all institutions attended for each program applied to unless the programs are in the same college or school.
- Submit a goals statement.
- Submit two letters of recommendation as required by the program.
- Submit an application for Virginia In-State Tuition Rates, if claiming entitlement to these rates.

The College of Education and Human Development will require applicants to the proposed degree program to satisfy additional requirements. Applicants must:

- Submit a resume.

Applicants who have not earned a baccalaureate or graduate degree in the U.S. must submit:

- Official English translations of all diplomas, certificates, and transcripts that are not already in English. Also, documents from foreign institutions must meet the university's guidelines for international transcript submission.
- Proof of English proficiency: either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) academic exam, the Duolingo English test, or the Pearson Tests of English (PTE) meeting the minimum requirements:
 - TOEFL: 88 points total and a minimum of 20 points in each section
 - IELTS: 7.0 total band score and 6.5 each subsection
 - Duolingo English Test: minimum score of 120
 - PTE: 67 overall score

Curriculum

The proposed MEd in Inclusive Early Childhood Education degree program will require 30 to 33 credit hours. A capstone course is required. An internship can fulfill capstone requirements.

The curriculum for the proposed degree program has been designed to meet Virginia Department of Education (VDOE) licensure standards. The core courses provide students with foundational knowledge and field experiences in inclusive early childhood education. Core courses emphasize language and literacy development, inclusive curriculum practices, engaging families, and assessment practices in early intervention and early childhood classrooms (birth through third grade).

Concentrations provide students with the specialized knowledge for Early/Primary Education PreK-3 or Special Education Early Childhood (birth-age 5 years). The concentration in Early/Primary Education PreK-3 extends foundational core coursework, with focused methods-related coursework in literacy, social studies, science, and math. The concentration in Special Education Early Childhood (birth-age 5 years) extends foundational coursework with specialized knowledge in special education law, early intervention and collaboration practices, medical aspects for children with disabilities, and early language and literacy development for children accessing early intervention services.

The proposed program also fulfills accreditation standards for initial preparation programs outlined by the Council for the Accreditation of Educator Preparation (CAEP). Coursework meets the professional standards articulated by the Council for Exceptional Children, Division of Early Childhood (DEC/CEC) and National Association for the Education of Young Children (NAEYC). Students will select from the optional teacher licensure concentrations (i.e., Early Childhood Special Education, Early/Primary Education PreK-3) or a non-licensure sequence.

The curriculum of the proposed degree program focuses on preparing and enhancing early childhood educators' professional and pedagogical knowledge and skill in creating inclusive classroom communities. The coursework integrates evidence-based recommended practices to support all learners accessing educational services birth through age eight. Students will learn to engage diverse learners in developmentally appropriate and disciplinary specific ways to support children's social-emotional, cognitive, linguistic, and physical development. Students will develop pedagogical and assessment knowledge and skills to provide inclusive and equitable learning experiences for children in early childhood education contexts. The curriculum emphasizes the students' responsibility to collaborate with families, learners, and other professionals to provide effective instructional experiences for ability-diverse and culturally diverse students.

Program Requirements

Core Courses: 15 credits

ECED 502: Foundations of Language and Literacy for Diverse Young Learners (Birth-Age 5) (3 credits)

ECED 503: Inclusive Curriculum for Young Learners: Planning Instruction and Guidance (3 credits)

ECED 504: Engaging Families of Diverse Young Learners (3 credits)

ECED 511: Assessment of Diverse Young Learners (3 credits)

Capstone Requirement

ECED 685: Applied and Teacher Research in Early Childhood Education (3 credits)

or ECED 788: Internship in Early Childhood Education Prekindergarten-Third Grade (3 credits)

or ECED 789: Internship in Early Childhood Special Education Birth-Five (3 credits)

Concentration Areas: 15-18 credits

Early Childhood Special Education (Birth to Age 5) (Licensure): 18 credits

This concentration area fulfills Virginia licensure requirements for students seeking initial licensure in Special Education Early Childhood (birth through age 5).

ECED 501: Developmental Pathways of Diverse Learners, Birth-Adolescence (3 credits)

ECED 505: Introduction to Early Childhood Special Education (3 credits)

ECED 506: Medical and Developmental Aspects of Disabilities of Diverse Young Learners (3 credits)

ECED 522: Developing Language, Literacy, and Communication of Diverse Infants and Toddlers (3 credits)

ECED 523: Early Intervention for Infants & Toddlers with Disabilities: Collaborative & Consultative Approaches (3 credits)

ECED 781: Seminar in Early Childhood Education (3 credits)

Early/Primary Education PreK-3 (Licensure): 18 credits

This concentration area fulfills Virginia licensure requirements for students seeking initial licensure in Early/Primary Education PreK-3.

ECED 501: Developmental Pathways of Diverse Learners, Birth-Adolescence (3 credits)

ECED 512: Language and Literacy Assessment and Instruction for Diverse Primary Grade Learners (3 credits)

ECED 513: Integrating Social Studies Across the Content Areas for Diverse Young Learners (3 credits)

ECED 515: Mathematics for Diverse Young Learners (3 credits)

ECED 516: Science for Diverse Young Learners (3 credits)

ECED 781: Seminar in Early Childhood Education (3 credits)

No Concentration: 15 credits

This concentration area serves students who already possess a license in education (e.g., early/primary education, early childhood special education, elementary education, special education) and are seeking additional expertise working with young learners. This pathway is also appropriate for students who possess an undergraduate degree outside of the education fields

and are seeking to gain expertise working with young learners and families in non-classroom contexts.

Restricted Electives

Students who do not select a concentration select 15 credits from a list of courses. With approval of an academic advisor, students may take up to 12 credits out of the ECED program.

ECED 501: Developmental Pathways of Diverse Learners, Birth-Adolescence (3 credits)

ECED 505: Introduction to Early Childhood Special Education (3 credits)

ECED 506: Medical and Developmental Aspects of Disabilities of Diverse Young Learners (3 credits)

ECED 512: Language and Literacy Assessment and Instruction for Diverse Primary Grade Learners (3 credits)

ECED 513: Integrating Social Studies Across the Content Areas for Diverse Young Learners (3 credits)

ECED 515: Mathematics for Diverse Young Learners (3 credits)

ECED 516: Science for Diverse Young Learners (3 credits)

ECED 522: Developing Language, Literacy, and Communication of Diverse Infants and Toddlers (3 credits)

ECED 523: Early Intervention for Infants & Toddlers with Disabilities: Collaborative & Consultative Approaches (3 credits)

ECED 601: Frameworks for Early Childhood Education (3 credits)

ECED 621: Teacher Well-Being in Early Childhood Education (3 credits)

ECED 623: Creating Disciplinary Project-Based Learning Environments (3 credits)

ECED 624: Building Strengths-Based Reciprocal Partnerships with Families of Young Children (3 credits)

ECED 691: Policy Perspectives in Early Childhood Education (3 credits)

Total credit hours: 30 to 33 credits

Capstone Requirement

Students in the MED concentrations leading to licensure are required to take a supervised internship course in which they will complete a minimum of 10 weeks supervised experience. Based on concentration area students will complete an internship in an Early Childhood Special Education birth to five context (ECED 789) or Early/Primary PreK-3 context (ECED 788), per VDOE requirements. Students must document a minimum of 300 clock hours of direct teaching experience with students in endorsement area. Throughout the internship, the student will be evaluated based on observations of instruction and assignments using standardized rubrics. Students will be required to maintain a log to track their instructional hours. Students will be assessed on completion of online modules, maintaining a reflection journal, formal internship meetings, and observations by the University Supervisor. If students do not successfully complete all hours or assignments, they may be required to repeat the internship. If a student fails the internship course, students will be given an opportunity to retake the course at an alternative location.

Students who do not select a concentration will complete a field-based research course (ECED 685) in which they will be required to formulate and conduct an action research project related to the contextual field in which they work (e.g., early care and education centers, early intervention, primary grades). Student work will culminate in a research symposium at the conclusion of the semester.

See Appendix A for a Sample Plans of Study.

See Appendix B for Course Descriptions.

Student Learning Assessment

Students who complete the proposed MEd in Inclusive Early Childhood Education degree program will possess the required expertise to work in a variety of early childhood contexts serving diverse young learners and families. Assessment of student learning in the proposed degree program will be conducted through analysis of systematic metrics specifically designed to measure student performance. Student assessment outcomes are aligned with InTASC Teaching Standards and Learning Progressions for Teachers,³ NAEYC professional standards,⁴ and DEC/CEC⁵ professional standards.

Student learning will be assessed throughout the program through a variety of evaluative assessment experiences. Assessment measures will include but not be limited to course assignments, activities, and an array of applied projects designed to facilitate the achievement of learning outcomes. The capstone course options are completed at or near the end of a student's program of study. Capstone course opportunities are designed to meet students' individual professional goals through the completion of an internship experience, a classroom, school, or community-based action research project, the development of a policy brief, or the implementation of a professional development seminars for early childhood professionals or families.

Internship capstones meet licensure requirements articulated by the VDOE. Internships are scaffolded clinical experiences in the setting aligned with the targeted licensure area (i.e., Early/Primary Education PreK-3 or Early Childhood Special Education (Birth to Age 5)). In internship students learn the roles and responsibilities of an educator by demonstrating competence in all aspects of instruction and the provision of services. Students in internship work under the supervision of a qualified, school-based mentor teacher and a university-based internship supervisor. During the internship experience, students complete weekly reports accounting for direct teaching hours and maintain a performance portfolio demonstrating mastery of CAEP initial teacher preparation accreditation standards. University-based capstone courses, focused on educational policy, research, or one's role as a professional leader in a school community, are completed at the end of the MEd program. Capstone courses require

³ Council of Chief State School Officers. 2013. InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0. https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf

⁴ National Association for the Education of Young Children (NAEYC). (2021). *Professional standards and competencies for early childhood educators*. <https://www.naeyc.org/accreditation/higher-ed/standards>

⁵ Division for Early Childhood of the Council for Exceptional Children. (2020). *The early interventionist/early childhood special educator standards*. <https://www.dec-sped.org/ei-ecse-standards>

students to integrate learning across all coursework and apply it to or within an educational setting. Students use critical thinking and problem-solving skills to approach classroom or community problems early educators are confronting. Capstone courses position students as life-long learners and advocates for inclusive educational practices and encourage longevity and commitment to the field of early childhood education. successful careers in education.

Each of the program assessment structures differs based on their need to address both college-wide and program specific standards and accrediting agencies. The specific assessments germane to each program are detailed below.

Learning Outcomes

Grounded in InTASC standards graduates will demonstrate knowledge and skill in four general categories (1) The Learner and Learning, (2) Content, (3) Instructional Practice, and (4) Professional Responsibility. These outcomes align with licensure requirements articulated by the VDOE for Early/Primary Education PreK-3 and Special Education Early Childhood (Birth to Age 5).

Students will be able to:

- Demonstrate knowledge of developmentally appropriate pedagogies and recommended instructional practices to create inclusive learning environments and experiences that honor diverse cultures and individual learning differences to meet high standards and promote learners' cognitive, linguistic, social, emotional, and physical development.
- Demonstrate an ability to apply deep and flexible content area knowledge in real world inclusive early education contexts to assure learners achieve mastery of targeted developmentally appropriate content knowledge and skills.
- Design, implement, and refine instructional practices (including assessment practices, and the integration of diverse instructional strategies) to maximize and individualize learning.
- Model practices demonstrating professional responsibility to include engaging in cycles of continuous self-improvement, collaborative professional environments with colleagues, learners, families, school professionals, and community members, and ethical behavior to enact change in practice.

Each concentration has additional learning outcomes or competencies that students who select the concentration area should acquire.

Early Childhood Special Education (Birth to Age 5) (Licensure)

Students in this concentration will be able to meet the following learning outcomes:

- Demonstrate knowledge about young children with disabilities within the context of human growth and development and learning expectations in the preschool years including an understanding of historical factors and legislation affecting service delivery.
- Develop strategies for guiding young children's behavior in a community of learners inclusive of children from diverse backgrounds.
- Demonstrate an understanding of medical and developmental aspects of children with disabilities, birth to age 5 including the etiology, symptomatology, and management of neuromotor and developmental disabilities and the adaptive strategies and assistive technology devices that support learners.

- Design instructional strategies, resources, and technologies, including assistive technologies, to develop language, literacy, and communication of diverse infants and toddlers with language delays and disorders that leverage adult-child interactions and the role of the family in children’s language, literacy, and communication development.
- Implement key aspects of consultation, interdisciplinary collaboration, service coordination, and family-centered services to support young learners.

Early/Primary Education PreK-3 (Licensure)

Students in this concentration will be able to meet the following learning outcomes:

- Demonstrate an ability to assess reading, writing, and the language arts of diverse young learners in primary grade classrooms and develop instructional practices that promote young children’s language and literacy development.
- Develop strategies for guiding young children’s behavior in a community of learners inclusive of children from diverse backgrounds.
- Design and develop curriculum, assessment, and instructional practices related to social studies content for young children with diverse abilities and cultural, linguistic, and socio-economic backgrounds.
- Design and develop curriculum, assessment, and instructional practices related to mathematics content for young children with diverse abilities and cultural, linguistic, and socio-economic backgrounds.
- Design and develop curriculum, assessment, and instructional practices related to science for young children with diverse abilities and cultural, linguistic, and socio-economic backgrounds.

Relation to Existing George Mason University Degree Programs

George Mason University’s College of Education and Human Development offers a Master of Education (MEd) degree program in Curriculum and Instruction with a concentration in Early Childhood Education, and a Master of Education (MEd) in Special Education degree program with a concentration in Early Childhood Special Education. Currently, all students seeking licensure as an early childhood educator complete one of these concentrations. In addition, students can elect to complete non-licensure pathways. If the proposed MEd in Inclusive Early Childhood Education is approved, prospective students seeking licensure as an early childhood educator or seeking to develop expertise in the field will be admitted directly into the proposed MEd in Inclusive Early Childhood rather than the MEd in Curriculum and Instruction or the MEd in Special Education. The current concentrations related to early childhood education in these degrees will be discontinued.

Because the proposed degree program will draw from the same pool of prospective students as the current degree programs, there is no anticipated overall negative impact on student enrollment. Resources currently used to support the operation of the MEd in Curriculum and Instruction, concentration in Early Childhood Education and the MEd in Special Education, concentration in Early Childhood Special Education will be reallocated to support the initiation and operation of the proposed MEd in Inclusive Early Childhood Education.

Justification for the Proposed Program

Response to Current Needs (Specific Demand)

The Commonwealth of Virginia and the nation as a whole is experiencing a severe and growing shortage of qualified teachers. The shortage is at a crisis level especially in high-poverty and diverse school divisions. In Virginia, there were 3573 teacher vacancies for the 2022-2023 school year.⁶ In response, Governor Glenn Youngkin signed Executive Directive 3, charging the field to: 1) Reduce barriers for qualified individuals to enter the profession, 2) Increase the number of candidates eligible to fill public school divisions' hard-to-staff positions, and, 3) Strengthen strategies to recruit and retain a diverse, highly-qualified educator workforce.⁷

The Virginia Department of Education has also identified 10 critical shortage areas (i.e., those disciplinary areas for which school divisions face the largest difficulty filling positions with qualified educators). Special Education and Elementary PreK-6 have been the top two areas on the list since 2010-2011.⁸

At the same time that policy makers, educators, and researchers have focused on the teacher shortage, there have been national calls for action to transform the early childhood workforce.⁹ The call has led to increased expectations that teachers in early childhood education will hold a minimum of a bachelor's degree. This suggests that an increasing number of early childhood educators will need degrees leading to licensure in EPK3 and ECSE.

As a result of instituting the proposed degree program, George Mason University anticipates producing a net increase of 20 teachers eligible for Early/Primary Education PreK-3 or Early Childhood Special Education (birth-age 5 years) Virginia licensure annually by program maturity in academic year 2025-2026.

The proposed degree program will enable the asserted increased production of teachers with literacy expertise by providing expanded access and clarity for marketing. First, offering program pathways that can be completed fully online supports prospective teachers' access to coursework that leads to licensure. Bringing together both early childhood licensure pathways into a single degree will streamline the endorsement process for teachers who hold existing professional teaching credentials by allowing teachers to complete licensure specific coursework required for the completion of credentials in high-need licensure areas in Early Childhood

⁶ Virginia Department of Education. (n.d.). Turning the tide: A strategic plan to address the educator shortage. Retrieved from: <https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/turning-the-tide>

⁷ Commonwealth of Virginia Executive Department (2022). Executive Directive Number Three. Retrieved from: <https://www.governor.virginia.gov/media/governorviriniagov/governor-of-virginia/pdf/ed/ED-3---Addressing-Teacher-Shortages-in-Virginia-Schools.pdf>

⁸ Virginia Department of Education. (2022). *Education workforce data & reports*. Retrieved from: <https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/education-workforce-data-reports>

⁹ National Academies of Sciences, Engineering, and Medicine. (2015). *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*. Washington, DC: The National Academies Press.

<https://doi.org/10.17226/19401>. Power to the Profession. (2020). Decision cycles 7 + 8. Retrieved from: https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/initiatives/power_to_the_profession_7-8_final_for_web.pdf

Special Education and Early/Primary Education PreK-3. The anticipated development of bachelor's to accelerated master's pathways for students studying early childhood at the baccalaureate level will help to bridge students from undergraduate to graduate work and allow for a wider pool of prospective students. The ability to market a new degree and one with greater clarity and relevance for potential students will increase access to and visibility of the program.

Duplication

Five public institutions in Virginia offer degree programs similar to the proposed degree program. James Madison University, Norfolk State University, Old Dominion University, Radford University, and Virginia Commonwealth University offer degree programs similar to the proposed degree program.

James Madison University (JMU)

JMU has offered a MAT in Education, concentration in Inclusive Early Childhood Education (Birth-Grade 3) and a MAT in Special Education, concentration in Early Childhood Special Education. The university catalog notes that the MAT degrees will no longer accept applications after May 2023. The degree programs have been offered online and fully face to face.

Old Dominion University (ODU)

ODU offers a MEd degree in Early Childhood Education, concentration in Initial Licensure-PreK-3 and a MEd in Special Education, concentration in Early Childhood Special Education. The degree programs are offered online and fully face to face.

Radford University (Radford)

Radford offers a MS in Special Education, concentration in Early Childhood Special Education. This program is offered online.

Virginia Commonwealth University (VCU)

VCU offers a MEd in Special Education, concentration in Early Childhood. The degree program is offered face to face.

Summary of Projected Student Enrollment

State Council of Higher Education for Virginia
Summary of Projected Enrollments in Proposed Program

Year 1		Year 2			Year 3			Year 4			Year 5 Target Year (4-year institutions)		
2024 - 2025		2025 - 2026			2026 - 2027			2027- 2028			2028 - 2029		
HDCT	FTES	HDCT	FTES	GRAD	HDCT	FTES	GRAD	HDCT	FTES	GRAD	HDCT	FTES	GRAD
50	36	115	83	36	139	101	58	141	102	58	141	102	60

Assumptions:

80 % Retention

90 % Full-time students 10 % part-time students

Full-time students: 9 credit hours per semester

Part-time students: 6 credit hours per semester

Full-time students graduate in 2 years

Part-time students graduate in 3 years

Projected Resource Needs for the Proposed Program

Resource Needs

George Mason University and the College of Education and Human Development have the resources needed to transition and sustain the proposed MEd in Inclusive Early Childhood Education. The following categories detail the resources required to launch and sustain the proposed program from its initiation in the Fall 2024 semester through the target year 2028-2029. Assessments of need for full-time faculty and adjunct faculty are based on the following ratio of student enrollment to faculty effort: 10 FTE of enrollment requires one FTE faculty for instruction. The proposed program will therefore require a total of 3.60 FTE to launch increasing to 10.25 FTE by the target year of 2028-2029.

Full-time Faculty

A faculty member currently teaching in the School of Education will serve as program coordinator for the proposed program. The program coordinator will be responsible for curriculum oversight, scheduling, marketing and recruitment strategy, and student satisfaction. The program coordinator will devote .60 FTE to teach core and required courses in the proposed program from the initiation year through the target enrollment year.

Four (4) faculty members currently teaching in the School of Education will devote .75 FTE each to teach required courses in the proposed program in the initiation year, rising to 1.0 FTE each by the target enrollment year.

One (1) new faculty member will be hired as an Assistant Professor in the third year of the proposed program's operation. An additional new faculty member will be hired as an Assistant Professor in the fourth year of the proposed program's operation. Salary for the new hires is expected to be \$80,000 with an additional \$25,680 in fringe benefits for a total cost of \$105,680 each. Total expense for the two (2) new hires will be \$160,000 in salaries with \$51,360 in fringe benefits for a total cost of \$211,360 by the target enrollment year. Each of the new faculty hires will devote 1.00 FTE each to the proposed program through the target enrollment year.

The proposed program will require 3.60 FTE of full-time faculty effort to initiate, rising to 6.60 FTE by the target enrollment year.

Part-time Faculty

Four (4) existing faculty members in the School of Education will devote .25 FTE each to teach required courses beginning in the second year of the program's operation through the target enrollment year.

The proposed program will require 0.0 FTE of part-time faculty effort to initiate, rising to 1.00 FTE by the target enrollment year.

Adjunct Faculty

Eight (8) adjunct faculty members teaching in the School of Education will devote .33 FTE each to teach required courses beginning in the second year of the program's operation through the target enrollment year.

The proposed program will require 0.0 FTE of adjunct faculty effort to initiate, rising to approximately 2.65 FTE by the target enrollment year.

Classified Positions

No additional classified support will be utilized to initiate or sustain the proposed program.

Equipment (including computers)

It is anticipated that \$2,500 in computer equipment will be required for each of the two (2) new hires for a total cost of \$5,000 in computer equipment by the target enrollment year.

Library

George Mason University Libraries has an extensive collection of journals and publications to support the proposed degree program. As a member of the Virtual Library of Virginia (VIVA), online access to journals is available.

Telecommunications

No new telecommunications will be required to initiate or sustain the proposed program. Telecommunications are available and will be used for the new hires.

Space

No additional space will be required to initiate or sustain the proposed program. Existing space in Thompson Hall on the main campus in Fairfax, VA, is available and will be utilized by the two (2) new hires.

Targeted Financial Aid

No targeted financial aid is required or designated to initiate and sustain the proposed degree program.

Special Tuition or Fee Charges

No special tuition or fee charges will be utilized or instituted to initiate and sustain the proposed degree program.

Other Resources

No additional College of Education and Human Development resources will be utilized to initiate or sustain the proposed program.

Funds to Initiate and Operate the Degree Program

Figures provided in the table below will be compared to SCHEV funding estimates using the current base adequacy model. This comparison will serve as a reference for the estimated costs. If there are large discrepancies, SCHEV may request additional clarification to ensure the institution’s assumptions are correct, or require modifications as a condition of approval.

Note: Institutions must use the recommended student-faculty ratio when estimating FTE enrollments and required faculty FTEs.

Cost and Funding Sources to Initiate and Operate the Program			
Informational Category		Program Initiation Year 2024 - 2025	Program Full Enrollment Year¹ 2026 - 2027
1.	Projected Enrollment (Headcount)	50	139
2.	Projected Enrollment (FTE)	36	101
3.	Projected Enrollment Headcount of In-State Students	45	125
4.	Projected Enrollment Headcount of Out-of-State Students	5	14
5.	Estimated Annual Tuition and E&G Fees for In-state Students in the Proposed Program	\$10,746	\$10,746
6.	Estimated Annual Tuition and E&G Fees for Out-of-State Students in the Proposed Program	\$14,346	\$14,346
7.	Projected Total Revenue from Tuition and E&G Fees Due to the Proposed Program	\$555,300	\$1,543,734
8.	Other Funding Sources Dedicated to the Proposed Program (e.g., grant, business entity, private sources)	\$	\$

¹ For the “Full Enrollment Year” use: for associate degrees, initiation year plus 1; for baccalaureate degrees, initiation plus 3; for masters degrees, initiation plus 2; for doctoral degrees, initiation plus 3.

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Description of Proposed Program

Program Background

George Mason University seeks approval for a Bachelor of Science in Education (BSEd) degree program in Secondary Education. The proposed degree program will be administered by the College of Education and Human Development, School of Education. The anticipated initiation date is Fall 2024.

First opening in 1957 as the Northern Virginia branch of the University of Virginia, George Mason University was established as an independent four-year, degree-granting institution in 1972. Since its inception the University has offered teacher preparation degree programs and currently has more than 3,000 students enrolled in the School of Education within the College of Education and Human Development. Current degree offerings in teacher preparation include undergraduate and graduate pathways to more than 30 different licensure and endorsement areas in Virginia.

To identify proposed degree programs, the College of Education and Human Development examined degree programs that would address critical shortages in teaching endorsement areas in Virginia as identified by the Virginia Department of Education (VDOE).¹ Data from market studies, professional organizations, and considerations of legislative changes were also used to determine new degree programs. The specific inclusion of the proposed BSEd in Secondary Education addresses teaching endorsement areas currently identified as high need by the Virginia Department of Education (VDOE) including computer science (secondary), English (secondary), and history and social science (secondary). It is expected that additional areas of concentration and high need in secondary science (biology, chemistry, mathematics, Earth science, physics) will be added to this degree program.

Accreditation

According to the Virginia Administrative Code 8VAC20-543-20, all Virginia educator preparation programs are required to obtain and maintain national accreditation from the Council for the Accreditation of Educator Preparation (CAEP). CAEP serves to “advance equity and excellence in educator preparation through evidence-based accreditation that assures quality and supports continuous improvement to strengthen P-12 student learning.”

The timeline for the next CAEP re-accreditation of the educator preparation programs offered at George Mason University is as follows:

February 2025	Programs submit self-study to CAEP
October 2025	CAEP accreditation team conducts site visit
April 2026	CAEP renders decision for re-accreditation status

¹ Virginia Department of Education. (n.d.) *Commonwealth of Virginia critical shortage teaching endorsement areas for 2023-2024 school year*. <https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/education-workforce-data-reports>

The proposed degree program and all evidence of meeting standards will be included in the next CAEP re-accreditation. CAEP requires an Annual Report to confirm program compliance and updates. The proposed degree program will be included in this submission.

State Licensing Agency Virginia Department of Education

The proposed BSEd in Secondary Education will be required to meet the accountability measures prescribed by the Virginia State Board of Education. The Virginia Department of Education (VDOE) provides detailed and specific information for meeting the accountability measures expected of Virginia's educators in the respective disciplines. The requirements are extensive, and all educator preparation programs must meet all of the licensure regulations, professional studies, and endorsement requirements for each discipline/teaching area to be approved to offer Educator Preparation Programs.

The proposed BSEd in Secondary Education with subject area concentrations in Computer Science, English, and History and Social Science is designed to meet all Virginia Department of Education regulations. George Mason University submitted its biennial reports for 2017-2019, 2019-2021, and 2021-2023 which evaluated all educator preparation programs offered by the University. The Virginia Department of Education approved all George Mason University educator preparation programs. The university will submit a 2023-2025 biennial report to the VDOE which will include applicable complete information for the proposed degree program.

Curriculum

The proposed BS degree program in Secondary Education will require 120 credit hours. An internship course is required.

The curriculum for the proposed programs is mapped to meet Virginia Department of Education (VDOE) content area endorsement requirements, Council for the Accreditation of Educator Preparation (CAEP) requirements, and the teacher education pedagogical courses and field experiences necessary for becoming a highly effective educator.

The proposed degree program in Secondary Education (SEED) is a 120-credit program that will prepare teacher candidates for secondary teaching positions in grades 6 through 12, in the subject areas of English, history/social science, and computer science. Through clinical experiences, the program will provide undergraduate teacher candidates with the knowledge, skills, and abilities necessary for becoming exemplary new teachers in accordance with the Interstate Teacher Assessment and Support Consortium (INTASC) standards. Upon successful completion of the program, teacher candidates will be eligible for licensure in their respective subject area in Secondary Education in the Commonwealth of Virginia. The proposed program in Secondary Education will utilize these standards to design and integrate university-based and school-based practical experiences to prepare graduates to work with diverse learners in grade 6-12 classrooms.

In addition, the proposed program in Secondary Education creates opportunities for expansion of the College of Education and Human Development's clinical, field-based

approach to teacher education in partnership with the 20 secondary schools in its partnership network. This clinical approach is built upon a mutually beneficial school and program partnership that impacts teacher preparation, grade 6-12 student learning, and teacher and university faculty professional development. Pending completion of prerequisite requirements, students choosing the degree program in secondary education may select one of the optional licensure concentrations in Computer Science, English, or History/Social Science.

Internship Requirement

Students are required to complete an intensive, supervised clinical experience (internship) in a Computer Science, English, or History and Social Science (grade 6-12) classroom corresponding to concentration endorsement area in an approved public school during the fall and/or spring semester of their senior year. The internship can be completed either in a full-time 16-week experience in one semester or a half-time 32-week experience in two consecutive semesters. The internship allows students (“interns”) to apply knowledge and skills obtained throughout their coursework. Interns complete a minimum of 150 hours of indirect teaching and a minimum of 150 hours of direct teaching.

During the internship experience, students are required to complete and submit eight formal lesson plans; participate in eight pre-observation conferences; be observed and evaluated in their internship classrooms eight times; participate in eight post-observation conferences; participate in start-of-the semester, mid-semester, and end-of-semester triad conferences with their mentor teacher and university supervisor/clinical coach; complete weekly reflections and have these reviewed/assessed by their mentor teacher, university supervisor/clinical coach, and internship seminar instructor; and complete mid-semester and end-of-semester self-evaluations and review mid-semester and end-of-semester evaluations completed by their mentor teacher and university supervisor/clinical coach.

All of these assignments (lesson plans, conferences, observations, reflections, and evaluations) focus on at least one of the INTASC standards, with observations expected to address a minimum three standards, and mid-semester, self-, and end-of-semester evaluations assessing interns on all 10 standards. Interns are required to demonstrate proficiency with all 10 standards by the conclusion of the internship, with evidenced identified by interns, mentor teachers, and university supervisors/clinical coaches. University supervisors/clinical coaches complete the final evaluations of interns and serve as the instructor of record. If a student does not successfully complete all hours or assignments or is not assessed as successfully addressing all INTASC standards or as otherwise not ready to be licensed, the student will be required to repeat the internship. If a student fails the internship course, they will be required to retake the course at an alternative location, with a new mentor teacher and university supervisor/clinical coach.

New courses are indicated with an asterisk (*).

Program Requirements

Mason Core (General Education) Requirements: 37 credits

Written Communication: Lower and Upper Divisions (6 credits)

Oral Communication (3 credits)

Literature (3 credits)
Quantitative Reasoning (3 credits)
Arts (3 credits)
Western Civilization/World History (3 credits)
Natural Science (7 credits)
Global Understanding (3 credits)
Information Technology and Computing (3 credits)
Social and Behavioral Science (3 credits)
Mason Core Writing-Intensive and Synthesis/Capstone (3 credits)**

Core Courses: 24 credits

EDRD 419: Literacy Across the Disciplines (3 credits)
SEED 407: Assessing Learning and Teaching in the Secondary Classroom (3 credits)*
SEED 408: Creating Advocacy with Adolescent Learners (3 credits)*
SEED 409: Perspectives on Extraordinary Teaching (3 credits)*
SEED 422: Foundations of Secondary Education (3 credits)
SEED 440: Human Development, Learning, and Teaching (3 credits)
SEED 477: Studying Teacher Impact on Student Learning (3 credits)*
SEED 478: Implementing Teacher Impact on Student Learning (3 credits)*

Concentration Areas: 51-66 credits

Secondary Education - Computer Science (57 credits)

This concentration offers coursework meeting the regulations of the Virginia Department of Education for licensure to teach at the secondary level with an endorsement in Computer Science.

CS 112: Introduction to Computer Programming (4 credits) †
CS 211: Object-Oriented Programming (3 credits)
CS 262: Introduction to Low-Level Programming (3 credits)
CS 310: Data Structures (3 credits)
CS 321: Software Engineering (3 credits)
CS 330: Formal Methods and Models (3 credits)
CS 483: Analysis of Algorithms (3 credits)
ENGH 101: Composition (3 credits)†
MATH 113: Analytic Geometry and Calculus I (4 credits) †
MATH 114: Analytic Geometry and Calculus II (4 credits)
MATH 125: Discrete Mathematics I (3 credits) †
MATH 203: Linear Algebra (3 credits)
SEED 466: Teaching Computer Science in Secondary School (3 credits)
SEED 476: Advanced Methods of Teaching Computer Science in the Secondary School (3 credits)
SEED 496: Internship: Secondary Education Computer Science (9 credits)
STAT 250: Introductory Statistics I (3 credits)
or STAT 344: Probability and Statistics for Engineers and Scientists I (3 credits)

Secondary Education - English (51 credits)

This concentration offers coursework meeting the regulations of the Virginia Department of Education for licensure to teach at the secondary level with an endorsement in English.

Required Courses: 36 credits

COMM 100: Public Speaking (3 credits) †

or COMM 101: Fundamentals of Communication (3 credits) †

or INTS 202: Public Speaking and Critical Thinking Skills (3 credits) †

ENGH 101: Composition (3 credits) †

ENGH 302: Advanced Composition (3 credits) †

ENGH 308: Theory and Inquiry (3 credits)

LING 306: General Linguistics (3 credits) †

LING 307: English Grammar (3 credits)

SEED 370: Young Adult Literature in Multicultural Settings (3 credits) †

SEED 469: Teaching English in Secondary School (3 credits)

SEED 479: Advanced Methods of Teaching English in the Secondary School (3 credits)

SEED 492: Internship: Secondary Education English (9 credits)

Restricted Electives: 15 credits

Students select one course from the three (3) areas below. Students select an additional 6 credits of ENGH-prefixed courses.

Students select one course from the following:

ENGH 320: Literature of the Middle Ages (3 credits)

ENGH 321: English Poetry and Prose of the 16th Century (3 credits)

ENGH 322: Introduction to Shakespeare (3 credits)

ENGH 323: Studies in Shakespeare (3 credits)

ENGH 324: English Renaissance Drama (3 credits)

ENGH 325: English Poetry and Prose of the 17th Century (3 credits)

ENGH 330: Augustan Age: 1660-1745 (3 credits)

ENGH 331: Age of Sensibility: 1745-1800 (3 credits)

ENGH 333: British Novel of the 18th Century (3 credits)

ENGH 334: British Poetry of the Romantic Period (3 credits)

ENGH 335: Prose and Poetry of the Victorian Period (3 credits)

ENGH 336: British Novel of the 19th Century (3 credits)

ENGH 337: British Poetry after 1900 (3 credits)

ENGH 338: British Novel after 1900 (3 credits)

Students select one course from the following:

ENGH 340: Early American Literature (3 credits)

ENGH 341: Literature of the American Renaissance (3 credits)

ENGH 342: Post-Civil War American Literature, 1865-1920

ENGH 343: Development of the American Novel to 1914 (3 credits)

ENGH 344: Development of the American Novel since 1914 (3 credits)

ENGH 345: American Drama of the 20th Century (3 credits)

ENGH 346: American Poetry of the 20th Century (3 credits)

ENGH 348: Beginnings of African American Literature Through 1865 (3 credits)
ENGH 349: African American Literature: Reconstruction to 1903 (3 credits)
ENGH 350: African American Literature Through 1946 (3 credits)
ENGH 351: Contemporary African American Literature (3 credits)
ENGH 352: Topics in Ethnic American Literature (3 credits)
ENGH 355: Recent American Fiction (3 credits)
ENGH 356: Recent American Poetry (3 credits)

Students select one course from the following list, or one special topics course selected with advisor approval.

ENGH 360: Continental Fiction, 1770-1880 (3 credits)
ENGH 361: Continental Fiction, 1880-1950 (3 credits)
ENGH 362: Global Voices (3 credits)
ENGH 366: The Idea of a World Literature (3 credits)
ENGH 367: World Literatures in English (3 credits)

Secondary Education - History and Social Science (66 credits)

This concentration offers coursework meeting the regulations of the Virginia Department of Education for licensure to teach at the secondary level with an endorsement in History and Social Science.

Required Courses: 39 credits

ECON 103: Contemporary Microeconomic Principles (3 credits) †
ECON 104: Contemporary Macroeconomic Principles (3 credits) †
GGG 101: Major World Regions (3 credits) †
GGG 102: Physical Geography (3 credits)
GGG 103: Human Geography (3 credits) †
GOVT 103: Introduction to American Government (3 credits)
HIST 121: Formation of the American Republic (3 credits)
 or HIST 122: Development of Modern America (3 credits)
HIST 125: Introduction to Global History (3 credits)
SEED 367: Teaching History and Social Science in the Secondary School (3 credits)
SEED 467: Advanced Methods of Teaching History and Social Science in the Secondary School (3 credits)
SEED 495: Internship: Secondary Education History and Social Science (9 credits)

Restricted Electives: 27 credits

Students select one course from the following list. Students select an additional 15 credits of GOVT-prefixed courses and 9 credits of HIST-prefixed courses.

HIST 351: History of the Old South (3 credits)
HIST 352: The South since 1865 (3 credits)
HIST 373: The Civil War and Reconstruction (3 credits)
HIST 391: History of Virginia to 1800 (3 credits)
HIST 401: Colonial America (3 credits)

General Electives: 0-11 credits

Students select general elective coursework to bring the degree total to 120 credits.

**Requirement is satisfied in the core coursework.

† Course will satisfy a Mason Core requirement.

Total Credits: 120 credit hours**Transfer Virginia Common Curriculum**

Transfer credits will be allowed and, with advisor approval, may count toward core and concentration coursework requirements. Transfer students must complete at least 30 credits at George Mason University to be eligible for graduation. The proposed degree program articulates with and will be represented in the Transfer VA portal. The proposed degree program will be included in George Mason University's ADVANCE partnerships with the Virginia Community College System (VCCS). These partnerships provide students with an articulated streamlined pathway (2+2) toward getting a bachelor's degree, saving time and money. In addition to the articulation, students have access to success coaches who provide targeted, personalized support from the VCCS to George Mason University, and students are allowed to participate in university program activities to enhance affinity while in the pathway.

The VCCS degree specializations will be eliminated over the 2023-2024 academic year. Majors within the AS in Teaching have been developed and are pending approval. Among these, one will seamlessly articulate to the BSEd in Secondary Education, Secondary Education – History and Social Science concentration.

Student Learning Assessment

Students who complete the proposed BSEd in Secondary Education will possess the required expertise to practice as a professional educator. Assessment of student learning in the proposed degree program will be conducted through analysis of systematic metrics specifically designed to measure student performance. Student learning will be assessed throughout the program through a variety of formative and summative measures. During the university classroom-based portion of the program students are evaluated by a variety of means including written in-class examinations, research papers, in-class activities, reflective assignments, performance-based assessments, and presentations.

In the field component of the program, students are frequently expected to complete reflective reports and demonstrate their competence at specific skills in practical application of university coursework. During their capstone internship, students are required to complete reflective activities, document teaching hours, engage in observations, co-teach, and successfully complete four weeks of independent teaching. During the teaching practicum experiences, students are expected to demonstrate the principles and practices of effectively teaching secondary level courses in their respective subject areas. Students will be mentored during the capstone internship experiences and will be expected to be able to develop whole course curricula, design learning assignments, construct methods for assessing, integrate instructional strategies for

teaching culturally diverse students, and demonstrate effective classroom management techniques.

The learning outcomes for the proposed degree program are specific to secondary level knowledge, skills, and abilities (i.e., competencies) that students should acquire during their training in the BSEd in Secondary Education. Key tasks are purposefully aligned with accrediting processes at the program and college levels, with a focus on the standards of the Interstate New Teacher Assessment and Support Consortium (InTASC):

- Standard #1: Learner Development: The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
- Standard #2: Learning Differences: The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
- Standard #3: Learning Environments: The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
- Standard #4: Content Knowledge: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
- Standard #5: Application of Content: The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- Standard #6: Assessment: The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
- Standard #7: Planning for Instruction: The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
- Standard #8: Instructional Strategies: The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.
- Standard #9: Professional Learning and Ethical Practice: The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.
- Standard #10: Leadership and Collaboration: The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

These broad-based learning outcomes are aligned with accreditation standards, yet the measures associated with each address specific assessments and objectives in core courses in the major. Items labeled as "Assessments" below are used for program-specific accreditation purposes. Items labeled as "Performance-based Assessments" are used programmatically to assess student learning. Items labeled as "Common Assessments" are used across the College of Education and Human Development for college accreditation. Grading rubrics are used for evaluation of each assessment.

Relation to Existing Degree Programs (Degree, Certificate, Sub-area)

George Mason University offers a Bachelor of Science (BS) degree program in Computer Science, a Bachelor of Arts (BA) degree program in English, and a Bachelor of Arts (BA) degree program in History. It is anticipated that these degree programs will experience an increase in enrollment, as students in the proposed BSEd in Secondary Education degree program will be required to take between 11 and 17 content area courses to meet Virginia Department of Education licensure requirements.

George Mason University offers post-baccalaureate certificates in Secondary Education – Computer Science (6-12) and Secondary Education – English (6-12). These certificates include solely education pedagogy coursework, and are taken by students who have advanced in the BS or BA degree in discipline. The BSEd in Secondary Education will serve a different population, specifically those students interested in the teaching degree solely.

George Mason University offers an MEd degree program in Curriculum and Instruction, including concentrations in Secondary Education – Computer Science, Secondary Education – English, and Secondary Education – History and Social Science. It is anticipated that the existing master's degree program will not be negatively impacted by the proposed degree program. The proposed degree program will draw from a different pool of prospective students. No degree programs will close as a result of the initiation and operation of the proposed degree program.

Justification for the Proposed Program

Response to Current Needs (Specific Demand)

Nationwide, the U.S. is facing a critical teacher shortage. The estimated shortage is anticipated to escalate to 316,000 teachers by 2025. The Commonwealth of Virginia is experiencing a severe and growing shortage of qualified teachers. The shortage is at a crisis level especially in high-poverty and diverse school divisions. The number of unfilled teacher positions has increased dramatically over the past 10 years, with over 3,500 positions left unfilled across the Commonwealth during the 2022-2023 school year.² The top ten critical needs identified by the Virginia Department of Education for 2023-2024 include three or more of the subject areas and grade levels of the proposed BSEd in Secondary Education program (i.e., Middle Education

² Virginia Department of Education. (n.d.) *Turning the tide: A strategic plan to address the educator shortage*. <https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/education-workforce-data-reports>

(Grades 6-8; English (Secondary) and History and Social Science (Secondary)).³ Additionally, the College of Science has indicated an interest in creating five concentrations addressing the Science (Secondary) areas of need (i.e., biology, mathematics, physics, chemistry, earth science) over the next two years.

As a result of instituting the proposed degree program, George Mason anticipates enrolling 50 students by the target enrollment year (2028-2029) and a net increase of nine (9) graduates in year four of the proposed program's operation.

With established strong relationships with the northern Virginia Community College System and the academic units across the university where students in the proposed degree program would be completing their content area requirements, George Mason University has a strong pipeline through which students will access the proposed teacher preparation option. The advising structures of the current secondary education program and the College of Education and Human Development engage regularly with advisors in the community college feeder institutions and with advisors in the academic units across the university, these other Mason departments, ensuring that students will have efficient advising structures and transfer options.

Duplication

Three (3) public institutions in Virginia offer degree programs similar to the proposed degree program. James Madison University, Virginia Commonwealth University, and Virginia Polytechnic Institute and State University offer degree programs similar to the proposed degree program.

James Madison University (JMU)

JMU offers a BS degree program in Secondary Education. The degree program is offered fully face to face.

Virginia Commonwealth University (VCU)

VCU offers a BSEd in Secondary Education and Teaching. The degree program is offered fully face to face.

Virginia Polytechnic Institute and State University (Virginia Tech)

Virginia Tech offers a BAED/BSEd in Secondary Education. The degree program is offered fully face to face and fully online.

³ Virginia Department of Education. (n.d.) *Education workforce data & reports*.

<https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/education-workforce-data-reports>

Summary of Projected Enrollments in Proposed Program

State Council of Higher Education for Virginia
Summary of Projected Enrollments in Proposed Program

Year 1		Year 2		Year 3		Year 4 Target Year (2-year institutions)			Year 5 Target Year (4-year institutions)		
2024- 2025		2025 - 2026		2026 - 2027		2027 - 2028			2028 - 2029		
HDCT	FTES	HDCT	FTES	HDCT	FTES	HDCT	FTES	GRAD	HDCT	FTES	GRAD
<u>15</u>	<u>11</u>	<u>29</u>	<u>22</u>	<u>45</u>	<u>34</u>	<u>65</u>	<u>49</u>		<u>73</u>	<u>55</u>	<u>18</u>

Assumptions

75% Retention

80% Full-time students 20% part-time students

Full-time students: 12 credits per semester

Part-time students: 9 credits per semester

Full-time students graduate in 4 years

Part-time students graduate in 5 years

Projected Resource Needs for the Proposed Program

Resource Needs

George Mason University and the College of Education and Human Development have the resources needed to initiate and operate the proposed degree programs. The following categories detail the resources required to launch and sustain the proposed program from its initiation in the Fall 2024 semester through the target year 2028-2029. Assessments of need for full-time faculty and adjunct faculty are based on the following ratio of student enrollment to faculty effort: 20 FTE of enrollment requires one FTE faculty for instruction. The proposed program will therefore require a total of .50 FTE to launch increasing to 2.75 FTE by the target year of 2028-2029.

Full-time Faculty

A faculty member currently teaching in the School of Education will serve as program coordinator for the proposed program. The program coordinator will be responsible for curriculum oversight, scheduling, marketing and recruitment strategy, and student satisfaction. The program coordinator will devote .50 FTE to teach core and required courses in the proposed program from its initiation through the target enrollment year.

Four (4) existing faculty members in the School of Education will devote .50 FTE each to the proposed program beginning in the second year of operation through the target enrollment year. The proposed program will require .50 FTE of full-time faculty effort to initiate, rising to 2.50 FTE in the target enrollment year.

Part-Time Faculty

No part-time faculty effort will be utilized to initiate or sustain the proposed degree program.

Adjunct Faculty

One adjunct faculty member teaching in the School of Education will devote .25 FTE to teach required courses in the proposed program beginning in the second year of operation and through the target enrollment year.

The proposed program will require a total of 0.0 FTE adjunct faculty effort to initiate, rising to .25 FTE by the target enrollment year.

Graduate Assistants

No graduate assistants will be utilized to initiate or sustain the proposed degree programs.

Classified Positions

No additional classified support will be utilized to initiate the proposed program. By the target enrollment year, it is anticipated that additional support for advising and administration may be needed to sustain the proposed program.

Equipment (including computers)

No equipment (including computers) will be needed to initiate the proposed program.

Library

George Mason University Libraries has an extensive collection of journals and publications to support the proposed degree program. As a member of the Virtual Library of Virginia (VIVA), online access to journals is available.

Telecommunications

No new telecommunications will be required to initiate or sustain the proposed program.

Space

No additional space will be required to initiate or sustain the proposed program.

Targeted Financial Aid

No targeted financial aid is required or designated to initiate and sustain the proposed degree program.

Special Tuition or Fee Charges

No special tuition or fee charges will be utilized or instituted to initiate and sustain the proposed degree program.

Other Resources

To advertise the proposed program, the College of Education and Human Development will allocate funds from its marketing budget.

Funds to Initiate and Operate the Degree Program

Figures provided in the table below will be compared to SCHEV funding estimates using the current base adequacy model. This comparison will serve as a reference for the estimated costs. If there are large discrepancies, SCHEV may request additional clarification to ensure the institution’s assumptions are correct, or require modifications as a condition of approval.

Note: Institutions must use the recommended student-faculty ratio when estimating FTE enrollments and required faculty FTEs.

Cost and Funding Sources to Initiate and Operate the Program			
Informational Category		Program Initiation Year 2024 - 2025	Program Full Enrollment Year¹ 2027 - 2028
1.	Projected Enrollment (Headcount)	15	65
2.	Projected Enrollment (FTE)	11	49
3.	Projected Enrollment Headcount of In-State Students	14	59
4.	Projected Enrollment Headcount of Out-of-State Students	2	7
5.	Estimated Annual Tuition and E&G Fees for In-state Students in the Proposed Program	\$10,692	\$10,692
6.	Estimated Annual Tuition and E&G Fees for Out-of-State Students in the Proposed Program	\$34,860	\$34,860
7.	Projected Total Revenue from Tuition and E&G Fees Due to the Proposed Program	\$196,632	\$852,072
8.	Other Funding Sources Dedicated to the Proposed Program (e.g., grant, business entity, private sources)	\$	\$

¹ For the “Full Enrollment Year” use: for associate degrees, initiation year plus 1; for baccalaureate degrees, initiation plus 3; for masters degrees, initiation plus 2; for doctoral degrees, initiation plus 3.

ITEM NUMBER:

Bachelor of Science in Education (BSEd) in Secondary Education Degree Program Proposal

PURPOSE OF ITEM:

The BSEd in Secondary Education degree program proposal is in development for submission to the State Council of Higher Education for Virginia (SCHEV) for Fall 2024. Prior to SCHEV submission, Board action is required.

APPROPRIATE COMMITTEE:

Academic Programs, Diversity and University Community Committee

BRIEF NARRATIVE:

To address the teacher shortage crisis in the areas of secondary education (grades 6-12), George Mason University is proposing a BSEd in Secondary Education pathway to teacher licensure at the undergraduate level. Teacher shortages are particularly acute in Virginia and the nation. The role of secondary education teachers is to educate students in core subjects in addition to mentoring and facilitating the intellectual, emotional, and professional development as they transition from adolescence into early adulthood. Upon successful completion of the program, students will be eligible for Virginia licensure in Secondary Education and specific content concentrations.

Through clinical experiences, the program will provide undergraduate teacher candidates with the knowledge, skills, and abilities necessary for becoming new teachers in accordance with the Interstate Teacher Assessment and Support Consortium (INTASC) standards. Students are required to complete an intensive, supervised clinical experience (internship) in a classroom corresponding to concentration endorsement area in an approved public school. The internship allows students to apply knowledge and skills obtained throughout their coursework.

Since its inception, George Mason University has offered teacher preparation degree programs through the College of Education and Human Development. A Secondary Education graduate concentration and a series of undergraduate certificates are currently offered. The proposed degree program would allow students to enter the profession with appropriate credentials and be licensed by the Commonwealth of Virginia.

REVENUE IMPLICATIONS:

The BSEd in Secondary Education degree program will be revenue neutral. All courses required for the degree have been developed and are currently incorporated in undergraduate certificates or cross-listed with the graduate curriculum.

STAFF RECOMMENDATION:

Staff recommends Board approval.

ACTION ITEMS

Academic Programs, Diversity, and University Community Committee

November 30, 2023

CONFERRAL OF EMERITUS/EMERITA STATUS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
Bennett	James T.	11/30/2023

Title: Professor Emeritus

Local Academic Unit: Economics (CHSS)

DeMulder	Elizabeth K.	2/2/2024
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Title: Professor Emerita of Education

Local Academic Unit: College of Education and Human Development

Klimoski	Richard J.	2/2/2024
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Title: Professor Emeritus of Management

Local Academic Unit: Costello College of Business

Linton	Harold	11/30/2023
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Title: Professor Emeritus

Local Academic Unit: Art (CVPA)

Winant	Peter B.	11/30/2023
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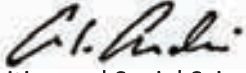
Title: Associate Professor Emeritus

Local Academic Unit: Art (CVPA)



College of Humanities and Social Sciences
 4400 University Drive, MS 3A3, Fairfax, Virginia 22030
 Phone: 703-993-8720

To: Kenneth D. Walsh, Interim Provost and Executive Vice President
 Gregory Washington, President

From: Ann Ardis, Dean 
 College of Humanities and Social Sciences

Subject: Emeritus Designation for James Bennett


Date: October 11, 2023

On the recommendation of the Department of Economics, I am pleased to recommend Dr. James Bennett for appointment as Professor Emeritus, effective upon approval of the BOV.

Dr. Bennett received his Ph.D. from Case Western Reserve University in 1970, and joined Mason in 1975, when economics courses were taught in the business school. He was part of a small group of scholars who worked closely together in those early years to create a vision for a new and separate department. That vision was realized, and the Department of Economics was created.

Until his retirement in June, 2023, Dr. Bennett was an Eminent Scholar at GMU. He held the William P. Snavely Chair of Political Economy and Public Policy in the Department of Economics, and was Director of the John M. Olin Institute for Employment Practice and Policy. He specialized in research related to public policy issues, the economics of government and bureaucracy, labor unions and health charities. He is founder and editor of the Journal of Labor Research and has published more than 60 articles in professional journals such as the American Economic Review, Review of Economics and Statistics, Policy Review, Public Choice and Cato Journal.

James Bennett’s contributions to the Department of Economics are innumerable. Based on his distinguished service at GMU, the Economics Department chair and faculty were unanimous and enthusiastic in their support of recommending James Bennett for emeritus status.

Approve Disapprove 
 Kenneth D. Walsh,
 Interim Provost and Executive Vice President 11/2/2023
Date

Approve Disapprove 
 Gregory Washington, President 11/13/2023
Date

This memo certifies that the criteria have been met by this Emeritus candidate according to the Faculty Handbook requirements: full-time Associate or Full Professor with ten or more years of continuous academic service, home unit and/or Dean recommendation, Provost recommendation, and the President’s recommendation.



Office of the Dean

College of Education and Human Development
4400 University Drive, MS 2F1, Fairfax, Virginia 22030
Phone: 703-993-2004; Fax: 703-993-2001

To: Kenneth D. Walsh, PhD, Interim Provost and Executive Vice President
Gregory Washington, PhD, President

From: Ingrid Guerra-López, PhD, Dean
College of Education and Human Development (CEHD)

Subject: Emerita Designation for Dr. Elizabeth DeMulder

Date: October 18, 2023

I am writing to request that Dr. Elizabeth DeMulder be awarded the title Professor Emerita of Education, effective February 2, 2024.

Dr. DeMulder has been a full-time faculty member in the College of Education and Human Development since 1994. Her contributions to George Mason University in teaching, research, and service have been extensive and multifaceted. Of particular note is her long-time leadership role in one of the College’s most innovative programs—a master’s degree program focused on “transformative teaching,” for which she served both as an architect and later as Academic Program Coordinator. Through her leadership in this academic program, Dr. DeMulder has had an enduring (and yes, transformative) impact on many hundreds of teachers in the Northern Virginia region.

During her career she has taught 25 different courses in multiple formats while also serving as a facilitative mentor for numerous doctoral students, including service on 21 dissertation committees. As a scholar, Dr. DeMulder was a pioneer in developing research and advocacy themes in child development, early childhood education, and teacher education and professional development focused on social justice, antiracism, and inclusive education. These themes are now ubiquitous in these fields. At the core of her nearly 200 scholarly products are lessons learned from research and practice for transforming the way teacher education researchers and education leaders define and organize their guiding pedagogical principles.

Dr. DeMulder has served in a wide variety of university and professional service roles throughout her faculty career, including numerous CEHD and Mason committees focused on antiracism and inclusive excellence, equity and social justice, and community engagement. She is also a long-time Commencement marshal, a facilitative mentor for junior and mid-career faculty, and an informed and engaged citizen at both the PK-12 and higher education levels.

Dr. Elizabeth DeMulder is an exemplary candidate for emerita status at George Mason University.

Approved Not Approved

Kenneth D. Walsh, PhD, Interim Provost and Executive Vice President

Approved Not Approved

Gregory Washington, PhD, President

This memo certifies that the criteria have been met by this Emerita candidate according to the Faculty Handbook requirements: full-time Associate or Full Professor with ten or more years of continuous academic service; nominated by the home unit with the Dean, Provost, and President’s recommendations.



School of Business

Enterprise Hall, 4400 University Drive, MS 1B1, Fairfax, Virginia 22030
Phone: 703-993-1880; Fax: 703-993-1867

To: Kenneth D. Walsh, Ph.D., Interim Provost and Executive Vice President
Gregory Washington, President
From: Ajay Vinzé, Dean, School of Business
Subject: Emeritus Designation for Professor Richard Klimoski
Date: October 16, 2023

Along with the tenured faculty members of the Management Area and the Faculty of the School of Business, I write to recommend that Professor Richard Klimoski be elected to the honorary rank of Professor Emeritus of Management effective February 2, 2024. Since joining Mason in 1995, Professor Klimoski has continuously made outstanding contributions to the development of students, faculty, research, and the university.

Dr. Klimoski joined George Mason University as Professor of Psychology and the Director of the Center for Behavioral and Cognitive Studies in 1995, a position that he held until 2001. He also served as the Director of the Applied/Experimental Psychology Graduate Programs, and the Associate Dean of the College of Arts and Sciences. Dr. Klimoski was Dean of the School of Business from 2001 to 2009. He was then a Professor of Management, served as Management Area Chair, Director of Faculty Research, and currently Associate Dean for Research.

As outlined in the attached Management Faculty Area memorandum, Professor Klimoski's accomplishments in research, administration, teaching, and service have been significant and far reaching. As a life-long contributor to scholarship, he particularly focused on effective organizational leadership and dynamics of successful work teams. He founded and/or led significant academic societies, published prolifically, is highly cited, and as a result has been recognized as a Fellow of the Academy of Management, the American Psychological Association, the Association for Psychological Science, and the Society for Industrial and Organizational Psychology. He has taught many students over his career, including serving as a mentor for PhD students, and developed and taught graduate and executive courses. Dr. Klimoski has served as a leader at Mason in the School of Business as well as across campus. Dr. Klimoski has had a tremendous impact on George Mason through his many roles. He has consistently exhibited the highest levels of organizational citizenship and we are thankful and appreciative for his dedication to George Mason.

Accordingly, I concur with the Management Area and Promotion and Tenure committee and enthusiastically recommend that Dr. Klimoski be elected to the honorary rank of Professor Emeritus of Management effective February 2, 2024.

[X] Approved [] Not Approved [Signature]
Kenneth D. Walsh, Ph.D.,
Interim Provost and Executive Vice President


[X] Approved [] Not Approved [Signature]
Gregory Washington, President

This memo certifies that the criteria have been met by this Emeritus candidate according to the Faculty Handbook requirements: full-time Associate or Full Professor with ten or more years of continuous academic service; nominated by the home unit with the Dean, Provost, and President's recommendations.



College of Visual and Performing Arts
 4400 University Drive, MS 4C1, Fairfax, Virginia 22030
 Phone: 703-993-8877; Fax? Who Faxes Anymore?

To: Kenneth D. Walsh, Interim Provost and Executive Vice President
 Gregory Washington, President

From: Rick Davis, Dean 
 College of Visual and Performing Arts


Subject: Emeritus Designation for Harold Linton, School of Art
 Date: October 20, 2023

I am pleased to recommend Harold Linton, Professor of Art, for Emeritus status effective November 30, 2023. Professor Linton’s retirement, after a distinguished eighteen-year career at Mason, was effective June 1, 2023.

An artist and scholar of international renown in several fields, Harold Linton served with distinction as Director of the School of Art for eight years, 2005-2013, during which he led the transition to the stunning new Art & Design Building, sought and received national accreditation for the program (NASAD), and implemented major curricular innovations.

He has exhibited widely as a painter and sculptor, and has published numerous book-length works on subjects as diverse as Color in Architecture, Portfolio Design (four editions and a Korean translation), Sketching the Concept, and catalog retrospectives of his own artistic work. He is regarded as one of the nation’s leading authorities on the artist’s portfolio, with a long list of panels, presentations, workshops, and consultations.

As Director Starr’s memorandum details, Harold Linton’s contribution to the School of Art at Mason is vast and transformational. His stature as a practicing American artist is no less impressive. I strongly recommend Emeritus election for Harold Linton.

Approval Disapproval 
 Kenneth D. Walsh, Interim Provost and Executive Vice President


Approval Disapproval 
 Gregory Washington, President

This memo certifies that the criteria have been met by this Emeritus candidate according to the Faculty Handbook requirements: full-time Associate or Full Professor with ten or more years of continuous academic service; nominated by the home unit with the Dean, Provost, and President’s recommendations.



College of Visual and Performing Arts
 4400 University Drive, MS 4C1, Fairfax, Virginia 22030
 Phone: 703-993-8877; Fax? Who Faxes Anymore?

To: Kenneth D. Walsh, Interim Provost and Executive Vice President
 Gregory Washington, President

From: Rick Davis, Dean 
 College of Visual and Performing Arts


Subject: Emeritus Designation for Peter Winant, School of Art
 Date: October 20, 2023

I am pleased to recommend Peter Winant, Associate Professor of Art, for Emeritus status effective November 30, 2023. Professor Winant’s retirement, after a distinguished twenty-three-year career at Mason, was effective June 1.

A sculptor and critic of national import, Peter Winant served with distinction for eleven years as, variously, Associate Director and Director of the School of Art. His tenure was marked by dramatic increases in enrollment, continued evolutionary innovation in curriculum, and a strong and successful commitment to community engagement. This last is a characteristic of his own artistic practice as well, as a founding member of Workingman Collective, a group of artists committed to collaboration, community impact, and innovation in the artistic process.

Peter’s work as a sculptor/3D artist is held in private collections throughout the US, and public commissions at Tyson’s Corner and for the US State Department exemplify his reach both stylistically and geographically. Residents of the DMV know him as the genial but tough-minded art critic on WETA-TV’s “Around Town,” for which he has reviewed more than 300 exhibitions.

As Director Starr’s memorandum details, Peter Winant’s contribution to the School of Art at Mason is vast and transformational. His stature as a practicing American artist is no less impressive. I strongly recommend Emeritus election for Peter Winant.

Approval Disapproval _____ 
 Kenneth D. Walsh, Interim Provost and Executive Vice President

Approval Disapproval _____ 
 Gregory Washington, President

This memo certifies that the criteria have been met by this Emeritus candidate according to the Faculty Handbook requirements: full-time Associate or Full Professor with ten or more years of continuous academic service; nominated by the home unit with the Dean, Provost, and President’s recommendations.

ACTION ITEMS

Academic Programs, Diversity, and University Community Committee

November 30, 2023

ELECTIONS OF NEW TENURED FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
Ahn	Ethan C.	11/30/2023

Title: Associate Professor

Rank: Associate Professor without Term

Classification: Tenured (without term) - Instructional

Local Academic Unit: Electrical and Computer Engineering (CEC)

Popat	Ketul C.	1/10/2024
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Title: Professor

Rank: Professor without Term

Classification: Tenured (without term) - Instructional

Local Academic Unit: Bioengineering (CEC)

Note(s): Additional Title: Department Chair for Bioengineering



Office of the Provost
 4400 University Drive, MSN 3A2
 Fairfax, Virginia 22030
 Phone: 703.993.8770; Fax: 703.993.8871

**Procedural Checklist for New Faculty
 Being appointed to Tenured (Without Term) Positions**

This form must be submitted in Interfolio as part of the Tenured upon Hire case at the Dean's recommendation step.

Ethan Ahn, Associate Professor

Faculty Member's Name and Title

Electrical and Computer Engineering (ECE)

Local Academic Unit



Verification of Hiring and Trainings:

I verify that all hiring requirements, including reference checks, for the candidate has been completed and the candidate has been informed of all training that need to be completed within the first few weeks of the start of their appointment (including but not limited to DEI trainings: Title IX Overview and Sexual Harassment Prevention, Equal Opportunity: A Fair Shake and Ethics).

One-half page justification for appointment, to include a description of the benefit of this hire for the department, school, etc., as well as the rationale for selecting this candidate over others.

Dr. Ahn was hired into the ECE Department as a result of an open competitive search. Dr. Ahn received his PhD in Electrical Engineering from Stanford University in 2015. He joined the University of Texas at San Antonio as an Assistant Professor of Electrical and Computer Engineering in 2016 and was promoted to the rank of Associate Professor with tenure in 2022. His research focuses on emerging nanoscale materials and device technologies and is highly relevant to the nation's technological needs considering the CHIPS & Science Act passed by the U.S. Congress. Dr. Ahn has published 31 refereed journal papers and 49 refereed conference publications since 2016, with the majority of his publication in top-tier journals or conferences. He has graduated four doctoral students and has secured a total of about \$4 million in external research funding. Dr. Ahn is an accomplished teacher. He has taught four different courses at both undergraduate and graduate levels, (including three that he developed) with excellent student ratings. Dr. Ethan Ahn will be an outstanding addition to our ECE Department and will contribute greatly to the College's strength in the areas of semiconductors and nanotechnology.

10. 18.2023

Dean

Date

Ethan C. Ahn
November 30, 2023

Ethan C. Ahn, Ph.D. is a candidate for Tenure upon Hire to Associate Professor without Term in the Department of Electrical Engineering within the College of Engineering and Computing (CEC). Professor Ahn received his Ph.D. in 2015 from Stanford University. He also received a M.S. in 2007 and a B.S. in 2005 at the Korea Advanced Institute of Science and Technology (KAIST).

Professor Ahn has a distinguished record. Prior to his appointment at Mason, he held an academic appointment at the University of Texas at San Antonio. His appointment began in 2016 as an assistant professor and earned tenure in September 2022 at the rank of Associate Professor. Prior to joining the University of Texas, Professor Ahn also held an appointment as a Postdoctoral Researcher at Stanford University and a Visiting Scholar appointment at Michigan State. Professor Ahn also served as a Faculty Fellow at the Naval research Laboratory and the Air Force Research Laboratory.

Professor Ahn's tenure dossier demonstrates that he has established an exceptionally strong record of research/scholarship, teaching, and service. His case strongly is supported by the CEC Review Committees, the Chair, and the Dean of the College each of which has documented the strength of his academic record.

The decision to hire Professor Ahn is well supported. He will be a valued member of our university community and is deserving of appointment to the rank of Associate Professor without Term.

Consistent with the recommendation of the CEC review committees, the Chair, and the Dean of the College, I also recommend that Professor Ahn be granted appointment without term to the rank of Associate Professor without Term in the Department of Electrical Engineering within the College of Engineering and Computing, effective November 30, 2023.

Ethan C. Ahn, Ph.D.

Associate Professor of Electrical Engineering
 Graduate Advisor of Record for Advanced Materials Engineering
 Department of Electrical and Computer Engineering (ECE)
 Klesse College of Engineering and Integrated Design (KCEID)
 The University of Texas at San Antonio (UTSA)

Faculty Research Member
 The AI Consortium (Matrix)
 The University of Texas at San Antonio

Faculty Research Member
 The Open Cloud Institute (OCI)
 The University of Texas at San Antonio

Faculty Research Member
 School of Data Science (SDS)
 The University of Texas at San Antonio

Founding Director
 UTSA Nanoelectronics Lab (UNL)
 Group Webpage: <http://utsanano.wixsite.com/nano>

Adjunct Graduate Faculty
 Department of Physics
 Texas State University, San Marcos, TX

Advisory Board Member
 Advanced Materials Technology (AMT) Program
 Northwest Vista College, San Antonio, TX

Contact Information

- Offices (Main Campus): BSE 1.550, 1 UTSA Circle, San Antonio, TX 78249
 (Downtown Campus): BVB 4.376, 501 W César E Chávez Bl., San Antonio, TX 78207
 (Downtown Campus): SPI 340A, 506 Dolorosa St., San Antonio, TX 78204
- Phone/Email: 210.458.4491 (office, main campus), ethan.ahn@utsa.edu (email)

Education

Stanford University	Electrical Engineering	Ph.D., 2015
<ul style="list-style-type: none"> • Thesis advisor: Prof. H.-S. Philip Wong • Title: <i>Emerging nonvolatile memory, enabled by carbon nanomaterials</i> 		
KAIST	Electrical Engineering	M.S., 2007
<ul style="list-style-type: none"> • Thesis advisor: Prof. Mincheol Shin • Title: <i>Quantum simulation of carbon nanotube field-effect transistors</i> 		
KAIST	Electrical Engineering (minor in IT Business)	B.S., 2005
<ul style="list-style-type: none"> • <i>Summa Cum Laude</i> in EE (GPA: 4.09/4.3) 		

Appointments

The University of Texas at San Antonio

- Associate Professor (with Tenure), Electrical and Computer Engineering 09/2022 – present
- Graduate Advisor of Record, Advanced Materials Engineering 09/2022 – present
- Graduate Faculty, Advanced Materials Engineering 06/2018 – present
- Assistant Professor, Electrical and Computer Engineering 09/2016 – 08/2022

Naval Research Laboratory

- Summer Faculty Fellow 2022 Summer

Air Force Research Laboratory

- Summer Faculty Fellow 2019 – 2021 Summer

Texas State University

- Adjunct Graduate Faculty, Physics 06/2017 – present

Apple Inc. (Cupertino, CA)

- Senior Panel Process Engineer 03/2016 – 08/2016

Stanford University

- Post-Doctoral Researcher, Electrical Engineering 08/2015 – 02/2016

IBM T. J. Watson Research Center

- Summer Research Intern (Manager: Dr. Mark Ritter) 2013 Summer

Samsung Advanced Institute of Technology (SAIT)

- Summer Research Intern (Manager: Dr. Jaekwang Shin) 2012 Summer

IMEC

- Summer Research Intern (Manager: Dr. Kittl Jorge) 2011 Summer

Michigan State University

- Visiting Scholar, Physics and Astronomy (Drs. Pratt and Bass) 03/2007 – 07/2010

KIST (Korea Institute of Science and Technology)

- Research Scientist 03/2007 – 07/2010

Research Topics (~\$4M awarded, ~\$20M pending) *See p. 19 for funding records

As a lead PI

• Next-generation Computing Hardware

- Deep Learning Accelerator (*Funded by UTSA Seed Grant*)
- Neuromorphic Computing
- Emerging Nonvolatile Memory Device (*Funded by AFRL*)
- Low-power, High-speed Logic Device (*Funded by NSF*)

**In collaboration with Stanford University (CA, USA), Air Force Research Laboratory (OH, USA), Naval Research Laboratory (Washington, DC)*

• Low-dimensional Nanomaterials

- Solution-processable Carbon Nanotube and Graphitic Nanosheet (*Funded by Lam Research*)
- 2D Inorganic Semiconductor and Heterostructure Integration (*Funded by UTSA Seed Grant*)

**In collaboration with UT Austin (TX, USA), University of Central Florida (FL, USA), Jackson State Univ. (MS, USA), ITESM (Mexico)*

• Nanomagnetism and Spintronics

- Fabrication of Ferromagnetic Tunnel Device (*Funded by AFOSR*)

- Nano MTJ as Reconfigurable Synaptic/Spiking Neural Device
- Circuit Implementation of p-bit (probabilistic-bit)
**In collaboration with UT Austin (TX, USA), Purdue University (IN, USA), Michigan State University (MI, USA), Qualcomm (CA, USA)*
- **Oxide Electronics**
 - Epitaxial Oxide Heterostructure
 - Conductivity Modulation of Oxide Thin Film (*Funded by NSF*)
 - Steep-slope Device (Electrostrictive FET)
 - *In collaboration with Texas State University (TX, USA)*
- **Energy Harvesting and Storage**
 - High Energy Density Supercapacitor with Graphene Electrode
 - 2D Material-based Piezoelectric Energy Harvesting
 - 2D Material-based Thermoelectric Energy Harvesting (*Funded by Sandia National Lab*)
- **Hardware Security for Edge Computing/IoT**
 - Vulnerability against Physical Attacks (*Funded by UTSA Seed Grant*)
 - STT-MRAM as Secure Main Memory
 - Device/Architecture co-design as an Encryption Alternative
 - *In collaboration with Qualcomm (CA, USA), Korea University (Seoul, Korea)*
- **Autonomous/Smart Device and System**
 - AI-capable Sensor for Power System Monitoring and Diagnosis (*Funded by Ministry of Trade, Industry and Energy of South Korea*)
 - *In collaboration with KERI (Korea Electrotechnology Research Institute), KIAT (Korea Institute for Advancement of Technology), Vitzro EM*
 - Wireless Charging of Battery for Electric and Autonomous Vehicles (*Funded by DoT*)
 - *In collaboration with UTSA Dept. of Civil Engineering, University of New Mexico (NM, USA)*

As a Co-PI

- **Biomedical & Clinical Device**
 - Microneedle Array for Cell Transfection and Transformation (*Funded by UTSA Seed Grant*)
 - Digital Extender for Airway Management (*Funded by US Army Institute of Surgical Research*)
 - Microfluidic Testbed for Cardiac Disease Diagnosis
 - *In collaboration with UTSA Depts. of Mechanical Engineering, Biomedical Engineering, University of North Texas (TX, USA), UT Health Science Center at San Antonio (TX, USA)*
- **Computational Nanotechnology**
 - Electronic and Spin Transport in Nanoscale Solids
 - Heat Transport in Silicon Nanostructure
 - *In collaboration with KAIST (Korea), Sookmyung Women's University (Korea), Stanford University (CA, USA)*
- **Semiconductor Synthetic Biology**
 - *In collaboration with KIST (Korea)*

***See "Grant History" on p. 19 for details of project title, funding amount, and period.**

Publication Summary

(80+ publications; 1,100+ citations, 16+ h-index, and 19+ i10-index in *Google Scholar*)

- **31** Journal Publications (*Nature Reviews Materials (2021 impact factor: 76.68)*, *Nano Letters*, *npj 2D Materials and Applications*, *ACS Nano*, *Nature Communications*, *IEEE Transactions on Electron Devices*, *Journal of Applied Physics*, *Applied Physics Letters*, etc.)
- **49** Peer-reviewed Conference Publications (*IEDM*, *VLSI*, *VLSI-TSA*, *ICS*, *APS March Meeting*, *MRS Spring Meeting*, *MNE*, *ECS Meeting*, *EPCOS*, *SSDM*, *IEEE Nano*, etc.)
- **2** US Patents (“Graphene-inserted phase change memory device and method of fabricating the same”, “Zero-Power Carbon Interconnect for Next-generation Computing Devices and Methods of Use”)
- **1** Book chapter (“Phase change memory” in *Emerging Nanoelectronic Devices*, ed. A. Chen, *John Wiley & Sons, Ltd.*)

***A full list of publications is found in pages starting from p. 21.**

Awards, Scholarships, and Honors

- 2022 NRL Summer Faculty Fellowship, USA
- 2021 ACUE (Association of College and University Educators) Teaching Fellowship
- 2021 AFRL Summer Faculty Fellowship, USA
- 2020 AFRL Summer Faculty Fellowship, USA
- 2019 AFRL Summer Faculty Fellowship, USA
- 2018 Certificate of Appreciation, *Journal of Nanophotonics*, SPIE
- 2017 User Proposal, Center for Integrated Nanotechnology (CINT), Sandia National Lab
- 2017 Faculty Travel Award, UTSA College of Engineering, USA
- 2017 Faculty Research Award, Lam Research, USA
- 2016 Faculty Travel Award, UTSA College of Engineering, USA
- 2016 Faculty Research Award, Lam Research, USA
- 2015 IEEE SFBA Nanotechnology Council Seminar Appreciation, IEEE
- 2014 Best Paper Award (nominated), VLSI Tech. Symp., USA
- 2014 John Bardeen Research Award for Excellence in Nanodevices Research, SONIC, USA
- 2013 Best Summer Intern, T.-C. Chen, IBM T. J. Watson Research Center, USA
- 2013 KSEA Graduate Scholarship, KSEA, USA-Korea
- 2010 Excellent Research Team Award, KIST, Korea
- 2006 Engineering Scholarship for Graduate Studies, KBS Kang Tae-Won Foundation, Korea
- 2004 GE Scholarship, General Electric, USA
- 2004 Outstanding Scholastic Performance Award, Purdue University, USA

Memberships, Services, Media

Membership for Professional Society

- IEEE
- IEEE EDS (Electron Devices Society)
- International Micro and Nano Engineering Society (iMNEs)
- American Vacuum Society (AVS)
- American Physical Society (APS)

- **ACUE** (Association of College and University Educators, Fellow)
- **Korean Physical Society** (KPS)
- **Korean Magnetics Society** (KMS)
- **Korean-American Scientists and Engineers Association** (KSEA)

Technical Committee

- IEEE EDS (Electron Devices Society) for Optoelectronic Devices (2017 – 2020)

TPC (Technical Program Committee) or TOC (Organizing Committee) for Conference/Workshop/Forum

- NSF International Workshop on Large Scale Neuromorphic Computing @ ICONS 2022 (International Conference on Neuromorphic Systems)
<https://www.nuailab.com/workshop.html>
- PDF 2019 (Professional Development Forum)
<https://pdf.kseas/2019/>
- SANTF 2018 (San Antonio NanoTechnology Forum)
<http://www.santf.net>
- EDSSC 2017 (The 13th IEEE International Conference on Electron Devices and Solid-State Circuits)
https://www.aconf.org/conf_101948.html
- SANTF 2017 (San Antonio NanoTechnology Forum)
<http://www.santf.net>

UTSA Committee Services (Department Level)

- ECE DFRAC (Departmental Faculty Review Advisory Committee) (Fall 2022 – present)
- ECE Scholarships and Awards Committee Member (Fall 2021 – present)
- ECE Voting Committee Member (Fall 2019 – present)
- ECE Senior Council (Faculty Advisory) Committee Member (Fall 2019 – present)
- ECE Graduate Program Committee Member (Fall 2017 – present)
- ECE Graduate Student Advisory & Recruitment Committee Member (Fall 2017 – present)
- ECE Safety Committee Member (Fall 2017 – present)
- ECE Space Committee Member (Fall 2017 – present)
- ECE Concentration Chair for Electronic Materials and Devices (Fall 2017 – Fall 2022)
- ECE Annual Review Committee Member (Fall 2019 – Spring 2021)

UTSA Committee Services (College Level)

- ECE Representative for New PhD Program in Materials Science and Engineering (Fall 2021 – present)

UTSA Committee Services (University Level)

- Physical Safety Committee (Spring 2022 – present)

Committee for Graduate Students (UTSA ECE and other departments)

Doctoral Dissertation (20)

- Committee **Chair** (dissertation advisor) for Doctoral Dissertation Proposal in Electronic Devices (Nacer Ibaroudene, *scheduled in Spring 2023*)

- *Dissertation Proposal Title*: Emerging Phase Change Alloys and Devices for High Temperature Applications
 - Committee **Chair** (dissertation advisor) for Doctoral Dissertation in Electronic Devices (Hebin Cherian, Spring 2022)
- *Dissertation Title*: Fabrication and Characterization of Spintronic Devices for Energy Efficient Computing
 - Committee **Chair** (dissertation advisor) for Doctoral Dissertation in Electronic Devices (Md. Khirul Anam, Spring 2022)
- *Dissertation Title*: Simulation, Synthesis and Characterization of Multi-phase Functional Materials for Emerging Computing Device Applications
 - Committee **Chair** (dissertation advisor) for Doctoral Dissertation in Electronic Devices (Pratheek Gopalakrishnan, Spring 2022)
- *Dissertation Title*: Synthesis and Characterization of Solution-processible Graphitic Nanomaterials for Emerging RRAM Device Applications
 - Committee **Chair** (dissertation advisor) for Doctoral Dissertation in Electronic Devices (Ann Sebastian, Spring 2022)
- *Dissertation Title*: 2D Materials and Heterostructures for Addressing the Critical Societal Challenges
 - Committee **Member** for Doctoral Dissertation in Robotics (Nafiseh Ebrahimi, Summer 2021)
- *Dissertation Title*: Biocompatible Electromagnetic Soft Actuator; Design Optimization, Development, Fabrication and Test
 - *Committee Chair* (dissertation advisor): Dr. Amir Jafari (Mechanical Engineering)
- Committee **Member** for Doctoral Dissertation in Information Systems and Cyber Security (College of Business) (Nihar Bendre, Summer 2021)
 - *Dissertation Title*: Explainability with Semantic Compositionality and Zero-shot Learning for Anomaly Detection
- *Committee Chair* (dissertation advisor): Dr. Paul Rad
- Committee **Member** for Doctoral Dissertation in Spintronics (Dept. of Physics, College of Sciences) (Janeth A. Garcia Monge, Summer 2021)
 - *Dissertation Title*: Spin Pumping Modulation in YIG-Based Structures Employing Piezoelectric Strain
- *Committee Chair* (dissertation advisor): Dr. Arturo Ayon
- Committee **Chair** (dissertation advisor) for Doctoral Dissertation Proposal in Electronic Devices (Pratheek Gopalakrishnan, Spring 2021)
 - *Dissertation Proposal Title*: Synthesis and Characterization of Solution-processible Graphitic Nanomaterials for Emerging RRAM Device Applications
- Committee **Chair** (dissertation advisor) for Doctoral Dissertation Proposal in Electronic Devices (Ann Sebastian, Spring 2021)
 - *Dissertation Proposal Title*: 2D Materials and Heterostructures for Addressing the Critical Societal Challenges
- Committee **Member** for Doctoral Dissertation in Advanced Materials (Brandon Young, Fall 2020)
 - *Dissertation Title*: Development of Ferroic and Multiferroic Nanomaterials for Hybrid 3D

Deposition of Multifunctional Devices

- *Committee Chair* (dissertation advisor): Dr. Ruyan Guo
- **Committee Chair** (dissertation advisor) for Doctoral Dissertation Proposal in Electronic Devices (Hebin Cherian, Fall 2020)
 - *Dissertation Proposal Title*: Fabrication and Characterization of Spintronic Devices for Energy Efficient Computing
- **Committee Chair** (dissertation advisor) for Doctoral Dissertation Proposal in Electronic Devices (Md. Khirul Anam, Fall 2020)
 - *Dissertation Proposal Title*: Simulation, Synthesis and Characterization of Multi-phase Functional Materials for Emerging Computing Device Applications
- **Committee Member** for Doctoral Dissertation Proposal in Information Systems and Cyber Security (College of Business) (Nihar Bendre, Spring 2020)
 - *Dissertation Proposal Title*: Context Aware AI-based Video Analytics for Anomaly Detection
- *Committee Chair* (dissertation advisor): Dr. Paul Rad
- **Committee Member** for Doctoral Dissertation Proposal in Spintronics (Dept. of Physics, College of Sciences) (Janeth A. Garcia Monge, Spring 2020)
 - *Dissertation Proposal Title*: Spin Pumping Modulation in YIG-Based Structures Employing Piezoelectric Strain
- *Committee Chair* (dissertation advisor): Dr. Arturo Ayon
- **Committee Member** for Doctoral Dissertation Proposal in Advanced Materials (Brandon Young, Fall 2019)
 - *Dissertation Proposal Title*: Development of Ferroic and Multiferroic Nanomaterials for Hybrid 3D Deposition of Multifunctional Devices
- *Committee Chair* (dissertation advisor): Dr. Ruyan Guo
- **Committee Member** for Doctoral Dissertation Proposal in Robotics (Nafiseh Ebrahimi, Spring 2019)
 - *Dissertation Proposal Title*: A Network of Electromagnetic Based Soft Actuator: Design Optimization, Development, Fabrication and Test
- *Committee Chair* (dissertation advisor): Dr. Amir Jafari (Mechanical Engineering)
- **Committee Member** for Doctoral Dissertation Proposal in Advanced Materials (Bryan Gamboa, Fall 2018)
 - *Dissertation Proposal Title*: Experimental and Numerical Evaluation of Stacked Piezoelectrics for Energy Harvesting
- *Committee Chair* (dissertation advisor): Dr. Ruyan Guo
- **Committee Member** for Doctoral Dissertation in Advanced Materials (Moumita Dutta, Fall 2017)
 - *Dissertation Title*: Ferroics and Multiferroics for Dynamically Controlled Terahertz Wave Propagation
- *Committee Chair* (dissertation advisor): Dr. Ruyan Guo
- **Committee Member** for Doctoral Dissertation Proposal in Advanced Materials (Moumita Dutta, Spring 2017)
 - *Dissertation Proposal Title*: Ferroics and Multiferroics for Dynamically Controlled Terahertz

Wave Propagation

- *Committee Chair* (dissertation advisor): Dr. Ruyan Guo

Master's Thesis (6)

- Committee **Chair** (thesis advisor) for Master Thesis in Electronic Devices (Chris Carley, Spring 2021)
 - *Thesis Title*: Fabrication and Performance Prediction of Graphene Micro-supercapacitor Devices For Future Energy Storage Applications
- Committee **Chair** (thesis advisor) for Master Thesis in Electronic Devices (Nhu Huynh, Spring 2021)
 - *Thesis Title*: Hardware Security of Emerging Non-volatile Memory Devices Under Imaging Attacks
- Committee **Member** for Master Thesis in Advanced Materials (Max Estrada, Summer 2019)
 - *Thesis Title*: Thermoelectric Performance Optimization of Stand-alone Roadway-embedded Sensing Module
 - *Committee Chair* (thesis advisor): Dr. Ruyan Guo
- Committee **Member** for Master Thesis in Advanced Materials (Paul Flynn, Summer 2019)
 - *Thesis Title*: Dielectric Non-destructive Evaluation of Fiber-reinforced Polymer Composites
 - *Committee Chair* (thesis advisor): Dr. Ruyan Guo
- Committee **Chair** (thesis advisor) for Master Thesis in Electronic Devices (Susana Ortega-Contreras, Spring 2019)
 - *Thesis Title*: Microfluidic Haptic Feedback Sensor for Airway Management
- Committee **Chair** (thesis advisor) for Master Thesis in Electronic Devices (Hebin Cherian, Fall 2018)
 - *Thesis Title*: Emerging Non-volatile Memories for Neuromorphic Computing

Master's Project (4)

- Committee **Chair** (project advisor) for Master Project in Electronic Devices (Danny Espinoza, Spring 2021)
 - *Project Title*: Circuit Modeling and Simulation of Graphene Micro-supercapacitors
- Committee **Chair** (project advisor) for Master Project in Electronic Materials (Albert Zuo, Summer 2020)
 - *Project Title*: Thermoelectric Generators: Principles, Technologies, and Applications
- Committee **Chair** (project advisor) for Master Project in Power Electronics (Manoj Belagumba Narayanappa, Spring 2019)
 - *Project Title*: Nanomaterials for Power Electronics with Enhanced Reliability
- Committee **Member** for Master Project in Power Electronics (Sarah Johnson, Spring 2017)
 - *Project Title*: Failure Predicting Transformers
 - *Committee Chair* (advisor): Dr. Hariharan Krishnaswami

Doctoral Qualifying Exam (3) – Now part of Doctoral Dissertation Proposal

- Committee **Chair** for Student Qualifying Exam II (oral exam) in Materials (Brandon Young, Fall 2017)
 - *Presentation Title*: Core-Shell Structured Nano-Composites: Designs and Fabrications

- Committee **Chair** for Student Qualifying Exam II (oral exam) in Materials (Bryan Gamboa, Fall 2017)
 - *Presentation Title*: Time Domain Responses of Electromechanical Wave Propagation in Piezoelectric Layered Structures
- Committee **Chair** for Student Qualifying Exam II (oral exam) in Communications (Anil Kumar, Fall 2016)
 - *Presentation Title*: Software Defined Networks (SDN) and Virtualized LTE Mobile Network Architectures

Other Committee Services (Outside UTSA)

- Committee **Member** for Master Thesis Defense in Dept. of Physics, Texas State University, San Marcos, TX (Barry D. Koehne, Spring 2019)
 - *Thesis Title*: Hall bar nano-fabrication on an STO/Si interface system for the detection and comparison of magneto transport measurements with the Van der Pauw method
 - *Committee Chair* (thesis advisor): Dr. Nikoleta Theodoropoulou

Advisory Board for Local Community College

- Board Member for Advanced Materials Technology (AMT) Program
 - NVC (Northwest Vista College), San Antonio, TX

Proposal Reviewers and Panelists

- NSF (2017)
- NSF (2018)
- DOE (2020)
- DOE (2021)
- NSF (2021)
- NSF (2022)
- ERC (European Research Council) (2022)
- NSF (2022)
- NSF – Ad Hoc (2023)

(Select) Journal Reviewers

- Applied **Physics Letters** (APL)
- **Journal of Applied Physics** (JAP)
- **Journal of Physics D: Applied Physics**
- **Journal of Nanophotonics** (JNP)
- **npj 2D Materials and Applications**
- **ACS Nano**
- **Optical Materials** (OM)
- **Nanoscale**
- **Applied Sciences**
- **Journal of the Electron Devices Society**
- **IEEE Journal on Emerging and Selected Topics in Circuits and Systems** (JETCAS)
- **AIP Advances**
- **Computers and Electrical Engineering**

- Energy Systems
- **IEEE Transactions on Nanotechnology (TNT)**
- **IEEE Transactions on Electron Devices (TED)**
- **IEEE Transactions on Very Large Scale Integration Systems (TVLSI)**
- **IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)**
- **IEEE Transactions on Neural Networks and Learning Systems (TNNLS)**
- **IEEE Electron Device Letters (EDL)**

(Select) News/Media Highlights

- **UTSA Today**

“UTSA professor awarded \$150K from Air Force for semiconductor research” (May 2022)

(<https://www.utsa.edu/today/2022/05/story/professor-award-funding-from-air-force-for-semiconductor-research.html>)

- **UTSA Today**

“Faculty commit to intensive teaching certification course amidst pandemic” (May 2021)

(<https://www.utsa.edu/today/2021/05/story/ACUE-effective-teaching-practices.html>)

- **Phys.Org**

“Team harnesses spin of electrons to power tech devices” (Apr. 2019)

(<https://phys.org/news/2019-04-team-harnesses-electrons-power-tech.html>)

- **News 4, San Antonio**

“UTSA engineers developing security measures for implantable technology” (Jul. 2017)

(<http://news4sanantonio.com/news/local/utsa-engineers-developing-security-measures-for-implantable-technology>)

- **Stanford News**

“Graphene key to high-density, energy-efficient memory chips, Stanford engineers say” (Oct. 2015)

(<http://news.stanford.edu/2015/10/23/graphene-memory-chips-102315/>)

Teaching (Electrical Engineering at UTSA)

- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Fall 2016 (student enrollment: 8, instructor evaluation: **5.0/5.0**)
- EE 5413 (grad), “Principles of Microfabrication”, Spring 2017 (student enrollment: 13, instructor evaluation: **4.62/5.0**)
- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Fall 2017 (student enrollment: 33, instructor evaluation: **4.35/5.0**)
- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Spring 2018 (student enrollment: 20, instructor evaluation: **4.58/5.0**)
- EE 4533/5413 (undergrad/grad), “Principles of Microfabrication”, Fall 2018 (student enrollment: 14, instructor evaluation: **4.69/5.0**)
- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Spring 2019 (student enrollment: 15, instructor evaluation: **4.82/5.0**)
- EE 6493/MATE 5253 (grad in EE/MatE), “Magnetic Materials and Engineering”, Spring 2019 (student enrollment: 7, instructor evaluation: **5.0/5.0**)
- EE 4533/5413 (undergrad/grad), “Principles of Microfabrication”, Fall 2019 (student

enrollment: 14, instructor evaluation: **4.45/5.0**)

- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Spring 2020 (student enrollment: 42, instructor evaluation: **course evaluation suspended due to COVID-19**)
- EE 6493/MATE 5253 (grad in EE/MatE), “Magnetic Materials and Engineering”, Fall 2020 (student enrollment: 11, instructor evaluation: **4.71/5.0**)
- EE 4533/5413 (undergrad/grad), “Principles of Microfabrication”, Fall 2020 (student enrollment: 21, instructor evaluation: **4.64/5.0**)
- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Spring 2021 (student enrollment: 43, instructor evaluation: **4.6/5.0**)
- EE 6493/MATE 5253 (grad in EE/MatE), “Introduction to Spintronics”, Spring 2021 (student enrollment: 12, instructor evaluation: **4.7/5.0**)
- EE 4533/5413 (undergrad/grad), “Principles of Microfabrication”, Fall 2021 (student enrollment: 26, instructor evaluation: **4.58/5.0**)
- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Spring 2022 (student enrollment: 53, instructor evaluation: **4.61/5.0**)
- EE 2213 (undergrad), “Electric Circuits and Electronics”, Spring 2022 (student enrollment: 49, instructor evaluation: **3.97/5.0**)
- EE 2213 (undergrad), “Electric Circuits and Electronics”, Summer 2022 (student enrollment: 15, instructor evaluation: **4.1/5.0**)
- EE 4533/5413 (undergrad/grad), “Principles of Microfabrication”, Fall 2022 (student enrollment: 12, instructor evaluation: **4.1/5.0**)
- EE 4523/5503 (undergrad/grad), “Introduction to Nanoelectronics”, Spring 2023 (student enrollment: 53, instructor evaluation: **TBD**)
- EE 2213 (undergrad), “Electric Circuits and Electronics”, Spring 2023 (student enrollment: 29, instructor evaluation: **TBD**)

***EE 4523/5503:** A technical elective (for undergraduates) and concentration area core (for graduates) course in the Department of ECE, newly designed and developed by Dr. Ahn. The presentation slides-free model (blackboard lecture, peer discussion, reading assignment, online tutoring, etc.) has been applied.

***EE 4533/5413:** A technical elective (for undergraduates) and concentration area core (for graduates) course in the Department of ECE, newly designed and developed by Dr. Ahn. The project-based, hands-on education (term project on microfabrication) has been provided.

***EE 6493/MATE 5253:** A technical elective (in EE and MatE) course for graduates, newly designed and developed by Dr. Ahn. The emerging disciplines of spintronics and quantum information and sciences have been taught.

***EE 2213:** A required course for Mechanical Engineering undergraduates, newly designed and developed by Dr. Ahn. This is offered in the ECE Department, yet for students of non-ECE major (e.g., mechanical or biomedical engineering students).

Student Mentoring for Research (UNL, UTSA Nanoelectronics Laboratory)

- **Current Students/Scholars under Supervision (10)** (URM: 50%)

- **Postdoc (1)**

Dr. Smita Dey (**female**)

- **PhD Students (2)**

Nacer Ibaroudene (3rd year, **African**)

Nhu Huynh (2st year, **female**)

- **MS Students (6)**

Justin Bisignano (2nd year)

Aaron Cantu (2nd year)

Ashkan Aminian (2nd year)

Oscar Osornio (1st year)

Natalia Bermudez (1st year, **female**)

Alejandro Reyes (1st year, **Hispanic**)

- **Undergraduate Students (1)**

Michael Gomez (sophomore)

- **Alumni**

- **Graduate Students (11)**

1. Hebin R. Cherian (MS in Electrical Engineering)

Thesis title: Emerging Non-volatile Memory Devices for Neuromorphic Computing

Graduation year & semester: 2018 Fall

Current affiliation: UTSA (PhD candidate in Electrical Engineering)

2. Susana Ortega Contreras (MS in Electrical Engineering, **female, Hispanic**)

Thesis title: Microfluidic Haptic Feedback Sensor for Airway Management

Graduation year & semester: 2019 Spring

Current affiliation: Boeing (TX, USA)

3. Manoj Belagumba Narayanappa (MS in Electrical Engineering)

Project title: Nanomaterials for Power Electronics with Enhanced Reliability

Graduation year & semester: 2019 Spring

Current affiliation: N/A

4. Albert Zuo (MS in Electrical Engineering, **Hispanic**)

Project title: Thermoelectric Generators: Principles, Technologies, and Applications

Graduation year & semester: 2020 Summer

Current affiliation: N/A

5. Chris Carley (MS in Advanced Materials Engineering)

Thesis title: Fabrication and Performance Prediction of Graphene Micro-supercapacitor

Devices for Future Energy Storage Applications

Graduation year & semester: 2021 Spring

Current affiliation: SRC, Inc., San Antonio (Rice University, MBA online)

6. Nhu Huynh (MS in Advanced Materials Engineering, **female**)

Thesis title: Hardware Security of Emerging Non-volatile Memory Devices Under Imaging

Attacks

Graduation year & semester: 2021 Spring

Current affiliation: UTSA (PhD Candidate in Electrical Engineering)

7. Danny Espinoza (MS in Advanced Materials Engineering, **Hispanic**)

Project title: Circuit Modeling and Simulation of Graphene Micro-supercapacitors

Graduation year & semester: 2021 Spring

Current affiliation: CPS Energy, San Antonio

8. Md. Khirul (Jishan) Anam (PhD in Electrical Engineering)

Project title: Simulation, Synthesis and Characterization of Multi-Phase Functional Materials for Emerging Computing Device Applications

Graduation year & semester: 2022 Spring

Current affiliation: Micron, Boise

9. Hebin Cherian (PhD in Electrical Engineering)

Project title: Fabrication and Characterization of Spintronic Devices for Energy Efficient Computing

Graduation year & semester: 2022 Spring

Current affiliation: Micron, Boise

10. Pratheek Gopalakrishnan (PhD in Electrical Engineering)

Project title: Synthesis and Characterization of Solution - processible Graphitic Nanomaterials for Emerging RRAM Device Applications

Graduation year & semester: 2022 Spring

Current affiliation: Micron, Boise

11. Ann Rose Sebastian (PhD in Electrical Engineering, **female**)

Project title: 2D Materials and Heterostructures for Addressing Critical Societal Problems

Graduation year & semester: 2022 Spring

Current affiliation: TBD

- Undergraduate Students (3)

1. Azeez Layeni (BS in Electrical Engineering, **African**)

Research Topic: Microfabrication of Resistive Random Access Memory (RRAM)

Graduation year & semester: 2017 Fall

Current affiliation: General Dynamics Electric Boat (CT, USA)

2. Melissa Escobar (BS in Mechanical Engineering, **female, Hispanic**)

Research Topic: Microfabrication of Fiber-optic Microneedle Arrays

Graduation year & semester: 2017 Fall

3. Spencer Palmer (BS in Electrical Engineering)

Research Topic: Microfabrication of Fiber-optic Microneedle Arrays

Graduation year & semester: 2021 Spring

Current affiliation: USAA, San Antonio

• Visiting International Scholars

- Faculty on Sabbatical Leave

Prof. Heonchang Yoo (Korea University, South Korea); January 2020 – August 2020

- Doctoral Students (Co-advising)

Laura Verdugo (Mexico); 2018-2019

Project topic: PVD synthesis and characterization of II-IV nanomaterials and heterostructures for photovoltaic applications

- Undergraduate Students

Arushi Shrivastava (International Institute of Information Technology, India); Spring/Summer 2020

- High School Students

Huyk-June Seong (Kyung-gi Science High School, Korea); January 2018

Chaewon Kim (Kyung-gi Science High School, Korea); January 2018

• REU (Research Experiences for Undergraduates)

- UTSA Research Immersion Camp Program (from Universidad de Sonora, Mexico)

Guillermo Olivarria Arnold (Industrial Engineering); Summer 2019

- Alamo Colleges Advanced Materials Technology (AMT) Internship Program

Kyle Slattery; Fall 2019

- NSF-funded LSAMP CIMA Program (from Alamo Colleges)

Robert Mendoza (Northwest Vista College); Summer 2018

- UTSA Undergraduate Research Volunteer Program

Reva Kulkarni; Fall 2020

Amber Slater; Fall 2020

Justin Bisignano; Summer/Fall 2020

Project topic: PVD synthesis and characterization for nanodevice applications

- UTSA UG Research Rotation Program

Michael Gomez; Spring 2022

• Local High School Student Interns

- School of Science and Technology (San Antonio)

John Cruz; Summer 2018

Talks and Seminars (All Invited)

1. "Nano MTJ for Emerging Computing Paradigm," **Georgetown University Graduate Colloquium (Dept. of Physics)**, Washington, DC, Nov. 2022

2. "Multi-functional Oxide Thin Films for Future Computing Paradigm," **The US-Korea Conference on Science, Technology, and Entrepreneurship (UKC) 2022**, Washington, DC, Aug. 2022

3. "Metal-oxide RRAM with rGO as oxygen exchange layer," **International Workshop on Thin Films for Electronics, Electro-Optics, Energy and Sensors (TFE3S) 2022**, Boston, MA, Aug. 2022

4. "Nanoscale PCM for Neuromorphic Computing," **IEEE NAECON (National Aerospace & Electronics Conference) 2022**, OH, Jul. 2022 (online)

5. “Hardware Implementation of Machine Learning by Emerging Nanodevices,” **UTSA Matrix AI Distinguished Lecture Series**, TX, Jan. 2022 (online)
6. “2D Nanomaterials for Memristor-based Neuromorphic Computing,” **AFRL Branch Seminar (RX/AN)**, OH, Nov. 2021 (online)
7. “Emerging Nanomaterials for Energy Harvesting and Storage Applications,” **SKKU (Sungkyunkwan University) Department of Energy Science, Distinguished Lecture Series**, Seoul, South Korea, Oct. 2021 (online)
8. “Emerging Non-volatile Memory for Neuromorphic Computing,” **AFRL**, OH, Jul. 2021 (online)
9. “Emerging Nanomaterials and Nanodevices for Power Systems of the Future,” **KERI**, Changwon, South Korea, Jun. 2021 (online)
10. “Emerging Nanomaterials and Nanodevices for Ultra-low Energy Systems,” **KU Leuven**, Leuven, Belgium, Sep. 2020 (online)
11. “Nano MTJs for Emerging Computing Paradigm,” **Seoul National University**, Seoul, South Korea, Sep. 2019
12. “Leading the way to better writing: from papers to proposals,” **UTSA ECE Summer Academy**, San Antonio, TX, USA, Aug. 2019
13. “Nano MTJs for Emerging Computing Paradigm,” **Purdue University**, West Lafayette, IN, USA, Jul. 2019
(Available at nanoHUB: <https://nanohub.org/resources/30911/watch?resid=30913>)
14. “Nano MTJs for Emerging Computing Paradigm,” **Ohio State University**, Columbus, OH, USA, Jun. 2019
15. “Nanotechnology for AI and Beyond,” **KSEA-Professional Development Forum**, Austin, TX, USA, Jun. 2019
16. “Emerging Non-volatile Memory for Neuromorphic Computing,” **IEEE Central Texas – San Antonio Computer Group**, St. Mary’s University, San Antonio, TX, USA, Feb. 2019
17. “Emerging Nonvolatile Memory for Machine Learning,” **AMD Inc.**, Santa Clara, CA, USA, May 2018
18. “Nanotechnology for Intelligent Heterogeneous Systems,” **KSEA-Professional Development Forum**, San Jose, CA, USA, May 2018
19. “Current status and future challenge in emerging non-volatile memory technologies,” **Naval Research Laboratory (NRL) – Physics of Electronic Materials Branch**, Washington, D.C., USA, Feb. 2018
20. “Advancing Emerging Nonvolatile Memory with Carbon Nanomaterials,” **San Antonio Nanotechnology Forum** Networking Lunch Seminar, San Antonio (UTSA), TX, USA, Feb. 2018
21. “Future computing architecture and enabling materials and devices technology: message for computer scientists,” **Sogang University**, Korea, June 2017
22. “Emerging non-volatile memory: from nanomaterials to nanosystems,” **KAIST (Department of Electrical Engineering)**, Korea, May 2017
23. “Emerging non-volatile memory for next-generation computing paradigm,” **KIST**, Korea, May 2017
24. “Nanoscale memories beyond SRAM, DRAM, and Flash,” **Kyung-Hee University**, Korea,

May 2017

25. "Future of memory and storage device technologies," **Samsung Electronics**, Korea, May 2017
26. "Emerging materials and devices technology and career opportunity for future physicists," **Texas State University (Dept. of Physics)**, San Marcos, TX, USA, Apr. 2017
27. "Emerging non-volatile memory: from devices to architectures," **AMD Inc.**, Austin, TX, USA, Apr. 2017
28. "Carbon nanomaterials to advance emerging non-volatile memory," **UT Dallas (Dept. of Materials Science and Engineering)**, Richardson, TX, USA, Mar. 2017
29. "Emerging non-volatile memory: from devices to architectures," **Sandia National Lab. (Center for Integrated Nanotechnologies)**, Albuquerque, NM, USA, Mar. 2017
30. "Emerging non-volatile memory: from devices to architectures," **IEEE Central Texas – San Antonio Computer Group**, St. Mary's University, San Antonio, TX, USA, Feb. 2017
31. "STT-MRAM: Challenges and research direction," **Qualcomm**, San Diego, CA, Nov. 2016
32. "STT-MRAM: Challenges and research direction," **UCSD**, San Diego, CA, Nov. 2016
33. "Energy-efficient computing: from devices to architectures," **U. of Pittsburgh**, Pittsburgh, PA, Jan. 2016
34. "Energy-efficient computing: from devices to architectures," **UT San Antonio**, San Antonio, TX, Jan. 2016
35. "Energy-efficient computing: from devices to architectures," **U. of Rochester**, Rochester, NY, USA, Mar. 2016
36. "Memory devices beyond SRAM, DRAM, and FLASH," **Intel**, Hillsboro, OR, USA, Oct. 2015
37. "Energy-efficient non-volatile memory, enabled by carbon nano-materials," **HGST, Inc., a Western Digital Company**, San Jose, CA, USA, Oct. 2015
38. "One-dimensional selection device for X-point RRAM array," **IMEC**, Leuven, Belgium, Sep. 2015
39. "Emerging non-volatile memory, enabled by carbon nanomaterials," **IEEE SFBA (San Francisco Bay Area) Nanotechnology Council**, Santa Clara, CA, USA, Sep. 2015
40. "Energy-efficient design for emerging NVM technology," **NCCA VS (Northern California Chapter, AVS)**, San Jose, CA, USA, Sep. 2015
41. "Emerging nanoscale memory/logic devices and architectures," **EPFL**, Lausanne, Switzerland, Mar. 2015
42. "Emerging nanoscale memory/logic devices and architectures," **CMU**, Pittsburgh, PA, USA, Mar. 2015
43. "Emerging non-volatile memory devices and architectures," **Micron**, Boise, ID, Mar. 2015
44. "Emerging non-volatile memory devices and architectures," **Micron**, Milpitas, CA, Mar. 2015
45. "Emerging nanoscale memory/logic devices and architectures," **Georgia Tech.**, Atlanta, GA, USA, Jan. 2015
46. "Physics of electrical conduction in the sub-threshold regime and crystallization due to thermal disturbances in phase-change memory," **E\PCOS**, Tampere, Finland, Jul. 2012
47. "Introduction to Spintronics," **KAIST**, Daejeon, Korea, Oct. 2009

48. “Nanoscale device modeling: Green’s function method,” **Samsung Electronics** (SAIT), Giheung, Korea, Feb. 2006

Research Achievements and Highlights [corresponding publication article #]

Computing Hardware of the Future

- Proposal of a novel sub-60 mV/decade logic device, employing the epitaxial oxide heterostructure for maximum strain transfer [J8]
- Development of a graphene-inserted tunneling device for enhanced spin injection efficiency in spin logic applications [C10] [J6]
 - *Highlighted in Phys.org (Apr. 2019)*
 - *US Patent Filed (Apr. 2019)*
- First demonstration of a full-stack deep learning accelerator system using magnetic tunnel junction devices [J11] [C21]
- First investigation of read disturbance issue in STT-MRAM main memory by device and architecture co-operative strategy and solution [J14]
- First non-stochastic approach to achieve multiple resistance states in STT-MRAM [C19] [C23]
- Development of non-uniform data quantization scheme for accelerating bioinspired computing [C25]
- First experimental investigation of security vulnerability of STT-MRAM buffer memory [C26]

Carbon Nanotube/Graphene/Low-dimensional Nanomaterials

- Development of high-sensitivity temperature sensor based on 2D materials and heterostructures [J3] [C3] [C6]
- Development of a cost-effective methodology to fabricate micro-supercapacitors with carbon nanostructures as interdigitated electrodes [J9] [C12]
- Provision of the unique insight and review on how 2D materials can advance the emerging spintronic devices [J10]
- First demonstration of nondestructive acid-based functionalization for single-walled carbon nanotubes [J15]
- Investigation of spin-on-CNT technology for cost-effective nanodevice integration [C24]
- First demonstration of CNFET (Carbon Nanotube FET) based cross-point RRAM and PCM array [J17] [J21] [C29]
- First demonstration of Graphene-inserted PCM device [J17] [J19]
 - *Highlighted in Stanford News Media (Oct. 2015)*
 - *US Patented (15/011, 199, 2016)*
- First demonstration of large-area nanomaterials for roadway embedded piezoelectric energy harvesting for electric vehicles [J2] [J13] [C19]

Emerging Nonvolatile Memory (NVM) and Storage Devices

- First study of using rGO as OEL for RRAM to address the variability issue [J1] [C2] [C4]
- First study of security vulnerability of RRAM and STT-MRAM under imaging attacks [C8] [C9]
- First demonstration of bidirectional programming for RRAM-based neuromorphic computing [J5]

- First demonstration of effect of different pulsing schemes on crystallization in PCM [J26]
- Record PCM cell with ultra-low RESET programming current (**Record:** $< 1 \mu\text{A}$) [J21]
- Study of conduction mechanism for HfO_x-based RRAM [C30] [C31]
- Study of read disturbance in STT-MRAM and proposal of an addressing strategy [J14]
- Proposal and implementation of 1D selection device and 1TnR array concept [J21] [C29]
- First demonstration of the impact of dry etching on PCM device (RESET) performance [J12] [C14]

Unconventional Thin-films and Applications (Spintronics, Oxides, etc.)

- First investigation of spin transport properties of CoFeB alloys [J28] [C43]
- Comprehensive experimental study of spin transport properties of various CoFe alloys [J27] [C41]
- Invention of a novel fabrication technique for sub-50 nm magnetic tunnel junction (MTJ) [J24]
- Development of a graphene-inserted tunneling device for enhanced spin injection efficiency in spin logic applications [C10] [J6]
- First demonstration of stress-induced conductivity modulation for STO thin films [J7] [C11]
- First demonstration of STO's tunability for novel device applications [C18]

Nanoscale Device Physics/Modeling/Simulation

- Phonon transport in silicon nanostructures [J16] [J18]
- First application of NEGF formalism to simulate nanoscale transistors within an effective mass framework [J30]
- Comprehensive scaling study and prediction of scaling limit of SBTT [J31]
- First simulative study on the impact of dry etching on PCM device (RESET) performance [J12] [C14]
- Development of a circuit-model for simulating micro-supercapacitors [J9] [C12]

Expertise and Leadership/Outreach Activities

- **Expertise**

- Micro/Nano Fabrication
(UV/E-beam Lithography, PVD, CVD, Epitaxy, ALD, RIE)
- Electronic/Spectroscopic/Microscopic Testing and Characterization
(EDS, Raman, FT-IR, XPS, SEM, TEM, AFM, PFM, MFM, I-V, C-V, Error Analysis, Low-Temperature Measurement)
- Device/Circuit Simulation
(TCAD, SPICE, Verilog)
- Finite Element Multiphysics Simulation
(Comsol)
- Coding
(MATLAB, LabVIEW, C/C++, JAVA)
- Numerical Simulation and Analysis
(NEGF, Nonequilibrium Green's Function)

- **(Select) Educational/Outreach Initiatives**

- GAR (Graduate Advisor of Record) for the MS Degree Program in Advanced Materials

Engineering (2022 – present)

: Masters Pathway in Engineering (Virtual Recruitment Fair in the College of Engineering, UTSA)

- Faculty Research Mentor (2017 – present)

: NSF-funded Alamo College LSAMP (Louis Stokes Alliance for Minority Participation) program

- Faculty Advisor for UTSA Student Organization (2020 – present)

: Roadrunner Men's & Women's Bowling

- Faculty Advisor for IEEE-Honor Society (2021 – present)

: HKN, Eta Kappa Nu

- K-12 Outreach

: Stanford Splash (2010 – 2015)

: President of Korean Student Association at Stanford (KSAS) (2012 – 2013)

Grant Records and History**Research Grants (Total Awarded: ~\$4M, Total Pending: ~\$20M)****Current (3)****US Federal**

- AFRL (\$149,999): July 2022 – June 2024, PI

“Emerging Phase Change Alloys and Devices for High Temperature Applications”

International (Ministry of Trade, Industry and Energy of South Korea)

- World Class Plus (\$2.5M): April 2022 – December 2025, PI

“Development of power device monitoring and diagnosis integrated system and lifetime prediction system using self-powered sensor”

The University of Texas System (UT System)

- Strategic Investment Fund (\$500K): September 2022 – August 2024, PI

“UTSA to Become a National Hub for Materials Research and Education”

Past (12)**US Federal**

- AFOSR, Quantum Electronic Solids/Condensed Matter Physics Program (\$444,951): March 2019 – February 2022, PI

“All-spin Logic enabled by 2D Materials”

- NSF, Division of ECCS (\$99,853): June 2019 – December 2020, PI

“EAGER: Feasibility Study of Epitaxial Oxide Resistive Field Effect Transistor (EOR-FET)”

- DoT, Tran-SET (\$80,000): March 2018 – August 2019, Co-PI

“Smart Charging of Future Electric Vehicles Using Roadway Infrastructure”

- Army Advanced Medical Technology Initiative (\$50,000): January 2018 – December 2018, Sub-contractor (from the US Army Institute of Surgical Research)

“Combat Airway Intubation Assistance Device with Haptic and Physiological Feedback”

US Industry

- Lam Research (\$50,000): April 2017 – March 2019, PI

“Investigation of novel nanomaterials for future computing paradigm”

US National Laboratory

- Sandia National Laboratory CINT (User Proposal): January 2017 – June 2018, PI
“Nanoscale Thermoelectric Device Based on 2D-layered Materials”

International Laboratory

- KERI, Korea Electrotechnology Research Institute (\$10,000): September 2020 – August 2021, PI
“Study on Smart, Self-powered Sensors Applicable to Power System Diagnosis”

UTSA Seed Funding

- T² (Transdisciplinary Teams) (\$20,000): September 2019 – December 2020, PI
“Transdisciplinary Investigation of Electromechanical Coupling-driven Properties of New 2D Materials”
- Strategic Research Award (\$15,000): January 2020 – December 2020, Co-PI
“Fabrication of an Innovative Nanopore Microneedle for Controlled Gene Transfection within 3D Cell Volumes”
- GREAT (Grant for Research Advancement and Transformation) (\$20,000): September 2018 – August 2019, PI
“A Full-Stack Solution for NVM-Based Deep Learning Acceleration”
- Strategic Research Award (\$15,000): April 2021 – August 2021, PI
“Proof-of-Concept Study for Perovskite Oxide-based New Logic Devices”
- Strategic Research Award (\$15,000): April 2021 – August 2021, Co-PI
“Fabrication of an Innovative Nanopore Microneedle for Controlled Electroporation and Gene Transfection”

Pending (5)

- NIH R01 (\$1,825,657, Co-PI, 4 years)
- NIH R21 (\$500K, Co-PI, 3 years)
- KETEP (\$2.1M, PI, 3 years)
- DoD (\$7.5M, Co-PI, 5 years)
- ARL (\$7.4M, Co-PI, 5 years)

(see next page for publication)

Journal Publications (h-index: 16+; i10-index: 19+; 1,100+ citations; sorted by date)

Google Scholar: <http://scholar.google.com/citations?hl=en&user=moiA1e8AAAAJ>

*IF: Impact Factor in 2021/2022

- 31 Publications (21: first-authored as a researcher and/or supervised as a faculty advisor, 10: co-authored as a collaborator), [J1]-[J31]

0. H. R. Cherian and **E. C. Ahn**, “Surface-induced Spin Decoherence in Graphitic Nanosheets,” *Submitted (2023)*

1. P. Gopalakrishnan, N. Ibaroudene, S. Ganguli, A. Roy, and **E. C. Ahn**, “Metal-oxide RRAM with rGO as Oxygen Exchange Layer”, *Proc. SPIE (Accepted, 2023) - IF: 0.38*

2. D. Fernandez, A. Sebastian, P. Raby, M. Genedy, **E. C. Ahn**, M. R. Taha, S. Dessouky, and S. Ahmed, “Roadway Embedded Smart Illumination Charging System for Electric Vehicles”, *Energies* **16**, 835 (2023) - *IF: 3.004*

3. A. R. Sebastian, Md. G. Kaium, T.-J. Ko, M. S. Shawkat, Y. Jung, and **E. C. Ahn**, “Temperature Dependent Studies on Centimeter-scale MoS₂ and vdW Heterostructures”, *Nanotechnology* **33**, 505503 (2022) - *IF: 3.953*

4. I. V. Martinez, J. Iturbe Ek, **E. C. Ahn**, and A. O. Sustaita, “Molecularly Imprinted Polymer via Reversible Addition-Fragmentation Chain-Transfer Synthesis in Sensing and Environmental Applications”, *RSC Advances* **12**, 9186 (2022) - *IF: 4.036*

5. Z. Jiang, Z. Wang, X. Zheng, S. Fong, S. Qin, H.-Y. Chen, **E. C. Ahn**, J. Cao, Y. Nishi, S. Wong, and H.-S. P. Wong, “Bidirectional Analog Conductance Modulation for RRAM-based Neural Networks”, *IEEE Transactions on Electron Devices* **67**, 4904 (2020) - *IF: 3.221*

6. H. R. Cherian, N. Birge, J. Pollanen, and **E. C. Ahn**, “Fabrication of Graphene-inserted Tunneling Device for Emerging Spin Devices,” *ECS Transactions* **98**, 3 (2020) - *IF: 0.64*

7. P. Gopalakrishnan, A. Sebastian, and **E. C. Ahn**, “Perovskite Oxides Tunable by Electromechanical and Electrothermal Couplings,” *ECS Transactions* **98**, 87 (2020) - *IF: 0.64*

8. Md. K. Anam, P. Gopalakrishnan, A. Sebastian, and **E. C. Ahn**, “Proposal for an Electrostrictive Logic Device with the Epitaxial Oxide Heterostructure”, *Scientific Reports* **10**, 14636 (2020) - *IF: 4.996*

9. C. Carley, D. Espinoza, J. Reyes-Rodriguez, and **E. C. Ahn**, “High Energy-Density Supercapacitor, Enabled by Carbon Nanostructures,” *ECSarXiv* doi:10.1149/osf.io/b3ec4 (2020)

10. **E. C. Ahn**, “2D Materials for Spintronic Devices”, *npj 2D Materials and Applications* **4**, 17 (*Invited Review Article, 2020*) - *IF: 10.516*

11. H. Yan, H. R. Cherian, **E. C. Ahn**, X. Qian, and L. Duan, “iCELIA: A Full-Stack Framework for STT-MRAM-Based Deep Learning Acceleration”, *IEEE Transactions on Parallel and Distributed Systems (IEEE-TPDS)* **31**, 408 (2020) - *IF: 2.687*

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26. **C. Ahn**, B. Lee, R. Jeyasingh, M. Asheghi, G.A.M. Hurkx, K. Goodson, and H.-S. P. Wong, “Crystallization Properties and Their Drift Dependence in Phase-Change Memory Studied with a Micro-Thermal Stage”, *Journal of Applied Physics* **110**, 114520 (2011) - *IF*: 2.877
27. **C. Ahn**, K.-H. Shin, J. Bass, R. Loloee, and W. Pratt, Jr., “Current-Perpendicular-to-Plane Spin Transport Properties of CoFe Alloys: Spin Diffusion Length and Scattering Asymmetry”, *Journal of Applied Physics* **108**, 023908 (2010) - *IF*: 2.877
28. **C. Ahn**, K.-H. Shin, and W. Pratt, Jr., “Magnetotransport properties of CoFeB and Co/Ru interfaces in the current-perpendicular-to-plane geometry”, *Applied Physics Letters* **92**, 102509 (2008) - *IF*: 3.971
29. M. Shin, J. Lee, and **C. Ahn**, “Simulation Study of the Scaling Behavior of Top-Gated Carbon Nanotube Field Effect Transistors”, *Journal of Nanoscience and Nanotechnology* **8**, 5389 (2008) - *IF*: 1.354
30. **C. Ahn** and M. Shin, “Quantum Simulation of Coaxially Gated CNTFETs by Using an Effective Mass Approach”, *Journal of the Korean Physical Society* **50**, 1887 (2007) - *IF*: 0.657
31. **C. Ahn** and M. Shin, “Ballistic Quantum Transport in Nano-scale Schottky-Barrier Tunnel Transistors”, *IEEE Transactions on Nanotechnology* **5**, 278 (2006) - *IF*: 2.570

US Patents

1. Y. Kim, **C. Ahn**, A. Sood, E. Pop, H.-S. P. Wong, K. E. Goodson, S. Fong, S. Lee, C. M. Neumann, M. Asheghi, “Graphene-inserted phase change memory device and method of fabricating the same”, *US9583702B2* (published in Feb. 2017)
- Synopsis: Provided is a phase change memory device including a graphene layer inserted between a lower electrode into which heat flows and a phase change material layer, to prevent the heat from being diffused to an outside so as to efficiently transfer the heat to the phase change material layer
2. **E. C. Ahn**, “Zero-Power Carbon Interconnect for Next-Generation Computing Devices and Methods of Use”, 62/853, 992 (filed in May 2019)
- Synopsis: Provided is an all-spin logic device including a tunable graphitic sheet inserted between a spin injection nanomagnet and a spin transport channel, to implement a highly energy-efficient interconnect for next-generation computing hardware

Book Chapters

1. R. Jeyasingh, **Ethan C. Ahn**, S. Eryilmaz, S. Fong, and H.-S. P. Wong, "Phase-change memory", Emerging Nanoelectronic Devices, ed. A. Chen, *John Wiley & Sons, Ltd.*, 1st edition, 576 pages (2015)

Conferences (refereed, sorted by date)

Google Scholar: <http://scholar.google.com/citations?hl=en&user=moiA1e8AAAAJ>

- 49 Publications (39: first-authored (presented) as a researcher and/or supervised as a faculty advisor, 10: co-authored as a collaborator), [C1]-[C48]

1. N. Ibaroudene, Md. K. Anam, and **E. C. Ahn**, "High Temperature Phase Change Materials," *MRS Spring Meeting* (Accepted, 2023)

2. P. Gopalakrishnan, N. Ibaroudene, S. Ganguli, A. Roy, and **E. C. Ahn**, "Reducing the Variability of RRAM by Graphitic Nanosheets," *48th International Conference on Micro and Nano Engineering (MNE)*, Leuven, Belgium, Sep. 2022

3. A. R. Sebastian, Md. G. Kaium, T.-J. Ko, M. S. Shawkat, Y. Jung, and **E. C. Ahn**, "Temperature Dependent Spectroscopic and Electrical Studies on MoS₂/PtTe₂," *48th International Conference on Micro and Nano Engineering (MNE)*, Leuven, Belgium, Sep. 2022

4. P. Gopalakrishnan, N. Ibaroudene, S. Ganguli, A. Roy, and **E. C. Ahn**, "Metal-oxide RRAM with rGO as oxygen exchange layer," *International Workshop on Thin Films for Electronics, Electro-Optics, Energy and Sensors (TFE3S) 2022*, Boston, MA, Aug. 2022

5. **E. C. Ahn**, "Multi-functional Oxide Thin Films for Future Computing Paradigm," *The US-Korea Conference on Science, Technology, and Entrepreneurship (UKC) 2022*, Washington DC, Aug. 2022

6. A. Sebastian, Md. G. Kaium, Y. Jung, and **E. C. Ahn**, "Centimeter-scale MoS₂ Thin Films as a Temperature Sensor," *241st ECS Meeting*, Vancouver, Canada, May 2022

7. N. Ibaroudene, **E. C. Ahn**, and R. L. Hood, "Fabrication of Nanopore Microneedles," 2022 BME Research Symposium, San Antonio, USA, March 2022

8. N. Huynh, H. Cherian, and **E. C. Ahn**, "Security Vulnerability of Metal-Oxide RRAM under SEM Imaging," *47th International Conference on Micro and Nano Engineering (MNE)*, Turin, Italy, Sep. 2021

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10. H. R. Cherian, N. Birge, J. Pollanen, and **E. C. Ahn**, "Fabrication of Graphene-inserted Tunneling Device for Emerging Spin Devices," *PRiME (ECS Pacific Rim Meeting on Electrochemical and Solid-State Science)*, Honolulu, USA, Oct. 2020

11. P. Gopalakrishnan, A. Sebastian, and **E. C. Ahn**, “Perovskite Oxides Tunable by Electromechanical and Electrothermal Couplings,” *PRiME (ECS Pacific Rim Meeting on Electrochemical and Solid-State Science)*, Honolulu, USA, Oct. 2020
12. C. Carley, D. Espinoza, J. Reyes-Rodriguez, and **E. C. Ahn**, “High Energy-Density Supercapacitor, Enabled by Carbon Nanostructures,” *PRiME (ECS Pacific Rim Meeting on Electrochemical and Solid-State Science)*, Honolulu, USA, Oct. 2020
13. Spencer Palmer and **E. C. Ahn**, “Fabrication of Nanopore Microneedle for Cell Transfection and Transformation”, *UTSA Undergraduate Research and Creative Inquiry Showcase*, San Antonio, TX, May 2020
14. Md. K. Anam and **E. C. Ahn**, “Simulation on Etching Imperfections in Nanoscale PCM”, *European Phase Change and Ovonic Symposium (EPCOS)*, Grenoble, France, Sep. 2019
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16. P. Raby, A. Sebastian, M. Genedy, **E. Ahn**, S. Ahmed, and M. Taha, “Smart Composite Materials for Charging Electrical Vehicle”, *EMI (Engineering Mechanics Institute) Conference*, Pasadena, USA, Jun. 2019
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18. P. Gopalakrishnan, N. Theodoropoulou, and **E. C. Ahn**, “Application-driven Perovskite Thin Films with Oxygen Vacancies Controlled”, *MRS (Materials Research Society) Spring Meeting*, Phoenix, USA, Apr. 2019
19. D. Fernandez*, A. Sebastian*, **E. Ahn**, M. R. Taha, S. Dessouky, and S. Ahmed, “Smart Illuminative Charging (SiC) of Future Electric Vehicles Using Roadway Infrastructure”, *TRANSET Conference*, San Antonio, USA, Apr. 2019
*Equally Contributed Authors
20. H. R. Cherian and **E. C. Ahn**, “Reconfigurable Spintronic Synaptic Device (RSSD) for Neuromorphic Computing”, *MNE 2018 (The 44th International Conference on Micro and Nanoengineering)*, Copenhagen, Denmark, Sep. 2018
21. H. Yan, H. R. Cherian, **E. C. Ahn**, and L. Duan, “CELIA: A Device and Architecture Co-Design Framework for STT-MRAM-Based Deep Learning Acceleration”, *ICS (The 32nd ACM International Conference on Supercomputing)*, Beijing, China, Jun. 2018
22. P. Gopalakrishnan and **E. C. Ahn**, “Perovskite Oxides for Next-generation High-k Dielectrics”, *The 4th San Antonio Nanotechnology Forum (SANTF)*, San Antonio, TX, USA, Apr. 2018

23. H. R. Cherian and **E. C. Ahn**, “STT-MRAM-based Synaptic Model for Neuromorphic Computing Systems”, *The 4th San Antonio Nanotechnology Forum (SANTF)*, San Antonio, TX, USA, Apr. 2018
24. A. Asghari and **E. C. Ahn**, “A novel approach in multi-walled carbon nanotubes deposition onto a variety of substrates”, *MRS (Materials Research Society) Spring Meeting*, Phoenix, USA, Apr. 2018
25. H. Yan, **E. C. Ahn**, and L. Duan, “Enabling NVM-Based Deep Learning Acceleration Using Nonuniform Data Quantization”, *CASES (International Conference on Compilers, Architecture, and Synthesis for Embedded Systems) WiP (Work-in-Progress) track*, Seoul, S. Korea, Oct. 2017
26. C. Chavda, **E. C. Ahn**, Y.-S. Chen, Y. Kim, K. Ganesh, and J. Lee, “Vulnerability Analysis of On-Chip Access-Control Memory”, *The 9th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage 17)*, Santa Clara, USA, Jul. 2017
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29. **C. Ahn**, Z. Jiang, C.-S. Lee, H.-Y. Chen, J. Liang, L. Liyanage, and H.-S. P. Wong, “A 1TnR Array Architecture using a One-Dimensional Selection Device”, *Symposia on VLSI Technology and Circuits*, Honolulu, USA, Jun. 2014
30. **C. Ahn**, S. Kim, T. Gokmen, O. Dial, M. Ritter, and H.-S. P. Wong, “Temperature-dependent Studies of the Electrical Properties and the Conduction Mechanism of HfOx-based RRAM”, *International Symposium on VLSI Technology, Systems, and Applications (VLSI-TSA)*, Hsinchu, Taiwan, Apr. 2014
31. S. Kim, **C. Ahn**, T. Gokmen, O. Dial, and M. Ritter, “Resistive Switching and Temperature-dependent Transport in HfOx-based Resistive Memory Devices”, *American Physical Society (APS) March Meeting*, Denver, USA, Mar. 2014
32. R. Jeyasingh, S. Fong, J. Lee, E. Bozorg-Grayeli, **C. Ahn**, M. Asheghi, K. Goodson, and H.-S. P. Wong, “Phase Change Memory – The Interplay Between Thermal and Electrical Effects”, *224th ECS meeting*, San Francisco, USA, Oct. 2013
33. K. Y. Jung, B.-C. Min, **C. Ahn**, G.-M. Choi, I.-J. Shin, S.-Y. Park, K. Rhie, and K.-H. Shin, “Fabrication of nano-sized magnetic tunnel junctions using lift-off process assisted by atomic force probe tip”, *The 10th Nano Korea Symposium*, Seoul, S. Korea, Aug. 2012
34. **C. Ahn**, B. Lee, R. Jeyasingh, M. Asheghi, G.A.M. Hurkx, K. Goodson, J. Chen, B. Gao, Y. Lu, Y. X. Deng, X. Y. Liu, J. F. Kang, and H.-S. P. Wong, “Physics of electrical conduction in the sub-threshold regime and crystallization due to thermal disturbances in phase-change

memory”, *European Phase Change and Ovonic Symposium (EPCOS)*, Tampere, Finland, Jun. 2012

35. R. Jeyasingh, M. Caldwell, J. Liang, **C. Ahn**, and H.-S. P. Wong, “Methodologies to study the scalability and physics of phase change memory devices”, *European Phase Change and Ovonic Symposium (EPCOS)*, Zurich, Switzerland, Sep. 2011

36. **C. Ahn**, B. Lee, R. Jeyasingh, M. Asheghi, G.A.M. Hurkx, K. Goodson, and H.-S. P. Wong, “Effect of Resistance Drift on the Activation Energy for Crystallization in Phase Change Memory”, *International Conference on Solid State Devices and Materials (SSDM)*, Nagoya, Japan, Sep. 2011

37. T. Y. Lee, **C. Ahn**, B.-C. Min, B. Jung, S. Y. Jang, S. H. Lim, J. Langer, B. Ocker, W. Maass, S.-Y. Park, Y. Jo, and K.-H. Shin, “Current-induced Magnetization Switching of Uncompensated Synthetic CoFeB/Ru/CoFeB Free Layers in MgO Magnetic Tunnel Junctions”, *International Conference of the Asian Union of Magnetism Societies (ICAUMS)*, Jeju, S. Korea, Dec. 2010

38. B.-C. Min, I.-J. Shin, G.-M. Choi, **C. Ahn**, J. Langer, B. Ocker, W. Maass, and K.-H. Shin, “MgO-based magnetic tunnel junctions for spin-transfer-torque random access memory”, *10th IEEE Conference on Nanotechnology*, Seoul, S. Korea, Aug. 2010

39. **C. Ahn**, B. C. Min, I.-J. Shin, J. Langer, B. Ocker, W. Mass, S.-Y. Park, Y. Jo, and K.-H. Shin, “Current-induced magnetization switching in MgO-based magnetic tunnel junctions with CoFeB/Ru/Co synthetic free layer”, *IEEE Nano/Nano Korea Joint Symposium*, Seoul, S. Korea, Aug. 2010

40. **C. Ahn**, B. C. Min, I.-J. Shin, J. Langer, B. Ocker, W. Mass, S.-Y. Park, Y. Jo, and K.-H. Shin, “MgO-based magnetic tunnel junctions with CoFeB/Ru/Co Synthetic free layers”, *International Symposium on Advanced Magnetic Materials and Applications (ISAMMA)*, Sendai, Japan, Jun. 2010

41. **C. Ahn**, K.-H. Shin, R. Loloee, J. Bass, and W. Pratt, Jr., “Current-Perpendicular-to-Plane Magnetoresistance of CoFe-based Exchange-Biased Spin-Valves”, *American Physical Society (APS) March Meeting*, Pittsburgh, USA, Mar. 2009

42. B. C. Min, **C. Ahn**, and K.-H. Shin, “Towards the reduction of switching current with high thermal stability in MgO-based MTJs”, *4th Taiwan International Conference on Spintronics*, Taipei, Taiwan, Oct. 2008

43. **C. Ahn**, K.-H. Shin, and W. Pratt, Jr., “Current-perpendicular-to-plane magnetoresistances of CoFeB-based exchange-biased spin valves and CoFeB/Ru multilayers”, *International Magnetism Conference*, Madrid, Spain, May 2008

44. J. Lee, **C. Ahn**, and M. Shin, “A Comparative Study of Schottky-Barrier Nanowire and Carbon Nanotube FETs”, *2nd IEEE International Conference on Nano/Micro Engineered and Molecular Systems*, Bangkok, Thailand, Jan. 2007

45. **C. Ahn** and M. Shin, “Enhanced Ambipolar Behaviors in Schottky-Barrier CNTFETs”, *2nd IEEE International Conference on Nano/Micro Engineered and Molecular Systems*, Bangkok, Thailand, Jan. 2007
46. **C. Ahn** and M. Shin, “Scaling Studies of Coaxially Gated Carbon Nanotube MOSFETs”, *1st IEEE Nanotechnology Materials and Devices Conference (NMDC)*, Gyeongju, S. Korea, Oct. 2006
47. J. Lee, **C. Ahn**, and M. Shin, “Simulations of Schottky-barrier nanowire field effect transistors,” *1st IEEE Nanotechnology Materials and Devices Conference (NMDC)*, Gyeongju, S. Korea, Oct. 2006
48. **C. Ahn** and M. Shin, “A Quantum Simulation of Coaxially Gated Schottky-Barrier Carbon Nanotube Transistors”, *The 13th International Symposium on the Physics of Semiconductors and Applications*, Jeju, S. Korea, Aug. 2006
49. **C. Ahn** and M. Shin, “Ballistic quantum transport in nano-scale Schottky barrier tunnel transistors”, *5th IEEE Conference on Nanotechnology*, Nagoya, Japan, Jul. 2005



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Procedural Checklist for New Faculty Being appointed to Tenured (Without Term) Positions

This form must be submitted in Interfolio as part of the Tenured upon Hire case at the Dean's recommendation step.

Ketul C. Popat, Professor and Chair

Faculty Member's Name and Title

Bioengineering

Local Academic Unit



Verification of Hiring and Trainings:

I verify that all hiring requirements, including reference checks, for the candidate has been completed and the candidate has been informed of all training that need to be completed within the first few weeks of the start of their appointment (including but not limited to DEI trainings: Title IX Overview and Sexual Harassment Prevention, Equal Opportunity: A Fair Shake and Ethics).

One-half page justification for appointment, to include a description of the benefit of this hire for the department, school, etc., as well as the rationale for selecting this candidate over others.

Dr. Popat has been hired as Chair of the Bioengineering Department in the College of Engineering and Computing following an open and competitive search. Dr. Popat received his Ph.D. in Bioengineering in 2003 from the University of Illinois. He joined Colorado State University at Fort Collins as an Assistant Professor in the School of Bioengineering in 2007 and was promoted to the rank of Professor in 2020. Among other roles, he has served as Associate Department Head of the Department of Mechanical Engineering and as Director of the Undergraduate Program in the School of Biomedical Engineering. In these roles he has made substantial educational contributions to his School. Dr. Popat is a leading researcher in the area of tissue engineering. He has published over 175 papers in high-impact journals, has a Google Scholar h-index of 50, and over 100,000 citations. He has served as Principal Investigator or Co-Principal Investigator on millions of dollars of funded research, and he has graduated 10 PhD students. Dr. Popat's strong record of leadership in education and in research will significantly contribute to the strength of the Bioengineering Department.

10. 18.2023

Dean

Date

Ketul C. Popat
November 30, 2023

Ketul C. Popat, Ph.D. is a candidate for Tenure upon Hire to Professor without Term in the Department of Bioengineering within the College of Engineering and Computing (CEC). He is also selected to serve as Department Chair in Bioengineering. Professor Popat received his Ph.D. in 2003 from the University of Illinois. He also received a M.Eng. in 2000 at the Illinois Institute of Technology and a B.Eng. in 1998 at the Maharaja Sayajirao University.

Currently, Professor Popat holds an appointment as a Professor of Mechanical Engineering in the School of Biomedical Engineering at Colorado State University since 2020 and is currently the Director of the Undergraduate Program for the School since 2019. He was also the Associate Department Head of Undergraduate Studies for the Department of Mechanical Engineering from 2018 – 2021. Prior to joining the faculty at Colorado State University, he served as an Associate Specialist in the Department of Physiology in the University of California, San Francisco and a Postdoctoral Research Associate at Boston University. In addition, Professor Popat also has held visiting appointments at a number of prestigious universities internationally.

Professor Popat's tenure dossier demonstrates that he has established an exceptionally strong record of research/scholarship, teaching, and service. His case strongly is supported by the CEC Review Committees and the Dean of the College each of which has documented the strength of his academic record.

The decision to hire Professor Popat is well supported for tenure and to serve as Department Chair. He will be a valued member of our university community and is deserving of appointment to the rank of Professor without Term.

Consistent with the recommendation of the CEC review committees and the Dean of the College, I also recommend that Professor Popat be granted appointment without term to the rank of Professor without Term in the Department of Bioengineering within the College of Engineering and Computing, effective January 10, 2024.

CURRICULUM VITAE

CV SECTION 1: Employment History/Awards

NAME

Ketul C. Popat

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Colorado State University
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Fort Collins CO 80523-1374

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EMAIL

ketul.popat@colostate.edu

EDUCATION

2003	PhD., Bioengineering, University of Illinois, Chicago IL, USA
2000	M.Eng., Chemical Engineering, Illinois Institute of Technology, Chicago IL, USA
1998	B.Eng., Chemical Engineering, Maharaja Sayajirao University, Baroda, India

ACADEMIC POSITIONS

2020 – present	Professor, Mechanical Engineering/School of Biomedical Engineering/School of Advanced Materials Discovery, Colorado State University, Fort Collins CO, USA
2013 – 2020	Associate Professor, Mechanical Engineering/School of Biomedical Engineering/ School of Advanced Materials Discovery, Colorado State University, Fort Collins CO, USA
2007 – 2013	Assistant Professor, Mechanical Engineering/School of Biomedical Engineering, Colorado State University, Fort Collins CO, USA

ADMINISTRATIVE POSITIONS

2019 – present	Director of the Undergraduate Program, School of Biomedical Engineering, Colorado State University, Fort Collins CO, USA
2018 – 2021	Associate Department Head of Undergraduate Studies, Department of Mechanical Engineering, Colorado State University, Fort Collins CO, USA

VISITING POSITIONS

2021 – present	Distinguished Visiting Professor, PSG Institute of Advanced Studies, Coimbatore, India
2015 – present	Adjunct Professor, Centre for Biomaterials Science and Technology School of Mechanical and Building Sciences, Vellore Institute of Technology, Vellore, India

SABBATICAL POSITIONS

2015 Visiting Erskine Fellow, Department of Chemical and Process Engineering, University of Canterbury, Christchurch, NZ
2015 Visiting Researcher, Departamento de Engenharia Mecânica, Pontifícia Universidade Católica do Paraná, Curitiba, Brazil

OTHER POSITIONS

2005 – 2007 Associate Specialist, Department of Physiology, University of California, San Francisco CA, USA
2003 – 2005 Postdoctoral Research Associate, Department of Biomedical Engineering, Boston University, Boston MA, USA

CURRENT JOB DESCRIPTION

30% Teaching
40% Research/Creative Activity
10% Service/Outreach
20% Admin

HONORS AND AWARDS

2020 Office of International Programs Distinguished Service Award
2019 George T. Abell Outstanding Mid-Career Award, College of Engineering, Colorado State University, Fort Collins CO, USA
2018 Art Corey Award for Outstanding International Contributions, Walter Scott, Jr. College of Engineering, Colorado State University, Fort Collins CO, USA
2017 Teaching Excellence Award, School of Biomedical Engineering, Colorado State University, Fort Collins CO, USA
2016 Best Professor Nominee, Engineering College Council, Colorado State University, Fort Collins CO, USA
2010 George T. Abell Outstanding Early Career Award, College of Engineering, Colorado State University, Fort Collins CO, USA
2006 REAC Award, College of Medicine, University of California, San Francisco CA, USA
2005 SPRInG Award, Boston University, Boston MA, USA

CV SECTION 2: Publications/Scholarly Record

PUBLISHED WORK

Books:

Editor: **Ketul C. Popat**, *Nanotechnology in tissue engineering and regenerative medicine*. (2010) CRC Press, ISBN: 978-1-4398-01410-3.

Refereed Journal Articles: (Google Scholar h-index: 47 as of November 2022)

1. Vignesh K. Manivasagam, **Ketul C. Popat**. *Improved Hemocompatibility on Superhemophobic Micro–Nano-Structured Titanium Surfaces*. *Bioengineering* (2023) 10(1) 43.

2. Harvinder Singh Virk, **Ketul C. Popat**. *Erythrocyte interaction with titanium nanostructured surfaces*. *In vitro models* (2022).
3. Siqi Niu, Wenbin Yang, Heng Wei, Michail Danilov, Ihor Rusetskyi, **Ketul C. Popat**, Yao Wang, Matt J Kipper, Laurence A Belfiore, Jianguo Tang. *Heterostructures of Cut Carbon Nanotube-Filled Array of TiO₂ Nanotubes for New Module of Photovoltaic Devices*. *Nanomaterials* (2022) 12(20) 3604.
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Refereed Chapters in Books:

1. Pearl Hameed, Vignesh K Manivasagam, Magesh Sankar, **Ketul C. Popat**, Geetha Manivasagam. *Nanofibers and Nanosurfaces*. In: Nanomaterials and Their Biomedical Applications. (2021) Springer Nature 16 107
2. Sadhana Sharma, **Ketul C. Popat** and Tejal A. Desai. *Design and biological applications of nanostructured poly(ethylene glycol) films*. In: Nanotechnology in Biology and Medicine: Methods, Devices, and Applications, Second Edition. (2017) 531-559
3. Vinod B. Damodaran, Victoria Leszczak, Melissa M. Reynolds and **Ketul C. Popat**. *Zwitterionic polymeric materials in biomedical applications*. In: Encyclopedia of Biomedical Polymers and Polymeric Biomaterials. (2017) Taylor & Francis, USA.
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Conference Proceedings:

1. Nicole L. Ramo, Jasmine Nejad, **Ketul C. Popat** and Kimberly Catton. Student Assessment of Active Learning Elements in 100-level Introductory Biomedical Engineering Course. In: 2018 ASEE Annual Conference & Exposition (2018).
2. David Bark, Hamed Vahabi, Sanli Movafaghi, **Ketul C. Popat**, Arun K Kota, Lakshmi Prasad Dasi. *Superhydrophobicity to minimize thrombogenic risk on mechanical heart valves*. In: Bulletin of the American Physical Society, (2017) 62.
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4. Marcela Dias Netipanyj, T Gradowski, Sheron Cogo, Selene Esposito, Paulo Soares, **Ketul C. Popat**. Effect of Annealing Temperature of Titania Nanotube Arrays on Adipose Derived Stem Cell Functionality. In: Tissue Engineering Part A, (2016) 22 S118-S119
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CONTRACTS AND GRANTS

Externally funded Projects as PI: (Note: Multiple contracts to single project are listed as one item.)

1. (2022 – 2024) Nanostructured surfaces with improved hemocompatibility, Co-PI: Matt J. Kipper, \$409,826, National Institutes of Health, 1R21EB033511.
The objective of this project is to In this work prevent thrombosis on implants by combining the promising properties of two biopolymers with nanoscale features on titania to develop a novel blood-compatible surface.
2. (2017 – 2023), Superhydrophobic Heart Valve Prosthesis, Co-PIs: Arun K. Kota and David Bark, \$1,066,142, National Institutes of Health, 1R01HL135505 (Multi-PI grant, subcontracted from Ohio State University, Total Budget: \$2,881,704).
The objective of this project is to develop an advanced superhydrophobic mechanical heart valve that is engineered with flow control technology for maximum blood compatibility. State-of-the-art manufacturing and experimental studies in the areas of materials sciences and flow control theory are utilized to construct this novel heart valve.

The proposed innovative approach combines these methods and techniques in a unique interdisciplinary effort to produce high performance mechanical heart valves. This research will lead to a dramatic improvement in heart valve and other mechanical support technology. As a PI, I am leading the evaluation of biocompatibility and hemocompatibility of the materials used to develop advanced superhydrophobic mechanical heart valve.

3. (2020 – 2022), Evaluating hemocompatibility of made by Merit Medical, Merit Medical Inc., (Total Budget: \$13,847).

The objective of this project is to evaluate hemocompatibility of catheters made by Merit Medical under flow.

4. (2017 – 2021), Superomniphobic Flow Controlled Prosthetic Heart Valve, Co-PI: Arun Kota, \$151,936, National Institutes of Health 1R21HL139208 (Multi-PI grant, subcontracted from Ohio State University, Total Budget: \$407,920).

The objective of this project is to develop an advanced superomniphobic mechanical heart valve that is engineered with flow control technology for maximum blood compatibility. State-of-the-art manufacturing and experimental studies in the areas of materials sciences and flow control theory are utilized to construct this novel heart valve. The proposed innovative approach combines these methods and techniques in a unique interdisciplinary effort to produce high performance mechanical heart valves. This research will lead to a dramatic improvement in heart valve and other mechanical support technology. As a PI, I am leading the evaluation biocompatibility and hemocompatibility of the materials used to develop advanced superomniphobic mechanical heart valve.

5. (2013 – 2018) Hyaluronan Enhanced Polymeric Heart Valve Prosthesis, Co-PIs: Susan P. James and Christopher Orton, \$533,361, National Institutes of Health, 5R01HL119824 (subcontracted from Ohio State University, Consortium PI: Lakshmi Prasad Dasi, Total Budget: \$999,673).

The objective of this project was to develop an advanced polymeric heart valve that is engineered for maximum blood compatibility through the use of cross-linked hyaluronan, which is present in all tissues. State-of-the-art manufacturing, experimental studies in the areas of mechanics and materials sciences are utilized to construct this novel heart valve. The proposed innovative approach combined these methods and techniques to optimize a highly innovative concept in a unique interdisciplinary effort to produce durable and highly functional polymeric heart valves. This novel technology will lead to a dramatic improvement in heart valve technology. As a PI, I was leading the evaluation of biocompatibility and hemocompatibility of the materials used to develop advanced polymeric heart valve.

6. (2015 – 2017) Cost Effective Trileaflet Biopolymeric Heart Valve for India, Co-PIs: Susan P. James and Christopher Orton, \$30,000, National Institutes of Health 1R03EB014255 (subcontracted from Ohio State University, Consortium PI: Lakshmi Prasad Dasi, Total Budget: \$223,050).

We have developed an advanced polymeric heart valve that is engineered for maximum biocompatibility through the use of cross-linked Hyaluronan. Testing, validation, and optimization of this novel low-cost technology is proposed as a joint effort between the US and Indian teams, while laying the ground work towards commercialization in India through TTK Healthcare (India's largest heart valve manufacturer). As a PI, I was leading the evaluation of biocompatibility and hemocompatibility of the materials used to develop advanced polymeric heart valves

7. (2015 – 2016) Bark: Biomechanical Response of Platelets to Superhydrophobic Surface in Mechanical Heart Valves and Other Blood-Contacting Medical Devices, \$57,962.00, National Institutes of Health 1F32HL129730.

Medical devices used to treat cardiovascular disease, e.g. prosthetic heart valves and stents, create a thrombotic (blood clot) risk in patients that is clinically addressed with anticoagulation and antiplatelet therapies. Experimental evidence indicates that surfaces that strongly repel water, like a lotus leaf, may be effective at reducing the risk for blood clots. Therefore, we are evaluating these surfaces in a flow environment typical of medical devices to assess their efficacy for future use in medical devices. As a PI, my role was to mentor Dr. David Bark.

8. (2014 – 2018) Fabrication of Titania Nanotubes on Titanium Implants AND Platelet Adhesion & Activation on Implant Materials, \$13,831, Bitol LLC.

Bitol Designs, LLC is a privately held start-up company in Concord, CA. It is categorized under surgical and medical instruments. They have rapid prototyping, CNC machining and 3D printing capabilities, to assist in the development of the technology. As a PI, I was leading the initial biocompatibility studies on titanium devices for application in neural shunts.

9. (2014 – 2015) Novel silicone-based materials for ocular lenses, Co-PIs: Susan P James and Travis Bailey, \$50,000, Colorado Office of Economic Development and International Trade.

We are developing novel silicone-based materials for ocular lenses that are more hydrophilic and less inflammatory than conventional ocular lenses. These silicone hydrogels are further enhanced with hyaluronan (HA) in a manner that should not change mechanical or optical properties but makes the lens much more hydrophilic and reduces the potential for inflammatory responses. As a PI, I was leading the protein interaction and inflammatory response on hyaluronan enhanced surfaces.

10. (2012 – 2014) Nanostructured Constructs from Human Tissue: Engineering DBM and DAT, Multi-PI: Matthew Kipper, \$28,310, AlloSource Inc.

To realize the potential of donated human tissues to develop new tissue constructs, this work will develop techniques to tune the nanostructure of demineralized bone matrix (DBM). We are also very interested in extending this technology to include decellularized adipose tissue (DAT). Engineering nanostructured materials from human tissues is a simple, low-cost, reproducible strategy for imparting stable biological signals. This strategy may rival or surpass more expensive strategies like growth factor and gene delivery. As a PI, I was leading the efforts related to evaluating cellular interaction with the engineered materials.

11. (2010 – 2014) Nanoscale Polymeric Templates for Orthopedic Tissue Engineering, \$324,081, National Institutes of Health 1R21AR057341.

Autogenous cancellous bone is currently the most widely used bone graft material. However, there are several problems associated with autogenous cancellous bone grafts such as additional scar tissue formation, donor site morbidity, pain, prolonged rehabilitation, increased risk of deep infection, inflammation and restricted availability. These problems have motivated the design of synthetic bone scaffolds as a replacement for autogenous cancellous bone grafts. This proposed project outlines the motivation and reasoning behind the development of the polymeric nanowire surfaces as a bone graft material. As a PI, I was responsible for all the aspects of the proposed research.

12. (2010 – 2011) Deposition and Evaluation of Hydroxyapatite Biological Coatings, Co-PI: John W. Williams, \$81,940, Plasma Controls LLC.

Plasma based ion implantation and deposition (PBII&D) is an advanced surface modification and coating tool that will be developed for biomedical applications. In this research, PBII&D will be used to deposit silver-doped hydroxyapatite coatings on titanium implant materials, improving an implant's ability to both integrate with existing tissue and resist bacterial infection. More generally, the proposed plasma system is useful for creating versatile and effective biomaterials and biocoatings. As a PI, I was responsible for evaluating the biocompatibility and anti-microbial activity of materials developed by Plasma Controls.

13. (2009 – 2012) Multifunctional Nanostructured Interfaces for Orthopedic Implants, \$57,000, Colorado Office of Economic Development and International Trade.

This work proposes application of novel nanostructured films of controllable architectures spanning the nano to micro-dimensional scales, as interfaces for existing orthopedic implants to improve their osseointegration capabilities. Such control over the nanoscale interface can prove advantageous for applications in biomaterials and tissue engineering, particularly in orthopedic implant materials. Further these nanostructured interfaces of controllable architectures can also be used to delivery drugs locally at the site of implantation. As a PI, I was responsible for all the aspects of the proposed research.

14. (2008 – 2012) Nanostructured Titania for Orthopedic Biomaterials, \$275,000, National Science Foundation 0827827.

A goal of current orthopedic biomaterials research is to design implants that induce controlled and guided growth of tissue, and rapid healing. To achieve these goals a better understanding of events at the bone-material interface is needed, as well as the development of new materials and approaches that promote osseointegration. We propose the use of well controlled nanostructured titania interfaces to enhance implant osseointegration. The integration of controlled nanoscale titania architectures into existing implant materials can promote osteoblast differentiation and matrix production and enhance short- and long-term osseointegration. As a PI, I was responsible for all the aspects of the proposed research.

Externally funded Projects as Co-PI:

1. (2017 – 2020) Tuning Interfacial Biomolecule Interactions with Massively Parallel Nanopore Arrays, PI: Matthew Kipper, Co-PI: Christopher Snow, \$410,894, National Science Foundation 1704901.

In this project, we will develop new applications for nanoporous protein crystals. The crystals are prepared by Chris Snow's lab (CSU, Chemical and Biological Engineering). Together, we are developing new methods for measuring protein-DNA interactions in porous protein crystals. As a co-PI, I am contributing towards nanomaterials characterization.

2. (2013 – 2014) Bone Matrix Nanofiber Scaffolds for Regenerative Medicine, PI: Matthew Kipper, \$54,000, Colorado Office of Economic Development and International Trade.

To realize the potential of donated human tissues to develop new tissue constructs, this work will develop techniques to tune the nanostructure of demineralized bone matrix (DBM). Engineering nanostructured materials from human tissues is a simple, low-cost, reproducible strategy for imparting stable biological signals. This strategy may rival or

surpass more expensive strategies like growth factor and gene delivery. As a co-PI, I was leading the efforts related to evaluating cellular interaction with the engineered materials.

3. (2013 – 2015) Hyaluronan Enhanced Polymeric Heart Valve Prosthesis, PI: Lakshmi Prasad Dasi, Co-PIs: Susan P. James, Christopher Orton, David Prawel. \$707,004, National Institutes of Health, 5R01HL119824

The objective of this project was to develop an advanced polymeric heart valve that is engineered for maximum blood compatibility through the use of cross-linked hyaluronan, which is present in all tissues. State-of-the-art manufacturing, experimental studies in the areas of mechanics and materials sciences are utilized to construct this novel heart valve. The proposed innovative approach combined these methods and techniques to optimize a highly innovative concept in a unique interdisciplinary effort to produce durable and highly functional polymeric heart valves. This novel technology will lead to a dramatic improvement in heart valve technology. As a co-PI, I was leading the evaluation of biocompatibility and hemocompatibility of the materials used to develop advanced polymeric heart valve.

4. (2013 – 2018) Development of a Novel Bioinspired Fiber Reinforced Hydrogel that Recapitulates Developmental Processes to Regenerate the Bone-Ligament Interface, PI: Tammy Haut Donahue, \$390,000, National Science Foundation 1306741.

Although numerous soft-tissue replacement constructs have been developed previously, less attention has been dedicated in recreating the interface between the engineered replacement soft-tissue and the hard bone. The proposed tissue construct will be prepared from a composite hydrogel reinforced with polycaprolactone nanofibers and seeded by mesenchymal stem cells (MSCs). In order to mimic the structure of native soft tissue-to-bone interface, biochemical and biophysical cues will be modulated along the length of the tissue construct to drive the differentiation of MSCs down the chondrogenic, fibrocartilaginous, and ligamentous pathways. As a co-PI, I was assisting with the studies related to MSC interaction with the scaffolds.

5. (2011 – 2012) Developing the Cardiovascular Applications of BioPoly, PI: Susan P James, Co-PI: Lakshmi Prasad Dasi, \$36,386, Colorado Office of Economic Development and International Trade.

The objective of this project was to develop an advanced material for maximum blood compatibility through the use of cross-linked hyaluronan, which is present in all tissues. As a co-PI, I was assisting in the evaluation of biocompatibility and hemocompatibility of the materials used to develop advanced polymeric heart valve.

6. (2010 – 2011) Evaluation of Hydroxyapatite Coatings Deposited using Novel Plasma Based Ion Implantation and Deposition, PI: John Williams, \$27,700, Colorado Office of Economic Development and International Trade.

In this project, PBI&D will be used to deposit silver-doped hydroxyapatite coatings on titanium implant materials, improving an implant's ability to both integrate with existing tissue and resist bacterial infection. More generally, the proposed plasma system is useful for creating versatile and effective biomaterials and biocoatings. As a co-PI, I was assisting with the biocompatibility of materials developed.

Internally Funded Awards:

- (2013 – 2014) Bone Matrix Nanofiber Scaffolds for Regenerative Medicine, PI: Matthew Kipper, \$40,000, Cancer Supercluster Colorado State University.

To realize the potential of donated human tissues to develop new tissue constructs, this work will develop techniques to tune the nanostructure of demineralized bone matrix (DBM). Engineering nanostructured materials from human tissues is a simple, low-cost, reproducible strategy for imparting stable biological signals. This strategy may rival or surpass more expensive strategies like growth factor and gene delivery. As a co-PI, I was leading the efforts related to evaluating cellular interaction with the engineered materials.

PAPERS PRESENTED / SYMPOSIA / INVITED LECTURES / PROFESSIONAL MEETINGS / WORKSHOPS

Note: * indicates the presenter.

Invited Lectures:

1. **Ketul C. Popat***, Biomimetic Surface Engineering of Materials for Orthopedic and Cardiovascular Implants, October 2022, 3rd BioMAH Conference, Italy.
2. **Ketul C. Popat***, Biomimetic Surface Engineering of Materials for Orthopedic and Cardiovascular Implants, September 2022, 20th Brazil-MRS annual meeting, Brazil.
3. **Ketul C. Popat***, Biomimetic Surface Engineering of Materials for Orthopedic and Cardiovascular Implants, September 2022, UNESP-Aracatuba, Brazil.
4. **Ketul C. Popat***, Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine, January 2022 (virtual presentation), ICAMEMS Conference, India.
5. **Ketul C. Popat***, Engineering material surfaces for blood contacting medical devices, December 2021, International Virtual Conference on Biomaterial-Based Therapeutics, Engineering and Medicine (BIOTEM-2021)
6. **Ketul C. Popat***, Modulating hemocompatibility and anti-bacterial activity through nanoscale surfaces, September 2021, The 31st Annual BioInterface Workshop & Symposium Virtual.
7. **Ketul C. Popat***, Modulating hemocompatibility and anti-bacterial activity through nanoscale surfaces, August 2021 (virtual presentation), MRS Mexico 2021 Conference, Mexico.
8. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, July 2021 (virtual presentation), Gujarat State Biotechnology Mission and Indian Institute of Technology Gandhinagar, India.
9. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, June 2021 (virtual presentation), Institute of Biomaterials, Tribocorrosion, Nano and Regenerative Medicine, University of Illinois at Chicago, IL.
10. **Ketul C. Popat***, Engineering material surfaces for blood contacting medical devices, May 2021 (virtual presentation), 2nd international conference on CHEMISTRY FOR BEAUTY AND HEALTH, Poland.
11. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, November 2020 (virtual presentation), Loughborough University, UK.
12. **Ketul C. Popat***, How do I become a successful entrepreneurial faculty: An applied scientist's perspective, December 2020 (virtual presentation), Faculty Development Program, Vellore Institute of Technology, Vellore, India.

13. **Ketul C. Popat***, *Nanotechnology in novel vascular graft and endovascular stent for non-thrombogenic vascular conduit*, December 2020 (virtual presentation), RICS-2020, PSG Hospitals, Coimbatore, India.
14. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, November 2020 (virtual presentation), BMBT-2020, Sathyabama Institute of Science and Technology, Chennai, India.
15. **Ketul C. Popat***, *Using online tools for student engagement and assessment*, December 2020 (virtual presentation), Vellore Institute of Technology, Vellore India.
16. **Ketul C. Popat***, Panel Discussion on “Current Trends and Future Challenges in Education”, October 2020 (virtual panel discussion), ICTFCE-2020, Vellore Institute of Technology, Chennai, India.
17. **Ketul C. Popat***, *Engineering material surfaces for blood contacting medical devices*, The 2nd World Summit on Advances in Science, Engineering and Technology, October 2019, Indianapolis, USA.
18. **Ketul C. Popat***, *Engineering material surfaces for blood contacting medical devices*, 2019 SBPMAT Conference, September 2019, Balneário Camboriú, Brazil.
19. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, OBI 2019 Conference, October 2019, Sao Paulo, Brazil.
20. **Ketul C. Popat***, *Engineering Material Surfaces for Cardiovascular Applications*, **Plenary Talk**, 35th Annual Meeting of the Canadian Biomaterials Society, May 2019, Quebec City, Canada.
21. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, May 2018, Laval University, Canada.
22. **Ketul C. Popat***, *Smart Stent Interfaces*, June 2018, Simposio De Regeneracao Tecidual E Biomaterias, Belo Horizonte, Brazil.
23. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, July 2018, BioMET 2018 Conference, Vellore, India.
24. **Ketul C. Popat***, *Engineering material surfaces for blood contacting medical devices*, March 2018, Institute of Hybrid Materials, Qingdao University, Qingdao, China.
25. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, January 2018, Centre for Biomaterials Science and Technology, Vellore Institute of Technology, Vellore, India.
26. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, December 2017, Department of Chemical Engineering, Universidade Estadual de Campinas, Campinas, Brazil.
27. Kevin Bartlett, Sanli Movafaghi, Arun K. Kota and **Ketul C. Popat***, *Superhemophobic surfaces for blood contacting medical devices*, COBEM 2017 Conference, Curitiba, Brazil.
28. Kevin Bartlett, Sanli Movafaghi, Arun K. Kota and **Ketul C. Popat***, *Superhemophobic surfaces for blood contacting medical devices*, eMRS Fall 2017 Conference, Warsaw, Poland.
29. Kevin Bartlett, Sanli Movafaghi, Arun K. Kota and **Ketul C. Popat***, *Superhemophobic surfaces for blood contacting medical devices*, ICTERM 2017 Conference, Vanderbijlpark, South Africa.

30. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, March 2017, Amrita Center of Nanosciences, Kochi, India.
31. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, March 2017, PSG Institutes of Advanced Studies, Coimbatore, India.
32. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, March 2017, Department of Biological Engineering, Indian Institute of Technology, Gandhinagar, India.
33. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, January 2017, Department of Materials Science and Engineering, Washington State University, Pullman WA.
34. **Ketul C. Popat***, *Superhemophobic surfaces for blood contacting medical devices*, January 2017, Centre for Biomaterials Science and Technology, Vellore Institute of Technology, Vellore, India.
35. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, II Workshop de Materiais Avançados - Materiais para Aplicações Biomédicas 2016, Guaratingueta, Brazil.
36. Jonathan Sorkin, Stephen Hughes, Paulo Soares, **Ketul C. Popat***, *Titania Nanotube Arrays as Interfaces for Neural Prostheses*, 2016 TMS Conference, Nashville TN.
37. **Ketul C. Popat***, *Modulating Hemocompatibility: Development of Nanostructured Surfaces for Medical Devices*, BITERM Conference 2016, Delhi, India.
38. **Ketul C. Popat***, *Modulating Immune Response Through Biomaterial Surface Nanotopography*, MRS Mexico 2016 Conference, Cancun, Mexico.
39. **Ketul C. Popat***, *Superhydrophobic Surfaces for Blood Contacting Medical Devices*, MS&T 2016 Conference, Salt Lake City UT.
40. **Ketul C. Popat***, *Titania Nanotube Arrays as Interfaces for Blood Contacting Interfaces*, November 2015, AIChE Conference, Salt Lake City UT.
41. **Ketul C. Popat***, Jonathan A Sorkin, Stephen Hughes, Paulo Soares, *Titania Nanotube Arrays as Interfaces for Neural Prostheses*, MS&T 2015 Conference, Columbus OH.
42. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, August 2015, Department of Mechanical Engineering, Pontifícia Universidade Católica do Paraná, Brazil.
43. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, August 2015, School of Mechanical and Aerospace Engineering, Queen's University, UK.
44. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, August 2015, Trinity Centre for Bioengineering, Trinity College, Dublin, Ireland.
45. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, April 2015, Department of Chemistry, Massey University, NZ.
46. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, March 2015, Queensland University of Technology, Brisbane, Australia.

47. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, March 2015, Auckland Bioengineering Institute, University of Auckland, NZ.
48. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, September 2014, Department of Biotechnology, Shree Ramkrishna Institute of Computer Education and Applied Sciences, Surat, India.
49. **Ketul C. Popat***, *Titania Nanotube Arrays as Interfaces for Blood Contacting Interfaces*, 2014 CBECIMAT Conference, Cuiaba, Brazil.
50. **Ketul C. Popat***, *Titania Nanotube Arrays Modulate in Vitro Hemocompatibility and Immune Response*, TMS 2014 Conference, San Diego CA.
51. Nathan A. Trujillo and **Ketul C. Popat***, *Osteogenic Differentiation of Adipose Derived Stem Cells on Polycaprolactone Nanowire Surfaces*, MS&T 2014 Conference, Pittsburgh PA.
52. Victoria Leszczak and **Ketul C. Popat***, *Hemocompatibility of polymeric nanostructured surfaces*, MS&T 2013 Conference, Montreal, Canada.
53. **Ketul C. Popat***, *Titania nanotube arrays as interfaces for blood contacting devices*, 8 December 2013, Zing Conferences – Coordination Chemistry, Playa Del Carmen, Mexico.
54. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, December 2013, National Chemical Laboratory, Pune, India.
55. **Ketul C. Popat***, *Modulating Biomaterials Immune Response using Nanotopography*, 24 December 2013, National Conference on Challenges in Biomaterials Research, Vellore, India
56. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, January 2013, Department of Mechanical Engineering, Sagar Institute of Research & Technology, Bhopal, India.
57. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, January 2013, Department of Mechanical Engineering, Maulana Azad National Institute of Technology, Bhopal, India.
58. Barbara S. Smith and **Ketul C Popat***, *Titania Nanotube Arrays as Interfaces for Blood-Contacting Implantable Devices*, MS&T 2012 Conference, Pittsburgh PA.
59. **Ketul C. Popat***, *Nanoengineering of material surfaces for tissue engineering and regenerative medicine*, 2012 SPIE NanoScience + Engineering Conference, San Diego, CA.
60. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, 2nd International Conference on Advances in Mechanical, Manufacturing and Building Sciences (ICAMB - 2012), Vellore Institute of Technology, Vellore, India.
61. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, November 2011, Department of Materials Technology, Universidade Estadual Paulista, Guaratingueta, Brazil.
62. Derek A. Carroll, Jennifer Lee, Michael Onorato, Kaitlin Spink, David A. Prawl and **Ketul C. Popat***, *Low Cost 3D Bio-Printing of Cellularized Vascular Graft Prototypes*, RAPDASA 2011 Conference, Vanderbijlpark, South Africa.

63. Samuel Bechara, Lucas Wadman and **Ketul C. Popat***, *Electro-conductive polymeric nanowire templates facilitates neural stem cell adhesion, proliferation and differentiation*, MS&T 2011 Conference, Columbus OH.
64. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, June 2011, Department of Biomedical Engineering, PSG Tech, Coimbatore, India.
65. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for tissue engineering and regenerative medicine*, November 2011, Program in Materials Science, Department of Bioengineering, University of California, Riverside CA.
66. Barbara S. Smith*, Laura Grissom, Sorachon Yoriya, Craig A. Grimes and **Ketul C. Popat**, *Hemocompatibility of Titania Nanotube Arrays*, LabAutomation 2011, Palm Springs CA.
67. Timothy Ruckh* and **Ketul C. Popat**, *An In Vitro Investigation of the Enhance Osteogenic Action of Mineralized Nanofibers for Bone Regeneration*, LabAutomation 2010, Palm Springs CA.
68. **Ketul C. Popat***, *Nano-engineered material surfaces for applications in orthopedics*, October 2008, Department of Bioengineering, University of Illinois, Chicago IL.
69. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for applications in biology and medicine*, April 2008, Department of Chemical Engineering, Colorado State University, Fort Collins CO.
70. **Ketul C. Popat***, *Micro/Nano-engineering of material surfaces for applications in biology and medicine*, March 2008, Department of Mechanical Engineering, University of Colorado, Boulder CO.
71. **Ketul C. Popat***, *Micro and Nanofabricated Interfaces for Therapeutic Delivery*, 2007 MEMS Alliance Symposium, Biotechnology Institute Center, University of Maryland, Rockville MD.
72. **Ketul C. Popat*** and Tejal A. Desai, *Improved Marrow Stromal Cells Response on Nanostructured Surfaces for Bone Biotemplating Applications*, 2005 AIChE Annual Meeting, Cincinnati OH.
73. **Ketul C. Popat***, *Fabrication and evaluation of peptide immobilized nanoporous alumina surfaces for bone biotemplating application*, Society for Experimental Mechanics 15th International Invitational UACEM Symposium on MEMS and Nanotechnology 2004, Springfield MA.
74. **Ketul C. Popat***, *Development of vapor deposited thin films for silicon based bio-microsystems*, September 2002, Department of Chemical Engineering, Maharaja Sayajirao University, Baroda, India.

Papers Presented:

1. James Michael*, Paulo Soares, **Ketul C. Popat**, *316L Stainless Steel Modified via Plasma Electrolytic Oxidation for Orthopedic Implants*, 2022 BMES Annual Meeting.
2. Somayeh Baghersad, Ketul C. Popat, Alessandro Martins, Matt Kipper, *Polyelectrolyte Multilayer Coatings using an Amphoteric Aminated Condensed Tannin (Tanfloc)*, 2022 BMES Annual Meeting.

3. Roberta M. Sabino*, Julietta V. Rau, **Ketul C. Popat**, *Bioactive Glass Ceramic Supplemented with Manganese Improves Osteogenic Property on Nanostructured Titania*, 2021 BMES Annual Meeting.
4. Roberta Maia Sabino*, Matt J Kipper, Alessandro F Martins, **Ketul C. Popat**, *Tannin/glycosaminoglycan-based Polyelectrolyte Multilayers Improve the Endothelialization of TiO₂ Nanotubes*, Society for Biomaterials Annual Meeting, Seattle GA (2021).
5. Roberta M. Sabino*, Kirsten Kauk, Liszt Y. C. Madruga, Matt J. Kipper, Alessandro F. Martins, **Ketul C. Popat**, *Tanfloc/Heparin Polyelectrolyte Multilayer Enhances Hemocompatibility and Antibacterial Activities of Titania Nanotubes*, 11th World Biomaterials Congress (2020).
6. Vignesh K. Manivasagam* and **Ketul C. Popat**, *Nano-patterned Hydrophilic Titanium Surface with Facile Hydrothermal Treatment for an Enhanced Hemocompatibility*, 11th World Biomaterials Congress (2020).
7. Vignesh K. Manivasagam*, **Ketul C. Popat**, *Enhanced Hemocompatibility On Hydrothermally Treated Nanostructured Titanium Surfaces*, 2020 BMES Annual Meeting.
8. Tara Wigmosta*, **Ketul C. Popat** and Matt Kipper, *Biomimetic and Antimicrobial Surfaces for Orthopedic Implants*, 2020 BMES Annual Meeting. (2020).
9. Roberta Maia Sabino*, Gabriela Mondini, Matt Kipper, Alessandro Martins, **Ketul C. Popat**, *Enhanced Osteogenic Differentiation of Adipose-Derived Stem Cells on Titania Nanotube Surfaces With Tanfloc/Heparin Polyelectrolyte Multilayers*, 2020 BMES Annual Meeting. (2020).
10. Zacharie Montgomerie* and **Ketul C. Popat**, *Improved Hemocompatibility and Reduced Bacterial Adhesion on Superhydrophobic Titania Nanoflowers Fabricated on Ti-6Al-4V Substrates*, 2020 BMES Annual Meeting (2020).
11. Roberta Sabino*, Kirsten Kauk, Liszt Y. C. Madruga, Matt J. Kipper, Alessandro F. Martins and **Ketul C. Popat**, *Enhanced Hemocompatibility and Antibacterial Activity on Titania Nanotubes*, TERMIS 2019 Annual Conference, Orlando FL (2019).
12. Roberta Sabino*, Tarun Kumar Jammu, Hamed Vahabi, Sanli Movafaghi, Arun K. Kota and **Ketul C. Popat**, *Hemocompatibility of Superhydrophobic and Superhydrophilic Surfaces*, Society for Biomaterials 2019 Annual Meeting, Seattle GA (2019)
13. Tara Wigmosta*, Ketul C. Popat and Matt J. Kipper, *Advanced Surfaces for Orthopedic Implants*, Biomedical Engineering Society National Meeting, Philadelphia, PA, (2019).
14. Matt Kipper*, **Ketul C. Popat**, Rachael-Simon Walker, Raimundo Romero, Joseph Staver, and Yanyi Zang, *Titania Nanotube Arrays and Functional Biopolymers as Interfaces Blood-Contacting Materials*. 2018 World Biomechanics Congress, Dublin, Ireland (2018).
15. Kevin Bartlett, Sanli Movafaghi, Arun K. Kota and **Ketul C. Popat***, *Superhemophobic Surfaces for Blood Contacting Medical Devices*. 2018 World Biomechanics Congress, Dublin, Ireland (2018).
16. Yanyi Zang*, **Ketul C. Popat** and Melissa Reynolds, *Nitric Oxide-Releasing Surfaces of Blood-Contacting Tubing Medical Devices*, ECMO 2018 Conference, Keystone CO (2018).
17. Nicole L. Ramo*, Jasmine Nejad, **Ketul C. Popat** and Kimberly Catton, *Student Assessment of Active Learning Elements in 100-level Introductory Biomedical Engineering Course*. ASEE Annual Conference & Exposition, Salt Lake City, UT (2018).

18. Kevin Bartlett, Sanli Movafaghi, Arun K. Kota and **Ketul C. Papat**, *Superhemophobic Titania Nanotube Array Surfaces for Blood Contacting Medical Devices*. Society for Biomaterials 2018 Annual Meeting, Atlanta GA (2018).
19. Roberta Maia Sabino*, Kirsten Kauk, Sanli Movafaghi and **Ketul C. Papat**, *Blood Plasma Protein Interaction With Superhydrophobic Titania Nanotube Surfaces*, 2018 BMES Annual Meeting, Atlanta GA (2018)
20. Roberta Maia Sabino*, Kirsten Kauk, Sanli Movafaghi and **Ketul C. Papat**, *Blood Plasma Protein Interaction With Superhydrophobic Titania Nanotube Surfaces*. Biointerface 2018, Boulder CO (2018)
21. David Bark*, Hamed Vahabi, Sanli Movafaghi, **Ketul C. Papat**, Arun K Kota and Lakshmi Prasad Dasi. *Superhydrophobicity to minimize thrombogenic risk on mechanical heart valves*. Division of Fluid Dynamics 2017 American Physical Society Meeting, Denver CO (2017).
22. Hamed Vahabi*, Wei Wang, **Ketul C. Papat**, Gibum Kwon, Troy Holland and Arun Kota. *A thermal sensitization approach toward the nano/microstructuring of binary alloy surfaces to tune their wettability*. Division of Fluid Dynamics 2017 American Physical Society Meeting, Denver CO (2017).
23. Hannah M. Pauly*, **Ketul C. Papat**, Daniel J. Kelly and Tammy L. Haut Donahue, *Use of a hierarchical electrospun scaffold to mimic ligament structural properties and promote collagen deposition*, Society for Biomaterials 2017 Annual Meeting, Minneapolis MN (2017).
24. João Pedro Aquiles Carobolante, Marcela Dias-Netipanyj, **Ketul C. Papat** and Ana Paula Rosifni Alves Claro*, *Formation of nanoporous TiO₂ on Ti₁₀Mo₈Nb alloy surface for biomedical applications*, ESB 2017 Conference, Athens, Greece (2017).
25. Joseph Staver*, Rachael Simon-Walker, Raimundo Romero, Yanyi Zang, Ketul C. Papat and Matthew Kipper, Melissa Reynolds, *Surface modification for increased hemocompatibility of a stent*, ACS 2017 Spring Meeting, San Francisco CA (2017).
26. Yanyi Zang*, **Ketul C. Papat** and Melissa Reynolds, *Nitric oxide releasing surfaces for blood-contacting medical devices*, ECMO 2017 Conference, Keystone CO (2017).
27. Joseph Staver*, Rachael Simon-Walker, Raimundo Romero, Yanyi Zang, **Ketul C. Papat** and Matthew Kipper, Melissa Reynolds, *Surface modification for increased hemocompatibility of a stent*, ECMO 2017 Conference, Keystone CO (2017).
28. Rachael Simon-Walker*, John Cavicchia, David A. Prawel, Lakshmi Prasad Dasi, Susan P. James and **Ketul C. Papat**, *Hemocompatibility of Hyaluronan-Enhanced Linear Low-Density Polyethylene Surfaces for Heart Valve Leaflet Applications*, World Biomaterials Congress, Montreal, Canada (2016).
29. Sanli Movafaghi, Victoria Leszczak, Arun K. Kota and **Ketul C. Papat***, *Effect of superhydrophobicity/superhydrophilicity of titanium surface on hemocompatibility*, World Biomaterials Congress, Montreal, Canada (2016).
30. Marcela Dias-Netipanyj*, Thatyanne Gradowski, Sheron Cogo, Selene Esposito, Paulo Soares and **Ketul C. Papat**, *Effect of annealing temperature of titania nanotube arrays on adipose derived stem cell functionality*, 2016 TERMIS Conference, San Diego CA (2016).
31. Hannah Pauly*, **Ketul C. Papat**, Nicholas Dunne, Daniel J. Kelly and Tammy Haut Donahue, *Chemically conjugated growth factors on electrospun biomimetic scaffolds enhance cell adhesion and proliferation*, 2016 SB3C Conference, Baltimore MD (2016).

32. Reginaldo T. Konatu*, Marcela Dias-Netipanyj, Sheron Cogo, Carlos Roberto Grandini and **Ketul C. Popat**, Ana Paula Rosifini Alves Claro, *Cell response on the Ti15Zr alloy surface after TiO₂ nanotubes growth*, 2016 SBPMat Conference, Campinas, Brazil (2016).
33. David L. Bark Jr.*, Hamed Vahabi, Hieu Bui, Sanli Movafaghi, Arun K. Kota, **Ketul C. Popat** and Lakshmi P. Dasi, *Blood Clotting Potential and Hemodynamic Analysis of a Superhydrophobic Heart Valve*, 2016 SB3C Conference, Baltimore MD (2016).
34. Matt J. Kipper*, **Ketul C. Popat** and Melissa M. Reynolds, *Multifunctional glycocalyx-mimetic surfaces reduce platelet activation on titanium*, ICS 2016 Conference, New Orleans (2016).
35. Nicole Ramo*, **Ketul C. Popat** and Kimberley Catton, *Incorporation of Undergraduate Learning Assistants in Biomedical Engineering 101*, ASEE 2016 Conference (2016).
36. Jacob DeRoo*, Michelle Ablutz, Selin Yaprak-Akgul, **Ketul C. Popat** and Matt J. Kipper, *Demineralized Bone Matrix Fibers Support Adipose Mesenchymal Stem Cells and Mineralization in Vitro*, BMES 2016 Conference, Minneapolis MN (2016).
37. Paulo Soares*, Selene Esposito, Marcela Dias and **Ketul C. Popat**, *Surface Properties and Bioactivity Ca and P Doped TiO₂ Nanotubes*, MS&T 2015 Conference, Columbus OH (2015)
38. Carolina da Silva Machado Martinelli*, Maurício Rangel Seixas, Victoria Leszczak, **Ketul C. Popat** and Ana Paula Rosifini Alves Claro, *Biocompatibility of the Ti-25Ta-25Nb-3Sn alloy for dental applications*, IADR 2015 Conference, Boston MA (2015).
39. Hannah M. Pauly*, **Ketul C. Popat**, Daniel J. Kelly and Tammy L. Haut Donahue, *Flat and 3D Electrospun Scaffolds for Ligament Tissue Engineering: Mechanical Properties and Cellular Response*, ORS 2015 Annual Meeting, Las Vegas NV (2015).
40. Hannah M. Pauly*, **Ketul C. Popat**, Daniel J. Kelly and Tammy L. Haut Donahue, *Influence of Nano- and micro-scale structure of aligned electrospun scaffolds on mechanical properties and cell response*, SB3C Conference, Snowbird UT (2015).
41. Rachael L. Simon-Walker*, John C. Cavicchia, David L. Bark Jr., Susan P. James, Lakshmi P. Dasi and **Ketul C. Popat**, *Hemocompatibility assessment of hyaluronan enhanced linear low density polyethylene for use in aortic heart valve leaflets*, SB3C Conference, Snowbird UT (2015).
42. Ryan W. Oba*, David L. Bark, Lakshmi P. Dasi and **Ketul C. Popat**, *In vitro pulsatile flow loop using human blood to mimic physiological flow conditions*, SB3C Conference, Snowbird UT (2015).
43. David A. Prawel, Ashley Beckwith, Rachael Simon-Walker, Susan P. James and **Ketul C. Popat**, *3D Printed Theroplastic Polyurethane for Biomaterial Applications*, RAPDASA 2015 Conference, Pretoria, South Africa (2015).
44. Jodi Emch*, Prasad Dasi, Sue James and **Ketul C. Popat**, *Hemocompatibility of Various Heart Valve Materials*, Society for Biomaterials 2014 Annual Meeting, Denver CO (2014).
45. Susan P. James, Casey Dean, John Cavicchia*, Justin Gangwish, **Ketul C. Popat** and David A. Prawel, *Hyaluronic Acid Enhancement of Polyethylene Terephthalate for Blood Contacting Applications*, Society for Biomaterials 2014 Annual Meeting, Denver CO (2014).
46. Jonathan A. Sorkin* and **Ketul C. Popat**, *Titania Nanotube Potential for use as a Neural Prosthesis Interface*, Society for Biomaterials 2014 Annual Meeting, Denver CO (2014).

47. Paulo Soares, Nathan A. Trujillo* and **Ketul C. Popat**, *Comparative cell behavior on titania nanotubes filled with HAP*, Society for Biomaterials 2014 Annual Meeting, Denver CO (2014).
48. Nathan A. Trujillo* and **Ketul C. Popat**, *Increased adipogenic differentiation and decreased chondrogenic differentiation of adipose derived stem cells with poly(ϵ -caprolactone) nanowire surfaces*, Society for Biomaterials 2014 Annual Meeting, Denver CO (2014).
49. Sean E. Kelley*, Mahli Ruff and **Ketul C. Popat**, *Smooth Muscle Cells Interaction with Titania Nanotube Arrays*, Society for Biomaterials 2014 Annual Meeting, Denver CO (2014).
50. Victoria Leszczak* and **Ketul C. Popat**, *Smooth Muscle Interaction with Collagen Immobilized Nanowire Surfaces*, Society for Biomaterials 2014 Annual Meeting, Denver CO (2014).
51. Victoria Leszczak* and **Ketul C. Popat**, *Collagen Immobilized Nanowire Surfaces for Cardiovascular Applications*, Biomedical Engineering Society 2013 Annual Meeting, Seattle WA (2013).
52. Nathan Trujillo and **Ketul C. Popat**, *Chondrogenic Differentiation of Adipose Derived Stem Cells on Polymeric Nanowire Surfaces*, Biomedical Engineering Society 2013 Annual Meeting, Seattle WA (2013).
53. Nicole Lewis*, Casey Dean, Justin Gangwish, David A. Prawel, **Ketul C. Popat**, Susan P. James, *Hyaluronic Acid Enhancement of Polyethylene for Cardiovascular Applications*, Society for Biomaterials 2013 Annual Meeting, Boston MA (2013)
54. Barbara S. Smith and **Ketul C. Popat***, *Nanostructured Material Interfaces for Blood-Contacting Implantable Devices*, ASME 2013 2nd Global Congress on Nanoengineering for Medicine and Biology, Boston MA (2013).
55. Victoria Leszczak* and **Ketul C. Popat**, *Hemocompatibility of Polymeric Nanoscale Surfaces*, Society for Biomaterials 2012 Annual Meeting, New Orleans LA (2012).
56. Nathan A. Trujillo* and **Ketul C. Popat**, *Interaction of adipose derived stem cells with poly(ϵ -caprolactone) nanowire surfaces*, Society for Biomaterials 2012 Annual Meeting, New Orleans LA (2012).
57. Samuel Bechara and **Ketul C. Popat***, *Micro-patterned nanowire surfaces produced by semi-rapid prototyping technique encourages directional neuronal cell growth*, RAPDASA Conference 2012, Pilanesberg, South Africa (2012).
58. Barbara S. Smith and **Ketul C. Popat***, *Titania Nanotube Arrays Modulates Surface Thrombogenicity*, 9th World Biomaterials Congress, Chengdu, China (2012).
59. Barbara S. Smith, Nicholas A. Reidel, John D. Williams and **Ketul C. Popat***, *Enhanced Thrombogenic Response on Oxygen Etched Ti6Al4V Surfaces*, 9th World Biomaterials Congress, Chengdu, China (2012).
60. Barbara S. Smith, Patricia Capellato, Sean Kelley, Derek LeFebre and **Ketul C. Popat***, *Evaluation of Magnesium as a Material for Orthopedic Applications*, 9th World Biomaterials Congress, Chengdu, China (2012).
61. Dustin Berger, **Ketul C. Popat*** and Ashok Prasad, *Long-Term Multipotent Mesenchymal Stromal Cell Response to Horizontally and Vertically Oriented Poly(ϵ -Caprolactone) Nanotopographies*, 9th World Biomaterials Congress, Chengdu, China (2012).

62. Nathan A. Trujillo, Rachael Oldinski, John D. Williams and **Ketul C. Popat***, *Antibacterial Effects of Sputter Deposited Silver-doped Hydroxyapatite Thin Films*, 9th World Biomaterials Congress, Chengdu, China (2012).
63. Patricia Capellato, Ana Paula Rosifini Alves Claro, Ana Lucia A. Escada, Joao P.B. Machado and **Ketul C. Popat***, *Surfaces modification Ti-30Ta Alloy for Biomedical Applications*, 9th World Biomaterials Congress, Chengdu, China (2012).
64. Patricia Capellato, Ana Paula Rosifini Alves Claro, Barbara S. Smith and **Ketul C. Popat***, *Nanotube formation on Ti-30Ta alloy for biomedical application*, 9th World Biomaterials Congress, Chengdu, China (2012).
65. Victoria Leszczak and **Ketul C. Popat***, *Hemocompatibility of Polymeric Nanoscale Scaffolds*, 9th World Biomaterials Congress, Chengdu, China (2012).
66. Brad J. Farrell*, Mark Pitkin, **Ketul C. Popat** and Boris I. Prilutsky, *Effect of pore size, implantation time and nano-surface properties on rat skin ingrowth into porous titanium*, 4th International Conference: ADVANCES IN ORTHOPAEDIC OSSEOINTEGRATION, San Francisco CA (2012).
67. Barbara S. Smith* and **Ketul C. Popat**, *Reduced Thrombogenicity of Nanotopographical Interfaces for Blood-Contacting Implantable Devices*, TERMIS NA 2011 Annual Conference, Houston TX (2011).
68. Vinod B. Damodaran*, Conan J. Fee and **Ketul C. Popat**, *Kinetic Models For Predicting PEG Covalent Grafting Using XPS Fractional C-O Intensities*, 242nd American Chemical Society Fall National Meeting, Denver CO (2011).
69. Samuel L. Bechara* and **Ketul C. Popat**, *Bio-functionalized electro-responsive polymeric nanowire templates facilitating neural stem cell proliferation and differentiation*, Society for Biomaterials 2011 Annual Meeting, Orlando FL (2011).
70. David Prawel*, **Ketul C. Popat** and Susan P. James, *A Drug Eluting, Osseointegrative Phospholipid Coating for Titanium Implants*, Society for Biomaterials 2011 Annual Meeting, Orlando FL (2011).
71. Barbara S. Smith*, Sorachon Yoriya, Thomas Johnson, Craig A. Grimes and **Ketul C. Popat**, *Platelet Interaction and Skin Cell Functionality on Titania Nanotube Arrays*, Society for Biomaterials 2011 Annual Meeting, Orlando FL (2011).
72. Nicholas A. Riedel*, Tyler B. Cote, **Ketul C. Popat** and John D. Williams, *Novel Helium Plasma Texturization Applied to Titanium for Enhanced Osseointegration*, ASME 2011 International Mechanical Engineering Congress & Exposition, Denver CO (2011).
73. Dustin Berger*, **Ketul C. Popat** and Ashok Prasad, *PCL Nanopillars Vs Nanofibers: A Stark Contrast in Progenitor Cell Morphology, Proliferation, and Fate Determination*, 2011 ASCB Annual Meeting, Denver CO (2011).
74. Derek A. Carroll, Jennifer Lee, Michael Onorato, Kaitlin Spink, David A. Prawel and **Ketul C. Popat***, *Low-Cost 3D Bio-printing of Cellularized Vascular Graft Prototypes*, RAPDASA Conference 2011, Vanderbijlpark, South Africa (2011).
75. Samuel L. Bechara* and **Ketul C. Popat**, *Polymeric Nanowire Templates as Scaffolds for Improved Neuronal Cell Functionality*, LabAutomation 2010, Palm Springs CA (2010).
76. Timothy Ruckh* and **Ketul C. Popat**, *An In Vitro Investigation of the Enhance Osteogenic Action of Mineralized Nanofibers for Bone Regeneration*, LabAutomation 2010 Palm Springs CA (2010).

77. Barbara S. Smith*, Sorachon Yoriya, Craig A. Grimes and **Ketul C. Popat**, *Blood Interaction and Protein Adsorption on Engineered Titania Nanotubular Arrays*, Society for Biomaterials 2010 Annual Meeting, Seattle WA (2010).
78. Nicholas Riedel*, John Williams and **Ketul C. Popat**, *Mesenchymal Stem Cell Response on Ion Beam Sputter-coated Hydroxyapatite Surfaces*, Society for Biomaterials 2010 Annual Meeting, Seattle WA (2010).
79. Samuel L. Bechara*, Anna C. Judson and **Ketul C. Popat**, *Polymeric Nanowire Templates as Scaffolds for Improved Neuronal Cell Functionality*, Society for Biomaterials 2010 Annual Meeting, Seattle WA (2010).
80. Timothy T. Ruckh*, Barbara S. Smith, Derek A Carrol and **Ketul C. Popat**, *Oleic acid delivered by nanofibers increases bone matrix formation by differentiated marrow stromal cells*, Society for Biomaterials 2010 Annual Meeting, Seattle WA (2010).
81. David P. Prawel*, **Ketul C. Popat** and Susan P. James, *Novel Electro-spray Technique for Applying Phospholipid Coatings to Titanium*, Society for Biomaterials 2010 Annual Meeting, Seattle WA (2010).
82. Susan S. Yonemura, Barbara S. Smith*, Marcio Forleo, Susan P. James and **Ketul C. Popat**, *Hemocompatibility of a Novel Hyaluronan-High Density Polyethylene Composite*, BMES 2010 Annual Meeting, Austin TX (2010).
83. Barbara S. Smith, Sorachon Yoriya, Thomas Johnson, Craig A. Grimes and **Ketul C. Popat***, *Increased Dermal Fibroblast and Decreased Epidermal Keratinocyte Functionality on Titania Nanotube Arrays*, 10th NJ Symposium on Biomaterial Science, New Brunswick NJ (2010).
84. Samuel Bechara and **Ketul C. Popat***, *Electrically Conductive Nanowire Templates Enhance Neural Stem Cell Compatibility*, 10th NJ Symposium on Biomaterial Science, New Brunswick NJ (2010).
85. Timothy T. Ruckh*, Matthew J. Kipper and **Ketul C. Popat**, *Improved marrow stromal cell adhesion and proliferation on micro/nano electrospun poly(ϵ -caprolactone) scaffolds*, Society for Biomaterials 2009 Annual Meeting, San Antonio TX (2009).
86. Nicholas Riedel*, John Williams and **Ketul C. Popat**, *Enhanced mesenchymal stem cell response on ion etched surfaces*, Society for Biomaterials 2009 Annual Meeting, San Antonio TX (2009).
87. Joshua R. Porter* and **Ketul C. Popat**, *Enhanced MSC activation and regulation on poly(ϵ -caprolactone) nanowire surfaces*, Society for Biomaterials 2009 Annual Meeting, San Antonio TX (2009).
88. Joshua R. Porter* and **Ketul C. Popat**, *Novel nanostructured scaffolds for craniofacial tissue engineering applications*, BMES 2009 Annual Meeting, Pittsburgh PA (2009).
89. Timothy T. Ruckh* and **Ketul C. Popat**, *Increased phototypic behavior of mesenchymal stem cells on electrospun Poly(ϵ -caprolactone) scaffold*, LabAutomation 2009, Palm Springs CA (2009).
90. Timothy T. Ruckh* and **Ketul C. Popat**, *Increased phenotypic behavior of marrow stromal cells on modified electrospun poly(ϵ -caprolactone) scaffold in osteogenic conditions*, Gordon Research Conference on Biomaterials: Biocompatibility/Tissue Engineering, Holderness NH (2009).

91. Joshua R. Porter* and **Ketul C. Popat**, *Biodegradable Poly(e-caprolactone) Nanowire Surfaces for Applications in Bone Tissue Engineering*, BMES 2008 Annual Meeting, St. Louis MO (2008).
92. Joshua R. Porter and **Ketul C. Popat***, *Enhanced Mesenchymal Stem Cell Response on Biodegradable Poly(e-caprolactone) Nanowires for Applications in Bone Tissue Engineering*, Society for Biomaterials 2008 Annual Meeting, Atlanta GA (2008).
93. **Ketul C. Popat***, Craig A. Grimes and Tejal A. Desai, *Micro/Nano-Engineering of Material Surfaces for Applications in Orthopedics*, LabAutomation 2008, Palm Springs CA (2008).
94. **Ketul C. Popat***, Matthew Eltgroth, Craig A. Grimes and Tejal A. Desai, *Biomimetic Nanostructured Surfaces for Enhanced Osseointegration*, BMES 2007 Annual Meeting, Los Angeles CA (2007).
95. Kristy M. Ainsle*, Sarah Tao, **Ketul C. Popat** and Tejal A. Desai, *Immunogenicity and Toxicity of Non-Particulate Nanomaterials*, BMES 2007 Annual Meeting, Los Angeles CA (2007).
96. **Ketul C. Popat*** and Tejal A. Desai, *Micro/Nano-engineering of material surfaces for applications in biology and medicine*, Gordon Research Conference on Biomaterials: Biocompatibility/Tissue Engineering, Holderness NH (2007).
97. **Ketul C. Popat***, Matthew Eltgroth and Tejal A. Desai, *Drug Eluting Nanostructured Coatings for Controlled Release*, 34th Annual Meeting of the Controlled Release Society, Long Beach CA (2007).
98. **Ketul C. Popat***, Craig A. Grimes and Tejal A. Desai, *Biomimetic Nanostructured Surfaces for Enhanced Osseointegration*, 2007 NanoBio Conference, San Francisco CA (2007).
99. **Ketul C. Popat***, Craig A. Grimes and Tejal A. Desai, *Biomimetic Nanostructured Surfaces for Enhanced Osseointegration*, 2007 NSTI Nanotech Conference, Santa Clara CA (2007).
100. **Ketul C. Popat***, Matthew Eltgroth and Tejal A. Desai, *Drug Eluting Nanostructured Coatings for Orthopedic Applications*, 2007 NSTI Nanotech Conference, Santa Clara CA (2007).
101. **Ketul C. Popat***, Craig A. Grimes and Tejal A. Desai, *Biomimetic Nanostructured Surfaces for Enhanced Osseointegration*, Society for Biomaterials 2007 Annual Meeting, Chicago IL (2007).
102. Binggui Sun, **Ketul C. Popat***, Yungui Zhou, Lennart Mucke, Tejal Desai, and Li Gan, *Specific Targeting of Microglia with Quantum Dots*, Society for Biomaterials 2007 Annual Meeting, Chicago IL (2007).
103. **Ketul C. Popat*** and Tejal A. Desai, *Microfabricated Nanoporous Silicon Membranes for Drug Delivery Applications*, 2006 AIChE Annual Meeting, San Francisco CA (2006).
104. **Ketul C. Popat*** and Tejal A. Desai, *Nanostructured Titanium Surfaces for Bone Biotemplating Applications*, AVS 53rd International Symposium & Exhibition, San Francisco CA (2006).
105. Ayca Yalcin*, John C. Aldridge, **Ketul C. Popat**, Tejal A. Desai, Nabil Chhbouki, M. Selim Unlu and Bennett B. Goldberg, *Microring Resonators for Biochemical Sensing*, 2005 American Physical Society March Meeting, Los Angeles (2005).

106. Ayca Yalcin*, **Ketul C. Popat**, Matthew Antes-Washburn, Nabil Chhbouki, Tejal A. Desai, M. Selim Unlu and Bennett B. Goldberg, *Microring Resonators for Biochemical Sensing*, Conference on Lasers and Electro-optics, Baltimore MD (2005).
107. **Ketul C. Popat***, Vivek Mukhatyar and Tejal A. Desai, *Fabrication and evaluation of micro to nano hierarchical structures of nanoporous architecture for bone biotemplating*, 2005 MRS Spring Meeting, San Francisco CA (2005).
108. Simon K. Su, **Ketul C. Popat*** and Tejal A. Desai, *Bioadhesive porous silicon particles for oral drug delivery*, ALA LabFusion 2004, Boston MA (2004).
109. **Ketul C. Popat***, Erin L. Swan and Tejal A. Desai, *Surface modification and characterization of nanoporous alumina films/membranes for biotemplating and biofiltration applications*, 7th World Biomaterials Congress, Sydney, Australia (2004).
110. Erin E. Leary Swan*, **Ketul C. Popat** and Tejal A. Desai, *Fabrication and Evaluation of Uniformly Sized Nanoporous Alumina for Human Osteoblast Cell Culture*, 7th World Biomaterials Congress Sydney, Australia (2004).
111. Barrett Nehilla*, **Ketul C. Popat**, David R. Pepperberg, Sarwat Chowdhury, Robert F. Standaert and Tejal A. Desai, *Assembly and Characterization of a Muscimol-Immobilized Silicon Surface*, 2004 ARVO Annual Meeting, Fort Lauderdale FL (2004).
112. Erin E. Leary Swan*, **Ketul C. Popat** and Tejal A. Desai, *Fabrication and Evaluation of Uniformly Sized Nanoporous Alumina for Human Osteoblast Cell Culture*, 2004 MRS Spring Meeting, San Francisco CA (2004).
113. **Ketul C. Popat*** and Tejal A. Desai, *Poly (ethylene glycol) grafted non-fouling nanoporous alumina membranes*, LabAutomation 2004, San Jose CA (2004).
114. **Ketul C. Popat*** and Tejal A. Desai, *Diffusion of biomolecules through nanoporous inorganic membranes*, 2003 MRS Fall Meeting, Boston MA (2003).
115. **Ketul C. Popat*** and Tejal A. Desai, *Biocompatibility of inorganic nanoporous films and biocapsules*, 77th ACS Colloid and Surface Science Symposium, Atlanta GA (2003).
116. **Ketul C. Popat***, Sadhana Sharma and Tejal A. Desai, *XPS characterization of thin PEG films on silicon surface*, Surface Analysis 2003, Champaign IL (2003).
117. **Ketul C. Popat***, Sadhana Sharma and Tejal A. Desai, *Developing surfaces for enhanced performance of silicon-based bio-microsystems*, LabAutomation 2003, Palm Springs CA (2003).
118. Sadhana Sharma*, **Ketul C. Popat** and Tejal A. Desai, *Biofouling and biocompatibility issues for silicon-based bio-microsystems and control strategies*, LabAutomation 2003, Palm Springs CA (2003).
119. **Ketul C. Popat*** and Tejal A. Desai, *Vapor deposited poly(ethylene glycol) interfaces: An approach for enhanced performance for microfluidic systems*, 2002 MRS Fall Meeting, Boston MA (2002).
120. **Ketul C. Popat*** and Tejal A. Desai, *Non-fouling PEG modified microcapillaries*, SmallTalk 2002, San Diego CA (2002).
121. **Ketul C. Popat*** and Tejal A. Desai, *Scanning electron microscopy of vapor deposited poly(ethylene glycol) films on silicon surface*, SmallTalk 2002, San Diego CA (2002).

122. **Ketul C. Popat***, Sadhana Sharma and Tejal A. Desai, *Engineered silicon surfaces for bioMEMS applications*, 76th Colloid and Surface Science Symposium, Ann Arbor MI (2002).
123. **Ketul C. Popat*** and Tejal A. Desai, *Capillary-specific poly(ethylene glycol) films for microfluidic systems*, 2002 BioMEMS Conference, Cambridge MA (2002).
124. **Ketul C. Popat***, Robert W. Johnson, Tejal A. Desai, *Vapor deposited poly(ethylene glycol) films for surface modification of microfluidic systems*, LabAutomation 2002, Palm Springs CA (2002).
125. **Ketul C. Popat***, Robert W. Johnson and Tejal A. Desai, *Vapor deposited PEG films on silicon substrates for implantable BioMEMS*", 2001 AIChE Annual Meeting, Reno NV (2001).
126. **Ketul C. Popat***, Robert W. Johnson and Tejal A. Desai, *AFM and XPS Characterization of Vapor Deposited Silane Films on Silicon Surface*, 222nd American Chemical Society Fall National Meeting, Chicago IL (2001).
127. **Ketul C. Popat*** and Tejal A. Desai, *Chemical Vapor Deposition of Silanes on Plain and Microfabricated Silicon Surfaces*, 221st American Chemical Society Spring National Meeting, San Diego CA (2001).
128. **Ketul C. Popat*** and Gulnur Birol, *Optimization of rate data for free and immobilized microbial endo-beta-gluconase and enzyme kinetics based on free energy profiles*, 5th Annual Undergraduate Research Conference, Illinois Institute of Technology, Chicago IL (2000).

COLLABORATIVE, INTERCOLLEGIATE & INTERDISCIPLINARY SCHOLARSHIP

1. School of Biomedical Engineering (SBME): When I first joined CSU in 2007, I began participating actively with the faculty from SBME. I have served as a member of graduate affairs committee since 2008 and more recently as a member of undergraduate academic committee since 2017. I have advised 6 PhD and 4 MS students from SBME. I have also advised three senior design teams from SBME. Through SBME I have also initiated new collaborations with Matt Kipper and Melissa Reynolds.
2. School of Advanced Materials Discovery (SAMD): The new School of Advanced Materials Discovery (SAMD) was launched as a collaboration between the College of Natural Sciences and the Walter Scott College of Engineering in 2017. SAMD now offers graduate degree programs. I am currently advising a PhD student from SAMD.
3. I currently have strong research collaborations with Vellore Institute of Technology, India (since 2008), Universidade Estadual Paulista, Brazil (since 2008), Vaal University of Technology, South Africa (since 2011), Pontificia Universidade Católica do Paraná, Brazil (since 2013), Universidade Federal do Ceará, Fortaleza (since 2019), and Universidade Estadual de Campinas (since 2017). These collaborations have resulted in several publications as well as visit from professors, postdoctoral researcher, graduate and undergraduate students in my laboratory. I have also visited these universities and given lectures and co-advised students.

OTHER ACTIVITIES / ACCOMPLISHMENTS – PUBLICATIONS / SCHOLARLY RECORD

Patents:

1. Tejal A. Desai, **Ketul C. Popat**, Craig A. Grimes. *Nanostructure surface coated medical implants and methods of using the same* (2019) US10426871B2, (Filed through University of California, San Francisco).
2. Susan P. James, Travis S. Bailey, **Ketul C. Popat**, David A. Prawel, Jackson T. Lewis, Richard L. Koch. *Synthetic polymeric materials and devices thereof* (2019) US10167387B2.
3. Arun Kumar Kota, **Ketul C. Popat**, Sanli Movafaghi, Victoria Leszczak, Wei Wang. *Hemocompatibility of superhemophobic titania surfaces* (2018) US15954943 (Pending).
4. Susan P. James, Harold Dean IV, Lakshmi Prasad Dasi, Marcio H. Forleo, **Ketul C. Popat**, Nicole R Lewis, David Alois Prawel. *Glycosaminoglycan and Synthetic Polymer Material for Blood-Contacting Applications* (2018) US10071186B2.
5. Matthew Kipper, **Ketul C. Popat**, Melissa Reynolds, Victoria, Leszczak, Raimundo Romero. *Surface treatments for vascular stents and methods thereof* (2017) US9597434B2.
6. David A Prawel, Susan P James, **Ketul C Popat**. *Methods for Delivering Compositions by Electrospraying a Medical Device* (2012) US20120058150A1.

CV SECTION 3: Evidence of Teaching and Advising Effectiveness

TEACHING

All credit courses taught at Colorado State University during the last **5 years** included below.

Resident Instruction:

Year	Semester	Course No/Title	Credit Hours	Enrollment
2022	Fall	BIOM 100 Overview of Biomedical Engineering	1	105
2022	Fall	MECH/BIOM 570 Biomedical Engineering	3	36
2022	Spring	MECH/BIOM 531 Materials Engineering	3	26
2022	Spring	BIOM 380A2 Global Challenges and Collaborations in BME	3	15
2021	Fall	BIOM 100 Overview of Biomedical Engineering	1	114
2021	Fall	MECH/BIOM 570 Biomedical Engineering	3	32
2021	Spring	MECH/BIOM 525 Cell and Tissue Engineering	3	27
2020	Fall	BIOM 100 Overview of Biomedical Engineering	1	126
2020	Fall	MECH/BIOM 570 Biomedical Engineering	3	29
2020	Spring	MECH/BIOM 574 Bioinspired Surfaces	3	24
2019	Fall	MECH/BIOM 570 Biomedical Engineering	3	30
2019	Spring	MECH/BIOM 531 Materials Engineering	3	13
2018	Fall	MECH/BIOM 570 Biomedical Engineering	3	44
2018	Fall	BIOM 100 Overview of Biomedical Engineering	1	166
2018	Fall	BIOM 200 Principles of Biomedical Engineering	2	34
2018	Spring	MECH/BIOM 525 Cell and Tissue Engineering	3	38
2017	Fall	MECH/BIOM 570 Biomedical Engineering	3	34
2017	Fall	BIOM 101 Introduction to Biomedical Engineering	3	138
2017	Spring	MECH/BIOM 531 Materials Engineering	3	25

Examples of Course Improvements:

Use of Learning Assistants in BIOM 101 (and BIOM 100 and 200):

Learning assistants (LAs) are undergraduate students who are prepared to provide support for student learning in interactive classroom environment. Learning assistants facilitate small group interaction in the class, and this helps the students to better understand the course content. In Fall 2016, I introduced LAs in BIOM 101 class and implemented in class learning activities with the help of graduate teaching fellow, Nicole Ramo. During the first week of the semester, students self-enrolled in teams of 6 or 7 for an out- of-class design project using the self-sign-up group feature of Canvas; these same teams were also used for all in-class learning activities. Class periods devoted to active learning where indicated as such on the course syllabus and schedule. On these scheduled days, the students came into class and immediately sat with their group. This allowed for the learning activity to start right away and for students who arrived late to easily find their group. At the start of a typical active learning session, the activity was introduced, and any general questions were addressed. Then, the groups worked together on the assigned task, raising their hands and looking for the LA assigned to their group, the instructor, or graduate teaching fellow if any questions arose. If needed, clarifying announcements were made to the entire class. Once a group had completed an activity (for the case of problem-solving or hands-on activities), it was checked by their LA, the graduate teaching assistant, or the instructor. The groups were then given a topic to discuss or simply waited for other groups to finish. By the mid-point of the semester, iClickers were used to indicate when groups had finished a task; this was very helpful in determining the best time to bring the class back together to go over the solution or hold class-wide discussion. An active learning class period could consist of one or more activities, but each activity could be characterized as one of the following:

- Problem-Solving: application of equations or methodologies discussed in class to real-world examples;
- Hands-On: games, activities, or demonstrations that required collaboration between group members; or
- Research: in-class reporting of what was learned from research conducted out-of- class.

Nicole conducted anonymous surveys using google forms to evaluate the effect of learning activities on student outcomes as well as better understanding of the course material by the students. The results of the survey show that the learning activities were well received by the majority of the students; 71% considered the active learning class periods valuable to their learning and 67% considered them enjoyable. Scores for the specific learning activities revealed that the problem-solving type was seen as the most helpful in understanding biomedical engineering or applying course material, followed by the hands-on activities, then the out-of- class researched based activities. The lower scores for the research-based activities may be due to the same student resistance to and attitudes about out-of-class learning responsibilities. Based on this response, LAs and in class interactive learning activities were permanently introduced in BIOM 101 (and BIOM 100 and 200) course effective Fall 2017.

Development of New Courses:

BIOM 100 and BIOM 200:

The surveys conducted by Nicole Ramo in Fall 2016 also indicated that many students found BIOM 101 extremely difficult course since they did not have appropriate background to understand the material covered. Further, there were many students who found the course to be too hard since they were admitted to CSU with lot of AP credits. Thus, based on these surveys, it was decided to split BIOM 101 into two courses, BIOM 100 – Overview of Biomedical Engineering (1 credit, to be taken in 1st year) and BIOIM 200 – Fundamentals of Biomedical Engineering (2 credits, to be taken in 2nd years). BIOM 100 gives Overview of the field of biomedical engineering with an emphasis on the roles of mechanical, electrical, and

chemical/biological engineering principles. There are no prerequisites for this course. This will help the students to understand how their partner major plays a critical role in the field of biomedical engineering. BIOM 200 discusses application of engineering analysis to physiology and biomedical engineering topics. The students will take this course in 2nd year. BIOM 100 is the prerequisite for this course, and by the time they take BIOM 200, they will have already taken relevant life science and math courses that will help them to be successful in this course. I taught BIOM 100 and 200 for first time in Fall 2018 and used LAs for these courses as well.

BIOM 380A2:

In our interconnected world, it is becoming increasingly important to be able to work with international partners and develop solutions for societies with differing cultures. This course (BIOM 380A2, 3 credit hours) provides a foundation for cross-cultural competence in the Biomedical Engineering (BME) field, considering social, political, and economic differences in areas such as medical device design, pharmaceuticals, bioinstrumentation, regulation, technology transfer, and ethics. As a CSU student in the course, they will closely interact with graduate students and professors from partner institutions in countries including India, Brazil, and Rwanda. These partnerships can open doors for future study abroad or research opportunities for students interested in further immersive international experiences.

STUDENT ADVISING/GRADUATE SUPERVISION

GRADUATE STUDENTS:

Current Graduate Advisees:

1. Vignesh Kannigaipair Manivasagam, PhD
2. Abhishek Bhattarcharjee, PhD
3. Aniruddha Savargaonkar, PhD

Current Graduate Committee Memberships (excluding those chaired):

- 4 PhD
- 2 MS

Graduate Committee Memberships (not including those above):

- 23 PhD
- 23 MS

Graduate Degrees Completed Under my Supervision:

1. Roberta Maia Sabino, PhD
2. Tara Wigamosta, PhD (Co-advised with Matt Kipper)
3. Rachael Simon-Walker, PhD
4. Nathan Trujillo, MS and PhD
5. Victoria Leszczak, PhD
6. Samuel Bechara, PhD

7. Barbara Smith, PhD
8. Timothy Ruckh, PhD
9. David Prawel, PhD (Co-advised with Susan James)
10. Nicholas Riedel, MS and PhD (Co-advised with John Williams)
11. James Michael, MS
12. Harvinder Singh Virk, MS
13. Zachary Montgomerie, MS
14. Sayudh Ghosh, MS
15. Prem Kantam, MS
16. Kevin Bartlett, MS
17. Kari Cowden, MS
18. Jonathan Sorkin, MS
19. Selin Yaprak Akgul (Co-advised with Matt Kipper)
20. Jodi Woodbury, MS
21. Sean Kelley, MS
22. Kevin Migita, MS
23. Joshua Porter, MS
24. Dustin Berger, MS (Co-advised with Ashok Prasad)
25. Jennifer Serao, ME

Graduate Advisor for Online Master of Engineering Students in Mechanical Engineering:

- 11 Current students
- 14 Graduated students

UNDERGRADUATE STUDENTS:

Undergraduate Advisees:

- Current undergraduate students working in my lab on research projects: 5
- Undergraduate students advised for research projects at CSU: 31

Other Undergraduate Mentoring Activities at CSU:

1. I have supervised 3 honors theses and have served in 2 honors theses committees.
2. I have advised 4 students who have taken independent study under my supervision.
3. I have mentored 4 high school students who have worked with other graduate students in my laboratory on research projects.

4. I have served as faculty advisor to biomedical engineering senior design project groups some with Matt Kipper for every academic year since 2016. In total, I have advised 8 groups with total of 32 students.
5. I have served as faculty advisor to mechanical engineering senior design project groups along with David Prawel (2010-2011) and John Williams (2008-2009). In total, I have advised 2 groups with total of 10 students.

OTHER ACTIVITIES / ACCOMPLISHMENTS – TEACHING/ADVISING

Visiting Scholars/Students Supported:

1. Leonardo Morais (2022), PhD student from Universidade Estadual Paulista, Aracatuba.
2. Daniele Domingues (2022), PhD student from Universidade Estadual Paulista, Guaratingueta.
3. Prof. Paulo Soares (2020), visiting sabbatical faculty from Department of Mechanical Engineering, Pontificia Universidade Catolica do Parana, Brazil.
4. Prof. Rodrigo Viera (2020), visiting sabbatical faculty from Department of Mechanical Engineering, Universidade Federal do Ceara, Fortaleza, Brazil.
5. Pranjal Jalota (2020), BS student from Vellore Institute of Technology, Vellore, India.
6. Kirti Tiwari (2020), MS student from Vellore Institute of Technology, Vellore, India.
7. Gabriela Mondini (2019), BS student from Pontificia Universidade Catolica do Parana, Curitiba, Brazil.
8. Prashant Medani (2019), BS student from Vellore Institute of Technology, Vellore, India.
9. Neha Meena (2019), BS student from Indian Institute of Technology, Gandhinagar, India
10. Lerato Madike (2019), PhD student from Vaal University of Technology, Vanderbijlpark, South Africa.
11. Leticia Bemben (2018), MS student from Pontificia Universidade Catolica do Parana, Curitiba, Brazil.
12. Rodrigo Nogoceke (2018), BS student from Pontificia Universidade Catolica do Parana, Curitiba, Brazil.
13. Tarun Kumar Jammu (2018), BS student from Indian Institute of Technology, Gandhinagar, India
14. Prof. Michael Pillay (2017), visiting faculty from Vaal University of Technology, Vanderbijlpark, South Africa.
15. Unisa Terblance (2017), PhD. student from Vaal University of Technology, Vanderbijlpark, South Africa.
16. Nolutho Mkhumbeni (2017), PhD from Vaal University of Technology, Vanderbijlpark, South Africa.
17. Luciane Santos (2017), PhD student from Pontificia Universidade Catolica do Parana, Curitiba, Brazil.
18. Dhanna Francisco (2017), BS student from Pontificia Universidade Catolica do Parana, Curitiba, Brazil.

19. Prof. Samira Camargo (2017), visiting sabbatical faculty from Universidade Estadual Paulista, Sao Jose dos Campos, Brazil.
20. Prof. Carlos Camargo (2017), visiting sabbatical faculty from Universidade Estadual Paulista, Sao Jose dos Campos, Brazil.
21. Ana Caroline Crema De Almeida, MS student from Pontificia Universidade Catolica do Parana, Brazil.
22. Krishna Pedrapolu (2017), BS student from Vellore Institute of Technology, Vellore, India.
23. Satyam Rajput (2017), BS student from Vellore Institute of Technology, Vellore, India.
24. Marcela Dias (2016-2017), PhD student from Pontificia Universidade Catolica do Parana, Brazil.
25. Akshay Singh (2016), MS student from Vellore Insitute of Technology, Vellore, India
26. Praneetha Pulyala (2016), MS student from Vellore Insitute of Technology, Vellore, India
27. Sheron Cogo (2016), BS student from Pontificia Universidade Catolica do Parana, Brazil.
28. Vitor Cassaniga (2016), BS student from Pontificia Universidade Catolica do Parana, Brazil.
29. Carolina Martinelli (2014-2015), PhD student from Universidade Estadual Paulista, Guaratingueta, Brazil.
30. Prof. Paulo Soares (2013), visiting sabbatical faculty from Department of Mechanical Engineering, Pontificia Universidade Catolica do Parana, Brazil.
31. Nandita Bal (2013), BS student from Vellore Institute of Technology, Vellore, India.
32. Bhawanjali Saxena (2011-2012), MS student from Vellore Institute of Technology, Vellore, India.
33. Patricia Capellato (2010-2011), PhD student from Universidade Estadual Paulista, Guaratingueta, Brazil.
34. Derek Lefebre (2011), Middle school teacher from Greeley Schools (supported as NSF RET).
35. Laura Grissom (2009), Middle school teacher from Greeley Schools (supported as NSF RET).
36. Vinod Babu Damodaran (2009), PhD student from University of Canterbury, Christchurch, New Zealand.
37. Kuldeep Kumar (2008), BS student from Indian Institute of Technology, Chennai, India.

Off-campus/Non-Credit Courses:

1. August 2021/September 2022, Tissue Engineering and Biomaterials, The Regional Centre of Excellence in Biomedical Engineering and eHealth (CEBE), University of Rwanda, Kigali, Rwanda.
2. March 2019, GIAN Short Course: Nanomaterials for Biological Applications, Centre for Biomedical Engineering, Indian Institute of Technology, Delhi, India.
3. June 2018, Short Course: Cell and Tissue Engineering, Department of Materials Technology, Universidade Estadual Paulista, Guaratingueta, Brazil.

4. July 2017 and December 2017: Short Course: Tissue Engineering, Indian Institute of Technology, Gandhinagar, India.
5. July 2017, Short Course: Tissue Engineering, Vaal University of Technology, Vanderbijlpark, South Africa.
6. January 2016, Short Course: Tissue Engineering, Centre for BioMaterials Science and Technology, Vellore Institute of Technology, Vellore, India
7. November 2015, Workshop: Tissue Engineering, Vaal University of Technology, Vanderbijlpark, South Africa.
8. August 2016, Short Course: Tissue Engineering, Department of Mechanical Engineering, Pontificia Universidade Catolica do Parana, Brazil
9. January 2015, Short Course: Tissue Engineering, Centre for BioMaterials Science and Technology, Vellore Institute of Technology, Vellore, India
10. January 2014, Short Course: Tissue Engineering, Centre for BioMaterials Science and Technology, Vellore Institute of Technology, Vellore, India
11. June 2011, Short Course: Tissue Engineering, Department of Biomedical Engineering, PSG Tech, Coimbatore, India.
12. November 2011, Workshop: Tissue Engineering, Vaal University of Technology, Vanderbijlpark, South Africa.
13. December 2011, Short Course: Biomaterials and Tissue Engineering, Department of Materials Technology, Universidade Estadual Paulista, Guaratingueta, Brazil.

CV SECTION 4: Evidence of Outreach/Service

COMMITTEES

University Committees:

1. Institutional Review Board, 2008-present
2. Committee on Strategic and Financial Planning (CoSFP), 2020
3. Committee on Scholastic Standards (CoSS), 2009-2018 (Chair of the committee during academic year 2011-2012)

College Committees:

1. Search committee member for head of the department of Mechanical Engineering, 2019
2. College Curriculum Committee, 2018-present
3. WSCOE ABET Committee, 2018-present
4. Chair for Director of Research Business Operations search committee, 2011-2012
5. Distance Education Committee, 2011-2013
6. Engineering Student Technology Committee, 2010-2011
7. Faculty advisor for BMES Student Chapter, 2009-2017

8. Faculty advisor for Professional Asian Society of Engineers and Scientists (PASES), 2010
9. Search committee member for head of the department of mechanical Engineering, 2009
10. FAR Online Committee, 2009-2010

Department Committees:

1. Search committee chair for Mechanical/Biomed Professor of Practice position in Mechanical Engineering 2021
2. Search committee member for Photovoltaics faculty position in Mechanical Engineering, 2020-2021
3. Chair for undergraduate curriculum committee in Mechanical Engineering, 2018-present
4. Undergraduate academic committee member in School of Biomedical Engineering, 2018-2021
5. Chair for non-tenure track faculty position in Mechanical Engineering, 2018-2019
6. Chair for non-tenure track faculty position in Mechanical Engineering, 2017-2018
7. Search committee member for Biomed faculty position in Mechanical Engineering, 2017-2018
8. Chair for materials faculty position in Mechanical Engineering, 2015-2016
9. Search committee member for Biomed faculty position in Mechanical Engineering, 2015-2016
10. Mechanical Engineering Online Graduate Admissions Committee, 2013-present
11. Advisor to Mechanical Engineering Online Students, 2013-present
12. Search committee member for Biomed faculty position in Mechanical Engineering, 2013-2014
13. Mechanical Engineering Department Awards Committee, 2011-2013
14. Search committee member for administrative professional position in School of Biomedical Engineering, 2009
15. School of Biomedical Engineering Graduate Admissions Committee, 2008-present
16. Search committee member for Biomed faculty position in Mechanical Engineering, 2008-2009

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Memberships in Professional Societies:

1. Biomedical Engineering Society, Member, 2004-present
2. Society for Biomaterials, Member, 2004-present

Office in professional societies:

1. Co-Chair, Nanomaterials Special Interest Group, Society for Biomaterials, 2013-2015

2. Program Chair, Nanomaterials Special Interest Group, Society for Biomaterials, 2011-2013
3. Co-Chair, Nanomaterials Special Interest Group, Society for Biomaterials, 2009-2011

Review/editorial boards:

1. Editor-in-chief, In vitro Models, Springer Nature Journal, 2021 onwards
2. Associate Editor, Frontiers Bioengineering and Biotechnology, 2020
3. Guest Editor, Regenerative Engineering and Translational Medicine, 2019-2020
4. Associate Editor, MRS Advances, 2017-2018
5. Advisory Board, Elsevier - Materials: Engineering, Science, Processing and Design, 2013-2014

Grant Review Panels:

1. NIH R01 Study Section, 2020, 2021
2. NSF MRI Review Panel, 2019, 2020
3. CDMRP Review Panel, 2015, 2016, 2017, 2019, 2020, 2021
4. NIH SBIR Study Section, 2014, 2020
5. NIH R13 Study Section, 2014, 2015, 2016
6. NIH COBRE/IBBRE Study Section, 2018
7. NSF SBIR Review Panel, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017
8. NSF Grant Review Panel, 2008, 2009, 2010
9. NIH ARRA Online Study Section, 2009
10. NSF CAREER Review Panel, 2008

Grant Refereeing:

1. Dutch Research Council, 2022
2. Novo Nordisk Fonden, 2022
3. Foundation pour la Recherche Médicale, 2021
4. Austrian Science Fund (FWF), 2020, 2021
5. Czech Science Foundation, 2020
6. University of Maryland Industrial Partnerships (MIPS) Program, 2019
7. Canada Research Chair, 2018
8. Mitacs Accelerate Award, 2018
9. Natural Sciences and Engineering Research Council of Canada, 2015, 2016, 2017, 2019
10. CRDF, 2017
11. Fonds de recherche du Québec – Santé, 2017

12. Shanti Swarup Bhatnagar Prize, 2015
13. CNPq Brazil, 2015
14. Ministry of Science, Education and Sports, Croatia, 2015
15. NWO Chemical Sciences Divisional Board, Netherlands, 2015
16. Medical Research Council, United Kingdom, 2013
17. Innovation and Technology Commission, The Government of the Hong Kong Special Administrative Region, 2013
18. Qatar National Research Fund (QNRF), 2013, 2015, 2020, 2021
19. Fundação para a Ciência e a Tecnologia, Portugal, 2012, 2013
20. Maryland Sea Grant, 2011
21. Wiener Wissenschafts-, Forschungs- und Technologiefonds, 2011
22. North Carolina Science and Technology Development Center, Reviewer/Referee, 2007

Manuscript Refereeing Invitations:

ACS Applied Materials and Interfaces, ACS Applied Biomaterials, ACS Biomaterials Science & Engineering, Acta Biomaterialia, Advanced Engineering Materials, Advanced Materials, Advanced Materials Interfaces, Advanced Science, Artificial Organs, AIChE Journal, Archives of Oral Biology, Analytical Chemistry, Annals of Biomedical Engineering, AIMS Bioengineering, APL Bioengineering, Applied Surface Science, Bioactive Materials, Biointerphases, Biomacromolecules, Biomaterials, Biomedical Materials, Biomedical Microdevices, Biomedical Physics and Engineering Express, Biomaterials Science, Bionanoscience, Biotechnology Progress, Bone, Computer, Methods and Programs in Medicine, Cellular and Molecular Bioengineering, Chemical Engineering Journal, Colloids and Surfaces B, Colloid and Interface Science Communications, Corrosion Science, Drug Delivery Letters, eCells and Materials, Electrochimica Acta, European Polymer Journal, Expert Review of Medical Devices, Frontiers Bioengineering, Frontiers Molecular Biosciences, Inorganica Chimica Acta, Industrial & Engineering Chemistry Research, International Journal of Nanomedicine, International Journal of Biological Macromolecules, International Journal of Bioinformatics Research and Applications, International Journal of Nanomedicine, Journal of 3D Printing in Medicine, Journal of Alloys and Compounds, Journal of Applied Biomaterials & Functional Materials, Journal of Biomaterial Applications, Journal of Biomaterials and Tissue Engineering, Journal of Biomaterials Science: Polymer Edition, Journal of Biomedical Materials Research A, Journal of Biomedical Materials Research B, Journal of Biomedical Nanotechnology, Journal of Functional Biomaterials, Journal of Material Science, Journal of Materials Chemistry, Journal of Materials Research, Journal of Material Science and Technology, Journal of Mechanical Behavior of Biomaterials, Journal of Membrane Science, Journal of Molecular Structure, Journal of Nanomaterials, Journal of Nanomedicine, Journal of Physical Chemistry, JoVE, Langmuir, Journal of Stem Cell Therapy and Transplantation, Life Sciences, Macromolecular Biosciences, Materials, Materials Chemistry and Physics, Materials Letters, Materials, Materials Research, Materials Research Express, Materials Science and Engineering C, Materials Today Bio, Metals, Metallurgy and Metal Physics, Nanomaterials, Nano Letters, Nanomedicine, Nanoscale, Nanotechnology, Nature Communications, Neural Computing and Applications, Pharmacological Research, PLOS One, Physica Status Solidi A, Recent Progress in Materials, Results in Physics, RSC Advances, Science Advances, Scientific Reports, Small, Surface and Coatings Technology, Surface and Interfaces, Surface Innovations, Thin Solid Films, Tissue Engineering

International Thesis Reviewing:

1. Indian Institute of Technology, Rourkee, India, 2022
2. Shiv Nadar University, Delhi, India, 2021
3. Tshwane University of Technology, Pretoria, South Africa, 2021
4. Amrita Centre for Nanosciences and Molecular Medicine, Kochi, India, 2021
5. Gujarat Technological University, Ahmedabad, India, 2020
6. Indian Institute of Technology, Gandhinagar, India, 2019, 2022
7. Indian Institute of Technology, Delhi, India, 2018, 2019, 2020
8. Indian Institute of Technology, Kharagpur, India, 2018
9. Bharathiar University, Coimbatore, India, 2017
10. Vellore Institute of Technology, Vellore, India, 2017, 2018, 2019, 2020, 2021, 2022
11. Anna University, Chennai, India, 2017, 2022
12. Indian Institute of Science, Bangalore, India, 2017
13. S.V. National Institute of Technology, Surat, India, 2015, 2020
14. Maulana Azad National Institute of Technology, Bhopal, India, 2013, 2014, 2015, 2016, 2018

Conference Reviewing:

1. World Biomaterials Congress, 2016, 2020
2. Annual meeting of Canadian Biomaterials Society, 2019
3. World Biomechanics Conference, 2018
4. MRS Conference, 2017, 2018
5. NSTI Conference, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015
6. Society for Biomaterials Annual Meeting 2009, 2010, 2011, 2012, 2013, 2014
7. BMES Annual Meeting, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2021
8. ASME Summer Bioengineering Conference, 2012
9. Controlled Release Society Annual Meeting, 2007
10. UC Systemwide Bioengineering Symposium, 2007

Conference Organization:

1. Session Chair and Organizer, MRS 2022 Spring Conference
2. Co-convener, BioMET 2018 Conference, Vellore Institute of Technology, Vellore, India
3. Session Chair and Organizer, World Biomechanics Congress 2018
4. Session Chair and Organizer, MRS 2018 Spring Conference
5. Session Chair and Organizer, MRS 2016 Spring Conference

6. Organizing Committee Member, Society for Biomaterials 2012 Annual Meeting
7. Session Chair, MS&T 2012 Conference
8. Session Chair, MS&T 2011 Conference
9. Session Chair and Organizer, BMES 2009 Annual Meeting
10. Session Chair and Organizer, Society for Biomaterials 2009 Annual Meeting

OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH

Consultations related to professional expertise:

- Merit Inc., 2021-2022
- Bitol LLC, USA, 2016-2018
- Coramaze Technologies GmbH, Germany, 2015-2016

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Acosta	Rene Paul M.	10/10/2023	1 year

Title: Research Assistant Professor, Miocene Climate Modelling

Rank: Research Assistant Professor

Classification: Term - Research

Local Academic Unit: Atmospheric, Oceanic and Earth Sciences (COS)

Bell	Glynita	8/25/2023	1 year
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Title: Instructional Assistant Professor

Rank: Instructional Assistant Professor

Classification: Term - Instructional

Local Academic Unit: Social Work (CPH)

Ehsan	Mohammad M.	8/25/2023	1 year
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Title: Instructional Assistant Professor

Rank: Instructional Assistant Professor

Classification: Term - Instructional

Local Academic Unit: Honors College

Evrendilek	Cem	1/10/2024	3 years
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Title: Professor

Rank: Instructional Professor

Classification: Term - Instructional

Local Academic Unit: Computer Science (CEC)

Guevara	Jacqueline J.	8/25/2023	1 year
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Title: Instructional Assistant Professor

Rank: Instructional Assistant Professor

Classification: Term - Instructional

Local Academic Unit: Social Work (CPH)

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Luo	Juan	1/10/2024	3 years

Title: Associate Professor

Rank: Instructional Associate Professor

Classification: Term - Instructional

Local Academic Unit: Computer Science (CEC)

Page	Amy P.	8/25/2023	1 year
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Title: Instructional Assistant Professor

Rank: Instructional Assistant Professor

Classification: Term - Instructional

Local Academic Unit: Social Work (CPH)

Parisi	Anna	1/10/2024	3.5 years
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Title: Assistant Professor

Rank: Assistant Professor

Classification: Tenure Track - Instructional

Local Academic Unit: Social Work (CPH)

Ramadan	David I.	8/25/2023	1 year
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Title: Professor of Practice

Rank: Professor of Practice

Classification: Term - Instructional

Local Academic Unit: Schar School of Policy and Government

Zhu	Zhuangdi	1/10/2024	3.5 years
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Title: Assistant Professor

Rank: Assistant Professor

Classification: Tenure Track - Instructional

Local Academic Unit: Cyber Security Engineering (CEC)

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF ADMINISTRATIVE AND PROFESSIONAL FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
Barton	Monica B.	9/10/2023

Title: Behavioral Health Resident in Counseling

Classification: At will - Admin/Professional

Local Academic Unit: Student Health Services (UL)

Beavers	Douglas W.	9/25/2023
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Title: Assistant Coach, Men's and Women's Diving

Classification: At will - Admin/Professional

Local Academic Unit: Intercollegiate Athletics

Bolton	Andre	9/10/2023
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Title: Associate Head Coach Women's Basketball

Classification: At will - Admin/Professional

Local Academic Unit: Intercollegiate Athletics

Butler-Allen	Tarrance L.	10/4/2023
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Title: Financial Aid Counselor

Classification: At will - Admin/Professional

Local Academic Unit: Office of Student Financial Aid

Connor	Kevin B.	8/10/2023
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Title: Director, Graduate Enrollment

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF ADMINSTRATIVE AND PROFESSIONAL FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
De Haan	Eric	9/25/2023

Title: Director of Development, Alumni Relations and Community Engagement

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

Dulak-Sigler	Corey	9/25/2023
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Title: Head Strength and Conditioning Coordinator

Classification: At will - Admin/Professional

Local Academic Unit: Intercollegiate Athletics

Ewing	Katherine R.	8/21/2023
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Title: Assistant Coach Lacrosse

Classification: At will - Admin/Professional

Local Academic Unit: Intercollegiate Athletics

Fickers	Crystal S.	9/25/2023
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Title: Associate Director of Student Programs and Community Initiatives, Center for Innovation and Entrepreneurship

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

Greenwaters	Kendra M.	7/24/2023
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Title: Senior Director of Development

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF ADMINISTRATIVE AND PROFESSIONAL FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
Hairston	Key'Shawn	9/10/2023

Title: Information System Security Manager

Classification: At will - Admin/Professional

Local Academic Unit: Office of Research, Innovation and Economic Impact

Highsmith	Shanelle D.	10/10/2023
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Title: Program Manager for Outreach and Partnerships

Classification: At will - Admin/Professional

Local Academic Unit: Office of the Provost

Hwang	Christine	10/2/2023
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Title: Financial Aid Counselor

Classification: At will - Admin/Professional

Local Academic Unit: Office of Student Financial Aid

Lacy	Bobby J.	9/5/2023
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Title: Associate Director, Green Machine

Classification: At will - Admin/Professional

Local Academic Unit: College of Visual and Performing Arts

Mancini	Terri A.	10/25/2023
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Title: Director of Research Administration

Classification: At will - Admin/Professional

Local Academic Unit: College of Public Health

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF ADMINISTRATIVE AND PROFESSIONAL FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
Michael	Marie T.	8/8/2023

Title: Assistant Coach, Women's Rowing
Classification: At will - Admin/Professional
Local Academic Unit: Intercollegiate Athletics

Nelin	Tyler R.	10/9/2023
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Title: Assistant Coach, Baseball
Classification: At will - Admin/Professional
Local Academic Unit: Intercollegiate Athletics

Nelson	Mackenzie E.	9/25/2023
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Title: Assistant Director, Family Programs
Classification: At will - Admin/Professional
Local Academic Unit: New Student and Family Programs (UL)

Peluso	Roger T.	11/10/2023
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Title: Assistant Coach, Men's Volleyball
Classification: At will - Admin/Professional
Local Academic Unit: Intercollegiate Athletics

Pettis	Alicia M.	10/31/2023
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Title: Associate Director of Development, Business
Classification: At will - Admin/Professional
Local Academic Unit: Costello College of Business

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF ADMINISTRATIVE AND PROFESSIONAL FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
Robinson	Corey D.	11/25/2023

Title: Assistant Dean, Undergraduate Programs
Classification: At will - Admin/Professional
Local Academic Unit: Costello College of Business

Roseman	Caryn A.	10/2/2023
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Title: Assistant Director of Academic Student Success
Classification: At will - Admin/Professional
Local Academic Unit: Antonin Scalia Law School

Simmons	Jaylen M.	7/25/2023
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Title: Certified Athletic Trainer
Classification: At will - Admin/Professional
Local Academic Unit: Intercollegiate Athletics

Swift	Shane B.	5/30/2023
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Title: Video Coordinator
Classification: At will - Admin/Professional
Local Academic Unit: Intercollegiate Athletics

Taheri	Ahmad	11/10/2023
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Title: Director of Information Technology and Cybersecurity
Classification: At will - Admin/Professional
Local Academic Unit: College of Science

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT OF ADMINISTRATIVE AND PROFESSIONAL FACULTY

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>
Thees	Windy	8/14/2023

Title: Assistant Coach, Softball
Classification: At will - Admin/Professional
Local Academic Unit: Intercollegiate Athletics

Walker	Brittany N.	7/10/2023
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Title: Community Director
Classification: At will - Admin/Professional
Local Academic Unit: Housing and Residence Life (UL)

Wallace	Alexandra	9/18/2023
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Title: Associate Director, Global Faculty-Led Programs
Classification: At will - Admin/Professional
Local Academic Unit: Global Education Office

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT/REAPPOINTMENT OF DEANS/DIRECTORS AND DEPARTMENT CHAIRS/SCHOOL DIRECTORS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Charlton	Everlena Z.	8/25/2023	< 1 year

Title: Interim Director

Local Academic Unit: Art (CVPA)

Chitnis	Parag	8/25/2023	< 1 year
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Title: Interim Chair

Local Academic Unit: Bioengineering (CEC)

Davis	Richard S.	5/25/2024	5 years
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Title: Dean

Local Academic Unit: College of Visual and Performing Arts

de Jonge	Elisabeth H.	8/25/2023	< 1 year
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Title: Interim Department Chair

Local Academic Unit: Nutrition and Food Studies (CPH)

Fuchs	Cynthia J.	8/25/2023	1 year
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Title: Interim Director

Local Academic Unit: Film & Video Studies (CVPA)

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

APPOINTMENT/REAPPOINTMENT OF DEANS/DIRECTORS AND DEPARTMENT CHAIRS/SCHOOL DIRECTORS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Healy	Megan K.	9/10/2023	1 year

Title: Interim Chief of Staff

Local Academic Unit: Office of the President

Maddox	Peggy J.	8/25/2023	< 1 year
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Title: Acting Co-Director of the School of Nursing

Local Academic Unit: Health Administration and Policy (CPH)

Mark	Brian L.	8/25/2023	< 1 year
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Title: Interim Department Chair

Local Academic Unit: Electrical and Computer Engineering (CEC)

Pfoser	Dieter	8/25/2023	4 years
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Title: Department Chair

Local Academic Unit: Geography and Geoinformation Science (COS)

Rodan	Margaret F.	8/25/2023	< 1 year
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Title: Acting Co-Director of the School of Nursing

Local Academic Unit: Nursing (CPH)

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

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APPOINTMENT/REAPPOINTMENT OF DEANS/DIRECTORS AND DEPARTMENT CHAIRS/SCHOOL DIRECTORS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Sun	Jiayang	7/25/2023	2 years

Title: Department Chair

Local Academic Unit: Statistics (CEC)

Vaisman	Iosif I.	8/25/2023	4 years
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Title: Director

Local Academic Unit: Systems Biology (COS)

Walsh	Kenneth D.	9/10/2023	1 year
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Title: Interim Provost and Executive Vice President

Local Academic Unit: Office of the President

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

November 30, 2023

RENEWALS AND REAPPOINTMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Alishetty	Suman	9/10/2023	1 year

Title: Research Assistant Professor
Rank: Research Assistant Professor
Classification: Term - Research
Local Academic Unit: Bioengineering (CEC)

Bashatah	Ahmed A.	9/4/2023	1 year
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Title: Research Associate (Instructor)
Rank: Research Associate (Instructor)
Classification: Term - Research
Local Academic Unit: Bioengineering (CEC)

de Jonge	Elisabeth H.	6/10/2023	5 Years
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Title: Instructional Professor
Rank: Instructional Professor
Classification: Term - Instructional
Local Academic Unit: Nutrition and Food Studies (CPH)

Note(s): Previous title: Term Associate Professor

Driscoll	David R.	8/25/2023	1 year
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Title: Senior Instructor
Rank: Senior Instructor
Classification: Term - Instructional
Local Academic Unit: INTO Mason (Provost)

Huddleston	Kathi C.	9/1/2023	1 year
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Title: Research Associate Professor
Rank: Research Associate Professor
Classification: Term - Research
Local Academic Unit: Nursing (CPH)

ANNOUNCEMENT

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RENEWALS AND REAPPOINTMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Johnson	Tyrel	7/18/2023	1 year

Title: Research Associate Professor

Rank: Research Associate Professor

Classification: Term - Research

Local Academic Unit: Physics and Astronomy (COS)

Kim	Esther H.	8/25/2023	1 year
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Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Kozumplik	Thomas	8/25/2023	1 year
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Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Lewis	Amy L.	8/25/2023	1 year
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Title: Instructional Associate Professor Humanities

Rank: Instructional Associate Professor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Lilley	Timothy P.	8/25/2023	1 year
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Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Note(s): Previous title: Instructor

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RENEWALS AND REAPPOINTMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Lin	Li	5/25/2023	1 year

Title: Research Assistant Professor, Agro-Geoinformation Sciences

Rank: Research Assistant Professor

Classification: Term - Research

Local Academic Unit: Center for Spatial Information Science and Systems (COS)

Miller	Laura L.	8/25/2023	1 year
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Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Paez	Bonny B.	8/25/2023	1 year
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Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Richardson	Mary C.	8/25/2023	1 year
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Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Rottenberg	Lori A.	8/25/2023	1 year
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Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

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RENEWALS AND REAPPOINTMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>EFFECTIVE DATE</u>	<u>APPT LENGTH</u>
Smith	Michael P.	8/25/2023	1 year

Title: Senior Instructor

Rank: Senior Instructor

Classification: Term - Instructional

Local Academic Unit: INTO Mason (Provost)

Swenson	Erik T.	1/25/2023	1 year
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Title: Research Assistant Professor

Rank: Research Assistant Professor

Classification: Term - Research

Local Academic Unit: Center for Ocean-Land-Atmosphere Studies (COS)

Swenson	Erik T.	1/25/2024	1 year
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Title: Research Assistant Professor

Rank: Research Assistant Professor

Classification: Term - Research

Local Academic Unit: Center for Ocean-Land-Atmosphere Studies (COS)

Zhou	Weidong	9/25/2023	1 year
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Title: Research Associate Professor

Rank: Research Associate Professor

Classification: Term - Research

Local Academic Unit: Center for Applied Proteomics and Molecular Medicine (COS)

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SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Addison	Patricia A.	Resignation	08/31/2023

Title: Assistant Program Director

Classification: At will - Admin/Professional

Local Academic Unit: College of Education and Human Development

Barzegar	Abbas	Contract expiration	09/05/2023
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Title: Director of Research for the Black American Muslim Internationalism Project

Classification: Term - Research

Local Academic Unit: Global Islamic Studies Program (CHSS)

Benson (Grunstad)	Constance P.	Retirement	12/24/2023
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Title: Director of Recreation

Classification: At will - Admin/Professional

Local Academic Unit: Intercollegiate Athletics

Bland-French	Joyce M.	Retirement	01/09/2024
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Title: Director of Risk Management

Classification: At will - Admin/Professional

Local Academic Unit: Safety, Emergency, and Enterprise Risk Management

Boyd	Derek W.	Resignation	05/24/2023
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Title: Associate Professor

Classification: Term - Instructional

Local Academic Unit: Philosophy (CHSS)

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SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Ceesay	Ebrima N.	Contract expiration	05/24/2023

Title: Instructional Associate Professor

Classification: Term - Instructional

Local Academic Unit: Information Sciences and Technology (CEC)

Dove	Frances A.	Resignation	01/09/2024
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Title: Associate Director of Graduate Admissions

Classification: At will - Admin/Professional

Local Academic Unit: College of Public Health

Everson	Michelle D	Resignation	11/09/2023
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Title: Associate Director

Classification: At will - Admin/Professional

Local Academic Unit: Jimmy and Rosalynn Carter School for Peace and Conflict Resolution

Ford	Meggan C.	Resignation	11/24/2023
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Title: Associate Dean, Undergraduate Programs

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

Note(s): This record supersedes the previous entry reported for September 2023 BOV.

Frank	Toya	Resignation	5/24/2023
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Title: Associate Professor

Classification: Tenured (without term) - Instructional

Local Academic Unit: College of Education and Human Development

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Academic Programs, Diversity, and University Community Committee

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SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Ginsberg	Mark R.	Retirement	11/24/2023

Title: Provost and Executive Vice President

Classification: Tenured (without term) - Admin/Professional

Local Academic Unit: Office of the Provost

Harley	Jessica L.	Resignation	12/12/2023
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Title: Health Promotion Nurse

Classification: At will - Admin/Professional

Local Academic Unit: Student Health Services (UL)

Jackson	Timya L.	Resignation	08/18/2023
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Title: Assistant Director for College Success

Classification: At will - Admin/Professional

Local Academic Unit: Early Identification Program (UL)

Kim	Eunice C.	Resignation	05/24/2023
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Title: Instructor

Classification: Term - Instructional

Local Academic Unit: George Mason University Korea

Kitsantas	Panagiota	Resignation	05/24/2023
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Title: Professor

Classification: Tenured (without term) - Instructional

Local Academic Unit: College of Education and Human Development

Note(s): Dr. Kitsantas has accepted a position with Florida Atlantic University.

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SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Klimoski	Richard J.	Retirement	01/09/2024

Title: Professor of Management

Classification: Tenured (without term) - Instructional

Local Academic Unit: Costello College of Business

Lahm	Sally A.	Resignation	08/31/2023
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Title: Research Associate Professor

Classification: Term - Research

Local Academic Unit: Global and Community Health (CPH)

Lauer	Anne E.	Resignation	01/09/2024
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Title: Instructor

Classification: Term - Instructional

Local Academic Unit: Costello College of Business

Lewis-Semien	Alexis	Resignation	09/24/2023
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Title: - Assistant Director, Student Transition and Empowerment Program

Classification: At will - Admin/Professional

Local Academic Unit: Diversity, Inclusion and Multicultural Education (UL)

Maribojoc	Roderick	Resignation	09/15/2023
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Title: Executive Director, Center for Real Estate Entrepreneurship

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

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November 30, 2023

SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Mazzini Bruschi	Simone	Contract expiration	09/26/2023

Title: Assistant Professor

Classification: Term - Instructional

Local Academic Unit: Mathematical Science (COS)

Miller	William G.	Retirement	09/23/2023
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Title: Assistant Director Code Compliance

Classification: At will - Admin/Professional

Local Academic Unit: Office of the Senior Vice President

Note(s): This record supersedes the previous entry reported in the September 2023 BOV.

Mitchell	Mark A.	Retirement	10/24/2023
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Title: Research Associate Professor

Classification: Term - Research

Local Academic Unit: Communication (CHSS)

Morell	Michael J.	Resignation	05/24/2023
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Title: Distinguished Visiting Professor

Classification: Term - Research

Local Academic Unit: Schar School of Policy and Government

Muz	Aaron F.	Resignation	10/23/2023
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Title: Assistant Director for College Readiness

Classification: At will - Admin/Professional

Local Academic Unit: Early Identification Program (UL)

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SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Orlick	Daylen	Resignation	11/09/2023

Title: Associate Director of Family Programs

Classification: At will - Admin/Professional

Local Academic Unit: New Student and Family Programs (UL)

Paulsen	Sabrina A.	Resignation	09/13/2023
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Title: Assistant Coach, Rowing

Classification: At will - Admin/Professional

Local Academic Unit: Intercollegiate Athletics

Popescu	Saskia	Resignation	08/24/2023
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Title: Instructional Assistant Professor

Classification: Term - Instructional

Local Academic Unit: Schar School of Policy and Government

Note(s): Professor Popescu has accepted a position with University of Maryland.

Richardson	Matthew	Resignation	07/27/2023
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Title: Director, External Relations and Strategic Initiatives

Classification: At will - Admin/Professional

Local Academic Unit: Law and Economics Center (ASLS)

Robinson	Emily A.	Resignation	01/09/2024
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Title: Associate Director of Advancement Communications

Classification: At will - Admin/Professional

Local Academic Unit: College of Visual and Performing Arts

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SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Rouge	Juliette R.	Resignation	10/24/2023

Title: Associate Dean

Classification: At will - Admin/Professional

Local Academic Unit: Jimmy and Rosalynn Carter School for Peace and Conflict Resolution

Note(s): Ms. Rouge has accepted a position with American Public University.

Serigos	Jacqueline	Resignation	05/24/2023
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Title: Assistant Professor

Classification: Tenure track - Instructional

Local Academic Unit: Modern and Classical Languages (CHSS)

Spence	Diane A.	Resignation	10/09/2023
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Title: Executive Director & Chief Business Officer - Level 3

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

Steinberg	Matthew P.	Resignation	09/01/2023
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Title: Associate Professor

Classification: Tenured (without term) - Instructional

Local Academic Unit: College of Education and Human Development

Toothman	Charles A.	Resignation	07/24/2023
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Title: Executive Director of Budget Planning and Strategic Analysis

Classification: At will - Admin/Professional

Local Academic Unit: Office of Budgeting and Planning

Note(s): Mr. Toothman has accepted a position with Virginia Department of Health.

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SEPARATIONS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>	<u>EFFECTIVE DATE</u>
Vadakkepatt	Gautham G.	Resignation	05/24/2023

Title: Associate Professor

Classification: Tenured (without term) - Instructional

Local Academic Unit: Costello College of Business

von Fricken	Michael E.	Resignation	05/24/2023
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Title: Associate Professor

Classification: Tenured (without term) - Instructional

Local Academic Unit: Global and Community Health (CPH)

Wang	Yue	Resignation	08/13/2023
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Title: Research Assistant Professor

Classification: Term - Research

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Dr. Wang has accepted a position with Georgia State University.

Williams	Sara L.	Resignation	08/04/2023
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Title: Initiatives Manager

Classification: At will - Admin/Professional

Local Academic Unit: Costello College of Business

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OTHER ANNOUNCEMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Aidoo Hewton	Abena A.	Title Change

Title: Talent Equity Advisor

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Associate Professor of Tourism and Events Management

Aier	Jagadison K.	Title Change
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Title: Dean's Faculty Fellow

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

Akhtari	Humaira	Title Change
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Title: Assistant Chair for Undergraduate, Graduate and Online Studies

Local Academic Unit: Information Sciences and Technology (CEC)

Note(s): Retained Title-Instructor

Albanese	Massimilano	Title Change
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Title: Associate Chair for Research, Information Sciences and Technology Department

Local Academic Unit: Information Sciences and Technology (CEC)

Note(s): Retained Title-Associate Professor

Altug	Mehmet S.	Title Change
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Title: Director, Retail Center

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

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Academic Programs, Diversity, and University Community Committee

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LAST NAME

FIRST NAME

TYPE

Altug

Mehmet S.

Title Change

Title: Academic Director, MS in Bus Analytics

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

Baily

Supriya

Title Change

Title: Director of Faculty Development

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor without Term

Baker

Pamela H.

Title Change

Title: Director of the Division of Special Education and DisAbility Research

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Associate Professor without Term

Baker

Robert E.

Title Change

Title: Director in the School of Sport, Recreation, and Tourism

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor without Term

Bellos

Ioannis

Title Change

Title: Director, Master of Business Administration (MBA)

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Benison	Brian J.	Title Change

Title: Director of Graduate Admissions and International Initiatives

Local Academic Unit: Antonin Scalia Law School

Note(s): Previous Title: Director of Graduate Admissions

Berg	Colleen F.	Title Change
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Title: Associate Chair, Department of Mechanical Engineering

Local Academic Unit: Mechanical Engineering (CEC)

Note(s): Retained Title-Instructor

Berkeley	Sheri L.	Title Change
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Title: Director of the PhD in Education Program

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor without Term

Billingham	Lisa A.	Title Change
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Title: Director of Choral Activities in the School of Music

Local Academic Unit: Music (CVPA)

Note(s): Retained Title-Professor without Term

Brouse	Peggy S.	Title Change
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Title: Associate Chair for Undergraduate Studies, CYSE

Local Academic Unit: Systems Engineering and Operations Research (CEC)

Note(s): Retained Title-Professor

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LAST NAME

FIRST NAME

TYPE

Buehl

Michelle M.

Title Change

Title: Division of Educational Psychology and Research Methods

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor

Bulancea

Gabriela

Title Change

Title: Associate Chair, Mathematical Sciences

Local Academic Unit: Mathematical Science (COS)

Note(s): Retained Title-Associate Professor

Burtch

Nathan R.

Title Change

Title: Associate Chair, GGS

Local Academic Unit: Geography and Geoinformation Science (COS)

Note(s): Retained Title-Assistant Professor

Butler

Henry N.

Title Change

Title: Chairperson of the Board, Law & Economics Center

Local Academic Unit: Antonin Scalia Law School

Note(s): Retained Title-Professor without Term

Cai

Xiaomei

Title Change

Title: CHSS Director of Faculty Diversity, Inclusion, and Belonging

Local Academic Unit: Communication (CHSS)

Note(s): Retained Title-Assistant Professor

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Caswell	Amanda M.	Title Change

Title: Head of School of Kinesiology

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor of Athletic Training

Chitnis	Parag	Title Change
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Title: Faculty Fellow for Graduate Education

Local Academic Unit: Bioengineering (CEC)

Note(s): Retained Title-Associate Professor without Term

Costa	Paulo C.	Title Change
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Title: Director, C41 and Cyber Center

Local Academic Unit: Cyber Security Engineering (CEC)

Note(s): Retained Title-Associate Professor without Term

Cressman	John R.	Title Change
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Title: Area Chair

Local Academic Unit: Physics and Astronomy (COS)

Note(s): Retained Title-Associate Professor without Term

Dabbagh	Nada	Title Change
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Title: Director of the Division of Learning Technologies

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor of Education without Term

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
D'Amboise	Christopher R.	Title Change

Title: Director of the LIVE Center
Local Academic Unit: Dance (CVPA)

Note(s): Retained Title-Associate Professor Without Term

Das	Sidhartha R.	Title Change
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Title: Assistant Area Chair, ISOM (OSCM)
Local Academic Unit: Costello College of Business

Note(s): Retained Title-Professor without Term

Dawn	Karalee	Title Change
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Title: Director of the Arts Management Program
Local Academic Unit: Arts Management (CVPA)

Note(s): Retained Title-Assistant Professor

Deans	Penny C.	Title Change
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Title: Academic Director of Master of Technology Management (MSTM)
Local Academic Unit: Costello College of Business

Note(s): Retained Title-Professor

Debuque	Rachel M.	Title Change
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Title: Associate Director, School of Art
Local Academic Unit: Art (CVPA)

Note(s): Retained Title-Associate Professor without Term

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Deola	Noelle	Title Change
Title: Assistant Director for Faculty and Employees Local Academic Unit: International Programs and Services (UL)		
Note(s): Previous Title:International Advisor for Employment-Based Visas		
Di	Liping	Title Change
Title: CSISS Director Local Academic Unit: Center for Spatial Information Science and Systems (COS)		
Note(s): Retained Title-Professor without Term		
Dinan	Desmond J.	Leave without Pay
Title: Professor without Term Local Academic Unit: Schar School of Policy and Government		
Note(s): Professor Dinan will be on Leave without Pay for the Fall Semester 2023 to serve as a Visiting Fellow in the European Parliament in Brussels.		
Dumas	Theodore C.	Title Change
Title: Associate Director, IPN Local Academic Unit: Neuroscience Program (COS)		
Note(s): Retained Title-Associate Professor without Term		
Duritz	Nicole S.	Title Change
Title: Director of Programs, Support and Outreach Local Academic Unit: Communication (CHSS)		
Note(s): Previous Title:Director of Outreach and Advocacy		

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Eiseman	Phil D.	Title Change

Title: Staff Clinician

Local Academic Unit: Counseling and Psychological Services (UL)

Note(s): Previous Title: Clinician, Diversity and Inclusion Focus

Erb	Megan S.	Title Change
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Title: Associate Chair, Chemistry and Biochemistry

Local Academic Unit: Chemistry and Biochemistry (COS)

Note(s): Retained Title-Associate Professor

Fuchs	Cynthia J.	Title Change
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Title: ARIE Committee

Local Academic Unit: Film & Video Studies (CVPA)

Note(s): Retained Title-Associate Professor

Gaj	Krzysztof M.	Title Change
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Title: Associate Chair for Graduate Programs, ECE

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Professor without Term

Garcia	Toni C.	Title Change
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Title: Concentration Director, Business Analytics

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Senior Instructor

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Garrison	Daniel J.	Leave with Pay

Title: Instructional Assistant Professor

Local Academic Unit: Information Sciences and Technology (CEC)

Note(s): Professor Garrison has been awarded a Faculty Study Leave for Fall Semester 2023.

George Mwangi	Chrystal	Title Change
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Title: CHSS Faculty Diversity Network Lead

Local Academic Unit: Higher Education Program (CHSS)

Note(s): Retained Title-Associate Professor without Term

Gillevet	Patrick M.	Title Change
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Title: Associate Dean for Research Operations

Local Academic Unit: College of Science

Note(s): Retained Title-Professor without Term

Glaberman	Scott R.	Title Change
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Title: Associate Chair of Research

Local Academic Unit: Environmental Science and Policy (COS)

Note(s): Retained Title-Assistant Professor

Grady	Victoria M.	Title Change
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Title: Program Director, Master of Science in Management (MSM)

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor

ANNOUNCEMENT

Academic Programs, Diversity, and University Community Committee

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FIRST NAME

TYPE

Guo

Liying

Title Change

Title: Associate Director, CSISS

Local Academic Unit: Center for Spatial Information Science and Systems (COS)

Note(s): Retained Title-Research Professor

Harley

Jessica L.

Title Change

Title: Health Promotion Nurse

Local Academic Unit: Student Health Services (UL)

Note(s): Previous Title:Health Equity Nurse Practitioner

Harris

Cameron J.

Title Change

Title: Assistant Area Chair of Business Foundations

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor

Hayes

Monson H.

Title Change

Title: Departmental Transition Coordinator, ECE

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Professor

Heilbrun

David W.

Title Change

Title: Interim Head, Metadata Services

Local Academic Unit: University Libraries

Note(s): Retained Title-Metadata Librarian

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TYPE

Hersch

Rebekah K.

Title Change

Title: Interim Director, CINA

Local Academic Unit: Office of Research, Innovation and Economic Impact

Note(s): Retained Title-Associate Vice President Research Development

Highsmith

Shanelle D.

Title Change

Title: CASBBI Community Outreach Liason

Local Academic Unit: Office of the Provost

Note(s): Retained Title-Program Manager for Outreach and Partnerships

Horstmeyer

Derek M.

Title Change

Title: Director, Student Managed Investment Fund

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Professor

Hunter

Brett D.

Title Change

Title: Associate Chair for Education, Department of Statistics

Local Academic Unit: Statistics (CEC)

Note(s): Retained Title-Associate Professor

Johnson

Bret A.

Title Change

Title: Academic Director, MS in Accounting

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

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TYPE

Joiner

Christopher

Title Change

Title: Assistant Area Chair of Marketing

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor

Jones

James

Leave with Partial Pay

Title: Associate Professor without Term

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s):

Professor Jones has been awarded a Faculty Study Leave for Academic Year 2023-2024.

Jones

Rochelle R.

Title Change

Title: Associate Chair, Department of Systems Engineering and Operations Research

Local Academic Unit: Systems Engineering and Operations Research (CEC)

Note(s): Retained Title-Associate Professor

Jones

James

Conversion

Title: Associate Professor without Term

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s):

Professor Jones converted from Administrative/Professional Faculty to Instructional Faculty.

Jordan

Yvette

Leave with Pay

Title: Associate Professor without Term

Local Academic Unit: History and Art History (CHSS)

Note(s): Professor Jordan has been awarded a Faculty Study Leave for Spring Semester 2024.

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Jorgenson	Linn	Title Change

Title: Director LIFE

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Associate Professor of Education

Jusu	Nikyatu	Leave with Partial Pay
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Title: Assistant Professor

Local Academic Unit: Film & Video Studies (CVPA)

Note(s): Professor Jusu will be on Leave with Partial Pay for the Fall Semester 2023 to engage in multiple professional film projects as Writer and Director.

Kelly	Theodore M.	Leave with Pay
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Title: Professor without Term

Local Academic Unit: History and Art History (CHSS)

Note(s):

Professor Kelly has been awarded a Faculty Study Leave for Spring 2024 as a recipient of the Fulbright Scholar Award.

Kennedy	William G.	Title Change
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Title: Associate Chair of Research, CDS

Local Academic Unit: Computational and Data Sciences (COS)

Note(s): Retained Title-Associate Professor

Khasawneh	Khaled	Title Change
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Title: Associate Director, C-TASC

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Assistant Professor

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TYPE

Kim

Younsung

Title Change

Title: Associate Chair, ESP

Local Academic Unit: Environmental Science and Policy (COS)

Note(s): Retained Title-Professor

Kosoglu

Laura

Title Change

Title: Associate Chair and Graduate Program Director, Sid and Reva Dewberry, CEIE

Local Academic Unit: Civil, Environmental and Infrastructure Engineering (CEC)

Note(s): Retained Title-Associate Professor

Kurtay

Pelin A.

Title Change

Title: Senior Associate Chair, Department of Electrical and Computer Engineering

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Professor

Lacayo

Candace P.

Title Change

Title: Faculty Fellow for Graduate Education

Local Academic Unit: Office of the Provost

Note(s): Retained Title-Associate Professor of Athletic Training

Lacayo

Candace P.

Title Change

Title: Director of the Office of Diversity and Inclusion

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Associate Professor of Athletic Training

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FIRST NAME

TYPE

Lair

Meredith

Leave with Pay

Title: Associate Professor without Term

Local Academic Unit: History and Art History (CHSS)

Note(s): Professor Lair has been awarded a Faculty Study Leave for Spring Semester 2024.

Langfred

Claus W.

Title Change

Title: Area Chair, Management

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

Lavengood

Megan

Title Change

Title: Director of Music Theory

Local Academic Unit: Music (CVPA)

Note(s): Retained Title-Assistant Professor

Lee

Yi-Ching

Leave without Pay

Title: Assistant Professor

Local Academic Unit: Psychology (CHSS)

Note(s):

Professor Lee will be on Educational Leave without Pay for Academic Year 2023-2024.

Leonato

Kristin P.

Title Change

Title: Associate Director, Programs and Outreach

Local Academic Unit: University Career Services (UL)

Note(s): Previous Title: Associate Director Strategic Initiatives

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FIRST NAME

TYPE

Light

Andrew

Leave without Pay

Title: Distinguished University Professor

Local Academic Unit: Philosophy (CHSS)

Note(s): Professor Light will be on Leave without Pay for the Spring Semester 2024 to serve as Assistant Secretary of Energy for International Affairs at the Department of Energy.

Madden

Charles R.

Title Change

Title: Associate Chair

Local Academic Unit: Biology (COS)

Note(s): Retained Title-Professor

Maex

Steven A.

Tenure Track Contract
Extension

Title: Assistant Professor

Local Academic Unit: Costello College of Business

Maggioni

Viviana

Title Change

Title: Director of Undergraduate Affairs

Local Academic Unit: Civil, Environmental and Infrastructure Engineering (CEC)

Note(s): Retained Title-Associate Professor

Marshall

Sophia L.

Title Change

Title: Assistant Professor

Local Academic Unit: Costello College of Business

Note(s): Previous Title:Instructor

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FIRST NAME

TYPE

McLaughlin

John F.

Title Change

Title: Assistant Chair for Undergraduate, Graduate and Online Studies - IST

Local Academic Unit: Information Sciences and Technology (CEC)

Note(s): Retained Title-Instructor

Miller

Toyah L.

Title Change

Title: Director, Research (CIE)

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Professor without Term

Nelson

Jill K.

Title Change

Title: VSE Associate Dean for Undergraduate Programs and Student Services

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Associate Professor

Nowzari

Cameron

Title Change

Title: Director, CREATE Lab

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Associate Professor

Odagawa

Satoko

Title Change

Title: Career Advisor

Local Academic Unit: University Career Services (UL)

Note(s): Previous Title:Industry Advisor

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OTHER ANNOUNCEMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Oetjen	Cheryl A.	Leave with Pay

Title: Instructional Professor

Local Academic Unit: Nursing (CPH)

Note(s): Professor Oetjen has been awarded a Faculty Study Leave for Fall Semester 2023.

Osgood	Robert	Title Change
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Title: Interim Director, MS Program in Telecommunications

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Associate Professor

Paige	Mikell	Title Change
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Title: Associate Chair of Research, Department of Chemistry and Biochemistry (Sci Tech Campus)

Local Academic Unit: Chemistry and Biochemistry (COS)

Note(s): Retained Title-Professor without Term

Pamas	Roberto A.	Title Change
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Title: Director of TEACHERtrack

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor of Education

Park	Hayon	Leave without Pay
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Title: Assistant Professor

Local Academic Unit: Art (CVPA)

Note(s): Professor Park will be on Leave without Pay for the Fall Semester 2023 to teach at George Mason University Korea.

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Parker	Audra K.	Title Change

Title: Director of the School of Education

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor without Term

Pettit	Robert	Title Change
---------------	---------------	--------------

Title: Associate Chair for Graduate Studies and Director of New Graduate Programs,
Department of Computer Science

Local Academic Unit: Computer Science (CEC)

Note(s): Retained Title-Professor of Practice

Philpov	Alexander Z.	Title Change
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Title: Area Chair, Finance

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

Plotnick	Jeremy E.	Title Change
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Title: Director, Minor Programs

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Instructional Assistant Professor

Ramirez	Melanie	Title Change
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Title: Staff Clinician

Local Academic Unit: Counseling and Psychological Services (UL)

Note(s): Previous Title: Clinician, Diversity and Inclusion Focus

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Rancourt	Emily D.	Title Change

Title: Associate Director, Forensic Science Program

Local Academic Unit: Forensic Science Program (COS)

Note(s): Retained Title-Associate Professor

Requeijo	Tiago C.	Title Change
-----------------	-----------------	--------------

Title: Academic Director, MS FNAN

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor, Finance

Robinson	Emily A.	Title Change
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Title: Interim Director of Development, Hylton Performing Arts Center

Local Academic Unit: College of Visual and Performing Arts

Note(s): Retained Title-Associate Director of Advancement Communications

Robinson	Gregory J.	Title Change
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Title: Director of Graduate Studies in the School of Music

Local Academic Unit: Music (CVPA)

Note(s): Retained Title-Associate Professor

Rytikova	Ioulia	Title Change
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Title: MS AIT Wiley Online Program Director

Local Academic Unit: Information Sciences and Technology (CEC)

Note(s): Retained Title-Professor

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TYPE

Sachs

Robert L.

Title Change

Title: Coordinator of High School Math Courses

Local Academic Unit: Mathematical Science (COS)

Note(s): Retained Title-Professor

Schmidt

Bernard

Title Change

Title: Interim Program Director, MS Data Analytics Engineering Program

Local Academic Unit: MS Data Analytics Engineering Program (CEC)

Note(s): Retained Title-Instructor

Schrag

Zachary

Leave with Pay

Title: Professor without Term

Local Academic Unit: History and Art History (CHSS)

Note(s): Professor Schrag has been awarded a Faculty Study Leave for Spring Semester 2024.

Shahrokhi

Farnoosh

Title Change

Title: Director of the Division of Education Leadership

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Outreach & Admin Coor, ELP

Shehu

Amarda

Title Change

Title: Associate Vice President of Research for IDIA & Associate Dean for Artificial Intelligence Innovation for CEC

Local Academic Unit: Office of Research, Innovation and Economic Impact

Note(s): Previous Title: Associate Vice President of Research for IDIA
Retained Title-Professor without Term

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OTHER ANNOUNCEMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Shelley	Louise	Leave with Partial Pay

Title: Distinguished University Professor

Local Academic Unit: Schar School of Policy and Government

Note(s):

Professor Shelley has been awarded a Faculty Study Leave for Academic Year 2023-2024.

Sherry	Lance C.	Title Change
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Title: Associate Chair Research, SEOR

Local Academic Unit: Systems Engineering and Operations Research (CEC)

Note(s): Retained Title- Professor

Shields	Susan M.	Title Change
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Title: Recruiting Coordinator, School of Dance

Local Academic Unit: Dance (CVPA)

Note(s): Retained Title-Professor without Term

Shin	Joan K.	Title Change
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Title: Director of the Division of Advanced Professional Teacher Development and International Education

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor without Term

Sikdar	Siddhartha	Title Change
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Title: Director, CASBBI

Local Academic Unit: Bioengineering (CEC)

Note(s): Retained Title-Professor

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OTHER ANNOUNCEMENTS

LAST NAME

FIRST NAME

TYPE

Sincere

Shakiyla

Title Change

Title: Community Director for Beacon Hall

Local Academic Unit: Housing and Residence Life (UL)

Note(s): Previous Title: Assistant Director for Housing and Strategic Diversity

Snyder

Mark H.

Title Change

Title: Associate Chair for Undergraduate Studies, Department of Computer Science

Local Academic Unit: Computer Science (CEC)

Note(s): Retained Title-Instructor

Soyata

Tolga

Title Change

Title: BS/MS Computer Engineering Coordinator

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Associate Professor

Stan

Cristiana

Title Change

Title: Associate Chair of AOES

Local Academic Unit: Atmospheric, Oceanic and Earth Sciences (COS)

Note(s): Retained Title-Professor without Term

Steen

Sammy L.

Title Change

Title: Director of the Division of Child, Family and Community Engagement

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Associate Professor without Term

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Stockdale	Rachel M.	Title Change

Title: Career Advisor

Local Academic Unit: University Career Services (UL)

Note(s): Previous Title: Industry Advisor

Taylor	Eugene A.	Title Change
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Title: WAC-Faculty Affairs and Development Fellow for Faculty Writing Support

Local Academic Unit: English (CHSS)

Note(s): Retained Title-Instructional Associate Professor

Thatchenkery	Tojo J.	Title Change
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Title: Co-Director, Schar School Inclusive Excellence Program

Local Academic Unit: Schar School of Policy and Government

Note(s): Retained Title-Professor

Thatchenkery	Tojo J.	Title Change
---------------------	----------------	--------------

Title: Director, Organization Development and Knowledge Management Program

Local Academic Unit: Schar School of Policy and Government

Note(s): Retained Title-Professor

Thompson	James C.	Title Change
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Title: MRI Scientific Director

Local Academic Unit: Psychology (CHSS)

Note(s): Retained Title-Professor without Term

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<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Tompkins	Catherine J.	Title Change

Title: Associate Dean Faculty and Staff Affairs

Local Academic Unit: College of Public Health

Note(s): Retained Title-Professor without Term

Tsirigotis	Eugenia P.	Title Change
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Title: Assistant Area Chair of Accounting

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Instructor

Urgessa	Girum S.	Title Change
----------------	-----------------	--------------

Title: Director of Student Leadership and Success

Local Academic Unit: College of Engineering and Computing (CEC)

Note(s): Retained Title-Associate Professor

Van Hoek	Monique	Title Change
-----------------	----------------	--------------

Title: Associate Director, SSB

Local Academic Unit: Systems Biology (COS)

Note(s): Retained Title-Professor without Term

Vlastara	Niki Maria	Title Change
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Title: Associate Director, Retail Center

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Assistant Professor

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OTHER ANNOUNCEMENTS

<u>LAST NAME</u>	<u>FIRST NAME</u>	<u>TYPE</u>
Vough	Heather C.	Title Change
Title: Program Director, PhD Local Academic Unit: Costello College of Business		
Note(s): Retained Title-Associate Professor without Term		
Weeks	Andrea	Title Change
Title: Associate Chair of Research, Department of Biology Local Academic Unit: Biology (COS)		
Note(s): Retained Title-Associate Professor without Term		
Wessels	Konrad J.	Title Change
Title: Associate Chair of Research, GGS Local Academic Unit: Geography and Geoinformation Science (COS)		
Note(s): Retained Title-Associate Professor without Term		
West	Matthew E.	Leave with Pay
Title: Instructional Assistant Professor Local Academic Unit: Global Affairs Program (CHSS)		
Note(s): Professor West will be on Leave with pay for Academic Year 2023-2024 to serve an ACLS Fellowship.		
White	Elizabeth L.	Title Change
Title: Associate Chair, Department of Computer Science Local Academic Unit: Office of the Provost		
Note(s): Retained Title-Associate Professor		

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LAST NAME

FIRST NAME

TYPE

Wilkerson

Philip L.

Title Change

Title: Employer Engagement Consultant

Local Academic Unit: University Career Services (UL)

Note(s): Previous Title: Industry Advisor

Winkler

Laura G.

Title Change

Title: Graduate Internship Supervisor

Local Academic Unit: University Career Services (UL)

Note(s): Previous Title: Graduate Internship Program Manager

Ye

Shun

Title Change

Title: Assistant Area Chair of Information Systems and Operations Management (MIS)

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Associate Professor without Term

Yu

Eugene G.

Title Change

Title: Associate Director, CSISS

Local Academic Unit: Center for Spatial Information Science and Systems (COS)

Note(s): Retained Title-Research Professor

Yuckenberg

Ashley K.

Title Change

Title: Writing Intensive Coordinator

Local Academic Unit: Costello College of Business

Note(s): Retained Title-Assistant Professor

ANNOUNCEMENT

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LAST NAME

FIRST NAME

TYPE

Zeng

Kai

Title Change

Title: Director, Wireless Cyber Center

Local Academic Unit: Electrical and Computer Engineering (CEC)

Note(s): Retained Title-Professor

Zenkov

Kristien G.

Title Change

Title: Director of the Division of Elementary, Literacy, Multicultural, and Secondary Education

Local Academic Unit: College of Education and Human Development

Note(s): Retained Title-Professor

Faculty and Academic Standards Committee						
November 30, 2023						
SUMMARY OF FACULTY ACTIONS AND ANNOUNCEMENTS						
APPOINTMENT OF FACULTY						
	Term		Tenure Track			
	9-month	12-month	9-month	12-month	Research	Grant Funded
Instructor	1	0	0	0	0	0
Assistant Professor	3	2	2	0	1	1
Associate Professor	1	0	0	0	0	0
Professor	1	0	0	0	0	0
Administrative/Professional	0	28	0	0	0	0
Totals	6	30	2	0	1	1
RENEWALS/REAPPOINTMENTS						
	Term		Tenure Track			
	9-month	12-month	9-month	12-month		Total
Instructor	9	1	0	0		10
Assistant Professor	0	4	0	0		4
Associate Professor	1	3	0	0		4
Professor	0	1	0	0		1
Administrative/Professional	0	0	0	0		0
Totals	10	9	0	0		19
SEPARATIONS						
	Resignation	Retirement	Contract Expiration	Deceased		Total
	30	6	3	0		39
OTHER ANNOUNCEMENTS						
	Leave with pay and Partial pay	Leave w/o pay	Title Change	Conversion	Tenure Track Contract Extension	Total
	10	4	121	1	1	137

*Summary Excludes Postdoctoral Research Fellows and Research Staff

**GEORGE MASON UNIVERSITY
BOARD OF VISITORS**

**Finance and Land Use Committee Meeting
November 30, 2023**

AGENDA

- I.** Call to Order
- II.** Approval of Minutes for September 28, 2023 (**ACTION**)
- III.** Financial Matters
 - A. Financial Update
 - B. FY 2023 Unaudited Financial Statements
 - C. FY 2024 Q1 Financial Report & Forecast
 - D. State Six-Year Operating Plan (**ACTION**)
- IV.** Operational Matters
 - A. Succession Planning Update
 - B. Retirement Plan Investment Policy Update
- V.** Capital Matters
 - A. Schematic Design for Activities Building (**ACTION**)
- VI.** Adjournment

APPENDIX I – Capital Projects Review (Stoplight)

APPENDIX II – Office of University Building Official Annual Report

APPENDIX III – Supplemental Information

**GEORGE MASON UNIVERSITY
BOARD OF VISITORS
Finance and Land Use Committee Meeting
September 28, 2023
Meeting Minutes**

Present:

Rector Blackman, Vice Rector Peterson, Chair Pence, Vice Chair Witeck, Visitors Burke, Brown, Chimaladinne, Prowitt, Hazel, Gray, Stimson, Alacbay, Marquez; Visitor Rosen participated remotely; President Washington; Executive Vice President Dickenson; Vice President Strike; Staff Senate Chair Gautney; Student Representatives Wyche and Velegapudi; Faculty Senate President Broeckelman-Post; Faculty Representatives Daniels and Venigalla; Secretary pro tem Waters.

Absent:

Visitors Meese and Oberoi

I. Call to Order

Chair Pence convened the meeting at 11:51 a.m.

II. Closed Session

Chair Pence moved that the committee go into Closed Session under the provisions of Code of VA: §2.2-3711.A.1 to discuss the performance of a school.

Vice Chair Witeck **SECONDED**, and the **MOTION CARRIED UNANIMOUSLY BY ROLL CALL VOTE.**

Following the closed session, Chair Pence moved that the Finance and Land Use Committee go back into public session and that by roll call it was affirmed only public business matters exempted from the open meeting, requirements under the Freedom of Information Act were heard, discussed, or considered in the closed meeting.

Vice Chair Witeck **SECONDED** and **ALL COMMITTEE MEMBERS RESPONDED IN THE AFFIRMATIVE BY ROLL CALL.**

III. Approval of Minutes for May 4, 2023 (ACTION)

Chair Pence **MOVED** that the committee approve the minutes for the May 4, 2023, meeting of the Finance and Land Use Committee. The **MINUTES WERE UNANIMOUSLY APPROVED AS WRITTEN BY ROLL CALL VOTE.**

The meeting was turned over to Deb Dickenson, Executive Vice President for Finance & Administration. Due to the limited amount of time remaining after Closed Session, Ms. Dickenson provided an abbreviated presentation of the materials.

IV. Financial Matters

A. Preliminary FY 2023 Year-End Close

B. Amended FY 2024 Budget (ACTION)

Ms. Dickenson presented the Amended FY 2024 Budget, which reflects changes to the Baseline Operating Budget and Capital Budget approved by the Board in May, amended to incorporate new allocations in the final Commonwealth budget, as well as other budget adjustments since May. Per the Committee's direction, the Antonin Scalia Law School will be exempted from budget reductions in the FY 2024 budget with the offset coming from Mason's reserves, as discussed in the earlier Closed Session. Ms. Dickenson noted the budget gap is starting to close as the University mitigates budget challenges through expense reductions. The committee will be provided thorough updates on the mitigation progress at future meetings.

Visitor Brown noted that the Closed Session discussion of the department performance issue identified processes for collaboratively addressing both short-term and longer-term strategy and that he agreed with how that had been outlined in the budget. Chair Pence opened the floor for any further discussion, as needed; there was no further discussion.

Ms. Dickenson recommended approval of the Amended FY 2024 Budget, including the Law School budget reduction exemption.

C. State Six-Year Operating Plan Update

Ms. Dickenson updated the committee on Mason's submission and presentation of its Six-Year Operating Plan presented to the Commonwealth, which was noted to be the best they had received. The plan highlights Mason's funding disparity and includes a request for realigned appropriations, as well as expense reductions. The Commonwealth has asked for an incentive model, which was interpreted as an acknowledgment of Mason's strong performance. The full Six-Year Plan is currently pending final Commonwealth review.

V. Operational Matters

A. Incentive Retirement Plan (ACTION)

Ms. Dickenson presented a new Incentive Retirement Plan (IRP) that the University would implement as part of its mitigation efforts. The plan would include a one-time exception to use up to 7% of the General Fund appropriation for faculty salaries and benefits for the IRP offering, up from the 1% amount currently permitted. If approved by the Board, the plan and exception will require subsequent approval by the Attorney General and Governor. Ms. Dickenson noted that Secretaries Guidera and Cummings were supportive of this exception when discussed at the Six-Year Plan presentation.

The voluntary IRP incorporates enhanced benefits from previous offerings to attract increased participation plan as part of Mason's budget mitigation efforts, as some of the impacted positions would be replaced at a lower level or salary. Applicants require approvals by a Dean and the Provost.

The proposed IRP would create an ongoing plan, however the 7% General Fund exception would only be for the current offering, after which funding would revert to the existing 1% threshold. Upon receipt of Board approval, staff will develop plan documents for Commonwealth submission, based on the criteria presented. Final IRP documents will be shared with the committee.

Chair Pence and Ms. Dickenson further clarified that the standing policy would only include the 1% General Fund threshold, with the 7% exception only applying to the June 2024 through June 2025 period, with any subsequent exception request requiring approvals from the Board, Attorney General and Governor.

Regarding the Capital Project Stoplight Chart, Chair Pence asked about possible overruns on the Telecom Infrastructure Phase 1 and Aquatic & Fitness Center Capital Renewal projects. Alex Iszard, Assistant VP of Planning, Design and Construction, explained that the red “stoplight” indicators are based upon the initial budgets and schedules that were set forth at the onset of the project. Both budgets were planned pre-pandemic, and since that time the University has seen unprecedented escalation, supply chain issues, and other issues that have caused budget overruns and schedule delays.

B. Joint Legislative Audit and Review Commission (JLARC) Span of Control

Ms. Dickenson provided the annual Span of Control report, as required, for which the University is meeting the average Span of Control target.

VI. Capital Matters

A. Land Use Certification (ACTION)

Ms. Dickenson presented the annual Land Use Certification. The significant changes over the past year are the acquisition of property across Fairfax Drive from the Mason Square campus and the addition of the Masonvale improvements as Commonwealth assets. Ms. Dickenson requested approval of the spreadsheet included in the Board Book for submission to the Commonwealth.

Visitor Pence **MOVED** that the Board of Visitors approve the three (3) action items, as outlined in the meeting materials, inclusive of the Law School’s expense reduction exemption in the Amended Budget:

1. Amended FY 2024 Budget
2. Incentive Retirement Plan
3. Land Use Certification

Visitor Witeck **SECONDED**, and the **MOTION CARRIED UNANIMOUSLY BY ROLL CALL VOTE.**

VII. Adjournment

There being no further business, Chair Pence adjourned the meeting at 12:48pm.

Prepared by secretary pro tem,

Rachelle Waters

Rachelle Waters

ITEM NUMBER III.D.:

**STATE SIX-YEAR OPERATIONAL PLAN*
(ACTION)**

PURPOSE OF ITEM:

The Higher Education Opportunity Act of 2011 requires biennial Board of Visitor approval of a Six-Year Plan, which is submitted to the State Council for Higher Education in Virginia (SCHEV).

APPROPRIATE COMMITTEE:

FINANCE AND LAND USE

BRIEF NARRATIVE:

The 2024 Six-Year Plan process was restructured this year to enable a more cohesive, consistent planning process. The Six Year plan includes a narrative and six-year financial plan that supports strategic plan priorities with a focus on the first two years (the biennium) of the plan.

SCHEV provided institutions with a common set of questions focused on mission and priorities; enrollment, program alignment and performance and financial effectiveness and sustainability, along with an institution-specific “Fact Pack”, compiled by the Boston Consulting Group and SCHEV, with ten years of institutional data to inform the narrative responses and the financial plan.

Mason’s 2024 biennium plan for FY25 and FY26, requests \$140M over the biennium, for equitable funding for Mason commensurate with our value and funding aligned with our peer institutions; support for revenue diversification and partnership opportunities; and support for unfunded mandates. The plan was submitted in July 2023, with an Op Six presentation (to representatives of the Governor’s Office; Secretary of Finance, Secretary of Education, Director of Planning and Budget, Executive Director of the State Council of Higher Education in Virginia, Staff Director of the House Committee on Appropriations, and Staff Director of the Senate Committee on Finance) on August 31, 2023.

Mason has demonstrated that we are efficient stewards of the State's resources through our ability to leverage constrained resources to achieve positive outcomes. However, without additional investment, our ability to make progress on the State's goals of cost-effective delivery of our academic, research, and student success mission is not sustainable.

Our Six-Year Plan request will allow us to continue our success in delivering quality education for diverse populations, enable social mobility, and significantly contribute to the prosperity of the Commonwealth, while enhancing cost-effectiveness, innovation and responsiveness to our constituents.

*** The Six-Year Plan is for planning purposes only; dependent upon General Fund support and pending BOV approval of future Tuition and Fees.**

STAFF RECOMMENDATION:

Staff recommends Board approval of the 2024 Six Year Plan.

ITEM NUMBER V.A.:

Activities Building Schematic Design Approval

PURPOSE OF ITEM:

This item seeks Board of Visitors (BOV) approval of Schematic Design for the project.

BRIEF NARRATIVE:

Under delegated capital authority procedures adopted by the BOV, staff shall present all capital projects to the Board at conclusion of the Schematic Design phase. At this stage, the Board will assure themselves that each project remains on track to deliver the project.

The current scope of the project is a 24,852 SF, single story building that serves the university as a multipurpose student engagement facility and activity center. The design consists of a variety of sized spaces allowing for flexibility when hosting student engagement and campus activities. The two largest spaces are sized such that the Mason pep band/ensemble can have full scale practices while also being able to host other activities of equal scale at the same time. There are also small, medium, and large activity rooms for student engagement, recreation, and well-being activities. Lastly, there are other spaces such as group rooms, conference rooms, storage, general restrooms, small offices, and spaces for building services.

The building's design consists of three rectilinear forms: two gable framed tent structures containing the majority of the student engagement spaces with a connecting center anchor/entrance area that holds the core building elements (restrooms, offices, mechanical spaces). The overall building aesthetically is meant to resemble a modern take on barn-like structures harkening to the historical aesthetic of the area while also taking clues from the current adjacent facilities to its east, the Recreation and Athletic Complex (RAC), and the George Mason Field House across Route 123 to its west.

The facility is situated along Campus Drive, bound on all four sides with existing Student Athletic, Health, and Wellness buildings such as the RAC, George Mason Fieldhouse, and the West PE Module of Student Athletes as well as several playing fields.

The exterior of the building will include a pre-engineered fabric membrane system that is tensioned horizontally and vertically to provide a tight, weatherproof finish which will cover the gymnasiums. The center section of the facility will be constructed of tilt-up concrete panels. The building is targeting the Sustainability goal of LEED silver.

The EIR for the Project was submitted to DEQ. Mason received review comments from DEQ in August, 2023, which indicates no objection to the proposed project provided regulatory requirements and recommendations included with the DEQ review comments are followed.

The Activities Building was presented at the November 2023 AARB Meeting and received Schematic Design approval with comments.

The schedule for this project includes start of construction on site work starting in March 2024. The building is currently targeting an occupancy in January 2025.

STAFF RECOMMENDATION:

After reviewing the respective Schematic Design, staff recommends Board approval of the above listed project to proceed through design and into construction.

APPENDIX: Capital Projects Review

This section provides the regular report on the status of capital construction projects on all three university campuses. The project “stoplight” chart provides a summary review. For purposes of black and white printing, all stoplights are “Green” unless otherwise noted. Scoring definitions:

- “Red”: Likely to exceed approved budget, schedule, or scope
- “Yellow”: At risk to exceed approved budget, schedule, or scope, but can still recover
- “Green”: Within approved budget, schedule, or scope

Scoring is reset at the time of preliminary design completion and construction contract execution.

Changes/updates since the September 2023 report include:

- Fuse at Mason Square (IDIA HQ) – Design is completed and the construction continues on site. Work on the elevated concrete slabs is progressing with topping out of concrete structural frame due to be complete in November 2023. Work on building skin continues with precast panel and glass curtain wall installation. It is anticipated that the building skin will be complete in early Spring 2024. The schedule to finish the core and shell of the building remains August 15, 2024. Mason will install furniture fixtures and equipment in the Spring of 2025 with full occupancy planned for summer of 2025. Work started early in November on the renovation of Mason Square Plaza. It is anticipated these improvements will be complete in Spring of 2024 in time for Spring Programming to start up in March of 2024.
- Life Sciences Engineering Building (Bull Run Hall IIIB) – Design is completed and the construction continues on site. The building is coming along nicely and is nearly waterproof. The building façade is being installed and building envelope testing is under way. The interior fit out has started and initial inspections by DEB have occurred. The project is still tracking for a January 2025 completion.
- Telecom Infrastructure Phase 1 – Design is completed and the construction continues on site. Work on Packages 1 (work inside buildings) and Package 3 (new West Campus Core Switch Building) is in progress and approximately 90% complete. Final punchlist for Package 1 is scheduled for December 4, 2023. The completion date for the Package 3 will be January 2024. Package 2 for outside plant (new IT ductbanks) was rescope and rebid. The new bids are due November 29, 2023. The completion date for package is now anticipated to be January 2025. Budget was changed to green as we do not anticipate exceeding the currently authorized budget.
- Johnson Center HVAC Repairs – Design is completed and the construction continues on site. Contractor completed work at the high ceiling areas at the atriums this past summer. The new air handling units and exhaust fans are currently anticipated to be shipped in March of 2024. The installation of the units will be phased to allow operations in the building to continue. Project is anticipated to be completed May of 2025.
- Central Heating and Cooling Plant Capacity Expansion – Design is complete and the project is in the procurement step. Bids are due January 9, 2024. The project is equipment intensive with the

equipment lead-time anticipated to be around 52 weeks. Anticipated project completion is January 2026.

- Aquatic & Fitness Center Capital Renewal – Design is completed and the construction continues on site. A platform has been constructed under the roof deck of the competition pool to allow work to the structure while the pool beneath is in operation. The Skylight demolition over both pools has been completed and the new skylight installation will start in December. The roof replacement will start after skylights are completed. Mechanical replacement will be completed over the Winter Break. The tile repairs, new competition pool lighting, bulkhead replacements, Kalwall replacement, and rooftop HVAC equipment replacement are scheduled for Summer of 2024 during the closure of the pool. Budget and schedule were changed to green as we do not anticipate exceeding the currently authorized budget or the schedule included in the contract to the general contractor.
- Telecom Infrastructure Phase 2 – Design is underway with the schematic design anticipated to be submitted on January 17, 2024. An onsite survey has been completed and the design team is working to determine exact location for the new telecom rooms.
- Telecom Infrastructure Phase 3 – A/E team has been selected and negotiations are taking place on scope and fee.
- Activities Building – A Design/Build contract was awarded to Hoar Construction. Design has begun and AARB approved the proposed building. The schematic plans have been submitted for OUBO review. Construction is anticipated to start in March and the project is anticipated to be completed by December of 2024.
- Construct Basketball Training, Wrestling, and Athlete Academic Support (RAC Addition) – Commonwealth has approved project for \$15.5M of fundraising. We believe that this project will have a budget of \$30M. Capital Strategies and Planning is working on the detailed planning program for the addition. Mason would like to use Design-Build as the delivery method for this building, which will require permission from DEB.
- Real Estate Acquisitions Phase 1 (Arlington) – Mason has purchased lot 6 and 11 and is working towards the purchase of lot 8. Closing for Lot 8 is scheduled for December 1, 2023.
- Real Estate Acquisitions Phase 2 (Vernon Smith Hall) – The Commonwealth has approved the purchase of Vernon Smith Hall. Closing was completed on November 15, 2023.
- Academic VIII – Project approved for planning only and contingent upon Mason providing seed funding. Project awaiting internal authorization to proceed.
- Point of View Cottages – Commonwealth has approved \$4M of funding for this project to match a target of \$4M of fundraising. Project is awaiting funding and internal authorization to proceed.
- Renovations Concert Hall – Higher Education Capital Outlay (HECO) authority approved to proceed on a \$25M renovation to the Concert Hall on the Fairfax Campus. The funding is based

upon donations. Project is awaiting funding and internal authorization to proceed.

- Business School Building – HECO authority approved to proceed on a \$165M and 200K GSF building for the School of Business on the Fairfax Campus. The funding is based upon donations. Project is awaiting funding and internal authorization to proceed.

STAFF RECOMMENDATION:

For Board Information Only

Facilities Projects Listing

Project #	Project Name	Scope(sf) New	Scope(sf) Reno	Total Budget	Budget Status	Schedule	Scope	Construction Start Date	Occupancy Date	Construction % Complete
Construction										
1	18482-000 FUSE (formerly IDIA HQ)	461,066	0	\$ 253,781,941	●	●	●	1/3/2022	7/1/2025	48.0%
2	18000-000 Life Sciences & Engineering Building - Bull Run Add*	133,300	0	\$ 107,123,650	●	●	●	8/31/2022	1/13/2025	35.0%
3	18339-000 Telecom Infrastructure Phase 1*	576	0	\$ 10,525,000	●	●	●	9/1/2022	1/17/2025	43.0%
4	A8247-027 Johnson Center HVAC Repairs	0	348,447	\$ 7,963,005	●	●	●	3/15/2023	5/15/2025	7.0%
6	18529-000 Aquatic & Fitness Center Capital Renewal	0	90,736	\$ 16,500,000	●	●	●	6/1/2023	9/1/2024	17.0%
Design										
5	18509-000 Central Heating & Cooling Plant Boiler & Chiller Addition*	0	0	\$ 8,197,000	●	●	●	1/23/2024	1/26/2026	N/A
7	18487-000 Telecom Infrastructure Phase 2	0	0	\$ 23,250,000	●	●	●	6/1/2025	4/16/2026	N/A
8	18593-000 Telecom Infrastructure Phase 3	0	0	\$ 24,000,000	●	●	●	TBD	TBD	N/A
9	221382 Activities Building	24,852	0	\$ 11,000,000	●	●	●	3/1/2024	12/31/2024	N/A
Design Procurement/ Pre-Planning										
10	18253-000 Construct Basketball Training, Wrestling, and Athlete Academic Support (RAC Addition)	TBD	TBD	\$ 15,500,000	●	●	●	TBD	TBD	N/A
Acquisition										
11	221512 Real Estate Acquisitions Phase 1 (Arlington)	0	0	\$ 40,000,000	●	●	●	N/A	N/A	N/A
12	231646 Real Estate Acquisitions Phase 2 (Vernon Smith Hall)	0	0	\$ 107,000,000	●	●	●	N/A	N/A	N/A
Pending Authorization to Proceed										
13	18498-000 Academic VIII*	200,000	0	\$ 185,675,000				TBD	TBD	N/A
14	18497-000 Point of View Cottages	TBD	0	\$ 8,000,000				TBD	TBD	N/A
15	TBD Renovations Concert Hall	0	120,750	\$ 25,000,000				TBD	TBD	N/A
16	TBD Business School Building	200,000	0	\$ 165,000,000				TBD	TBD	N/A

* Pool Funded Project; will require DPB/DEB approval for release of funds after Preliminary Design



Office of University
Building Official

ALL TOGETHER DIFFERENT

OFFICE OF UNIVERSITY
BUILDING OFFICIAL

2022 - 2023 ANNUAL REPORT



OUR HISTORY, MISSION & VISION

The Restructured Higher Education Financial and Administrative Act of 2005 and the Management Agreement with the Commonwealth of Virginia granted the university the authority to designate its own building official. The office was created as a result of Mason attaining Tier III Management Authority by the Commonwealth of Virginia and approved through resolution in November 2020 by the Board of Visitors. Formal delegation of building official authority was transferred from the Division of Engineering and Buildings to the University Building Official in March 2022.

The Office of University Building Official first day of operations was March 14, 2022. The Office of University Building Official is charged with administering the Virginia Uniform Statewide Building Code (USBC) for all construction on all Mason owned facilities across the Commonwealth, including campuses in Manassas, Fairfax and the greater Washington, D.C. metro areas.

With the establishment of our office this provided Mason the opportunity to impact positive change and foster community-wide dialogue around code compliance, safety, and accessibility.

MISSION

The Office of the University Building Official strives for excellence through solution based professional services advancing the quality, value, accessibility, health, and safety of our University community.

VISION

To be a creative partner collaboratively seeking the best solutions for the University.





KENNETH WALSH

Vice President,
Strategic Initiatives
& Chief of Staff

BOARD OF
VISITORS AND
RECTOR



DAVID M. KIDD
Building Official



BILL G. MILLER
Deputy Building
Official



**DONNA MARTINEZ-
VALLEJOS**
Permit Administrator



JUSTIN BILLER
Plan Examiner
Fire Protection



TIM HAGEDORN
Plan Examiner
Civil/Structural



KEVIN KLINE
Plan Examiner
Electrical



ETHAN SCHOLL
Plan Examiner
Mechanical/Plumbing

OUR TEAM

The University Building Official, David M. Kidd holds a reporting and policy relationship to the Board of Visitors and the University Senior Leadership. The role of the Office of University Building Official is a critical component of the project execution cycle that includes master planning, capital and non-capital planning, procurement, project management, design and construction.

With the creation of our office it has expedited the design review, permitting and inspection process, but more importantly it provides on-site solution based collaboration with Mason Departments and stakeholders. Our main focus aligns with the University mission to create a welcoming, inclusive, safe environment and sustainable buildings for everyone to enjoy.



Campus wide accessibility is a major goal, requiring more than meeting codes or standards but exceeding them to become inclusive for everyone to enjoy this beautiful campus”

– DAVID M. KIDD
Building Official

OUBO TEAM

Our highly qualified team of seven dedicated engineer plan reviewers, inspectors and permit administrator have 174 years of combined experience in design, building, inspections and construction. The team are cross-trained to serve as primary liaison with outside regulatory agencies on code issues that affect the design, construction, and approval to occupy new university facilities or maintain existing ones.

We have continued to create, redesign, update, and sometimes replace steps within each of our processes, forms, and website to improve the services that we provide. Every aspect of our departmental processes are being evaluated through the lens of how we can realize our full value and service potential to all stakeholders.



521 HOURS
OF ANNUAL
PROFESSIONAL
DEVELOPMENT
COMPLETED

REPRESENTED
MASON AT **15**
PROFESSIONAL
CONFERENCES

2 MASTER CODE
PROFESSIONALS
(Highest level of Building Code
Certification)

18
PROFESSIONAL
MEMBERSHIPS

OVER **122**
CERTIFICATIONS

**325**

PLANS REVIEWED

**207**

PERMITS ISSUED

**499**

INSPECTIONS

OUBO SERVICES

The 2023 Annual Report provides information utilizing metrics to identify service functions including construction plan review, permits and inspections from the start of operations. Having the Office of University Building Official on campus provides increased service response resulting in improved project schedules and constructibility.

To help facilitate on-time and within-budget project delivery, the Office of University Building Official collaborates with project stakeholders from the university community throughout the duration of the project to identify potential code issues early and provide solutions based dialogue.

PLAN REVIEWS

Having technical expertise and deep knowledge of Mason facilities means we identify problems and provide fast quality solutions. As Licensed professionals we hold the highest standard of integrity to ensure conformance with federal and state codes plus University standards.

When plans are reviewed by discipline specific professionals we identify potential issues in projects that often don't reveal themselves until the end of the construction process, we then work with the design team and project management to ensure project success while meeting codes.

On average our team of reviewers perform plan reviews daily and have completed 100% of reviews prior to project deadlines.

WORKING DRAWINGS

145

8.21 AVG.
REVIEW DAYS

PRELIMINARY DESIGNS

16

8.24 AVG.
REVIEW DAYS

ADMINISTRATIVE REVIEWS

7

1.53 AVG.
REVIEW DAYS

SCHEMATIC DESIGNS

3

3.90 AVG.
REVIEW DAYS

CONCEPT/RE-EVALUATION DESIGN

11

5.36 AVG.
REVIEW DAYS



OUBO PERMIT TYPES

2

DEMOLITION PERMITS

10

PLUMBING PERMITS

10

FIRE ALARM PERMITS

11

FIRE SUPPRESSION PERMITS

20

MECHANICAL PERMITS

63

ELECTRICAL PERMITS

74

BUILDING PERMITS

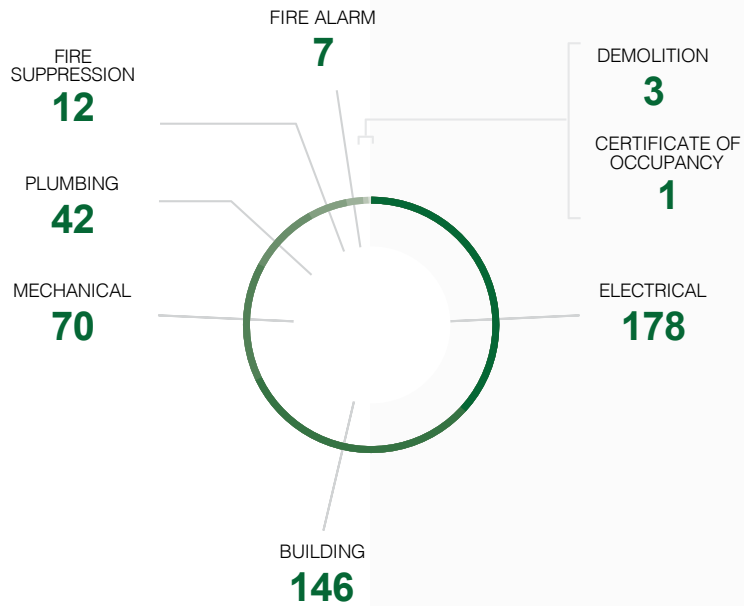
PERMITS

While most building permits we issue are for renovation work or new construction, we also issue demolition permits, early-site, foundation or structural work, temporary structures, and small projects. To expedite the start of construction on projects our office strives to provide excellent customer service and responsiveness.

TYPE OF REVIEW	AVG. REVIEW DAYS
License Verification	0.3
Permit Application Approval	1.5

INSPECTIONS

The inspection program provides customer-focused services through collaboration and clear communication with project managers, construction field representatives and contractors. Our on-site inspection team provides immediate response to inspection requests to ensure compliance with life safety, accessibility, structural, mechanical, electrical, and plumbing codes. In addition, they are able to share their expertise with contractors and provide solutions for issues that may arise during the project inspections and avoid delays/cost to projects.



1.89 AVG. DAYS FOR INSPECTION

0.58 AVG. DAYS TO SCHEDULE INSPECTION

0.24 AVG. DAYS TO ASSIGN INSPECTOR





When working with clients and stakeholders we believe it is important to educate and train our customers and colleagues while seeking feedback for improvement of services”

— DAVID M. KIDD
Building Official

TRAINING VALUE TO MASON

The Office of University Building Official plays a critical role in assisting project managers, architects, engineers and contractors performing construction in new and existing facilities. Our highly qualified team exemplifies lifelong learning and strives to stay current on building codes and industry standards to better serve the University as code professionals. The Office of University Building Official provides training opportunities to all stake holders.

THE OUBO TRAINING:

- 9 Trainings sessions on construction standards, fire protection, HECO standards for plan design, plan submission, plan reviews, permit applications, inspections, and e-Builder construction management system.
- 308 Attendees (project managers, architects, engineers, contractors, construction inspectors, emergency management personnel, information technology personnel, and facilities maintenance trades staff).
- Scheduled individual meetings with term Contractors.
- Provided individual meetings/training to Architects & Engineers.

COLLECTIVE CONNECTIONS

The Building Official and Plan Review Engineers worked over a year to support Facilities Administration on the 2023 edition of the Higher Education Capital Outlay (HECO Manual) updates and revisions, which were completed February 6, 2023.

Currently, our OUBO Team is working with Facilities Administration on the updates and revision to Mason's Design Standard Manual. In addition, we have established ongoing meetings with stakeholders, University Departments and Partners to continue working toward improvement of services through partnerships, training and collaboration.

PARTNERSHIPS

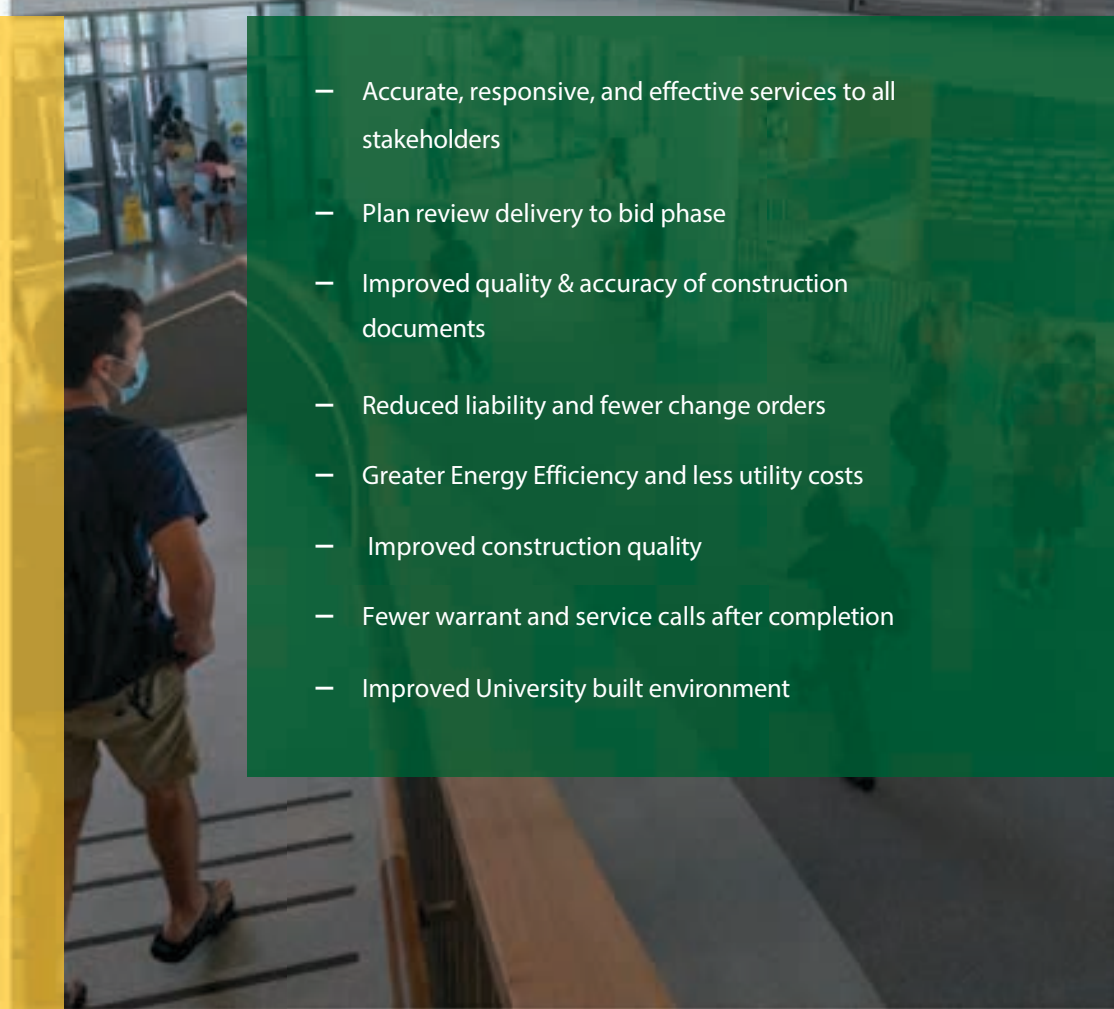
- UNIVERSITY SENIOR LEADERSHIP
- FACILITIES LEADERSHIP TEAM
- PROJECT MANAGERS / CFR
- ARCHITECTS, ENGINEERS & GENERAL CONTRACTORS
- FACILITIES MAINTENANCE DEPARTMENTS
- UNIVERSITY DEPARTMENTS
- VARIOUS JURISDICTION BUILDING DEPARTMENTS
- VIRGINIA TECH & UNIVERSITY OF VIRGINIA BUILDING OFFICE
- EMERGENCY MANAGEMENT
- FIRE MARSHAL
- VIRGINIA DIVISION OF ENGINEERING & BUILDINGS

BENEFITS & GOALS

The OUBO continues to strive for excellence through solution-based professional services advancing the quality, value, accessibility, health, and safety of our University.

- Partner with state & local officials including building officials from Virginia Tech and University of Virginia to foster new or improved relationships which will help the University community thrive through collective connections.
- Continue to proactively reach out to our customers and colleagues with the purpose to provide education and training while gaining insight and feedback for improvements to our methods to better serve our customers.
- University Building Code Analysis database integration within Archibus with support from Capital Strategy & Planning.
- Certifications offer OUBO flexibility in succession planning as well as cross-training which provides improved services during limited disruptions or increased work loads. All staff members are encouraged to seek ICC certification as Master Code Professional (MCP), of which David Kidd and Justin Biller currently hold. Only one other Virginia Office of University Building official has a MCP.

- Accurate, responsive, and effective services to all stakeholders
- Plan review delivery to bid phase
- Improved quality & accuracy of construction documents
- Reduced liability and fewer change orders
- Greater Energy Efficiency and less utility costs
- Improved construction quality
- Fewer warrant and service calls after completion
- Improved University built environment





BOARD OF VISITORS
Finance & Land Use Committee

Office of the Executive Vice President | November 30, 2023

Agenda

Financial Matters

- A. Financial Update
- B. FY 2023 Unaudited Financial Statements
- C. FY 2024 Q1 Financial Report & Forecast
- D. State Six-Year Operating Plan (ACTION)

Operational Matters

- A. Succession Planning Update
- B. Retirement Plan Investment Policy Update

Capital Matters

- A. Schematic Design for Activities Building (ACTION)

Appendix - Supplemental Information



Financial Update

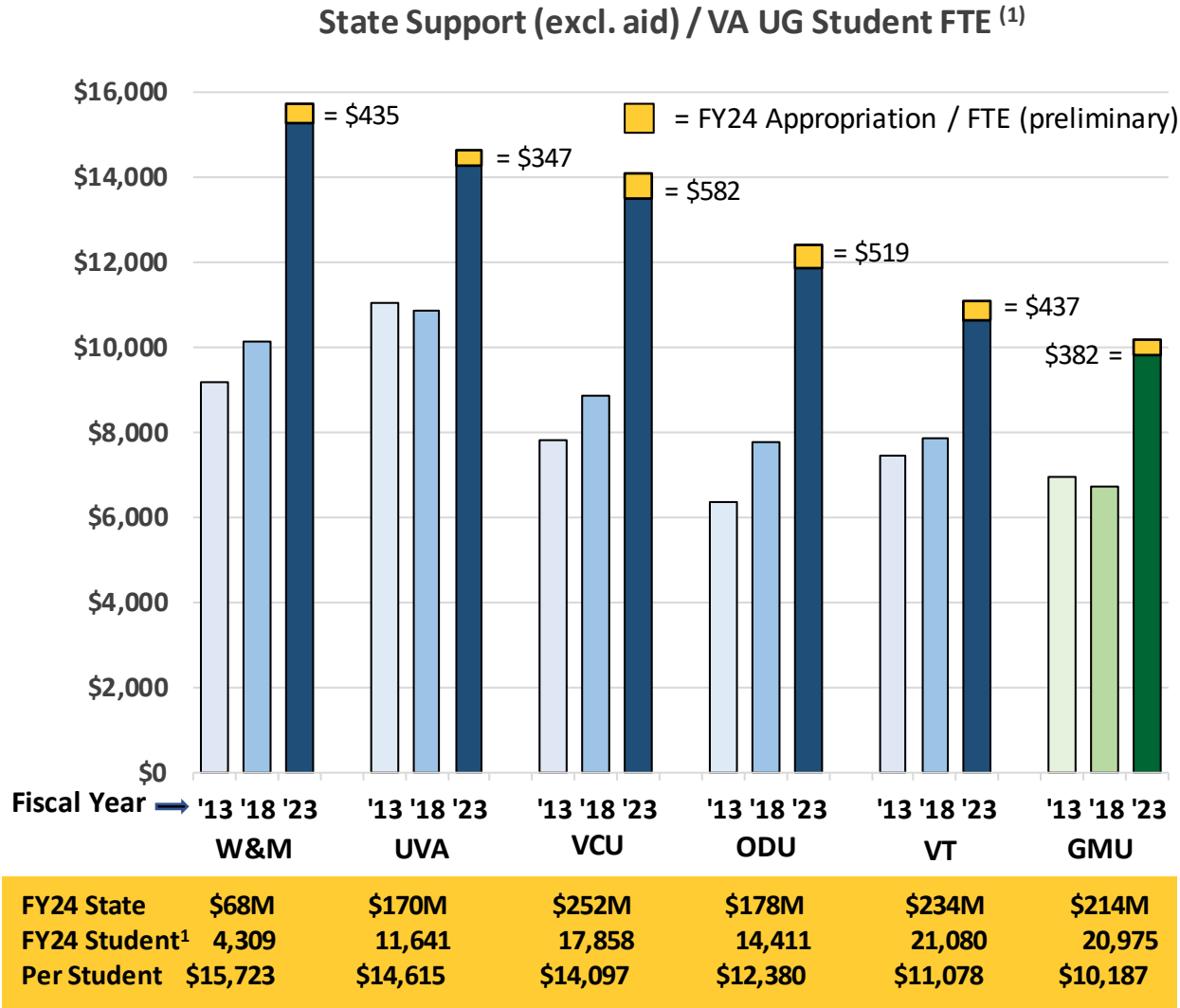
Financial Matters

SCHEV FY 2025 E&G Recommendations

	FY 2024	NPS	Funding Disparities	VMSDEP Waiver	Total	% Increase
CNU	\$46,097,000	\$462,000		\$1,131,000	\$1,593,000	3%
GMU	\$208,433,000	\$2,868,000	\$18,536,000	\$4,163,000	\$25,567,000	12%
JMU	\$136,028,000	\$1,770,000	\$793,000	\$2,040,000	\$4,603,000	3%
LU	\$41,843,000	\$282,000		\$751,000	\$1,033,000	2%
NSU	\$82,467,000	\$472,000		\$1,048,000	\$1,520,000	2%
ODU	\$177,494,000	\$1,648,000		\$5,130,000	\$6,778,000	4%
RU	\$70,290,000	\$556,000		\$1,018,000	\$1,574,000	2%
UMW	\$41,976,000	\$377,000		\$772,000	\$1,149,000	3%
UVA	\$169,628,000	\$2,531,000		\$2,191,000	\$4,722,000	3%
UVAW	\$30,520,000	\$196,000		\$87,000	\$283,000	1%
VCU	\$250,913,000	\$2,691,000		\$6,482,000	\$9,173,000	4%
VMI	\$21,641,000	\$162,000		\$523,000	\$685,000	3%
VSU	\$63,158,000	\$499,000		\$676,000	\$1,175,000	2%
VT	\$220,559,000	\$3,028,000	\$11,179,000	\$3,493,000	\$17,700,000	8%
WM	\$66,364,000	\$840,000		\$1,713,000	\$2,553,000	4%
RBC	\$13,035,000	\$143,000		\$100,000	\$243,000	2%
VCCS	\$511,910,000	\$5,779,000		\$2,022,000	\$7,801,000	2%
Total	\$2,152,356,000	\$24,304,000	\$30,508,000	\$33,340,000	\$88,152,000	4%

“In public higher education, the Commonwealth’s policy has been to fund each institution’s average faculty salary at the 60th percentile of its national peers... One institution, George Mason University, is below the 30th percentile.”

State Appropriations per In-State Undergraduate (FTE) E&G General Fund (excluding aid)



Slower appropriations growth has put Mason further behind over last decade

Mason per student vs peer median:

- FY13: \$859 below
- FY23: \$3,710 below
- FY24: \$3,910 below

If Mason received funding equitable to our nearest peer, it would offset our operating shortfall by \$19M

1 - FY24 Appropriation is preliminary. FY24 in-state undergraduate student FTE is based on FY23 (Fall 2022) enrollment.

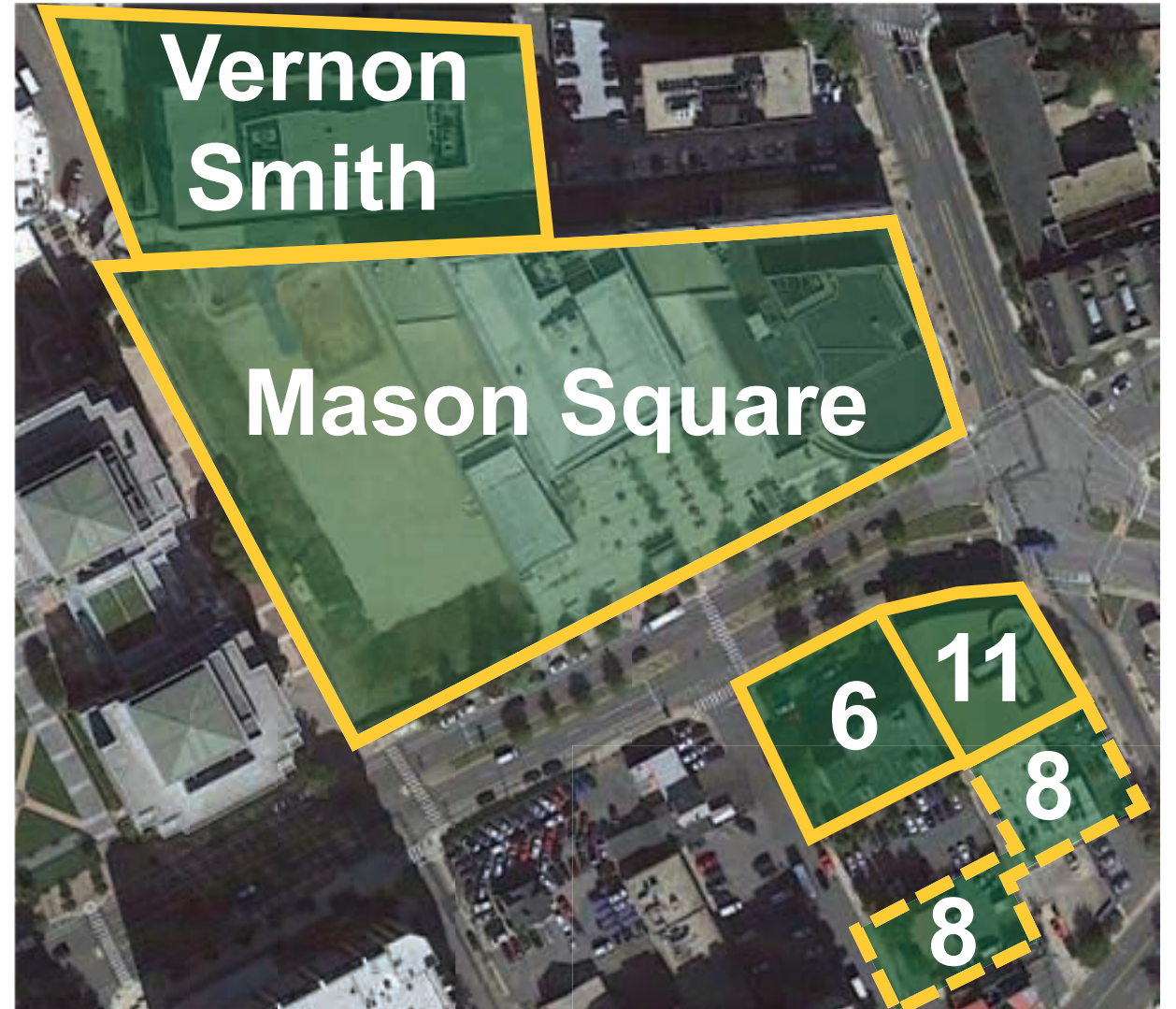
State Appropriations per In-State Undergraduate (FTE) E&G General Fund (excluding aid)



Capital Investment

Commonwealth partnership has enabled acquisition opportunities:

- ✓ **Masonvale**
 - *Closed: June 15, 2023*
 - Generates \$3.5M annually
- ✓ **Lots 6 & 11**
 - *Closed: April 6, 2023*
 - Potential development opportunity
- ✓ **Vernon Smith Hall (VSH)**
 - *Closed: November 15, 2023*
 - Generating annual cashflow and expense savings
- **Lot 8**
 - Closing in December 2023
 - Potential development opportunity





FY 2023 Unaudited Financial Statements

Financial Matters

FY2023 Unaudited Financial Statements

❖ Provided to Auditor of Public Accounts and posted online

<https://fiscal.gmu.edu/generalaccounting/review-financial-statements/>

❖ APA audit entrance meeting conducted today

❖ Audited statements expected May 2024

❖ Significant Transactions:

- ❖ Masonvale
- ❖ GASB 96 Adoption (SBITA's)
- ❖ Institutional Aid presentation change

\$61.6M Net Position Increase

REVENUES \$1,230.3 MILLION

- Student Tuition & Fees, net
- Grants & Contracts
- Auxiliary Enterprises and Other
- State appropriations
- Capital appropriations and Gifts
- Other Nonoperating Revenue



EXPENSES \$1,168.7 MILLION

- Instruction
- Research
- Auxiliary Enterprises Program
- Academic Support
- Depreciation & Amortization
- Institutional Support
- Operation & Maintenance of Plant
- Student Services
- Student Aid
- Public Service
- Interest Expense
- Other Nonoperating Expense



George Mason University

FY 2022 and FY 2023 Revenues & Expenses - Accrual Basis

(\$ in millions)

	FY 2022 <u>Audited (Adj)</u>	FY 2023 <u>Unaudited</u>	% <u>Inc/(Decr)</u>
<u>Operating Revenues</u>			
Student Tuition & Fees, net	\$ 344.7	\$ 360.3	4.5%
Grants & Contracts	180.7	198.2	9.7%
Auxiliary Enterprises and Other	210.7	219.3	4.1%
Total Operating Revenues	\$ 736.1	\$ 777.8	5.7%
<u>Nonoperating Revenues</u>			
State appropriations	\$ 256.6	\$ 269.6	5.0%
Capital appropriations and Gifts	45.1	93.6	107.5%
Other Nonoperating Revenue	121.8	89.3	(26.7%)
Total Revenues	\$ 1,159.6	\$ 1,230.3	6.1%
<u>Operating Expenses</u>			
Education and General	\$ 845.5	\$ 897.8	6.2%
Auxiliary Enterprises	101.3	141.9	40.1%
Depreciation & Amortization	74.9	90.4	20.7%
Total Operating Expenses	\$ 1,021.7	\$ 1,130.1	10.6%
<u>Nonoperating Expenses</u>			
Interest Expense	\$ 20.2	\$ 20.3	0.6%
Other Nonoperating Expenses	5.3	18.3	244.6%
Total Expenses	\$ 1,047.2	\$ 1,168.7	11.6%
Increase in Net Position	\$ 112.4	\$ 61.6	(45.2%)

Source: Audited 2022 and unaudited 2023 Financial Statements

Key takeaways:

- ❖ Updated distribution of institutional aid
 - ❖ prior year adjusted for comparability
- ❖ **Revenues increased 6.1%**
 - ❖ Relative composition of revenue consistent with FY22
 - ❖ Increase in capital appropriations offsets decreased COVID relief funds
- ❖ **Expenses increased 11.6%**
 - ❖ Compensation up \$89M (14%)
 - ❖ Auxiliary Enterprises reflect return to on-campus operations and reinstatement of overhead charge
 - ❖ \$17M of non-operating related to Masonvale acquisition
- ❖ **Accounts Receivable write-offs:**
 - ❖ FY23 w/o: \$3.2M/0.5% of FY22 billings
 - ❖ As of 6/30/23, 96.8% collection of FY23 billings



FY 2024 Q1 Financial Report & Forecast

Financial Matters

FY 2024 Q1 Financial Forecast-Operating

Cash basis, in \$M's	FY 2023 Actual	FY 2024 Amended Budget	FY 2024 1Q Forecast	var to FY 2024 Amended Budget
Revenues				
Net Tuition and Fees	496	514	520	6
State Appropriations	267	327	327	-
Grants & Contracts	244	256	267	11
Auxiliary Enterprises	249	266	270	4
Other Operating Revenue	29	27	36	9
<u>Non-Operating Revenue:</u>				
Relief Funding	50	-	-	-
Total Revenues	1,335	1,391	1,421	30
Expenses				
Salaries and Wages	595	640	640	(0)
Fringe Benefits	163	187	183	4
Contractual Services	210	208	220	(12)
Travel	20	21	24	(3)
Supplies	27	28	28	(1)
Equipment	22	21	25	(4)
Capital Expenditures	4	3	2	1
Scholarships & Fellowships	164	187	194	(7)
Occupancy	41	45	44	1
Transfers-Capital Projects/Debt	135	58	58	(0)
AE Infrastructure	0	2	-	2
Total Expenses	1,381	1,399	1,419	(19)
Shortfall	(46)	(9)	2	11
Balancing Mitigation Strategies	46	9	(2)	(11)
Adjusted Shortfall	-	0	0	-

Note: Operating includes the following funds: Education and General (E&G), Auxiliary Enterprises, Sponsored Research, Indirects, Financial Aid. Other Restricted & Other Unrestricted. EXCLUDES Capital

FY 2024 Q1 Financial Forecast-E&G Operating

Cash basis, in \$M's	FY 2023 Actual	FY 2024 Amended Budget	FY 2024 1Q Forecast	var to FY 2024 Amended Budget
Revenues				
Net Tuition and Fees	494	514	520	6
State Appropriations	220	246	246	-
Grants & Contracts	220	-		
Auxiliary Enterprises	1	1	1	-
Other Operating Revenue	19	14	19	5
Total Revenues	734	775	786	11
Expenses				
Salaries and Wages	457	494	491	2
Fringe Benefits	140	146	145	1
Contractual Services	80	80	82	(2)
Travel	6	7	8	(1)
Supplies	18	17	17	-
Equipment	11	11	14	(3)
Capital Expenditures	2	1	-	1
Scholarships & Fellowships	46	45	50	(5)
Occupancy	22	24	24	0
Transfers-Capital Project Funding	31	3	1	1
AE Infrastructure*	(18)	(18)	(22)	4
Total Expenses	796	810	811	(1)
E&G Shortfall	(62)	(35)	(25)	10
Balancing Mitigation Strategies	62	35	25	(10)
Adjusted E&G Shortfall	0	0	-	-

* AE Infrastructure reflects AE to E&G overhead transfer

FY 2024 Q1 Financial Forecast-Capital

Cash basis, in \$M's	FY 2023 Actual	FY 2024 Amended	FY 2024 1Q Forecast	var to FY 2024 Amended Budget
Revenues				
Capital Grants	82	169	169	-
Total Revenues	82	169	169	-
Expenses				
Contractual Services	3	3	3	-
Equipment	1	2	2	-
Capital Expenditures	130	302	302	-
Debt Service	25	49	49	-
Transfers-Capital Project Funding	(135)	(58)	(58)	-
Total Expenses	25	298	298	-
Capital (Shortfall)/Surplus	57	(129)	(129)	-
Drawdown/Increase of Fund Balances	(57)	129	129	-
Adjusted Margin	-	-	-	-

FY 2024 Shortfall Mitigation

<i>Major Expense Drivers</i>
Savings from benefitted position vacancies
Increased use of wage, part time faculty, and student workers for staff augmentation
Contract escalations, market increases, and consultant staffing
<i>Mitigating actions</i>
Continue critical vacancy review, with additional review of using wage/other compensation to offset pause in permanent hiring
Leverage all available funding sources:
> <i>Direct charging appropriate funds</i>
> <i>Allocation of infrastructure across all benefitting funds</i>
Reduce/minimize discretionary spending
Contract reviews/negotiations
Organizational reviews/realignments and improvement in operational efficiencies
Incentive retirement plans



Six-Year Operating Plan

Financial Matters

“What Support Can Op Six Provide?”

- **Support equitable funding – realignment of appropriations**
Acknowledging the value Mason provides the Commonwealth, we seek funding commensurate with our value and aligned with funding provided other institutions
- **Support revenue diversification & partnership opportunities**
Allow Mason to manage own cash
Support future partnerships to move Mason forward
- **Policy Changes & Unfunded Mandates**
Cover full cost of compensation increase for state employees
Virginia Military Survivors & Dependent Education Program
DHRM policy flexibility
 - Retirement incentive
 - Reorganizations
 - Performance Management Exception for Classified Staff

General Fund Request

Priority Ranking	Strategies (Match Academic-Financial Worksheet Short Title)	Biennium 2024-2026 (7/1/24-6/30/26)			
		2024-2025		2025-2026	
		Total Amount	GF Support	Total Amount	GF Support
1	Deliver a distinctive & inclusive student experience that fosters lifelong engagement				
	1a) Financial Aid	\$18,267,204	\$8,000,000	\$18,909,435	\$8,000,000
	1b) Expand Access	\$2,365,000	\$1,182,500	\$2,365,000	\$1,182,500
	1c) Student Success Initiatives	\$20,000,000	\$13,000,000	\$16,800,000	\$13,400,000
	1d) Unfunded Mandate-Virginia Military Survivors & Dependent Education Program	\$13,013,000	\$13,013,000	\$16,916,900	\$16,916,900
4	Expand the impact of Mason's research, scholarship, & creative enterprise				
	4a) Support/ Infrastructure	\$9,850,000	\$9,850,000	\$3,850,000	\$3,850,000
	4b) Scholarship	\$2,750,000	\$2,750,000	\$2,750,000	\$2,750,000
3	Expand partnerships for economic & social impact.	\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000
2	Invest in faculty and staff success				
	2a) Equitable Compensation	\$6,115,894	\$6,115,894	\$6,273,585	\$6,273,585
	2b) Efficient systems, infrastructure, reduce manual processes	\$5,500,000	\$5,500,000	\$3,700,000	\$3,700,000
	2c) HEETF-Increased institutional support	\$5,000,000	\$5,000,000	\$8,000,000	\$8,000,000
	Total General Fund Request	\$88,261,098	\$69,811,394	\$84,964,920	\$69,472,985

FY24 Commonwealth Capital Submission

(millions)

	GF Authorization	NGF Authorization	Total Authorization
Life Sciences and Engineering Building - Equipment	\$9.0 ⁽²⁾	\$0	\$9.0
Real Estate Acquisitions Phase 2 <i>(Vernon Smith Hall)</i>	\$0	\$107.0	\$107.0
Student Innovation Factory Building	\$37.0	\$0	\$37.0
Interdisciplinary Sci. & Eng. Building - 1 (ISEB-1)	\$165.0	\$0	\$165.0
Business School Building ⁽¹⁾	\$82.5	\$82.5	\$165.0
Critical Deferred Maintenance	\$36.0	\$0	\$36.0
Total	\$329.5	\$189.5	\$519.0

(1) Project was previously approved by BOV in May 2019 with \$165M NGF budget. Project was submitted as part of the University's 2024 Commonwealth Capital Plan submission. If approved, funding will be split between NGF and GF.

(2) Funding is already part of existing pool.

Staff Recommendation to Board

The Finance & Land Use Committee recommends approval by the Board of Visitors of the State Six-Year Operating Plan as detailed in the Board Book.



Succession Planning Update

Operational Matters

Overview

Mason must plan for continuous changes in our workforce by:

- **Tracking specific workforce metrics, including Retention/ Turnover Rates & Retirement Eligibility**
- **Identifying essential employees & having succession strategy**

Update on risk factors, workforce metrics, and next steps to mitigate identified risks and develop robust succession plans

Mason is required to provide succession plan annually to DHRM & Board of Visitors

Risk Factors

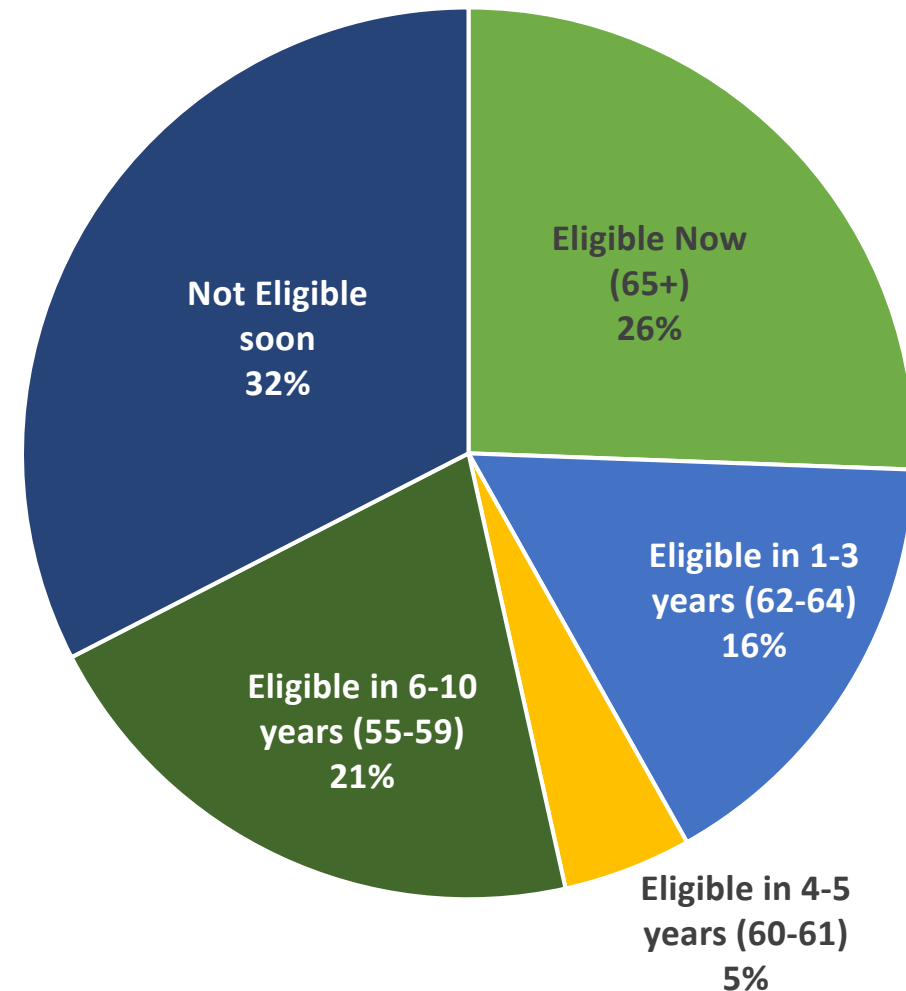
- **Identifying “Workforce Planning Critical Positions”**
 - Identify key positions to develop and retain who impact Mason’s mission, operations, quality, strategy and engagement.
 - If unfilled, these positions may have a significant negative impact on executing our mission.
- **A workforce heading towards retirement**
 - As our aging workforce retires and leaves gaps in institutional knowledge, we must prepare the next generation to be their successors.
 - What are key metrics to identify critical employees headed to retirement and their successors?
- **Mason’s greatest talent risks**
 - Our geographic location presents unique challenges in attracting and retaining talent.
 - The pandemic and new work environment created a need for re-skilling and upskilling of our workforce.
 - Ability to provide professional growth, pathways and opportunity for internal promotions.

Executive Leadership

43 executive leaders include vice presidents, deans, and other senior leadership positions.

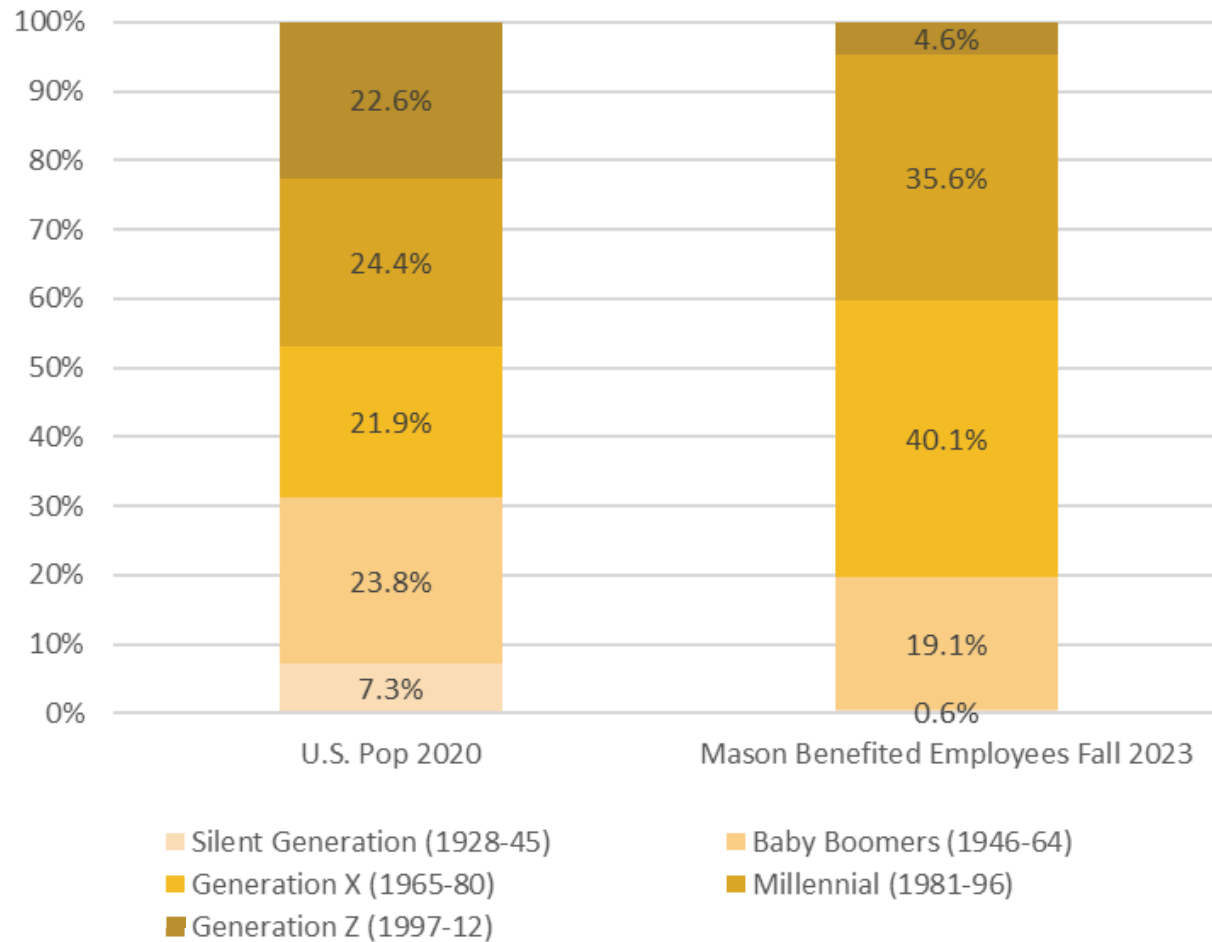
- Six of these executive leaders are currently interim
- 26% currently eligible to retire
- 21% could retire within the next 5 years
- 32% are not eligible for retirement

Mason Executives Retirement Eligibility

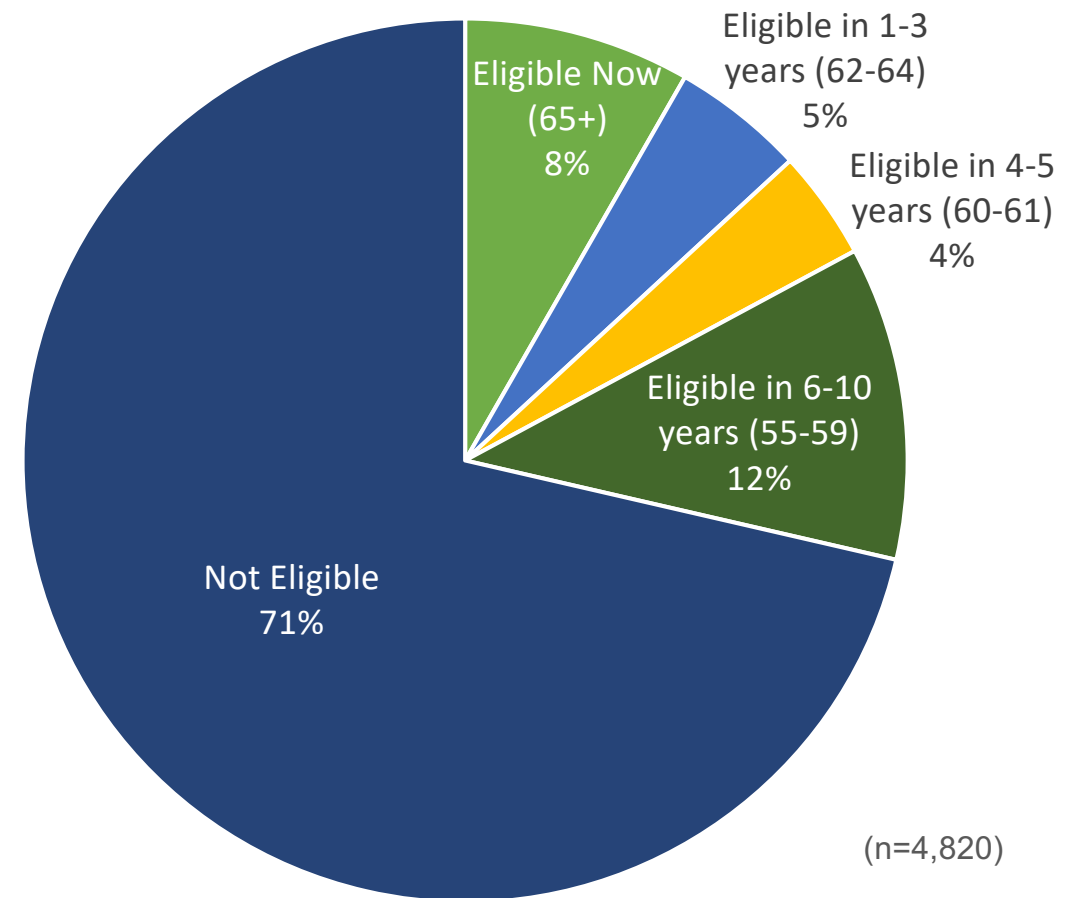


Mason Benefited Employees

**National vs Mason
Generational Makeup of Workforce**



**Mason Benefited Employees
Retirement Eligibility**



Next Steps

Ongoing:

- Survey conducted identifying unit utilization of succession planning
- Implementation and testing of the succession planning module
- Succession planning tools and learning programs are in development

Short-term:

- Develop a 5-year plan, defining metrics and identifying opportunities to mitigate talent gaps
- Launch a campaign linking learning, performance, and succession planning
- Use HR metrics to identify retention and succession planning risk factors

Long-term:

- Implement the 5-year plan, based on the established metrics
- Cascade succession framework to ensure all supervisors have plans
- Utilize technology to assist units with long-term succession planning goals



Retirement Plan Investment Policy Update

Operational Matters

Mason Investment Policy Statement

The Investment Policy Committee advises and assists the Executive Vice President in monitoring investment options for the following defined contribution retirement plans maintained by the University for the benefit of its employees:

1. University's Defined Contribution Retirement Plan (ORP) for Faculty
2. George Mason University Cash Match Plan
3. Supplemental Defined Contribution Plan for Employees
4. George Mason University Tax Deferred Savings Plan
5. George Mason University Employer 403(b) Plan

Investment Policy Statement Highlights:

- Outlines investment program structure, IPC duties, responsibilities, and the policies and procedures under which the IPC operates.
- Establishes guidelines and procedures used for selection of investment options.
- Defines criteria and procedures used to report investment option performance and evaluation of the respective investment options.

Investment Overview

Total Assets: \$1.2 B

TIAA Optional Retirement Plan (ORP)	\$452M
TIAA Cash Match	\$18M
TIAA 403(b)	\$360M
Fidelity Optional Retirement Plan (ORP)	\$197M
Fidelity Cash Match	\$11M
Fidelity 403(b)	\$173M

Hardship/Loan Information

Active Loans	167
Hardships	12
Active Loan Balance	\$1.78M
Active Hardship Balance	\$46k

Data pulled as of 11/08/2023 for Fidelity and 11/07/2023 for TIAA, subject to change thereafter

Investment Policy Committee (IPC)

Key accomplishments during past year:

- Fund menu consolidation, simplification and alignment for all Mason sponsored Retirement Plans across Fidelity and TIAA
 - On campus support during and through the transition
 - Addition of self-directed brokerage window
 - Closing and mapping of deselected Funds
 - Tiering of the menu for easy and more understandable fund selection
 - Great and overwhelmingly positive feedback
- Continued Fee re-negotiations with TIAA and Fidelity

Next Steps

Reviewing the current fee structure and accounts to migrate to a more transparent and equitable model



Schematic Design for Activities Building

Capital Matters

Project Program

- One-story, 24,852 GSF new building
 - 2 pre-engineered tension fabric building over two full-sized basketball court
 - 1 tilt-up concrete panel over the multipurpose rooms in between the pre-engineered tension fabric building
- Primary usage of building:
 - Full-scale band and pep rally practices as well as other equally sized recreation activities in the two basketball courts
 - Additional offices, conference rooms, and activities room which for hosting student engagement and campus activities
- Construction scheduled to start **March 2024**
- Occupancy scheduled for **January 2025**



OVERALL OCCUPANCY TYPE AND LOAD SCHEDULE (Table 1004.5, 2018 Virginia Construction Code)

LEVEL	NAME	SPECIFIC USE	*AREA	**FLOOR AREA / OCCUPANT	***OCCUPANT LOAD	COMMENTS
LEVEL 01	CONFERENCE 1	B (A-3 ACCESSORY)	200 SF	15	14	
LEVEL 01	CONFERENCE 2	B (A-3 ACCESSORY)	200 SF	15	14	
LEVEL 01	EQUIPMENT STORAGE 1	A-3	444 SF	300	2	
LEVEL 01	EQUIPMENT STORAGE 2	S (A-3 ACCESSORY)	443 SF	300	2	
LEVEL 01	FLOOR SERVICE AREA	N/A	2213 SF	0		
LEVEL 01	GROUP 1	A-3	145 SF	15	10	
LEVEL 01	GROUP 2	A-3	100 SF	15	7	
LEVEL 01	GROUP 3	A-3	107 SF	15	8	
LEVEL 01	GYMNASIUM 1	A-3	7994 SF	50	160	
LEVEL 01	GYMNASIUM 2	A-3	8003 SF	50	161	
LEVEL 01	IT	S (A-3 ACCESSORY)	110 SF	300	1	
LEVEL 01	JC	S (A-3 ACCESSORY)	57 SF	300	1	
LEVEL 01	LARGE ACTIVITIES	A-3	1824 SF	20	92	
LEVEL 01	MEDIUM ACTIVITIES 1	A-3	882 SF	20	45	
LEVEL 01	MEDIUM ACTIVITIES 2	A-3	1000 SF	20	50	
LEVEL 01	OFFICE 1	B	100 SF	150	1	
LEVEL 01	OFFICE 2	B	100 SF	150	1	
LEVEL 01	OFFICE 3	B	100 SF	150	1	
LEVEL 01	OFFICE 4	B	100 SF	150	1	
LEVEL 01	OFFICE 5	B	100 SF	150	1	
LEVEL 01	PANTRY	A-3	504 SF	15	34	
LEVEL 01	SMALL ACTIVITIES	A-3	451 SF	20	23	
LEVEL 01	UTILITY ROOM	S (A-3 ACCESSORY)	247 SF	300	1	
			25422 SF		630	

Renderings



Aerial View

Perspective View



Building Materials



Concrete Formliner

Concrete Formliner

Tension Fabric

Metal Canopy

Prefinished Glazing

Concrete Formliner

Staff Recommendation to Board

The Finance & Land Use Committee recommends approval by the Board of Visitors of the schematic design for the Activities Building as detailed in the Board Book.

Board Action Items

Motion: I move to approve the following items, en bloc, as they are outlined in the meeting materials:

- State Six-Year Operating Plan
- Schematic Design for Activities Building



Appendix: Supplemental Information

Student Innovation Factory Building



- Lack of space for learn-by-doing pedagogies to support capstone projects & design competition
- Students currently use off-campus lease space, repurposed computer lab, Facilities complex, & common spaces.

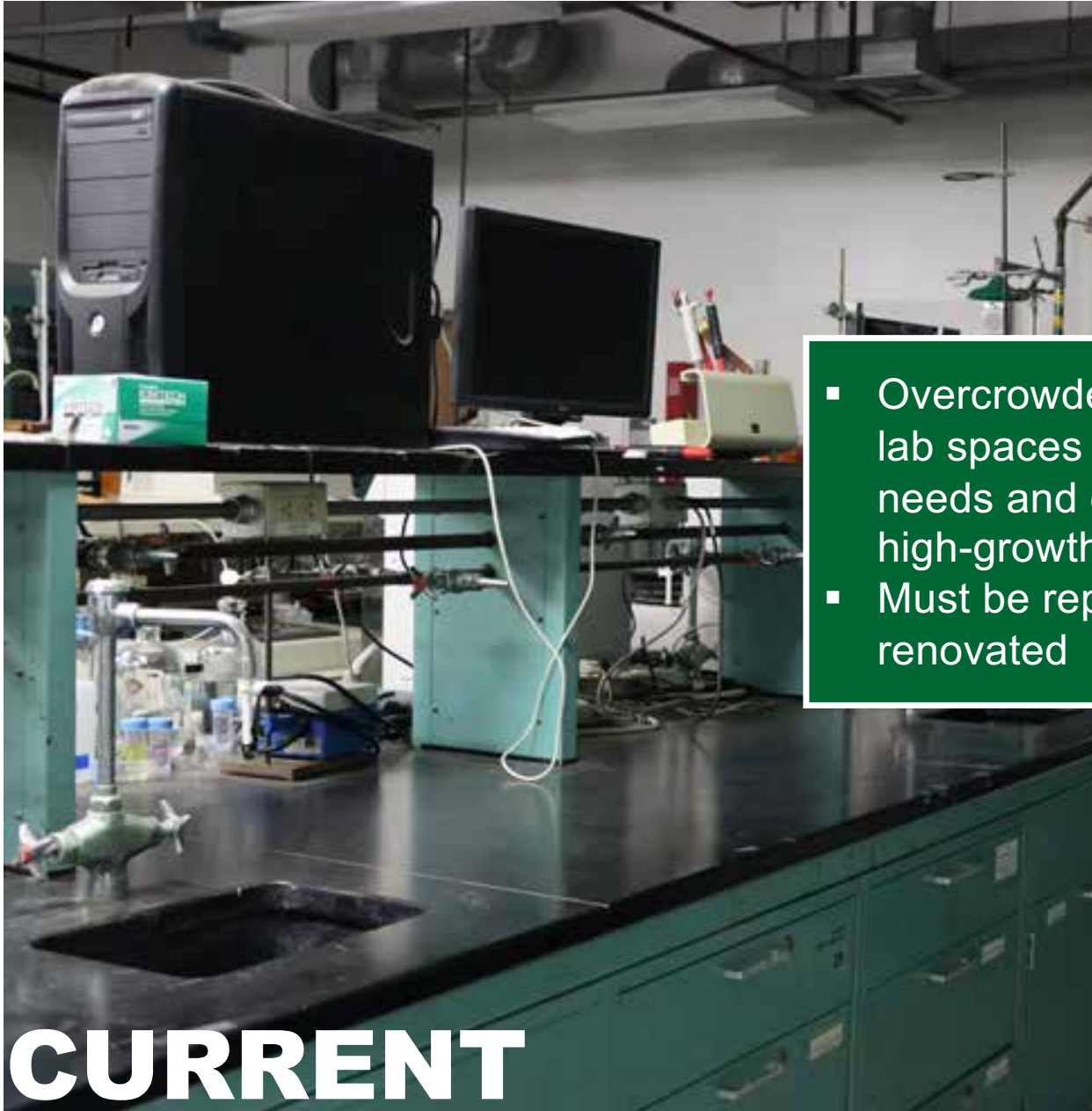


CURRENT



FUTURE

Interdisciplinary Science & Engineering Building



- Overcrowded, antiquated lab spaces barely meet the needs and demands of high-growth R1 programs
- Must be replaced or renovated

CURRENT

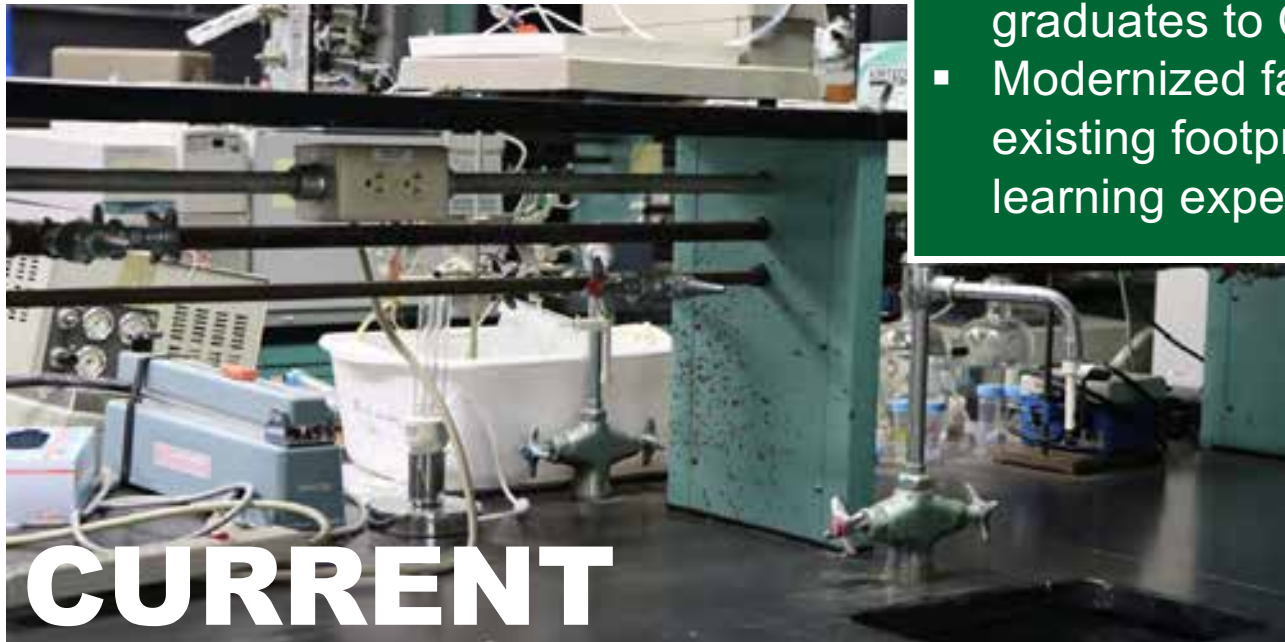


FUTURE

Modern Facilities for High-Demand Programs



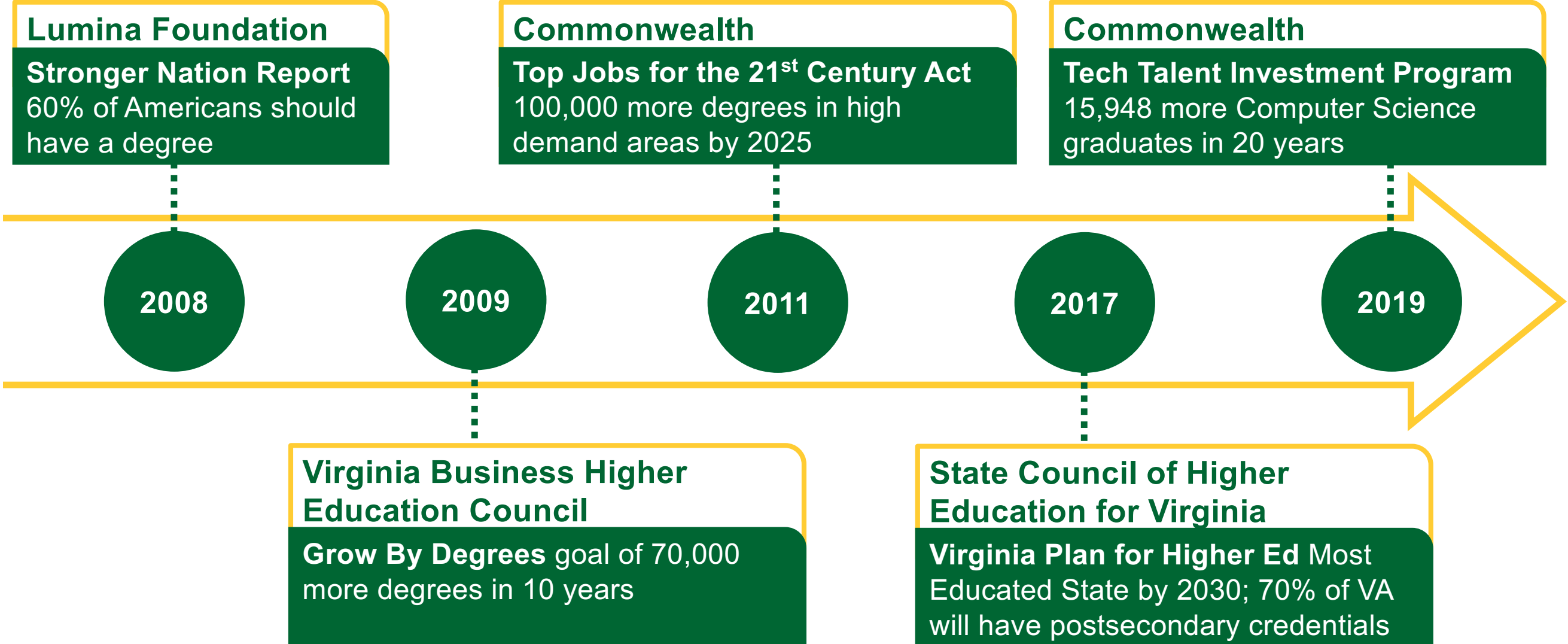
- Support Mason's high-demand science & engineering programs
- Provide access to excellence for Virginians & workforce ready graduates to Commonwealth
- Modernized facilities within existing footprint for cohesive learning experience



CURRENT

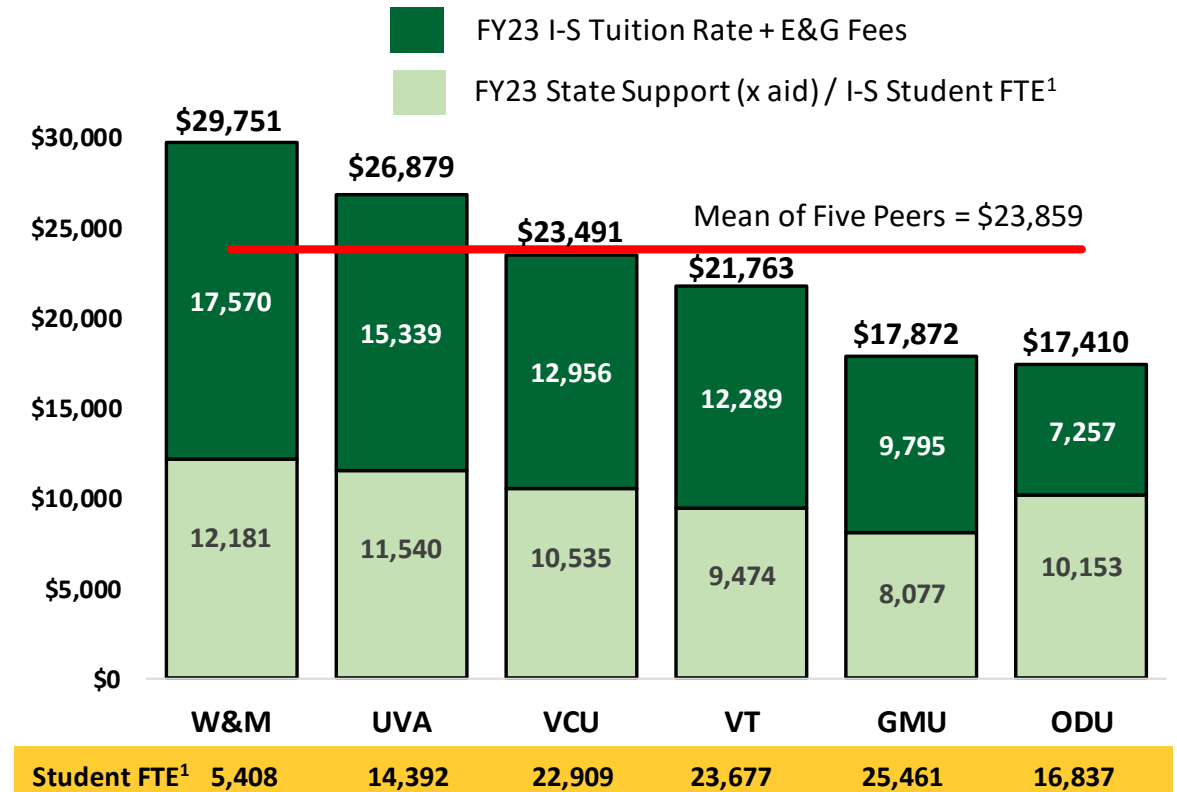
FUTURE

Enrollment Growth Demand



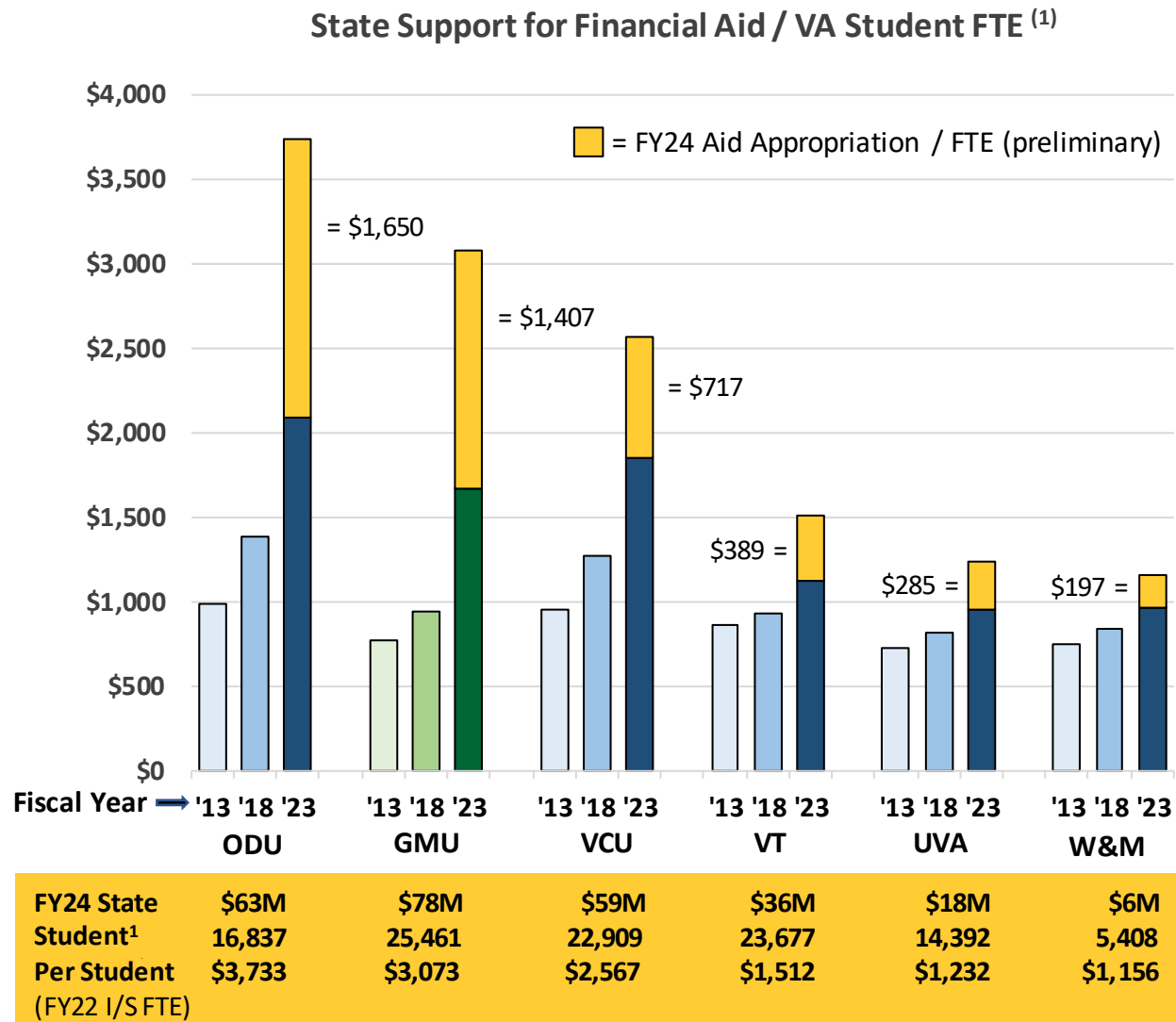
Mason Keeps Tuition Low

When state and tuition funding are combined, Mason is nearly **\$6,000** per in-state student FTE below the mean of five doctoral peer institutions, despite operating in the **most expensive region** in the Commonwealth



(1) I-S Student FTE is based on FY22 enrollment. The update for FY23 will be available in the Fall.

State Financial Aid Appropriation per In-State Student (FTE)



State support per student for Mason financial aid has nearly tripled in the last five years

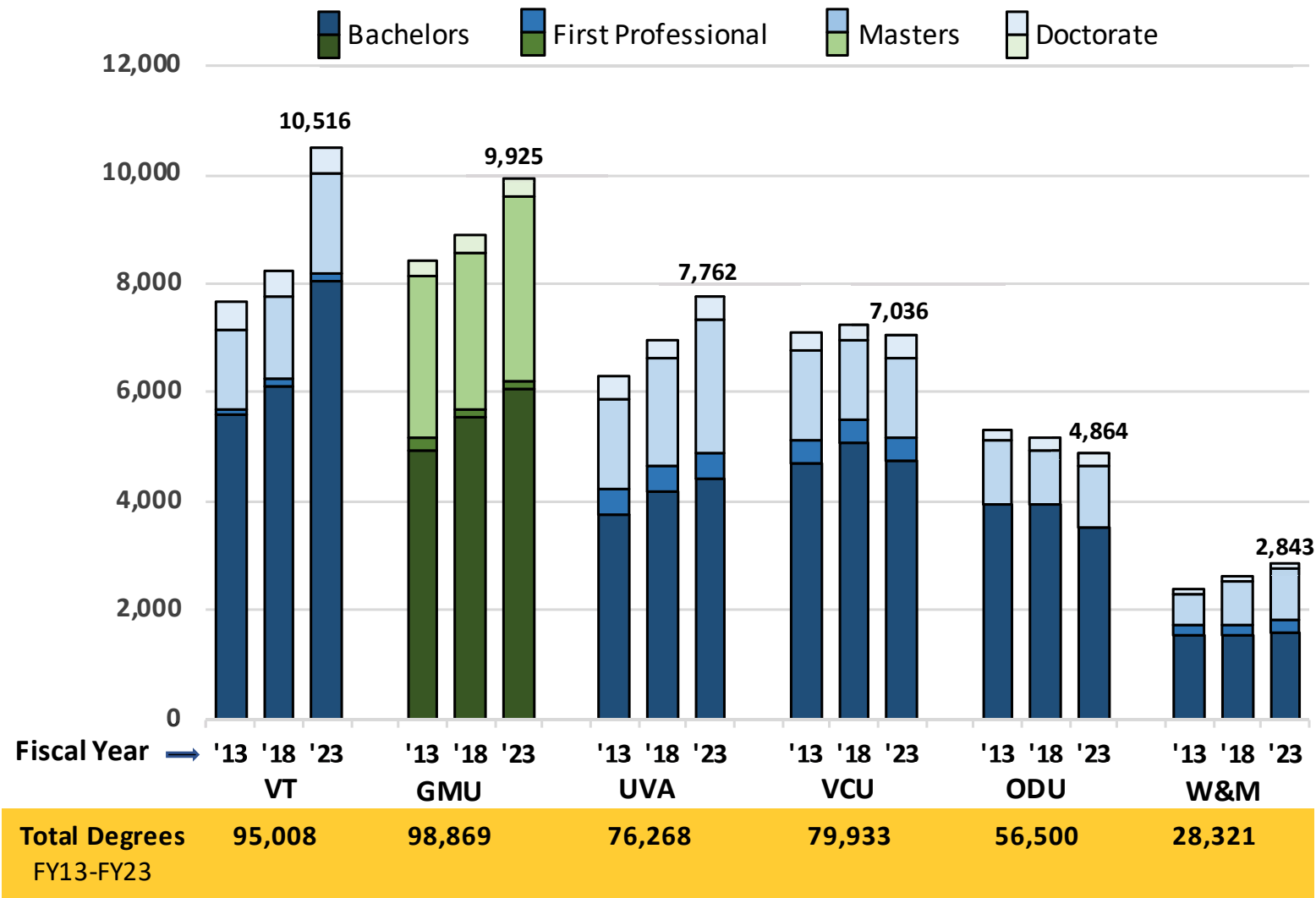
Mason per student financial aid vs peer median:

- **FY13: \$87 below**
- **FY23: \$543 above**
- **FY24: \$1,561 above**

Financial Aid appropriation passes directly through to students

1 - FY24 Appropriation is preliminary. FY24 Student FTE is based on FY22 (Fall 2021) enrollment and will be updated in late September 2023.

Degrees Granted



Despite the funding disparity, Mason conferred the second highest number of degrees among peers in FY23 and most total degrees FY13-FY23

More of Mason's graduates stay in Virginia than peers' average:

- **In-state: 73% vs 64%**
- **Out-of-state: 29% vs 19%**

Imagine what Mason could achieve with funding equity

Source: SCHEV

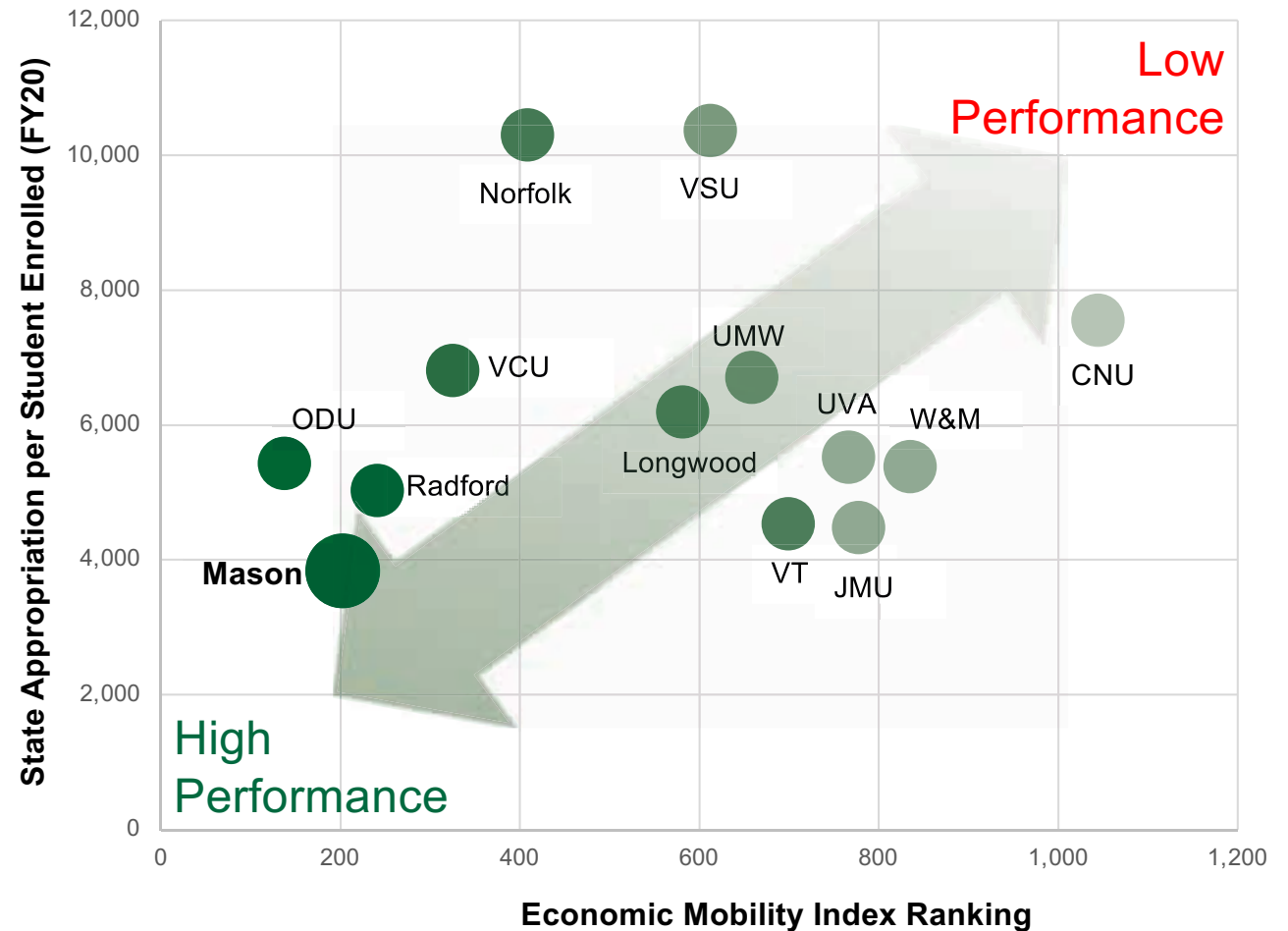
*Includes in-state and out-of-state; all degrees except Associates
Mason's peers are Virginia R1 doctoral institutions*

Delivering Economic Mobility

Mason provides the second highest economic mobility among all Virginia institutions

However, Mason has the best performance when comparing economic mobility and funding per student

Mason is the **best ROI** for the Commonwealth



Economic mobility is based on volume of Pell students and the success at graduating those students

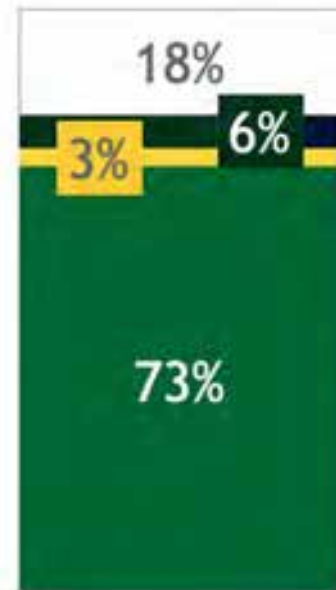
Source: Fair Funding and the Future of Higher Education in Virginia, Partners for College Affordability and Education Reform Now, September 8, 2022.

Mason Graduates Stay In Virginia

(%) Location in 2018 (1-10 yrs post-grad)

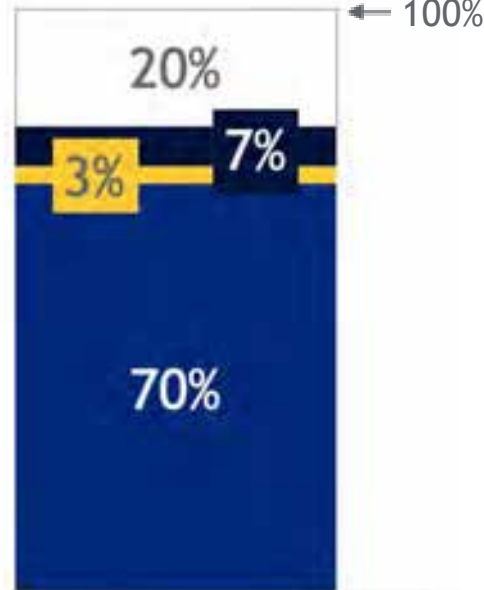
In-State Graduates (all levels)

N=67.4K



George Mason University

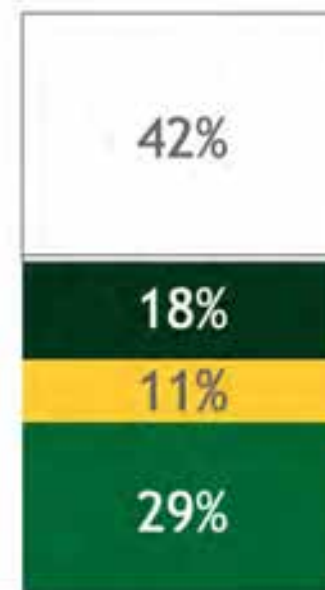
N=376.2K



All Public 4-Yr Institutions

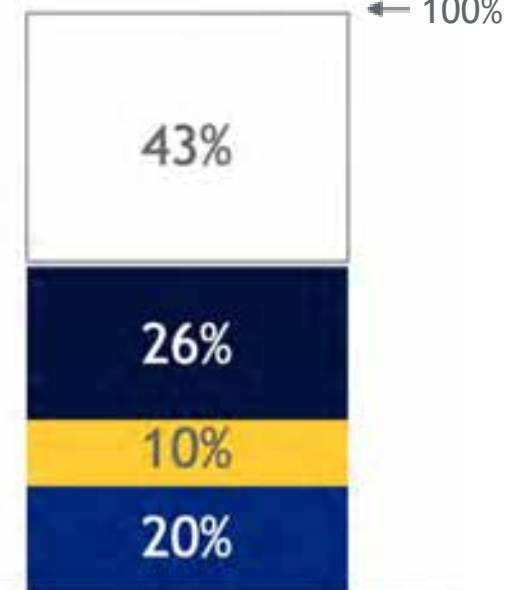
Out-of-State Graduates (all levels)

N=17.4K



George Mason University

N=118.2K



All Public 4-Yr Institutions

Unknown
 Rest of US
 Border States¹
 In Virginia

Personnel: Numbers & Costs

Chart (C): How has personnel increased on a per-student basis?

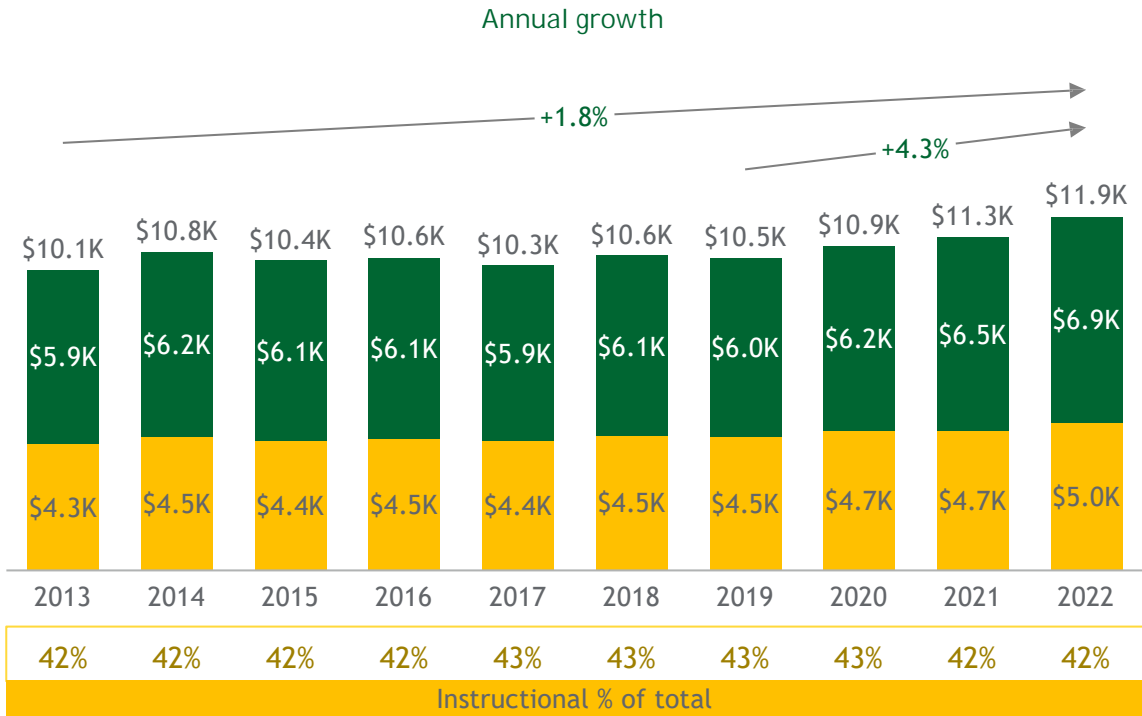
Breakdown of personnel by # and \$ on a per-student basis [2013-2022]

	Annual	Total
Inflation (HEPI) ¹	2.8%	28%
Inflation (CPI) ¹	2.6%	26%

By # of employees per student FTE



By salary outlay \$\$ per student FTE



■ Non-instructional ■ Instructional

1. Determined as growth in HEPI/CPI over period
 Note: full-time personnel only; includes personnel from all sources of funding; William & Mary includes VIMS and VT/VSU include extension campuses
 Source: IPEDS

**George Mason University
Board of Visitors**

**Development Committee Meeting
November 30, 2023
Merten Hall, Room #1201, Fairfax Campus**

A G E N D A

I. Call to Order

**II. Approval of Development Committee Meeting Minutes from September 28, 2023
(ACTION ITEM)**

III. New Business

- A. GMUF Chair Update – Michael E. Stievater
- B. University Advancement & Alumni Relations Update – Trishana Bowden
- C. Athletics Update - Marvin Lewis
- D. Corporate and Foundation Relations & University Priorities Update – Lauren Bird

IV. Old Business

V. Adjournment

**George Mason University
Board of Visitors**

**Development Committee Meeting
September 28, 2023
8:30 a.m. –9:25 a.m.
Merten Hall, Room 1201, Hazel Room**

MINUTES DRAFT – FOR COMMITTEE REVIEW – September 28, 2023

Attendees: Vice-Chair Jon Peterson, Visitor Dolly Oberoi, Visitor Bob Pence, Visitor Cully Stimson.

Absent: Chair Anjan Chimaladinne

Guests: Visitor Armand Aacbay Rector Horace Blackman, Visitor Reginald Brown, Visitor Lindsey Burke, Visitor Jimmy Hazel, Visitor Wendy Marquez, President Dr. Gregory Washington, Vice President Trishana Bowden; Faculty Senate Chair Melissa Broeckelman-Post; Staff Senate Chair William Gautney; David Drummey (Legal Counsel); Anne Gentry (Legal Counsel); Bijan Jabbari, faculty representative; Susan Allan, faculty representative; Nicole Pozinsky, secretary pro-tem; and guest speakers Chairman Michael E. Stievater of the George Mason University Foundation; Beth Cantrell of the George Mason University Foundation; Dean Ken Randall of the Antonin Scalia Law School; Paul Wyche, student representative; Vikas Velagapudi, student representative.

I. Call to Order

The meeting was called to order by Vice-Chair Jon Peterson, substituting for Development Committee Chair Anjan Chimaladinne, at 8:35 a.m.

Vice-Rector Peterson reviewed the meeting procedures for virtual meetings and FOIA requirements, and then proceeded with the order of business. No opening remarks were made.

**II. Approval of Development Committee Meeting Minutes from May 4, 2023
(ACTION ITEM)**

Vice-Rector Peterson confirmed the committee meeting had reached a quorum. The chair called for any changes or edits to the meeting minutes from May 4, 2023. There were none. There being none, the minutes from May 4, 2023, were **APPROVED AS WRITTEN**.

Vice-Rector Peterson introduced the committee to Mr. Michael E. Stievater, chair of the George Mason University Foundation, Inc. (Foundation/GMUF). Chairman

Stievater delivered an update regarding recent GMUF and Board of Trustees activities during the past few months.

III. New Business

A. George Mason University Foundation Chairman Update – Michael E. Stievater

Chairman Stievater, now marking his eight year on the Board of Trustees, and second year as Board Chair, stated the following report to the Visitors present.

Board of Trustees

The Foundation welcomed five new Trustees, two new Alumni representatives, a new Dean representative (Dean Melissa Perry, College of Public Health) and a new faculty representative (Dr. Michael Nickens, “Doc Nix”) to the board this fiscal year. The board is currently in the midst of its fall cycle.

- The Investment Committee met last week and reviewed the fiscal year 2023 investment results. I am happy to report that the endowment returned a positive 15% and the market value at June 30 was \$179 million. The endowment paid out \$5 million in support for university students, faculty, and programs.
- The Advancement and University Priorities Committee will continue their efforts to engage the Trustee group as advocates for Mason. The committee will hear a presentation from Advancement’s Corporate and Foundation Relations team in relation to these efforts.
- The Nominating and Governance Committee will review the upcoming nominations process and timeline. The committee continues to focus on areas of need to best support the Foundation’s mission.
- The Finance and Real Estate Committee will review the fiscal 2023 year-end budget results and the reserve balances framework, as well as real estate project operations and current related activity.
- The Audit Committee will review the fiscal year 2023 Audited Financial Statements with Cherry Bekaert, the Foundation’s external auditors. As of June 30, 2023, the foundation has approximately \$513 million in total assets, \$147 million in total liabilities and net assets of \$366 million. Academic institutional support expended for Mason programs and activities exceeded \$83 million for the fiscal year.

Chairman Stievater welcomed questions from the Visitors. Vice-Rector Peterson asked the Visitors if there were any questions for Chairman Stievater.

Visitor Jimmy Hazel advised that he had previously been in Chairman Steinaker’s position on the Board of Trustees. Visitor Hazel pointed out that before announcing a campaign, and beginning its public phase, it is important to have

Board of Trustee member support and involvement. Visitor Hazel asked if there were any requirement of the Trustees, in regards to financial support or volunteer engagement. Chairman Stievater stated that the Trustees look to give financially as they can, but also provide support in other aspects, giving their time, getting out into the community on behalf of Mason, tapping their networks and building new networks, and advancing the Mason cause, mission and understanding within the community.

Vice-President Trishana Bowden shared that Advancement brought in a campaign consultant to work with the Trustees and discuss their specific engagement. They stated that campaigns start with words and passion, but must be broadened to include our region and the nation beyond. Vice-President Bowden advised we have filled a new position in Advancement this year with Nicole Davis, our Director of Volunteer Engagement and Philanthropy. This position was established for the specific purpose of focusing on Board of Visitor and Board of Trustee involvement in the campaign. The desire is to align them with our campaign leadership.

Vice-Rector Peterson asked Chairman Stievater about the new Trustees that have just joined the Foundation. He asked how many Trustees are on the board, what was their make-up and how their trustee vetting process worked? Vice-President Bowden advised that there are approximately 45 Trustees and five committees. Foundation Chief Financial Officers, Beth Cantrell, would be presenting later during the meeting with a Foundation overview that would walk them through the process. Chairman Stievater stated that the Trustees come from a diverse community, with a large percentage of Mason alumni. Trustee terms ran three years, and they were permitted to serve three, three-year terms for a maximum of 9 years of service on the board. The Foundation seeks to add representatives from all of the different colleges and schools, in order to assure a diverse viewpoint from the alumni. The Trustees join us from a variety of industries and have skill expertise in the areas of the committees they serve on.

Vice-Rector Peterson asked the Visitors if they had any additional questions. There were none. Hearing none he thanked Chairman Stievater for his presentation before the Visitors.

Vice-Rector Peterson introduced Ms. Trishana E. Bowden, President of the George Mason University Foundation, Inc., and Vice President of Advancement and Alumni Relations. Ms. Bowden provided an update on the recent activities of the department over the past few months and shared several highlights of recent and upcoming events.

B. University Advancement and Alumni Relations Update – Trishana E. Bowden

Ms. Bowden stated that George Mason University welcomed our largest-ever freshman class—more than 4,400 diverse, well-prepared students. Last week,

U.S. News & World Report Best Colleges 2024 ranked Mason at #51 among all public universities, and at #105 among all universities nationwide. Furthermore, Mason placed #1 in Virginia across all rankings that measure social mobility.

Ms. Bowden shared an Advancement and Alumni Relations update report regarding the University's progress with the "Mason Now" fundraising campaign.

Ms. Bowden welcomed and acknowledged new Visitor Cully Stimson to the Development Committee, an alumnus of the Scalia Law School. She also expressed pleasure with the opportunity to continue working with Rector and alumnus, Horace Blackman. We are also delighted to be working with Jon Peterson in his role as the Vice-Rector. All of our Visitors bring incredible expertise and experience to the board and to the Development Committee. Mason is grateful to be working with them, and to have their service at George Mason University, along with our students. Ms. Bowden introduced herself to the assembled committee, and stated the purpose of today's Advancement report was to provide the Visitors with a campaign update.

In FY 2023, Mason had a historic fundraising year, amassing \$139.3 million by the end of June. This new fiscal year, over the typically quiet summer we secured during our first quarter, we have already raised over \$18.4 million, and two of the colleges, the College of Engineering & Computing and the College of Public Health, are over 50 percent of the way towards their FY 2024 goal.

We're thrilled with this progress and are looking forward to a really successful fiscal year. All of this is due to the Advancement staff's hard work and enthusiasm, and we are making this progress possible through lots of engagement with strategic relationships with our donors in the alumni community.

In August, the George Mason University Foundation received a \$4.85 million gift from an anonymous private family foundation based in California, to support innovative and impactful research for bruise detection on individuals with darker skin. The research team includes Katherine Scafide; and Janusz Wojtusiak from the College of Public Health; and also, David Lattanzi, who is from our College of Engineering and Computing. This private foundation will consider giving even more funds towards this effort, which could be an additional \$16 million, depending on the progress of this research team. But it's really exciting to have a multi-school collaboration working in research. With this initial gift, we're hoping it is just the beginning of the support for this incredible team of faculty.

The Carter School for Peace & Conflict Resolution received \$250,000 as seed funding to establish a meaningful collaboration between the school and the Rotary International.

We are really grateful for the support of a faculty member in important work at the College of Science. Yesterday we learned of a new gift that will allow a

Mason Korea student to spend a year living and studying in Mason at our Fairfax campus, and we're grateful for the work that went into this gift and it allows the two campuses to work together. Hopefully it's the beginning of more of these opportunities for our students at the Mason Korea campus.

Our Corporate and Foundation Relations team is currently working on solicitations worth approximately \$40 million. In addition, the team has another \$35 million in the cultivation phase, leading to a solicitation in FY 2024. Of these current solicitations, \$15 million are related to the Fuse at Mason Square project. We look forward to sharing results with you over the next few months.

Building on last year's successful CGI@Mason night with the men's basketball team, which was hosted by our very own Rector Blackman, our Office of Alumni Relations is coordinating with our new athletic director, Marvin Lewis, and the athletics team to create a program to invite more of our corporate friends to work with us and bring their alumni and friends onto campus. And it's a strategic program to engage our top corporate donors, hosting them for basketball games, as well as other corporate-to-campus events. This will help us initiate relationships, and then have an opportunity for follow-up activities and cultivation initiatives.

In just a few weeks, we will be celebrating Mason alumni at our annual Celebration of Distinction, which is one of Mason's longest standing alumni traditions. We have representation from each one of our schools and colleges. Our alumni are the best ambassadors for George Mason and we are really excited to honor them that evening and to celebrate their achievements and how they are the best of ambassadors in their industries as well as in their communities.

We are continuing on with our engagement efforts. As you all know, philanthropy is personal and at its heart, it's about connecting people. We're working very closely to make those connections with all of our constituents, our students, researchers, entrepreneurs, and again alumni and corporate donors, in hopes of getting everyone to see how their contributions will really enhance the education for our students here at George Mason.

Our Advancement team held a leadership retreat with our fundraising partners in late May, and it was a wonderful opportunity for our Deans and Vice-Presidents to work together on what we call "capacity analysis reports." Our Deans and Vice-Presidents worked with Marts & Lundy, which is our fundraising counsel, to discuss their individual donors and strategies. We are working towards where the donors are in a fundraising pipeline. Those who have really warm relationships and those who have cold relationships, and engagements to get them to the point of being really warm and to close a gift.

We also had individual meetings with the Deans and Vice-Presidents, and we're excited to work with them over the upcoming years, while we're in the campaign,

and put some of those strategies to work. Our Advancement Communications office is working with idFive to create a comprehensive case statement for the university. It will allow us to lay out the goals for the Mason Now campaign. It will also give us an opportunity again to display, not only the priorities, but to talk about Mason's contributions to our community, and to the world, and how philanthropy can help make a difference.

We will soon share with our endowment donors, the endowment reports, breaking down the growth in our investments, and how their gifts have impacted our programs at George Mason. Many of these reports will actually be hand-delivered to our donors. We have more than 1,500 reports that will be given out, and over the years we've been really impressed with the generosity that has come from these reports. We've raised more than \$2.8 million in additional gifts that come in just from the proceeds of these endowment reports.

So, looking forward to following up with that, and as I conclude, I just want to share a few internal things. I am meeting with Advisory Boards for Mason schools and units, to talk with our volunteers about how they can help us with our efforts in the campaign. I have already had the pleasure of attending a School of Business Advisory Board meeting, as well as the Honors College Advisory Board, and in October I look forward to joining the College of Humanities and Social Sciences. I am hoping to schedule more meetings in the next few months. And as I mentioned earlier, the George Mason University Foundation Board of Trustees have been active in their engagement. Each one of them are working on completing a philanthropy and engagement report, where they identify not only their personal philanthropy, but how they want to engage their network to help us to raise dollars for the campaign.

We are excited to share we have some wonderful events coming up.

- We have Arts by George!, which will be held this Saturday, September 30th. This is our signature College of Visual and Performing Arts event that benefits students scholarships, as well as our community arts program. Sandy Spring Bank is once again the presenting sponsor, but Carolyn Peterson, the Peterson Family Foundation, and Robert Purks are the executive producer sponsors of this really incredible event. It's the 17th year and we will feature Renee Elise Goldsberry, who is a Tony, Grammy and Emmy award winning star of both screen and stage. And again, we invite our board members to join us for that incredible event.
- In November, Mason will mark a meaningful transformation for our School of Business, when we officially celebrate renaming the school as the Donald G. Costello College of Business on November 30th. The State Council of Higher Education has officially approved the name

change, so we're looking forward to celebrating that in just a few weeks.

- And this afternoon, we really encourage the Visitors to join our faculty and staff at the kickoff, right on the Merten Lawn. We will be having a faculty and staff celebration of the Mason Now campaign launch.

Ms. Bowden concluded the Advancement presentation, sharing a quote from Mason's Associate Provost for Undergraduate Education, Keith Renshaw, when he spoke at the fall New Student Convocation. He said that, "Across all of it, you have at least one thing that binds you. You all are a part of the Mason Nation now." And so, we say to you, "Mason Now we're all a part of it." We truly value your participation, your partnership. And we look forward to working with each one of you Visitors, and so does the team both in Advancement, in Alumni Relations, as well as the Foundation - on getting towards our billion dollar goal. You are all part of the Mason Nation Now!

Ms. Bowden welcomed questions from the Visitors. Vice-Rector Peterson asked the Visitors if there were any questions for Ms. Bowden.

Rector Horace Blackman asked Ms. Bowden how much Mason is short towards the \$1 Billion. She advised Mason has raised \$385 Million with \$616 Million to go. Visitor Blackman stated he believes we have some new board members; we have some folks who really feel passionate about Mason, and if we can wrap this up before the meeting ends...Ms. Bowden welcomed the assistance and advised the Dr. Washington might just raise the goal to \$2 Billion. Rector Blackman joked that he wanted to show up the former Rector (Visitor Jimmy Hazel). He called on Visitor Hazel to help him reach the campaign goal Visitor Hazel responded stating that he had planned to do something for Mason, but it would not quite cover the \$600 Million plus, but he would help one way or another. He asked that an important comment go on record, when the campaign goes public and takes off, it will be very important for Ms. Bowden, the Advancement staff, the Board of Trustees to be able to say Mason has had 100% participation from its governing boards.

Visitor Hazel pointed out Visitor's gifts don't have to be large, necessarily, but he did hope that every one of the Board of Visitors (members) will make a point to make a contribution to the Mason Now campaign sooner, rather than later, so that Ms. Bowden has that line. When she goes out to talk to other people, they know she's got the support of her governing board. Rector Blackman added that it is a huge selling point to other people who are looking. They will ask that same question. Is your board completely on board with this campaign? That's an important tic box to check for us.

Vice-Rector Peterson asked the Visitors if there were any other questions for Ms. Bowden. There were none. Vice-Rector Peterson said he wanted to add a plug for

the Arts, by George! event. He stated that it's hard to understand what actually happens that night, he has been to the event many times, He shared, “When you walk in there, you have certain expectations, and I will tell you when you walk out, you're going to say it's the best use your time, it's a great evening. And it's a great group of people who are passionate about the arts.” He urged the Visitors to attend a really great Mason event.

Ms. Bowden thanked Vice-Rector Peterson for her time before the Visitors.

Vice-Rector Peterson called to the podium and introduced Ms. Beth Cantrell, Chief Financial Officer of the George Mason University Foundation, Inc. (GMUF) who provided a presentation overview of the functions of the GMUF.

C. George Mason University Foundation, Inc. Overview – Beth Cantrell

Ms. Cantrell introduced herself and spoke to her function and role. She will give overview of the Foundation and its relation to Mason.

Ms. Cantrell narrated the following series of PowerPoint slides: (31 Slides – See PowerPoint presentation for details)

1. TITLE SLIDE - George Mason University Foundation, Inc. Overview
2. College and university foundations are separate 501(c)3 charitable organizations
3. Purpose/Public/Governance
4. Foundations in Virginia - There are 15 public 4-year universities in Virginia;...
5. Mission and History
6. Mission
7. History – Key points from 1966/1971/1972
8. History – Key points from 1978/1986-89/1998
9. History – Key points from 2004/2005/2006/2007
10. History – Key points from 2011/2012/2015/2016
11. History – Key points from 2018/2023
12. Entity Overview
13. GMUF Structure
14. GMUF Functions
15. Board Structure and Committees
16. George Mason University Foundation Board Structure (BOT)
17. Executive Committee 2023-2024
18. Advancement and University Priorities Committee - Responsibilities
19. Audit Committee - Responsibilities
20. Finance and Real Estate Committee - Responsibilities
21. Investment Committee - Responsibilities
22. Nominating and Governance Committee - Responsibilities
23. Financial Highlights – June 30, 2023, final numbers will be available in the end of October.

24. Assets – June 30, 2023
25. Current Use Donor Restricted Funds
26. Endowment Donor Restricted Funds
27. Real Estate – June 30, 2023
28. Liabilities – June 30, 2023
29. Support and Revenue – June 30, 2023, total revenue?
30. Expenses – June 30, 2023, total expenses?
31. FINAL SLIDE - Thank you!

Vice-Rector Peterson thanked Ms. Cantrell for her presentation. Vice-Rector Peterson asked the Visitors for any further questions for Ms. Cantrell. Visitors Hazel thanked Ms. Cantrell for in-depth presentation showing the Visitors how the GMUF functioned. He asked if the Mathy House land parcel, which he recalled was 85-acres, he wanted to know how much of it is Mason using. Ms. Cantrell stated that she did not know the exact amount off of the top of her head, but could obtain the information.

Visitor Hazel advised that he was not up to date on the current state of real estate in Fairfax County, but proposed the possibility of selling part of the property. He asked if Mason needed the whole 85-acres. He asked if there was a way Mason might be able to raise some cash. If we're not looking at it (the property) he thought we ought to. He advised that President Dr. Gregory Washington had a comment. Dr. Washington joked that he didn't have any neighbors, but it would make a lot of deer really, really angry.

Ms. Cantrell advised that the GMUF holds the property for the benefit of the university, and that the discussion would be based on the university needs for what they want to accomplish. Vice-Rector Peterson thanked her and stated that it's something the Foundation and University have looked at in the past. There have been a number of plans thrown around, but we've not come up with something that makes a whole lot of sense at this point. It's insane where it is. For now, it's something that hasn't risen to the top of the priority.

Visitor Hazel stated that he was not pushing Shirley Gate (“Drive” property) as hard as he had pushed ten years ago, but he thinks it's because we're more aware of the Shirley Gate property that the university holds, not the Foundation, but it might be a way for Mason to help ourselves. And another way to help is find a Trustee with a really big backyard, and ask Doc Nix to bring the Green Machine. We would have a home run; it'd be fun.

Vice-Rector Peterson called to the podium and introduced Dean Ken Randall, the Allison and Dorothy Rouse Dean of the Antonin Scalia Law School, who provided a presentation of their campaign priorities.

D. Campaign Priorities – Antonin Scalia School of Law – Dean Ken Randall

Dean Ken Randall thanked the Visitors for the invitation to present. He advised that his presentation would be laid out in two parts.

The first will cover the Law School, and in terms of its progress and goals. The strategic initiatives of a campaign must be linked with the context of the Law School within the priorities of the Law School. We're going to start with our business model. Everything we do at the Antonin Scalia Law School is based on a business plan, then at the end, we'll show you how philanthropy fits into that model.

It is true that GMUF is a separate entity from GMU, but at some point, all of the revenue sources need to come together in a consolidated way to balance the budget and to achieve strategic initiatives.

Dean Randall narrated the following series of PowerPoint slides: (12 Slides – See PowerPoint presentation for details)

1. TITLE SLIDE - Progress on Law School Priorities Campaign Support for the Next Era
2. “Repeat of Slide #1 Text”
3. Continued Rise in US News Rankings, We have the #1 part-time JD program in the country. We are #2 among the DC law schools, only beat by George Washington University. We are #2 in the Virginia Commonwealth, with only the University of Virginia ahead of us.
4. Scalia Law #3 Among All 16 DMV Schools
5. Lowest Median JD Debt on Graduation Among Peer Regions Schools (refer to stats on recording) about \$93,000 in debt. Most get financial aid. Great value as public law school.
6. Non-JD Program Growth: Enrollment up 133%; Revenue up 252%, about 350 students that help support the JD students.
7. Developed Income - The Law School raises more money than any other school at GMU...(refer to stats)
8. Developed Income - ...and almost all comes from non-alumni sources
9. 2023-2024 Hires Bring Distinction (five new faculty members this year, gave short bios)
10. Campaign Priorities – (refer to stats on student tuition, school income, faculty and Hazel Hall reno and refurb needs, etc. on recording – talked about Rouse gift and how it brings in more money.)
11. FINAL SLIDE - Questions

Vice-Rector Peterson thanked Dean Randall for his presentation. Chair Chimaladinne asked the Visitors for any further questions for Dean Randall.

Visitor Cully Stimson thanked Dean Randall for his great presentation and congratulated him on the Law School's driving up success. He also stated that Ms. Cantrell gave a great presentation as well on the GMUF itself. He noted that the University of Virginia's (UVA) Law School has their own foundation founded

in 1952. On top of that, the William and Mary Law School, the oldest law school in the country, has their own foundation that was founded in 1982. Has the Law School considered or discussed a stand-alone Law School foundation that would be complementary to George Mason's Foundation? How would that work? How would that help the Law School? Dean Randall replied that we are at a disadvantage by not having one. His alma mater, the University of Alabama, had a foundation. On certain policies, it was not that they were ungoverned, or not working consistently with the model, no, the plan for a separate foundation is advantageous to an academic unit. In particular, he believes the Law School says that we are at a disadvantage by not having one. Visitor Hazel asked if there were any other questions from the Visitors. He exclaimed that he would be the first to say he got his JD from the Mason Law School in 1984. We acquired the real estate for the Arlington campus for \$5 million, and we thought of it as an investment. It has shown its value! Dean Randall agreed that the Law School is proud of Hazel Hall.

IV. Old Business

Vice-Rector Peterson called for any topics of "Old Business" to discuss. There were none.

V. Adjournment

There being no further business to discuss, Vice-Rector Peterson adjourned the meeting at 9:25 a.m.

George Mason University Board of Visitors

GMU Intercollegiate Athletics

Thursday, November 30, 2023

What a Year for Mason Athletics!

Competition

3 Conference
Championships

Academics

20 Programs >3.0
GPA

Storytelling

60% social
engagement growth

Fundraising

\$1.7 million

Financial

Balanced Operating
Budget

Community Service

2,000+ hours

MARVIN LEWIS

DEFINING SUCCESS AT MASON



V
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O

TRANSFORMATIONAL EXPERIENCES

- ✓ Graduate Student-Athletes
- ✓ Compete for Championships and/or Games That Matter
- ✓ Develop “Pro Ready” Programming and Learning Beyond the Classroom
- ✓ Serve the Local Community

CHAMPIONSHIP CULTURE

- ✓ Recruit/Hire/Retain Quality and Diverse Coaches and Staff
- ✓ Develop Strategic Roadmap, Financial Model, and Operational Plan
- ✓ Leverage Areas of Distinction and Optimize Resources
- ✓ Celebrate “Wins” Aligned With Strategic Goals and Core Values

TELL OUR STORY

- ✓ Develop and Implement Distinct Storytelling and Messaging Strategy
- ✓ Advance University and Athletics Fundraising Priorities
- ✓ Leverage Campus, Corporate, and Other Community Partnerships
- ✓ Engage/Inspire Fairfax, Northern Virginia, o

MARVIN LEWIS – FIRST 100 DAYS

Learn and Tell Our Story ♦ Optimize the Infrastructure ♦ Engage with the Community

1

LISTEN

- Meet individually with every head coach and unit leader
- Meet with every member of the President's Council
- Host luncheon with each sport and administrative unit
- Host dinners and/or town halls with key student groups (e.g., SAAC, team captains, SGA, etc.)
- Conduct key donor, alumni, and community roundtables

2

LEARN

- Conduct SWOT analysis with each athletics unit and sports program
- Review key vendor and sponsorship agreements
- Thoroughly review fiscal year 2023 and 2024 operating budgets
- Analyze University strategic plan and facility master plan goals/objectives
- Review head coach performance evaluations and student-athlete surveys

3

LEAD

- Launch strategic working groups: business development, community engagement, student engagement
- Establish regular meetings with key campus stakeholders (e.g., FAR, Advancement, Administration, Finance, Admissions, Dean of College, etc.)
- Create infrastructure and long-term financial plan
- Advance fundraising and capital project initiatives

“We need to start acting and treating ourselves like the largest university in the state of Virginia and less like a commuter school.”

Current Strength and Conditioning Coach

What's one decision you would make if you were the AD?

External Stakeholder Feedback

- Improve relationship with former student-athletes and alumni
- Increase fan and student game attendance for all sports
- Optimize communication channels to better tell the “Mason” story
- Retain quality coaches and staff members to sustain success
- Clarify short and long-term fundraising priorities



Immediate Action Steps

- Redesigned organizational structure
- Initiated Search for Sr. Associate AD/Director of Development
- Revised Meeting Cadence and Internal Communication Strategy
- Enhanced External Messaging and Distribution Strategy
- Initiated Athletics Working Groups or “TEAMS”



Patriot Brew



Assessment Phase - YEAR “0”

Organizational
Health

Fundraising
Campaign
Strategy

Time &
Score



Strategic
“Playbook”

Staffing &
Infrastructure
Assessment

Visual Identity
Refresh

Fundraising Priorities (In Progress)

FUEL & DEVELOP

- Student-Athlete (SA) Mental Health Initiative
- Fueling & Nutrition
- Leadership/Career Development

RECRUIT & RETAIN

- Scholarship Fund
- Name, Image, and Likeness (NIL)
- AD Performance Fund

BUILD & MODERNIZE

- *Basketball & Academic Performance Center (RAC Expansion)*
- West Campus Development
- Eagle Bank Arena



Basketball and Academic Performance Center



Basketball & Academic Performance Center

➤ \$30M (\$15 million funded by ICA)

- Est. completion date – Summer 2026

➤ Basketball Operations Center (15k sq/ft.)

- Coaches Offices and workstations
- Satellite weight room, athletic training room
- Wellness room and nutrition/hydration station
- Expanded practice facility (2 full courts)
- Environmental branding/storytelling (i.e., Hall of Honor)

➤ Academic Support Center (7k sq/ft.)

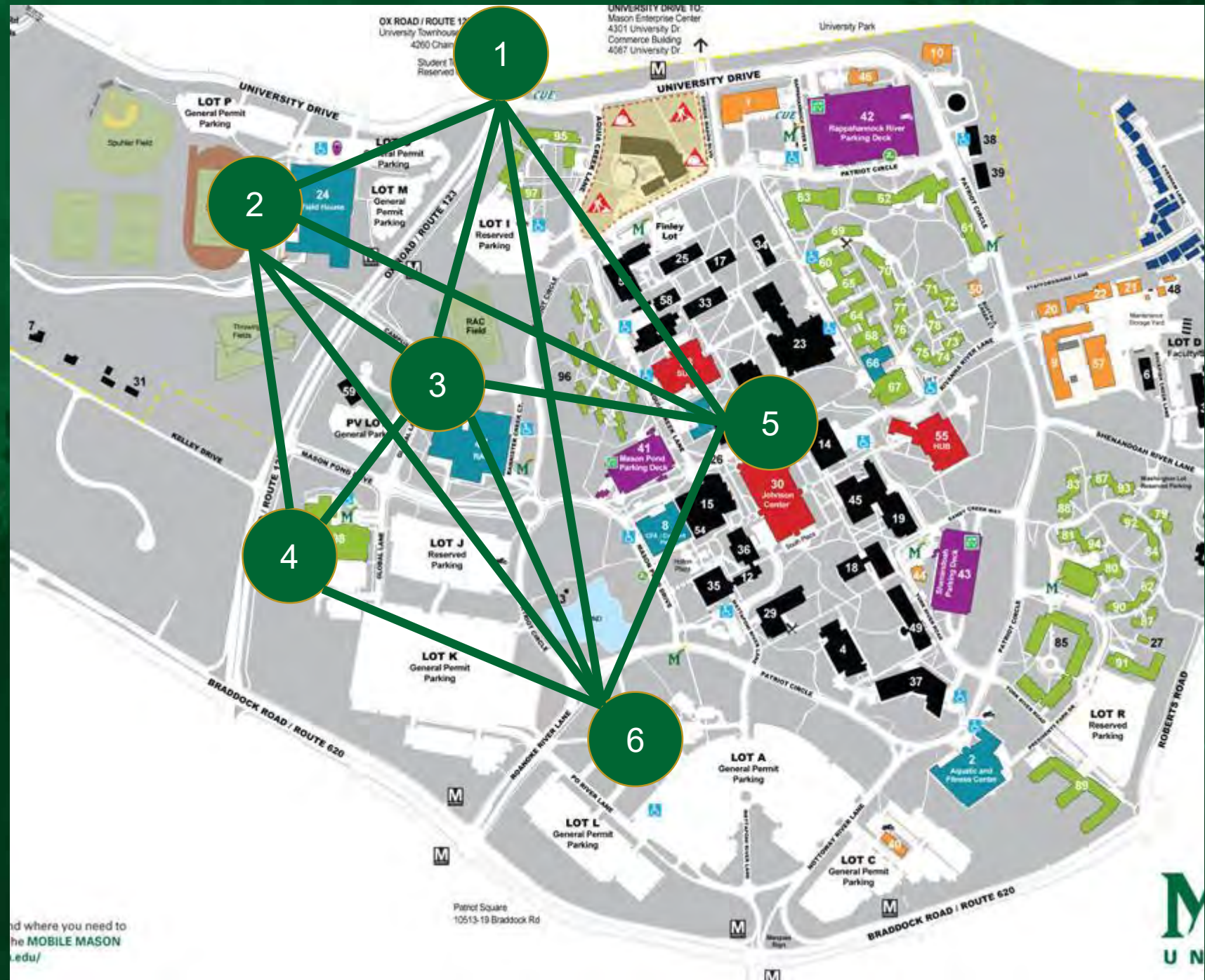
- Academic Support Staff Offices
- Study and Tutoring Rooms
- Computer Lab and Study Hall Area



Men's Basketball Day (Current)

1. The Flats/Off-Campus Housing
2. Athletic Field House
3. Basketball Practice Facility
4. Academic Resource Center
5. Campus/Dining
6. EB Arena (EBA) – Offices, Locker Room, Practice/Games

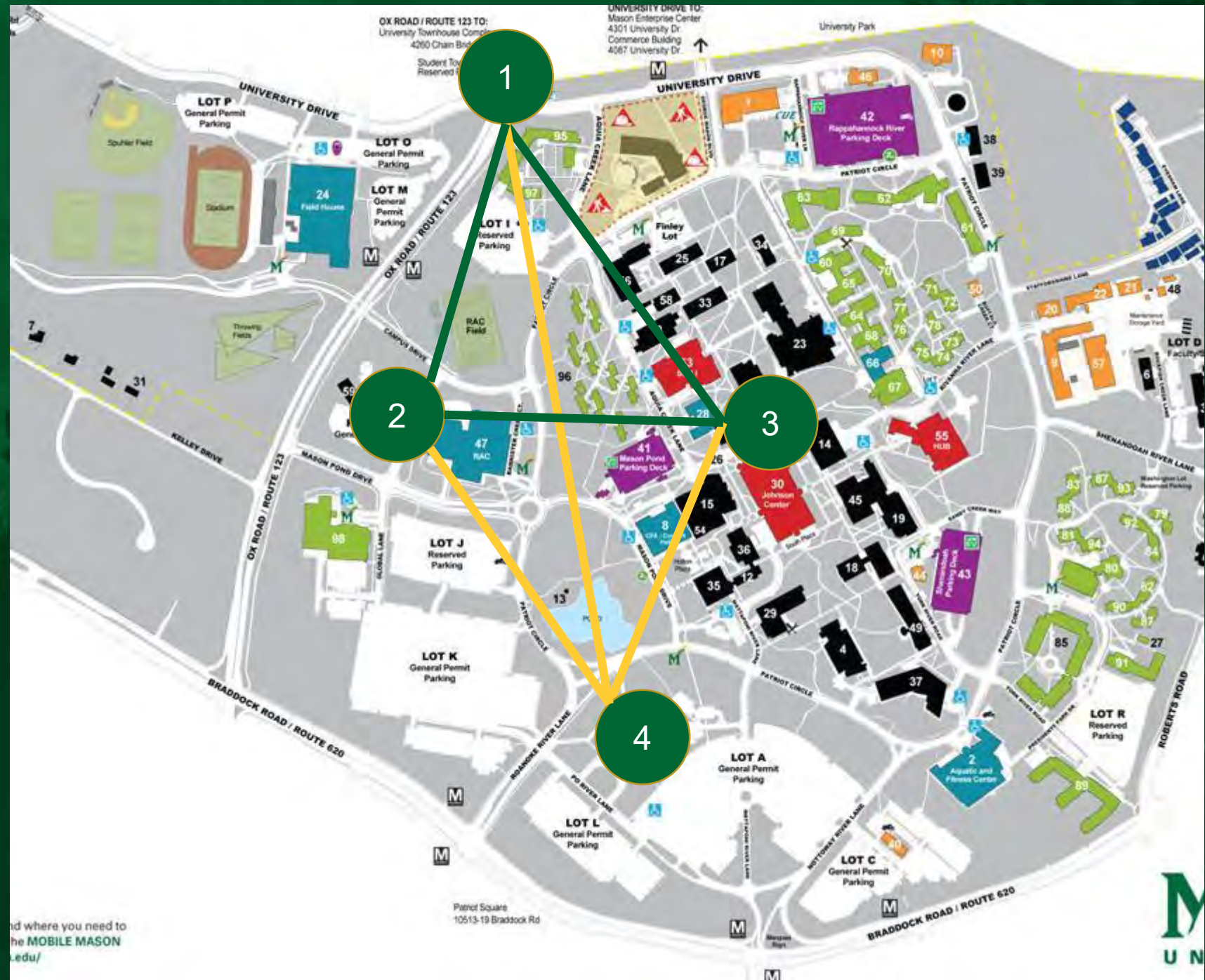
Average Mileage = 4+ miles
Walk Time = >75 minutes



Men's Basketball Day (Proposed)

1. The Flats/Off-Campus Housing
2. Basketball and Academic Excellence Center
3. Campus/Dining
4. Eagle Bank Arena (EBA)

Average Mileage = 1.5 mile
Walk Time = <30 minutes



Conference Comparisons

School	Project Scope	Date Completed	Costs
VCU	Basketball Complex (new)	October 2015	\$25 million
Dayton	Donoher Basketball Center (upgrade)	November 2015	\$4 million
Davidson	Harry Vance Athletics Center (expansion)	Fall 2015	\$13 million
UMASS	Kennedy Champions Center (new)	Fall 2015	\$24 million
Loyola Chicago	Norville Practice Facility (expansion)	August 2019	\$18.5 million
Richmond	Quelly Athletics Center	October 2020	\$15 million
St. Louis	O'Loughlin Champions Center (all sports)	October 2023	\$20 million

How Can You Help?

**ATTEND
EVENTS**

**OPEN
DOORS**

SUPPORT

**TELL "OUR"
STORY**



QUESTIONS??

Contact Us

Website – gomason.com

Email - ADMason@gmu.edu

Phone - (703) 993-3256

MASON NOW

POWER THE POSSIBLE

Lauren Bird
Interim AVP, University Priorities | Corporate & Foundation Relations



Meet the Team

University Priorities | Corporate and Foundation Relations

Lauren Bird – Interim Assistant Vice President

Kim Cumberbatch – Executive Assistant for University Priorities and Corporate and Foundation Relations

University Priorities

Jeff Danaher – Director of Development for University Priorities

Pedro J. Rivera, Esq. – Director of Development for University Priorities

Jacque Connor – Associate Director of Development for University Priorities

Corporate and Foundation Relations

Mercedes Price – Senior Director of Development for Corporate and Foundation Relations

Angelina Jarrouj – Associate Director of Development for Corporate and Foundation Relations

University Priorities

Corporate and Foundation Relations

What we do:

- Major gift fundraising team for central advancement
- Partner with the schools and units to provide enterprise-wide engagement strategies for individuals, corporations, and foundation prospects
- Provide advancement support for president and provost-led initiatives
- Create and distribute resources to streamline prospect engagement for the schools and units



Advancement Support for University Initiatives

- Fuse at Mason Square / Tech Talent Investment Program (TTIP)
- Institute for Digital Innovation
- Mason Enterprise Center
- Military, Veterans, and Families Initiative
- Center for Health Workforce
- Smithsonian - Mason School of Conservation
- Institute for BioHealth Innovation
- Institute for Sustainable Earth
- Sci-Tech Campus

Mason Will Play a Critical Role in Bringing Innovation to the Region



Workforce Development

Mason will increase the number of bachelor's and master's degree recipients in computer science, computer engineering, and software engineering programs



Collaborative Research

Mason launched the Institute for Digital Innovation to amplify capacity in Arlington



Placemaking

Mason will serve as the anchor to a vibrant and engaged planned innovation district along the Rosslyn-Ballston Corridor



Campus Expansion

Mason will invest in expanding our Arlington Campus with a 500,000-square-foot, mixed-use structure

Military, Veterans, & Families Initiative

The Military, Veterans, & Families Initiative (MVFI) seeks to leverage Mason's strengths as the largest, most diverse public research university in our region to support those who have given their all in service to our nation. We focus our efforts in four main areas:

1. Education: Approximately 10% of the student body self-identifies as a service member, veteran, or family member (SMVF).
2. Direct Services: MVFI provides direct services pro bono to SMVF through applied training in some of Mason's graduate/professional programs. Two primary examples are the M-VETS clinic in the Scalia Law School and the Center for Psychological Services in the Psychology Department.
3. Training: MVFI provides training that addresses issues specific to the SMVF population.
4. Research: Through targeted research initiatives, MVFI is able to provide targeted analysis that positively impacts the challenges facing the SMVF population. Partnership and funding from organizations like the Department of Defense play a major role in supporting and implementing the research findings.

SERVING THOSE WHO SERVE

Center for Health Workforce

The Mason Center for Health Workforce serves as an anchor institution to lead collective efforts in health workforce planning and development for the Commonwealth of Virginia. The Center utilizes a collective **impact strategy to leverage Mason's considerable scale, resources, and faculty expertise to connect and support workforce program planning in Virginia.**

The Center has a foundational structure built on three primary activity streams:

Data Analysis and Research: conduct activities related to workforce data collection, evaluation, and data analysis

Training and Education: encompasses health workforce training development, learning, and program activities

Integration and Innovation: coordinate business development, technology, and strategic initiatives for health workforce programs to continue to provide state of the art solutions

Corporate and Foundation Relations

“Great things in business are never done by one person. They’re done by a team of people”

Steve Jobs

Corporate and Foundation Relations

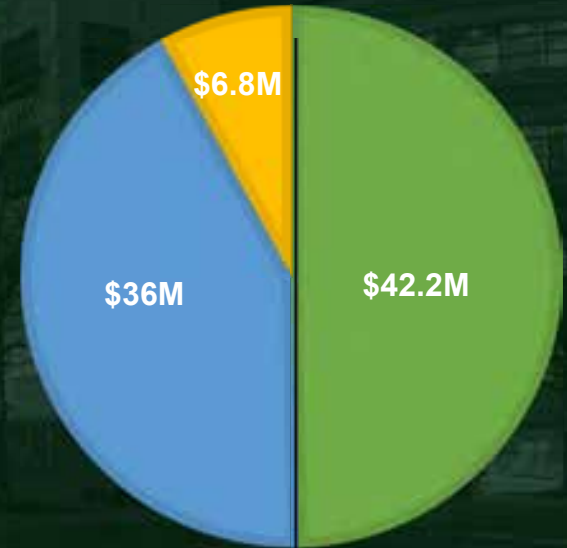
What We Do:

- Responsible for building University-wide relationships with corporate and foundation partners
- Create new relationships and steward existing partnerships
- Meet with leadership and faculty members to create internal partnerships for corporate and foundation engagement plans
- Convene multidisciplinary groups from across campus to create unique projects for major funding opportunities
- Execute strategic proposal development in partnership with Colleges, Schools, and Units
- Develop stewardship strategies for funded proposals
- Coordinate Limited Submission Opportunities

CFR by the Numbers:

FY24 Opportunities

■ Cultivation ■ Solicitation ■ Closed



Mason Internal Partners

- Office of the President
- Office of Government and Community Relations
- Office of the Provost
- Research/Office of Sponsored Programs
- Mason Athletics
- University Life
- Office of Continuing and Professional Education
- Colleges, Schools, and Units

*“Success is best when
it is shared.”*

- Howard Schultz

Building Holistic Partnerships

Corporate and Foundation Relations partners with colleges, schools, and units to streamline and position high value Mason offerings to drive successful identification, cultivation, and solicitation based on corporate priorities

Company "X"

Presidential Engagement
with C-Suite Leadership

Hackathon

Career Fair Participation

Research

Advisory Board Membership

Bank "X"

Athletics

Arts

Early Identification Program

Scholarship

College of Business

Partnering Across Campus

Industry Nights @ EBA

Alumni Relations, Athletics, and CFR partner to host the university's top corporate partners at a Mason basketball game.

Industry Round Tables

Thematic roundtables for Mason and industry to unite, exchange insights and collaboratively tackle challenges, foster innovation and form meaningful connections.

Corporate Summits

In partnership with internal university stakeholders, CFR hosts corporate partners on campus to determine partnership priorities and create an implementation timeline.

Board of Visitors Engagement Opportunities

- Broker introductions to C-suite leadership
- Assist in identifying Foundations whose funding missions support Mason initiatives
- Invite advancement team members to events where our presence can be leveraged to create impactful engagement opportunities for Mason
- Consider hosting a salon to expose your personal and professional networks to Mason by showcasing a University program or initiative based on the your interests or that of your network

Thank you!

**GEORGE MASON UNIVERSITY
BOARD OF VISITORS**

**Research Committee Meeting
November 30, 2023
Merten 1201**

AGENDA

- I. Call to Order

- II. Approval of Minutes (**ACTION ITEM**)
 - A. Meeting minutes for September 28, 2023

- III. Office of Research, Innovation, and Economic Impact Update (A. Marshall)

- IV. Forty Plus Years of Mercatus at GMU (T. Cowen and A. Tabarrok)

- V. Adjournment

**GEORGE MASON UNIVERSITY
BOARD OF VISITORS
Research Committee Meeting**

**MINUTES
September 28, 2023**

Present: Visitors: Nancy Prowitt, Chair; Armand Alacbay, Lindsey Burke, Anjan Chimaladinne, Bob Witeck; Faculty Senate Representative: Melissa Broeckelman-Post; Staff Senate Representatives: William Gautney; Faculty Representatives: Tara Chaplin, Alison Landsberg; Student Representatives: Paul Wyche, Vikas Velegapudi

Absent: Visitor: Wendy Marquez, Bob Witeck

Also Present: President Gregory Washington; Rector Horace Blackman, Visitors: Cully Stimson, Jon Peterson, Mike Meese, Dorothy Gray

I. Meeting was called to order by Chair Nancy Prowitt at 1:25 p.m.

II. Approval of Minutes (ACTION ITEM)

It was **MOVED** by Visitor Prowitt to approve the minutes from the February 23, 2023 and May 4, 2023 for the Research Committee Meeting. Approval of the meeting minutes was approved.

III. New Business

A. Office of Research, Innovation, and Economic Impact Update

Dr. Andre Marshall – Vice President for Research, Innovation & Economic Impact
Vice President for Research, Innovation, and Economic Impact, Andre Marshall, reported continued strong advancement in Mason's research enterprise with 55% year over year growth in research awards followed by early indicators of increased research activity reflected in the 34% year over year increase in July thru August research expenditures. A dashboard was also provided aligned with the framework for describing research in terms of scholarship, partnership, and translational research activities; and infrastructure, services, and research culture support.

B. Wearable Ultrasound Systems for Assessment of Musculoskeletal Injury and Recovery

Parag Chitnis, Associate Professor, BioEngineering, College of Engineering and Computing

Erika King, Mason Doctoral Student

Dr. Parag Chitnis, Associate Professor in the College of Engineering and Computing and PhD Student Erica King provided an overview of their work on Wearable Ultrasound Systems for Assessment of Musculoskeletal Injury and Recovery. A multidisciplinary

team of Mason researchers led by Dr. Parag Chitnis, is developing novel wearable-ultrasound technologies for achieving these objectives. This presentation provided an overview of these efforts and perspectives of Bioengineering Doctoral student, Ms. Erica King, who is spearheading validation of these ultrasound-based methods against conventional clinical and biomechanical approaches.

IV. Adjournment

Chair Prowitt asked if there was any additional business to be discussed. With no further comments or items of discussion the meeting was adjourned at 2:07 p.m.

Respectfully submitted,

Corinne Hurst
Research Committee Secretary Pro Tem

Board of Visitors Research Committee

November 30, 2023



Agenda

- I. Call to Order
- II. Approval of Minutes (Action Item)
- III. Office of Research, Innovation, and Economic Impact Update
- IV. Mason Research: Forty Plus Years of Mercatus at GMU (T. Cowen and A. Tabarrok)
- V. Adjournment

Approval of Minutes

(Action Item)

September 28, 2023

ORIEI Updates

Andre Marshall, **Vice President for Research, Innovation and Economic Impact**

BOV Research Committee

November 30, 2023

Mason is a maturing top-tier research university that broadly values access and delivers on impact.

Last Year	FY22	FY23	Difference
Award	\$171M	\$255M	49.4%
Expenditure	\$178M	\$185.7M	4.3%
F&A	\$23.8M	\$28.6M	20.1%

This Year To Date	FY23 – October	FY24 – October	Difference
Award	\$120M	\$96.9M	-18.9%
Expenditure	\$57.8M	\$82.0M	42.1%
F&A	\$9.1M	\$13.9M	52.6%

Mason's research enterprise drives discovery and the creation of new knowledge to meet the toughest current and future challenges and creates opportunities yet to be imagined.

Research Core Activities

Mason Research
METRIC

51 US News
Ranked
Public

30 of 45 Graduate Programs

Ranked among Top
US News Publics **50**

Scholarship

Mason Research
METRIC

Industry

100+ | **13**
Partners | Fortune 500

University

118 **R1**
28 **R2**
21 **International**
3 **MSI**
4 **Community Colleges**

Partnerships

Mason Research
DIFFERENTIATOR



**\$1M Center for Excellence in
Government Cybersecurity Risk
Management and Resilience**

11/08 Launch - Profs. Shehu (l)
and Auffret (r) partner on federal
government cybersecurity and IT
modernization efforts to translate
research and disseminate best
practices (Rep. Connolly Project)

Translation

Research Support

Mason Research METRIC

	Buildings	
	#	New
Mason Square	3	Fuse
FFX	107	
SciTech	12	LSEB
Mason Korea	1	

Infrastructure

Mason Research HIGHLIGHT

Research Integrity and Assurance & Institutional Compliance and Ethics

The new **University Policy 4021: Outside Professional Activities and Conflict of Commitment** took effect in September 2023 after more than two years of development and with collaboration from all ten colleges and schools and supported by **RAMP**.

Research
Transparency | Integrity

Services

Mason Research DIFFERENTIATOR

\$1.9M NSF Award



Profs. Motti (l) and Wittman (r) will develop wearable tech designed to help neurodiverse individuals succeed in the workforce.

<https://www.gmu.edu/news/2023-10/two-mason-professors-receive-nsf-grant-study-wearables-and-inclusive-workplaces>

Culture

Mason Research: **Forty Plus Years of
Mercatus at GMU**

Speakers: **Tyler Cowen, PhD
Alex Tabarrok, PhD**



MERCATUS CENTER

George Mason University

History

ATTRACTING TALENT TO MASON SINCE 1980



Mercatus started with 3 students



James Buchanan



Vernon Smith

And grew to attract 2 future Nobel laureates



**SERVING THE MASON
ACADEMIC COMMUNITY**



Supporting Faculty

We support 30+ faculty at Mason

In economics, law, philosophy, geography, public policy, sociology, and more

Raised funds to create 12 faculty positions

Mercatus scholars have published 93 books in the last 5 years, and their research is published in top journals

The American Economic Review, The Economic Journal, and Econometrica

Mercatus scholars are recognized with awards and leadership positions

Peter J. Boettke (PhD '89) was the 2016–17 president of the Southern Economic Association

Christopher J. Coyne (PhD '05) and Virgil Storr (PhD '03) have each received the CHSS Distinguished Alumni award for Economics

Tyler Cowen (BA '83) received the Beck Family Presidential Medal for Excellence in Research and Scholarship in 2019

Paul Dragos Aligica was elected to The Academy of Europe in 2023

Supporting Students



436

Mason alumni of Mercatus PhD, MA, and undergrad programs



Hired at top schools

Including the University of Pennsylvania, Georgetown University, and New York University

79

Current number of Mason undergraduate and graduate students supported by Mercatus



REAL-WORLD IMPACT





IMPACT

**SSRN ranks Mason Economics
18th and Mercatus
19th in Economics Departments
& Research Centers Worldwide**





IMPACT

**Mason Economics ranks
in the top 50 public economics
programs
in the US by *Times Higher
Education* and the Shanghai
Rankings**





IMPACT

**Mercatus scholars have
served at high levels in
government**



Bill Beach - BLS commissioner



Keith Hall - CBO director



Hester Peirce - SEC commissioner



IMPACT

Scholars regularly testify at the state and federal level and appeared in the media 30,000 times in 2022





IMPACT

Mercatus podcasts make cutting-edge research accessible to the world





Monetary Policy

Thousands tune in weekly to hear David Beckworth interview the best minds in macroeconomic theory and practice. Listenership spans academia, the financial press, and both staff and leadership at the Federal Reserve



India

Shruti Rajagopalan (PhD '13) is building a new intellectual community with India's top policy makers and opinion shapers through her research program, *Ideas of India* podcast, and yearly events in India



AI

Mercatus just published a 'generative book,' which has stoked interest from Anthropic and HarperCollins

Marginal Revolution University is incorporating an AI tutor into its online education platform



Emergent Ventures

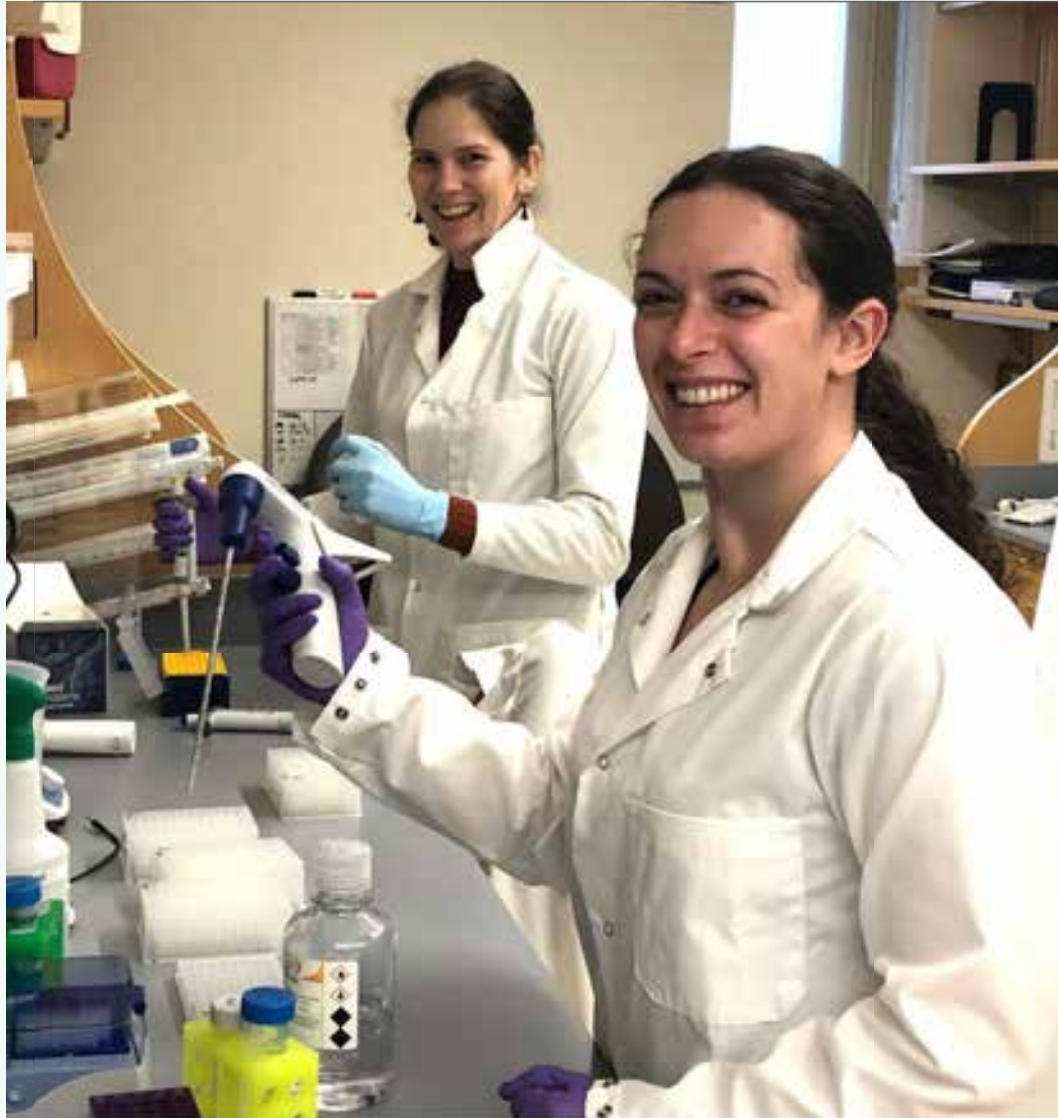
Awarded 790 grants totaling \$16.2 million

Some highlights:

Recidiviz partners with state criminal justice agencies to use data to safely reduce incarceration

Curative's pivot to COVID-19 testing was supported by EV and was eventually responsible for 11% of all US COVID tests

Upsolve helps low-income individuals respond when they are sued for allegedly unpaid debts



Fast Grants

During the first few months of the pandemic, the Fast Grants team reviewed over 5,500 applications, awarded more than 250 grants, and raised over \$50 million to accelerate COVID-19 research

Some highlights:

Recipients at Yale created saliva-based rapid COVID-19 tests

Supported a clinical trial for research on the ability of vaccines to improve the symptoms of long COVID



MERCATUS CENTER

George Mason University

GEORGE MASON UNIVERSITY
AUDIT, RISK, AND COMPLIANCE COMMITTEE OF THE BOARD OF VISITORS

November 30, 2023
AGENDA

- I. Call to Order**
- II. Approval of Audit, Risk, and Compliance Committee Minutes**
 - A. Approval of Committee Minutes for September 28, 2023 Meeting (**ACTION**)
- III. New Business**
 - A. Auditor of Public Accounts Examination Discussion
 - B. Information Technology Update (includes **CLOSED SESSION** regarding security of information technology systems (Code of Virginia: §2-2.3711.A.19))
- IV. Reports**
 - A. Report of Approved Waivers of Contractual Conflicts of Interest
 - B. Report of Compliance with Gramm-Leach-Bliley Act Safeguards Rule
 - C. Office of University Audit Summary Report
 - D. Office of Institutional Compliance Summary Report
 - E. Information Technology Risk and Control Infrastructure Program Update
- V. Adjournment**

**GEORGE MASON UNIVERSITY
AUDIT, RISK, AND COMPLIANCE COMMITTEE
OF THE BOARD OF VISITORS**

**September 28, 2023
MINUTES**

PRESENT: Chair Oberoi; Visitors Alacbay, Brown, and Stimson.

ABSENT: Vice Chair Meese.

ALSO PRESENT: Rector Blackman; Visitors Burke and Peterson; President Washington; Vice President and Chief Branding Officer Allvin; Vice President and Chief Diversity Officer Artis; Faculty Senate President Broeckelman-Post; Executive Vice President of Finance and Administration Dickenson; Faculty Liaison Douthett; Senior Vice President for Operations and Business Services Ferree; Staff Senate Chair Gautney; University Counsel Gentry; Provost and Executive Vice President Ginsberg; Special Advisor Healy; Vice President of Finance Heinle; Assistant Vice President for Planning, Design, and Construction Iszard; Vice President for Research, Innovation, and Economic Development Marshall; Associate University Counsel Schlam; Interim Vice President and Chief Information Officer Spann; Vice President for Facilities Strike; Graduate Student Representative Velagapudi; Executive Vice President of Strategic Initiatives and Chief of Staff Walsh; Undergraduate Student Representative Wyche; Chief Audit and Compliance Officer Dittmeier; Associate Vice President for Institutional Compliance Lacovara; and Associate University Auditor Watkins.

I. Chair Oberoi called the meeting to order at 9:41 a.m.

II. Approval of Minutes

Chair Oberoi called for any corrections to the minutes of the May 4, 2023 Audit, Risk, and Compliance Committee meeting. Hearing none, the **MINUTES STOOD APPROVED AS WRITTEN.**

III New Business

A. Facilities Condition Assessment Program Update

Senior Vice President Ferree and Vice President Strike briefed the Committee on Mason’s program to assess the condition of facilities and determine action priorities and plans.

AUDIT, RISK, AND COMPLIANCE COMMITTEE

September 28, 2023

Page 2

Mr. Strike stated that the Facilities Condition Assessment program maintains a comprehensive inventory of Mason's facilities. The condition of facility components, such as exterior closure, roofing, plumbing, HVAC, fire protection, and many more, are inspected at least once every three years. Inspections also consider input of users, facility zone managers, campus energy managers, and, where necessary, contracted subject matter specialists. Based on these inspections, and assessments, component conditions are prioritized for future maintenance or improvement activity. Condition thresholds are in place to inform 'repair or replace' actions. Annual action plans, in conjunction with three, five, and ten-year roadmaps, are developed and prioritized in consideration of health and safety; support for mission; student experience, including student input; sustainability and resiliency; and continuity of operations. He also discussed the application of the program for several recent projects, including Student Apartments, stormwater management, energy enhancements, Horizon Hall, Harris Theatre, and the Aquatic and Fitness Center.

The Committee discussed with management the level of reserves associated with future maintenance activities, supplemented with capital-funded projects. Undergraduate Student Representative Wyche recognized the facilities team for their responsiveness to student feedback related to maintenance concerns.

B. Approval of Audit, Risk, and Compliance Committee Charter

The Committee reviewed minor revisions to the Audit, Risk, and Compliance Committee Charter and noted that the charter is aligned with the university's by-laws. Visitor Stimson **MOVED** and Visitor Alacbay **SECONDED** that the Audit, Risk, and Compliance Committee Charter be approved.

MOTION CARRIED UNANIMOUSLY BY VOICE VOTE.

C. Approval of Office of Audit, Risk, and Compliance Charter

The Committee reviewed the Office of Audit and Compliance Committee Charter. Mr. Dittmeier confirmed the organizational independence of Mason's internal audit function. After discussion, the Committee concurred with Mr. Dittmeier's organizational independence confirmation. Visitor Brown **MOVED** and Visitor Stimson **SECONDED** that the Office of Audit and Compliance Charter be approved.

MOTION CARRIED UNANIMOUSLY BY VOICE VOTE.

AUDIT, RISK, AND COMPLIANCE COMMITTEE

September 28, 2023

Page 3

IV. Reports

Ms. Watkins reported on the status of audit operations described in the Office of University Audit Summary Report. Among other things, she updated the Committee on the ongoing use of co-sourced professionals to provide assurance services while recruitment activities to fill a vacant senior auditor position continue. The Committee discussed with Ms. Watkins and Mr. Dittmeier the nature and scope of the competitive environment for recruiting audit talent to Mason. Ms. Watkins also reported that one internal audit report had been issued since the prior meeting.

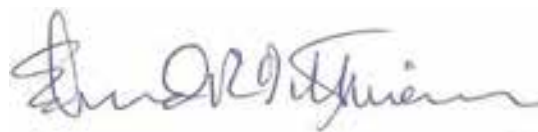
Ms. Watkins then described University Audit's audit planning process which determines internal audit priorities. Consistent with University Audit's re-freshed views, areas of audit focus are expected to include processes related to enrollment; the growing research enterprise; financial and operational processes; information technology and protection of data; and campus safety, security, health, and well-being. The Committee discussed with Mr. Dittmeier the sufficiency of the audit personnel and financial resources available to design and conduct audit work appropriate to the scope and scale of Mason's responsibilities.

Mr. Lacovara reported on the status of institutional compliance activities since the prior meeting. He described the status of compliance program self-assessments which are in progress and noted the university's establishment of a new conflict of commitment policy and actions to strengthen related disclosure processes. The Committee discussed with Mr. Lacovara the size of the Institutional Compliance team charged with providing oversight in relation to comparable universities.

Mr. Spann reviewed highlights of the Information Technology Risk and Control Infrastructure Program Update provided to the Committee. He discussed with the Committee and with Rector Blackman security awareness training completion rates and consequences for non-completion as well as the need for future cyber risk vulnerability assessment activities.

VI. Adjournment

Chair Oberoi adjourned the meeting at 10:23 a.m.



Edward R. Dittmeier
Secretary pro tem

ITEM NUMBER: III.A.

Auditor of Public Accounts Discussion

PURPOSE OF ITEM:

Brief the Audit, Risk, and Compliance Committee regarding the upcoming financial statement audit for the year ended June 30, 2023.

NARRATIVE:

The Commonwealth's Auditor of Public Accounts is responsible for auditing the accounts of every state department, officer, board, commission, institution, or other agency handling any state funds. Among other things, the Auditor of Public Accounts determines that state agencies are providing and reporting appropriate information on financial and performance measures.

David Rasnic is representing the Auditor of Public Accounts.

ACTION:

Receive briefing and discuss.

George Mason University Audit Engagement Audit, Risk, and Compliance Committee



David Rasnic, CPA, CISA – Project Manager
Justin Rhodes, CPA – Auditor In-Charge

Engagement Overview

- Audit Team: David Rasnic - Project Manager
Justin Rhodes— In-Charge
- Audit Period: July 1, 2022 – June 30, 2023
- Audit Timing: January 2024 – April 2024
- Objectives: University-specific
Statewide Single Audit

Audit Objectives

- **Basic Financial Statements**
 - Primary objective of audit is to provide an opinion on fair presentation in accordance with GAAP
 - We assess risk of material misstatement at the line item level and design an audit approach responsive to those risks
 - Procedures include a combination of tests of detailed transactions and balances, as well as internal control processes

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Audit Objectives

- **Required Supplementary Information (RSI)**
 - We review for consistency with the basic financial statements
 - We perform limited procedures, including management inquiries and review of support
 - We do not provide an opinion concerning RSI

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Significant Risks

Management Override

- Risk is present at all organizations
- Access controls
- Segregation of duties
- Culture/tone at the top

Revenue Recognition

- Risk is generally present at all organizations

Approach to Materiality

- We consider what is likely to influence the judgment of a financial statement user in order to:
 - Assess risk and design audit procedures
 - Evaluate misstatements in amounts and deficiencies in processes
- Calculate quantitative thresholds by ‘opinion unit’
 - GMU Business Type Activity and Component Units
- Apply qualitative considerations in addition to quantitative

Approach to Fraud

- Team interviews personnel and assesses the risk of fraud
- Team looks for red flags and considers the potential for fraud as it relates to exceptions identified during fieldwork
- George Mason is required to notify APA when suspected fraud is identified



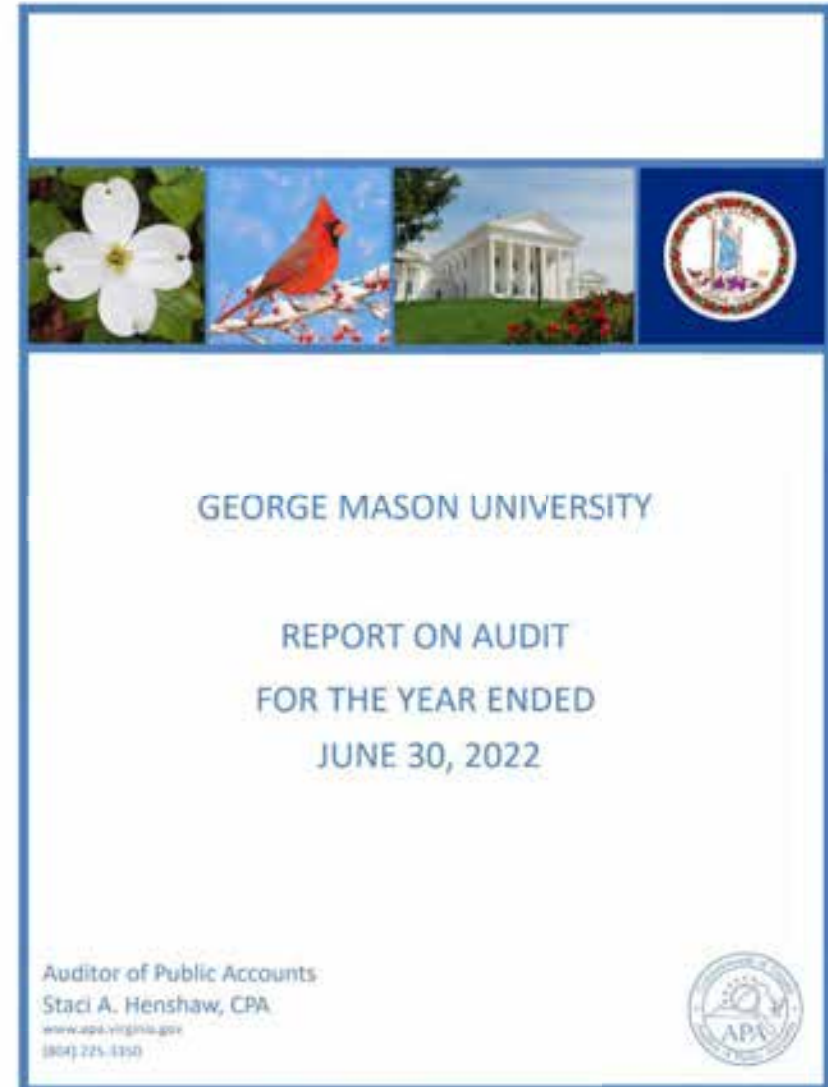
Approach to Compliance

- We consider the risk that potential non-compliance could have a material direct or indirect effect on the financial statements
- We assess management's processes
- We test compliance which we deem significant in the context of the audit objectives



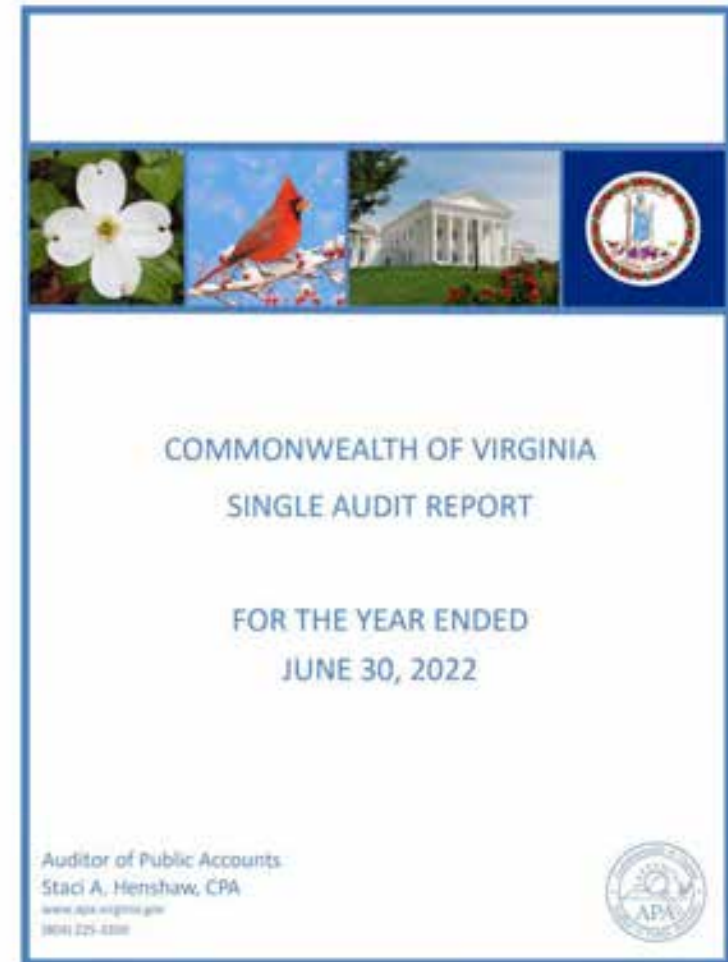
Audit Objectives

- **Report on Internal Controls and Compliance**
 - We do not provide an opinion on internal controls
 - We are required to report any findings that we deem to be significant deficiencies or material weaknesses
 - Though not required, we plan to issue this report the same week we release the audit opinion



Audit Objectives

- **Virginia Single Audit**
 - The Statewide Single Audit (SSA) report serves as the internal control report for the Commonwealth's Annual Comprehensive Financial Report
 - This report will include the results of tests designed to evaluate the Research and Development federal programs
 - GMU Internal Audit is performing APA-directed work over the Research and Development federal programs



Management Communication

- Entrance/Exit with Management
- Biweekly status updates
- When potential concerns are noted:
 - Confirm condition
 - Obtain response
 - Evaluate significance

BOV Communication

- If you are aware of risks our audit should address, please share those with us
- Unless there are findings requiring your immediate attention, we will present our results to you at the conclusion of the audit
- If earlier communication is warranted, we will coordinate with management to ensure the Committee is informed in a timely manner
- Terms of the engagement and representation letters

Intended Use Statement

This presentation is intended solely for the information and use of those charged with governance and management, and is not intended to be, and should not be, used by anyone other than these specified parties.

ITEM NUMBER: III.B.

Information Technology Update

PURPOSE OF ITEM:

Brief the Audit, Risk, and Compliance Committee on the status of the university's information technology and associated processes for managing such technology.

NARRATIVE:

Charles Spann, Interim Vice President and Chief Information Officer, will brief the Committee.

Among other things, Mr. Borek will provide an overview of information technology at Mason. This overview will include a discussion of the current state of information technology at Mason and the status of key programs of focus in making progress towards the desired future state.

ACTION:

Receive briefing and discuss.

Information Technology Update

November 30, 2023



Information Technology
Services

Agenda

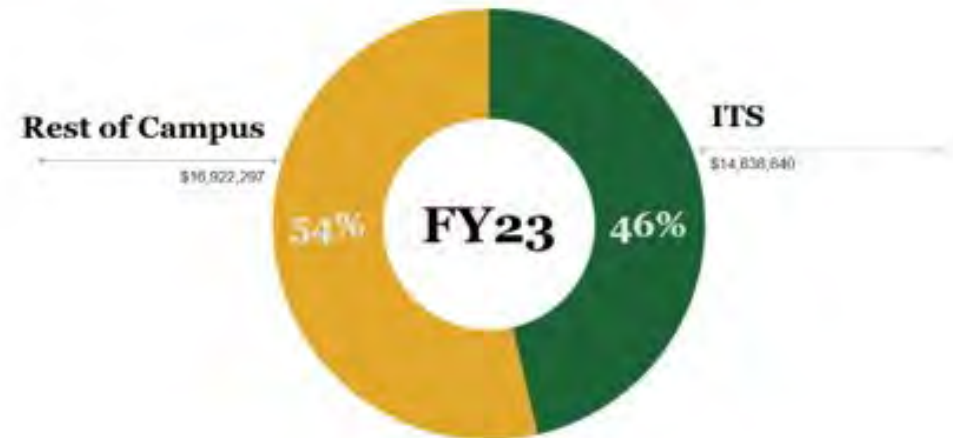
- ❑ Mason Information Technology Overview
- ❑ Information Technology Risk and Control Infrastructure Program
- ❑ Security Threat Landscape
- ❑ Questions and Answers

Information Technology at George Mason University

Mason operates in a distributed IT environment with shared governance

- ❑ ITS manages ERP/CRM/HR/PR/LMS/Student
- ❑ University Research is conducted within Schools, sometimes with shared IT functions (compute, administration)
 - ❑ Schools and Colleges, and some units have IT departments
- ❑ Demarcations in governance, roles/responsibility not always clearly defined

Information Technology Expenditures – Annual VITA Report

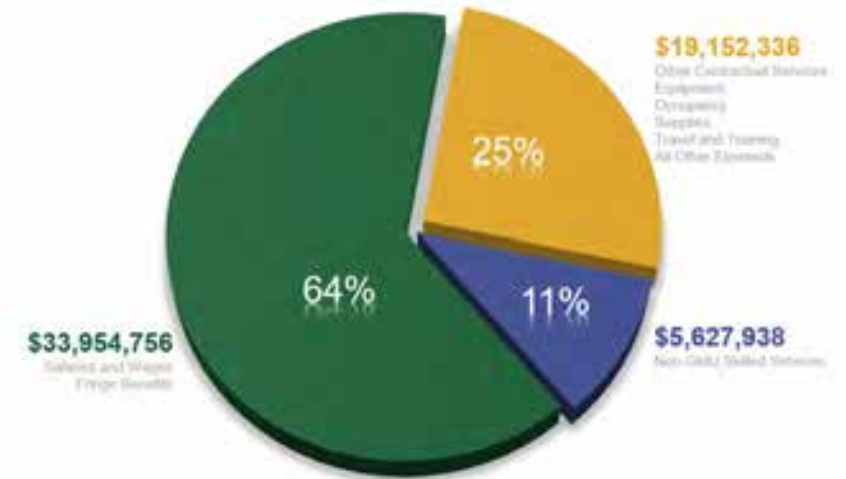


Note: The following accounts codes have been used for comparison: 73720, 73740, 73750, 73760, 73775, 74874, 74883, 74884, 76870, 76873, 76874, 76875, 76876, and 76878.

Information Technology Services

- ITS salaries and contractors account for roughly 75% of ITS spend
- ITS employs 269 FTE , 71 student wage, 34 contractors and 28 wage employees
- ITS Units; Academic Strategies, Enterprise Applications, Enterprise Infrastructure Services, Enterprise Service Delivery, Learning Support Services, Information Technology Security Office

ITS Expenditures – Labor vs. Non-Labor E&G Comparison



Elevating Internal Audit Activities from IT Security to IT/Business Risk Management

- ❑ ***Audit Workplans Aligned with Management Goals and Workplan***
 - ❑ Audit actively engaged as objective collaborator: IT strategy, goals, business objectives, project deliverables, prioritization
 - ❑ Emphasis on proactive management and risk mitigation in rapidly changing technology environment
 - ❑ Structural vs. symptomatic assessments
 - ❑ There are and will be a need for routine audits in certain areas
 - ❑ (e.g. third-party service providers, distributed environments management)

Information Technology Risk and Control Infrastructure Program

Representative Strategic Programs of Focus

Most outstanding IT Security audit findings have common structural roots in underlying business processes and systems

- Portfolio and Project Management
- IT Security Compliance Program
- Configuration and Change Management
- Identity Management and Access Control
- Risk Assessment and Remediation Program

Progress in these areas is reported regularly to the committee Representative – but not all-inclusive programs

A stylized graphic on a teal background. On the left, a large, light-teal letter 'M' is partially visible. To its right, a tree-like structure is formed by several curved, overlapping bands of varying shades of teal, creating a sense of depth and movement. The overall composition is clean and modern.

PROGRAMS OF FOCUS

Portfolio and Project Management

FY2023 Activities/Accomplishments

- Established Governance Council Program
- Functioning IT Domain Council; Pilot Finance and Administration Council
- Updated PMO dashboard to reflect revised governance structure

FY2024 Planned Initiatives

- Pilot Domain Council for projects initiated within Provost's Domain
- Implement supporting tools for project tracking in TeamDynamix (ITSM Tool)
- Track established project metrics for continuous improvement

IT Security Compliance Program

FY2023 Activities/Accomplishments

- NIST 800-53 based security baseline control framework, tailored to university environment; approved by CIO and concurred by EVP
- Began socialization of new control framework within ITS and distributed IT
- Created Draft IT Security Standard based on new control framework
- Co-facilitated self-assessment of Banner core environment with OUA, based on the Mason tailored and scoped NIST 800-53 security high -risk baseline

FY2024 Planned Activities

- Publish and socialize results of NIST 800-53 IT Security Standard self-assessment of Banner core environment, perform subsequent next steps (e.g., update SSP and POA&M)
- Move Disaster Recover and Continuity of Operations plans into Mason GRC tool

Configuration and Change Management

FY2023 Activities/Accomplishments

- Change Management process was reviewed during the APA audit and no findings were flagged.
- ITS has an operational pilot of the TeamDynamix change management system

FY2024 Planned Initiatives

- Move all ITS change management activity to TeamDynamix, train staff
- Review ITS change management procedures for compliance with NIST 800-53
- Evaluate Development Operations practice to enhance Software Development Lifecycle to align with industry best practices.
- Establish University Change Control Board to review changes in process or systems that impact the student, employee or other university lifecycles.

Identity and Access Management

FY2023 Activities/Accomplishments

- Partnered with Human Resources on PageUp implementation, updating position descriptions and workflow
- Continued work on an IAM technology roadmap
- Gathered requirement for a modern IAM system

FY2024 Planned Initiatives

- Complete IAM technology roadmap
- Implement bridge IAM improvements and plan for future implementation of a modern IAM system; potentially in FY25

Risk Assessment and Remediation Program

FY2023 Activities/Accomplishments

- Created FAR 52-204.21 compliance security plan template for the Hopper Cluster to position Mason to be able to support research grant requests that require compliance to the FAR 52-204.21 controls.
- Operationalized the pilot ITS Risk Register forum
- Partnered with Research community to improve endpoint security for research

FY2024 Planned Activities

- Penetration test of Banner core services
- Continue to configure and operationalize the risk assessment, issues, action plans, and exceptions management functionality in GRC tool.

Closed Session Motion

Motion:

I move that the Audit, Risk, and Compliance Committee go into Closed Session under the provisions of Section 2-2.3711.A.19 of the Code of Virginia to discuss the security of university information technology systems.

Closed Session Motion

Motion:

I move that the Audit, Risk, and Compliance Committee go back into Public Session and further move that by ROLL CALL VOTE we affirm that only public business matters lawfully exempted from the open meeting requirements under the Freedom of Information Act were heard, discussed or considered in the Closed Meeting, and that only such business matters that were identified in the motion to go into a Closed Meeting were heard, discussed, or considered in the Closed Meeting. Any member of the Committee who believes that there was a departure from the requirements as stated above, shall so state prior to taking the roll call, indicating the substance of the departure that, in their judgment, has taken place.

CLOSING REMARKS
Q&A





Office of Institutional Compliance
4400 University Drive, MS 1A2, Fairfax, Virginia 22030

MEMORANDUM

TO: Members of the Audit, Risk, and Compliance Committee of George Mason University's Board of Visitors

FROM: George Mason University Office of Institutional Compliance
Elizabeth Woodley, University Ethics Officer and Outside Interests Manager

SUBJECT: Approved Contractual Conflict of Interest Waivers

DATE: November 1, 2023

Pursuant to the Board of Visitors Resolution adopted on August 1, 2014 (Appendix A) delegating to the President the authority to approve waivers of conflicts of interest arising from contracts pursuant to §2.2-3106 and §2.2-3110.A.5 of the Code of Virginia, the following is a report of existing approved contractual conflict of interest (COI) waivers at George Mason University (Mason) as of November 1, 2023.

There are three categories of COI waivers at Mason:

- Research COI waivers: these are waivers of employee conflicts of interest in contracts relating to research and development or commercialization of intellectual property (§2.2-3106.C).
- Non-Research COI waivers: these are waivers of conflicts of interest in other contracts, not relating to research (§2.2-3110).
- Immediate Family Waivers; these are waivers of employment of immediate family members at Mason (§2.2-3106.C.2).

Research COI waivers are reviewed and recommended for approval by the Conflict of Interest Committee¹, prior to being approved by the President and the Vice President for Research, Innovation, and Economic Impact. As a condition of each waiver, the employee will not participate, or has no authority to participate, in contract negotiations or oversight on behalf of Mason or the outside entity. The employee will also follow the requirements of the applicable Outside Employment policy. All Research COI waivers are monitored at least annually by the Office of Institutional Compliance to confirm the terms of the waivers are followed. Appendix B of this report lists the 22 research COI waivers existing as of November 1, 2023; there were 26 research COI waivers existing as of October 31, 2022 (the prior report to the Committee).

¹ The Conflict of Interest Committee consists of 14 members: representatives of each College as well as Human Resources, Fiscal Services, Research, and Institutional Compliance.

Non-Research COI waivers are reviewed and recommended for approval by the Conflict of Interest Committee, prior to being approved by the President and the Executive Vice President for Finance and Administration. As a condition of each waiver, the employee will not participate, or has no authority to participate, in contract negotiations or oversight on behalf of Mason or the outside entity. The employee will also follow the requirements of the applicable Outside Employment policy. All Non-Research COI waivers are monitored at least annually by the Office of Institutional Compliance to confirm the terms of the waivers are followed. Appendix C of this report lists the 28 non-research COI waivers existing as of November 1, 2023; there were 30 non-research COI waivers existing as of October 31, 2022.

Immediate Family Waivers are granted by the University Ethics Officer and Outside Interests Manager when, upon evaluation with the responsible supervisor and with Human Resources, it is determined that the dual employment of the immediate family members is in the best interest of the University. The terms of all immediate family waivers require that neither employee exercises sole control over the employment or employment activities of the other, including decisions regarding initial appointment, retention, promotion, tenure, salary, leave of absence, and evaluation; and that the employment of the immediate family members will further the University's educational and research mission. All immediate family waivers are monitored at least every two years by the Office of Institutional Compliance to confirm the terms of the waivers are followed. Appendix D of this report lists the 134 immediate family waivers existing as of November 1, 2023; there were 141 immediate family waivers existing as of October 31, 2022. Of the 134 immediate family waivers existing on November 1, 2023:

- 49 waivers involve at least one tenured faculty member. In these cases, the other family member was a tenured faculty member (17), non-tenured instructional or research faculty member (20), or not a member of the instructional or research faculty (i.e., administrative or staff, 12).
- 39 waivers involved no tenured faculty and at least one family member being a non-tenured instructional or research faculty member. In these cases, the other family member was a non-tenured instructional or research faculty member (20), or not a member of the instructional or research faculty (i.e., administration or staff, 19).
- 46 waivers involved both family members being members of the administration or staff.

Highlighted Waivers: As of November 1, 2023, there were six Research or Non-Research COI waivers where:

- Two or more Mason employees have a COI in the same company (not including spouses whose only financial interest is through their spouse); OR
- The contract giving rise to the COI has the following characteristics:
 - the parties are Mason and a for-profit company,
 - the contract is potentially related to the conflicted employee's work at Mason,
 - the contract is negotiated (rather than routine or boilerplate),
 - the conflicted employee is Faculty or Classified Staff (i.e., not adjunct, or wage employee), and
 - Mason is paying over \$5,000 to that company.

1. Suman Alishetty, Research Assistant Professor, Bioengineering Department;
Manuel Carrasco, Graduate Research Assistant, CEC School Grad Assistants;

Caroline Hoemann Professor, Bioengineering;
Mikell Paige, Associate Professor, Chemistry Instruction
AexeRNA Therapeutics, LLC;

waiver period: 9/8/2021–8/30/2024 (\$0 paid by Mason, \$160,000 paid to Mason in FY 2023)

Personal Interest: Alishetty and Carrasco have over 3% but less than 20% ownership. Hoemann has over 20% but less than 50% ownership. Paige has over \$5,000 annual income from his divestiture of stock in AexeRNA. AexeRNA is in the process of licensing rights to a lipid nanoparticle platform for mRNA delivery. AexeRNA will establish contracts with Mason for sponsored research, which will each be governed by an approved Management Plan. The George Mason University Research Foundation is also a shareholder, owning over 3% but less than 20% of AexeRNA.

2. Stephen Curtis, Head Coach Women's Tennis;
James Davis, Head Coach Men's Tennis;
A Plus Sports, Burke Racquet & Swim Club;

waiver period: 3/16/2022–3/1/2024 (\$0 paid by Mason, \$15,780 paid to Mason in FY 2023)

Personal interest: Curtis and Davis have between 20% and 50% Ownership and receive over \$5,000 from A Plus Sports (BRSC). Mason will utilize BRSC facilities for men's and women's tennis practice as needed depending on schedules and the weather, as Mason does not have indoor tennis courts. A Plus Sports (BRSC) will utilize University facilities pursuant to the standard Mason Recreation facilities use contract and operate a summer sports camp. The waiver specifies oversight and requirements in order to continue Mason's contractual relationship with BRSC.

3. Paul Allvin, Vice President and Chief Brand Officer, Office of University Branding;
Brynmor Holdings, LLC;

waiver period: 2/1/2023–1/31/2024 (\$8,400 paid by Mason in FY 2023)

Personal interest: Allvin has 100% ownership in Brynmor Holdings, LLC through his spouse. Brynmor has been contracted to consult with Mason on the provision of childcare services and to potentially support Mason in the application for a federal grant. Allvin will have no authority over this contract and will recuse himself from any decisions or discussions which directly involve or affect Brynmor.

4. Catrina King, Attending Veterinarian, ORIA;
Caerus;

waiver period: 5/11/2022–3/31/2024 (\$6034.16 paid by Mason in FY 2023)

Personal interest: King receives over \$5,000 annual income from Caerus. Caerus has contracted with Mason for utilization of vivarium space at the Center for Infectious Disease Research (CIDR). King will recuse herself from any IACUC and IBC decisions for any projects that involve Caerus. In addition, another George Mason University veterinarian will provide compliance oversight and also serve as the primary point of contact for veterinary consultations with Caerus concerning its animal subject research activities at Mason. King will not serve as an advisor to Caerus concerning actual or potential future contracts with George Mason University.

5. Andrew Gerard, Director, Men's and Women's Track and Field/Cross Country;
Andrew Gerard Coaching & Training, LLC;
waiver period: 3/21/2023–4/28/2024 (\$8,500 paid by Mason in FY 2023)
Personal interest: Gerard has 100% ownership of Andrew Gerard Coaching & Training. The LLC will provide timing and results reporting for Cross Country and Track & Field Events. Purchasing and Athletics were directly involved in the arrangement of this contract to confirm Mason's Purchasing guidelines were followed. Gerard will not participate in negotiations or oversee the contract on behalf of Mason. The waiver specifies oversight and requirements in order to continue Mason's contractual relationship with the LLC beyond the current contract.

6. Catherine Winkert, Associate Director Finance and Administration, College of Visual and Performing Arts;
Monumental Sports & Entertainment;
waiver period: 1/25/2019–1/25/2024 (\$818,278.81 paid by Mason in FY 2023)
Personal interest: Winkert receives over \$5,000 annual income from her spouse's employment at Monumental Sports & Entertainment at the Capital One Arena. Monumental Sports & Entertainment manages the Eagle Bank Arena and provides parking attendants during events hosted at the Eagle Bank Arena and for Center for the Arts (CfA). Winkert does not have the authority to participate and will not participate in contract negotiations with Monumental on behalf of Mason. In addition, Winkert does not sign off on invoices from Monumental Sports & Entertainment. The Front of House Manager at CfA contacts Monumental to make arrangements, and the Finance and Budget Analyst at CfA reviews/approves invoices.

Please feel free to contact me (at ewoodley@gmu.edu) should you like to discuss this report.

**RESOLUTION
OF THE
BOARD OF VISITORS OF GEORGE MASON UNIVERSITY**

Whereas: The State and Local Government Conflict of Interest Act prohibits certain conduct related to contracts, and

Whereas: The General Assembly has recognized the benefits provided to the citizens of Virginia by the scholarly and research activities of the Commonwealth's institutions of higher education, and

Whereas: To facilitate scholarship and research the General Assembly has created generous exceptions to otherwise prohibited conduct specifically for institutions of higher education, and

Whereas: It is the desire of the Board of Visitors to delegate the responsibility for approving waivers to the President in accord with his general authority to manage the affairs of the University, therefore

BE IT RESOLVED:

That the President or his designee is hereby authorized to approve waivers of conflicts of interest arising from contracts pursuant to §2.2-3106 and §2.2-3110.A.5. of the Code of Virginia, in the manner as set forth in the statutes, and,

BE IT FURTHER RESOLVED

That the President or his designee shall report to the Audit Committee of the Board annually, on or before December 1, all contract waivers approved.

Adopted: August 1, 2014



Rector
Board of Visitors
George Mason University

August 1, 2014
Date

Appendix B: Research COI Waivers

I. Waivers of personal interests due to ownership and/or income from companies

#	Employee	Other Interest	Nature of COI	Waiver Period
1	Suman Alishetty, Research Assistant Professor, Bioengineering Department, College of Engineering and Computing	AexeRNA Therapeutics, LLC	<ul style="list-style-type: none"> • Alishetty has over 3% but less than 20% ownership of AexeRNA Therapeutics, LLC. • AexeRNA Therapeutics, LLC is in the process of licensing rights to a lipid nanoparticle platform for mRNA delivery. AexeRNA will establish contracts with Mason for sponsored research, which will each be governed by an approved Management Plan. • The George Mason University Research Foundation Inc. (an independent 501(c)(3) established for the benefit of George Mason University) also owns over 3% but less than 20% of AexeRNA Therapeutics, LLC. • In FY23, Mason has paid \$0 to AexeRNA. AexeRNA has paid \$160,000 to Mason. 	9/8/2021 – 8/1/2024
2	Manuel Carrasco, Graduate Research Assistant, College of Engineering and Computing	AexeRNA Therapeutics, LLC	<ul style="list-style-type: none"> • Carrasco has over 3% but less than 20% ownership of AexeRNA Therapeutics, LLC. • AexeRNA Therapeutics, LLC is in the process of licensing rights to a lipid nanoparticle platform for mRNA delivery. AexeRNA will establish contracts with Mason for sponsored research, which will each be governed by an approved Management Plan. • The George Mason University Research Foundation also owns over 3% but less than 20% of AexeRNA Therapeutics, LLC. • In FY23, Mason has paid \$0 to AexeRNA. AexeRNA has paid \$160,000 to Mason. 	8/1/2023 – 8/1/2024
3	Boris Gafurov, Assistant Professor, Special Ed and disability Research, College of Education and Human Development	ATWare Solutions	<ul style="list-style-type: none"> • Gafurov has 100% ownership of ATWare Solutions. • ATWare Solutions was formed to submit free apps developed at Mason’s Training and Technical Assistance Center (TTAC) for people with disabilities to iTunes and Google Play. • TTAC is a Mason Center that provides resources and technical assistance to educators. • In FY23, Mason has paid \$500 to ATWare Solutions. 	9/8/2021- 7/1/2024
4	Kenneth Griffin,	National Health Promotion	<ul style="list-style-type: none"> • Griffin received over \$5,000 annual income from NHPA for outside consulting. 	4/30/2020 – 7/1/2023*

	Professor, Global and Community Health, College of Public Health	Associates, Inc. (NHPA)	<ul style="list-style-type: none"> • Mason has subcontracted with NHPA on a sponsored research project. Griffin is Principal Investigator on this research project and has a Research Management Plan approved by the COI Committee. • Griffin's consulting work is unrelated to the subcontract and involves providing general advice and consultation to NHPA staff regarding evaluation design, survey development, and qualitative and quantitative data analysis. • In FY23, Mason has paid \$0 to NHPA. NHPA has paid \$4,924 to Mason. 	
5	Caroline Hoemann Professor, Bioengineering, College of Engineering and Computing	AexeRNA Therapeutics, LLC	<ul style="list-style-type: none"> • Hoemann has over 20% but less than 50% ownership of AexeRNA Therapeutics, LLC. • AexeRNA Therapeutics, LLC is in the process of licensing rights to a lipid nanoparticle platform for mRNA delivery. AexeRNA will establish contracts with Mason for sponsored research, which will each be governed by an approved Management Plan. • The George Mason University Research Foundation also owns over 3% but less than 20% of AexeRNA Therapeutics, LLC. • In FY23, Mason has paid \$0 to AexeRNA. AexeRNA has paid \$160,000 to Mason. 	9/8/2021– 8/30/2024
6	Saleet Jafri, Professor, School of Systems Biology, College of Science	Pathodynamics, LLC	<ul style="list-style-type: none"> • Jafri and his spouse own 100% of Pathodynamics, LLC. • Pathodynamics applied for NSF National I-Corps (Innovation-Corps) funding through Mason. Mason administers those funds. The company is intended to commercialize intellectual property developed at Mason. • This contract is overseen by, and invoices signed by, Iosif Vaisman, Director of the School of Systems Biology, on behalf of Mason. • In FY23, Mason has paid \$0 to Pathodynamics. 	9/8/2021– 8/30/2024
7	James Jones, Director, Criminal Investigations and Network Analysis Center, College of Engineering and Computing	American Council on Education (ACE)	<ul style="list-style-type: none"> • Jones receives over \$5,000 annual income from ACE due to his spouse's employment. • Mason is a member of the American Council on Education. • Jones's role at Mason does not interact with ACE. • In FY23, Mason has paid \$24,463 to ACE. 	2/19/2019– 2/19/2024
8	Mikell Paige, Associate Professor, Chemistry and Biochemistry, College of Science	AexeRNA Therapeutics, LLC	<ul style="list-style-type: none"> • Paige has received over \$5,000 from divestiture of stock from AexeRNA Therapeutics, LLC. • AexeRNA Therapeutics, LLC is in the process of licensing rights to a lipid nanoparticle platform for mRNA delivery. AexeRNA will establish contracts with 	9/8/2021– 8/1/2024

			<p>Mason for sponsored research, which will each be governed by an approved Management Plan.</p> <ul style="list-style-type: none"> • The George Mason University Research Foundation also owns over 3% but less than 20% of AexeRNA Therapeutics, LLC. • In FY23, Mason has paid \$0 to AexeRNA. AexeRNA has paid \$160,000 to Mason. 	
9	Jayshree Sarma, Director of Research Computing, Office of Research	Leidos Holdings, Inc.	<ul style="list-style-type: none"> • Sarma receives over \$5,000 annual income from her spouse’s employment at Leidos. • Mason has contracts with Leidos related to sponsored research. • Neither Sarma nor Sarma’s spouse oversee or interact with Mason’s contract with Leidos. • In FY23, Mason has paid \$0 to Leidos. Leidos has paid \$7,425 to Mason. 	1/19/2021–12/31/2023
10	Sita Slavov, Professor of Public Policy, Schar School of Policy and Government	International Monetary Fund (IMF)	<ul style="list-style-type: none"> • Slavov receives over \$5,000 annual income from her spouse’s employment at the IMF. • Mason has contracts with the IMF related to sponsored research. • Slavov’s research is reviewed to determine whether her interest in IMF requires a Research Management Plan. • In FY23, Mason has paid \$0 to the IMF. IMF has paid \$0 to Mason. 	2/21/2019–2/21/2024
11	Ali Weinstein, Professor, Global & Community Health, College of Public Health	Inova Health System	<ul style="list-style-type: none"> • Weinstein received over \$5,000 annual income from her outside consulting (less than one day per week) at Inova. • Mason has contracts with Inova related to sponsored research. Weinstein’s research is reviewed to determine whether her interest in Inova requires a Management Plan. • In FY23, Mason has paid \$12,163 to Inova. Inova has paid \$178,581 to Mason. 	10/29/2020–11/1/2023*

II. Waivers of personal interests due to income from Universities:

#	Employee	Other Interest	Nature of COI	Waiver Period
12	Giorgio Ascoli, University Professor, Bioengineering, College of Engineering and Computing	University of Michigan	<ul style="list-style-type: none"> • Ascoli receives over \$5,000 annual income from outside consulting (less than one day per week) at the University of Michigan for a grant on biologically realistic modeling of the hippocampal formation. • Mason has subcontracts with University of Michigan related to sponsored research. • Ascoli’s consulting is not related to Mason’s contracts, and his research is reviewed to determine whether his interest requires a Management Plan. • In FY23, Mason has paid \$48,104 to University of Michigan. The University of Michigan has paid \$45,661 to Mason. 	1/19/2021–11/1/2023*

13	Giorgio Ascoli, University Professor, Bioengineering, College of Engineering and Computing	University of Washington	<ul style="list-style-type: none"> • Ascoli receives over \$5,000 annual income from outside consulting (less than one day per week) at the University of Washington for a project on developing ‘citizen science’ infrastructures to facilitate digital reconstructions of neuronal morphology. • Mason has subcontracts with University of Washington related to sponsored research. • Ascoli’s consulting is not related to Mason’s contracts, and his research is reviewed to determine whether his interest requires a Management Plan. • In FY23, Mason has paid \$481,289 to University of Washington. The University of Washington has paid \$205,602 to Mason. 	4/9/2021– 5/31/2024
14	Lawrence Cheskin, Professor, Nutrition and Food Studies, College of Public Health	Johns Hopkins University	<ul style="list-style-type: none"> • Cheskin receives over \$5,000 annual income from Outside Employment (less than one day per week) at Johns Hopkins. • Mason has subcontracts with Johns Hopkins University related to sponsored research. • Dr. Cheskin is a part-time staff physician at a clinical and research center at Johns Hopkins University. His research is reviewed to determine whether his interest requires a Management Plan. • In FY23, Mason has paid \$28,217 to Johns Hopkins. Johns Hopkins has paid \$244,749 to Mason. 	10/7/2021– 3/12/2024
15	Rebecca Goldin, Professor, Mathematics Instruction, College of Science	University of Michigan	<ul style="list-style-type: none"> • Goldin receives over \$5,000 annual income from her spouse’s employment. Goldin is Giorgio Ascoli’s spouse. • Goldin’s research is reviewed to determine whether her interest requires a Management Plan. • In FY23, Mason has paid \$48,104 to University of Michigan. The University of Michigan has paid \$45,661 to Mason. 	1/28/2021– 11/1/2023*
16	Rebecca Goldin, Professor, Mathematics Instruction, College of Science	University of Washington	<ul style="list-style-type: none"> • Goldin receives over \$5,000 annual income from her spouse’s employment. Goldin is Giorgio Ascoli’s spouse. • Goldin’s research is reviewed to determine whether her interest requires a Management Plan. • In FY23, Mason has paid \$481,289 to University of Washington. The University of Washington has paid \$205,602 to Mason. 	1/28/2021– 11/1/2023*
17	Annie Green, Data Governance Specialist, ITS	George Washington University	<ul style="list-style-type: none"> • Green receives over \$5,000 annual income from approved Outside Employment as an adjunct faculty member at George Washington University. • Mason has subcontracts with George Washington University related to sponsored research. 	1/6/2022– 1/31/2024

			<ul style="list-style-type: none"> • Green’s role at Mason and at GW is not involved with sponsored research. • In FY23, Mason has paid \$376,612 to George Washington University. GW has paid \$83,545 to Mason. 	
18	William Hahn, Program Director, GeorgeSquared Advanced Biomedical Sciences Programs, College of Science	Georgetown University	<ul style="list-style-type: none"> • Hahn receives over \$5,000 annual income from approved Outside Employment as an adjunct faculty member at Georgetown. • Mason has subcontracts with Georgetown related to sponsored research. • Hahn’s research is reviewed to determine whether his interest requires a Management Plan. • In FY23, Mason has paid \$449,362 to Georgetown University. Georgetown has paid \$152,005 to Mason. 	10/14/2022– 8/31/2024
19	Catherine Creighton Martin, Training and Technical Assistance Center (TTAC) Coordinator, College of Education and Human Development	Marymount University	<ul style="list-style-type: none"> • Martin receives over \$5,000 annual income from approved Outside Employment as an adjunct faculty member at Marymount. • Mason has contracts with Marymount University related to sponsored research. • Martin’s research is reviewed to determine whether her interest requires a Management Plan. • In FY23, Mason has paid \$45,318 to Marymount University. Marymount has paid \$0 to Mason. 	9/8/2021– 7/30/2024
20	Marybeth (MB) Mitcham, Dir MPH Online Program Global and Community Health, College of Public Health	Cornell University	<ul style="list-style-type: none"> • Mitcham receives over \$5,000 annual income from approved outside consulting as an independent contractor facilitating non-credit-bearing certificate programs at Cornell. • Mason has agreements with Cornell related to sponsored research. • Mitcham’s research is reviewed to determine whether her interest requires a Management Plan. • In FY23, Mason has paid \$5,000 to Cornell University. Cornell has paid \$301,335 to Mason. 	2/6/2023– 11/30/2023
21	Kun Sun, Associate Professor, Information Sciences and Technology,	Virginia Tech	<ul style="list-style-type: none"> • Sun received over \$5,000 annual income from outside consulting (less than one day per week) at Virginia Tech on the investigation of using the Virtual Machine Introspection (VMI) technique to build a forensic tool, which can enhance existing defense techniques in the cloud. • Mason has subcontracts with Virginia Tech related to sponsored research. 	6/29/2022– 5/31/2024

	College of Engineering and Computing		<ul style="list-style-type: none"> • Sun’s research is reviewed to determine whether his interest requires a Management Plan. • In FY23, Mason has paid \$523,999 to Virginia Tech. Virginia Tech has paid \$328,459 to Mason. 	
22	Ozlem Uzuner, Chair and Associate Professor, Information Sciences and Technology, College of Engineering and Computing	Harvard Medical School	<ul style="list-style-type: none"> • Uzuner receives over \$5,000 annual income from outside consulting (less than one day per week) at Harvard Medical School on the management of a data dissemination portal. • Mason has subcontracts with Harvard Medical School related to sponsored research. • Uzuner’s research is reviewed to determine whether his interest requires a Management Plan. • In FY23, Mason has paid \$9,900 to Harvard Medical School. Harvard Medical School has paid \$0 to Mason. 	9/12/2022–7/31/2024

Appendix C: Non-Research COI Waivers

I. Waivers due to ownership of a contracting entity or income interest in a contracting entity related to Mason employment

#	Employee	Other Interest	Nature of COI	Waiver Period
1	Paul Allvin, Vice President and Chief Brand Officer, Office of University Branding	Brynmor Holdings, LLC	<ul style="list-style-type: none"> • Allvin has 100% ownership in Brynmor Holdings, LLC through his spouse. • Brynmor has been contracted to consult with Mason on the provision of childcare services and to potentially support Mason in the application for a federal grant. • Allvin will have no authority over this contract and will recuse himself from any decisions or discussions which directly involve or affect Brynmor. • In FY23, Mason has paid \$8,400 to Brynmor. 	2/1/2023–1/31/2024
2	Charles Davidson, Postdoctoral Research Fellow, Carter School	Forgotten Song, Inc.	<ul style="list-style-type: none"> • Davidson receives over \$5,000 from Outside Employment with ForgottenSong. • ForgottenSong is a subcontracting organization facilitating a peacemaking project with the Carter School. • Davidson will not negotiate with Mason on behalf of ForgottenSong and will have no oversight over business interactions between Mason and ForgottenSong. Davidson will follow the terms of the Management Plan determined for any future Research projects which study the results of the ForgottenSong project. • In FY23, Mason has paid \$0 to Forgotten Song. 	12/13/2021–11/30/2023
3	Andrew Gerard, Director, Men’s and Women’s Track and Field/Cross Country	Andrew Gerard Coaching & Training, LLC	<ul style="list-style-type: none"> • Gerard has 100% ownership of Andrew Gerard Coaching & Training. • The LLC will provide timing and results reporting for Cross Country and Track & Field Events. Purchasing and Athletics were directly involved in the arrangement of this contract to confirm Mason’s Purchasing guidelines were followed. • Gerard will not participate in negotiations or oversee the contract on behalf of Mason. The waiver specifies oversight and requirements in order to continue Mason’s contractual relationship with the LLC beyond the current contract. • In FY23, Mason has paid \$8,500 to Gerard Coaching & Training. 	3/21/2023–4/28/2024
4	Catrina King, Attending Veterinarian, ORIA	Caerus	<ul style="list-style-type: none"> • King receives over \$5,000 annual income from outside consulting at Caerus. • Caerus has contracted with Mason for utilization of vivarium space at the Center for Infectious Disease Research (CIDR). • King will recuse herself from any IACUC and IBC decisions for any projects that involve Caerus. In addition, another George Mason University veterinarian will provide compliance oversight and also serve as the primary point of contact for veterinary consultations with Caerus concerning its animal subject research 	5/11/2022–3/31/2024

			<p>activities at Mason. King will not serve as an advisor to Caerus concerning actual or potential future contracts with George Mason University.</p> <ul style="list-style-type: none"> • In FY23, Mason has paid \$6,034 to Caerus. Caerus has paid \$2,810 to Mason. 	
5	Melanie Knapp, Assoc Dean Library Technology, Scalia Law Library	Bloomberg Law	<ul style="list-style-type: none"> • Knapp receives over \$5,000 annual income due to her spouse's employment at Bloomberg Law. • George Mason University and BloombergLaw have contracts and business interactions related to the Antonin Scalia Law School Law Library's subscription to the BloombergLaw online legal research service. • The decision to continue to select BloombergLaw as a library resource is made by the Collection Development Committee, of which Knapp is a member. Knapp must recuse herself from participating in the decision to select Bloomberg Law and from contract negotiations. • In FY23, Mason has paid \$72,720 to Bloomberg LP, parent company of Bloomberg Law. 	12/13/2021– 12/1/2023
6	Catherine Rodman, Senior Facilitator, The Edge, Mason Recreation	Concord Associates LLC dba Community Building Institute (CBI)	<ul style="list-style-type: none"> • Rodman receives over \$5,000 annual income from approved Outside Employment as a subcontractor with CBI. • Mason periodically contracts with CBI to facilitate employee retreats and similar events. • Rodman does not have the authority to participate and will not participate in selection of or contract negotiations with CBI on behalf of Mason or on behalf of CBI. Rodman does not engage in CBI work for events where she would be involved as an employee, i.e., School of Business or UL/REC/EDGE, nor has CBI done work in those areas that would include her position. • In FY23, Mason has paid \$67,972 to CBI. 	8/19/2022– 8/1/2024
7	Catherine Winkert, Associate Director Finance and Administration, College of Visual and Performing Arts	Monumental Sports & Entertainment	<ul style="list-style-type: none"> • Winkert receives over \$5,000 annual income from her spouse's employment at Monumental Sports & Entertainment at the Capital One Arena. • Monumental Sports & Entertainment manages the Eagle Bank Arena and provides parking attendants during events hosted at the Eagle Bank Arena and for Center for the Arts (CfA). • Winkert does not have the authority to participate and will not participate in contract negotiations with Monumental on behalf of Mason. In addition, Winkert does not sign off on invoices from Monumental Sports & Entertainment. The Front of House Manager at CfA contacts Monumental to make arrangements, and the Finance and Budget Analyst at CfA reviews/approves invoices. 	1/25/2019– 1/25/2024

			<ul style="list-style-type: none"> • In FY23, Mason has paid \$818,278 to Centre Group LP/EagleBank Arena operated by Monumental Sports & Entertainment. 	
8	Yuntao Wu, Professor, Center for Infectious Disease Research, College of Science	Virongy Biosciences, Inc.	<ul style="list-style-type: none"> • Wu has over 50% but less than 100% ownership of Virongy. • Virongy is a company based in Manassas which produces research products, such as HIV indicator cells, peptides, etc. used by Dr. Wu's lab and other research labs at the University. Virongy will also sponsor research at Mason. • Wu has committed to following the procedures below to manage the conflict of interest: <ul style="list-style-type: none"> (1) I will report any changes in my SFI to George Mason University through the COI disclosure process within 30 days. (2) I will not be involved in any purchase decision that involves a Virongy product. (3) If my lab needs to purchase a unique product that is solely produced by Virongy, a sole source documentation of the product shall be submitted to the university's procurement office. Documentation of the fair market price of the product will be presented. Any requests for purchasing a unique product for my lab for any dollar amount will be first approved by Dr. Ali Andalibi. (4) If a Virongy, LLC product is not a sole-source product, at least three (3) quotations from three (3) different vendors will need to be independently acquired and compared, and a purchase decision will be made independently. Dr. Yuntao Wu will not be involved in the processes. Currently, Dr. Ali Andalibi is the purchase decision maker. Dr. Andalibi will monitor this process to ensure that he agrees with the scientific reasons this purchase is in Mason's best interest. Documentation should be attached to orders submitted to Purchasing, showing this procedure was followed. (5) Any research results and their publications, presentations, and patent application disclosures from Dr. Yuntao Wu's lab will be promptly disclosed to Mason. (6) Any employees or faculty in Dr. Wu's lab will not be involved in any research and commercialization activity in Virongy. • In addition to the above, any research project at Mason sponsored by Virongy will be reviewed and subject to a Management Plan. • In FY23, Mason has paid \$0 to Virongy. Virongy has paid \$7,229 to Mason. 	8/19/2022– 07/30/2023*

II. Waivers due to Athletics facility contracts (e.g. athletic camps and clinics)

#	Employee	Other Interest	Nature of COI	Waiver Period
9	Frank Beasley, Head Coach, Wrestling	Beasley Training Systems	<ul style="list-style-type: none"> • Beasley has 100% ownership of Beasley Training Systems. • Beasley Training Systems will utilize University facilities pursuant to the standard facilities use contract and operate a summer wrestling camp. • In FY23, Mason has paid \$0 to Beasley Training Systems. Beasley Training Systems has paid \$940 to Mason. 	9/27/2021– 6/30/2024
10	Vanessa Blair-Lewis, Head Coach Womens Basketball	Remedy Consulting, LLC	<ul style="list-style-type: none"> • Blair-Lewis has 100% ownership of Remedy Consulting. • Remedy Consulting will utilize University facilities pursuant to the standard Department of Intercollegiate Athletics sports camp facilities use contract and operate sports camps. • In FY23, Mason has paid \$0 to Remedy Consulting. Remedy Consulting has paid \$0 to Mason. 	6/13/2022– 7/30/2024
11	Shawn Camp, Head Coach Baseball	Shawn Camp Baseball Academy, LLC	<ul style="list-style-type: none"> • Camp has 100% Ownership of Shawn Camp Baseball Academy. • Shawn Camp Baseball Academy will utilize University facilities pursuant to the standard Department of Intercollegiate Athletics sports camp facilities use contract and operate clinics and a summer baseball camp. • In FY23, Mason has paid \$0 to Shawn Camp Baseball Academy. Shawn Camp Baseball Academy has paid \$9,225 to Mason. 	9/27/2022– 8/31/2024
12	Stephen Curtis, Head Coach Womens Tennis	A Plus Sports, Burke Racquet & Swim Club	<ul style="list-style-type: none"> • Curtis has over 20% but less than 50% ownership of and receives over \$5,000 annual income from A Plus Sports (BRSC). • Mason will utilize A Plus Sports (BRSC) facilities for men's and women's tennis practice as needed depending on schedules and the weather, as Mason does not have indoor tennis courts. • A Plus Sports (BRSC) will utilize University facilities pursuant to the standard Mason Recreation facilities use contract and operate a summer sports camp. • The waiver specifies additional oversight and requirements in order to continue Mason’s contractual relationship with BRSC. • In FY23, Mason has paid \$0 to A Plus Sports (BRSC). A Plus Sports (BRSC) has paid \$15,780 to Mason. 	3/16/2022– 3/1/2024
13	James Davis, Head Coach Mens Tennis	A Plus Sports, Burke Racquet & Swim Club	<ul style="list-style-type: none"> • Davis has over 20% but less than 50% ownership of and receives over \$5,000 annual income from A Plus Sports (BRSC). 	5/11/2022– 5/18/2024

			<ul style="list-style-type: none"> • Mason will utilize A Plus Sports (BRSC) facilities for men's and women's tennis practice as needed depending on schedules and the weather, as Mason does not have indoor tennis courts. • A Plus Sports (BRSC) will utilize University facilities pursuant to the standard Mason Recreation facilities use contract and operate a summer sports camp. • The waiver specifies additional oversight and requirements in order to continue Mason's contractual relationship with BRSC. • In FY23, Mason has paid \$0 to A Plus Sports (BRSC). A Plus Sports (BRSC) has paid \$15,780 to Mason. 	
14	Jennifer Everett, Sr Associate AD for Finance and Administration, CFO, Athletics	HUSEL, Inc.	<ul style="list-style-type: none"> • Everett has 98% ownership of HUSEL. • HUSEL rents George Mason University turf fields and indoor space to coach youth female field hockey athletes in the community. • In FY23, Mason has paid \$0 to HUSEL. HUSEL has paid \$14,060 to Mason. 	3/16/2022–1/31/2024
15	Benjamin Herboth, Assistant Coach Men's and Women's Diving	Dive Mason	<ul style="list-style-type: none"> • Herboth has 100% ownership of Dive Mason. • Dive Mason will utilize University facilities pursuant to the standard Mason facilities use contract to operate a diving club. • In FY23, Mason has paid \$0 to Dive Mason. Dive Mason has paid \$7,335 to Mason. 	11/22/2022–11/30/2023
16	Nicholas Mata, Assistant Coach Womens Volleyball	Gold Star Volleyball, LLC	<ul style="list-style-type: none"> • Mata has over \$5,000 annual income from Gold Star Volleyball. • Gold Star Volleyball will utilize University facilities pursuant to the standard Department of Intercollegiate Athletics sports camp facilities use contract and operate clinics and a summer volleyball camp. • In FY23, Mason has paid \$0 to Gold Star Volleyball. Gold Star Volleyball has paid \$18,334 to Mason. 	6/13/2022–5/18/2024
17	Kara Mupo, Head Coach Womens Lacrosse	Surge Elite Lacrosse Academy	<ul style="list-style-type: none"> • Mupo has 100% ownership of Surge Elite Lacrosse Academy. • Surge Elite Lacrosse Academy will utilize University facilities pursuant to the standard Department of Intercollegiate Athletics sports camp facilities use contract and operate a summer sports camp as well as clinics. • In FY23, Mason has paid \$0 to Surge Elite Lacrosse Academy. Surge Elite Lacrosse Academy has paid \$1,800 to Mason. 	8/20/2021–5/18/2024
18	Manya Puppione, Head Coach Womens Soccer	Puppione Soccer, Inc.	<ul style="list-style-type: none"> • Puppione has 100% ownership and over \$5,000 annual income from Puppione Soccer. 	2/9/2022–4/28/2024

			<ul style="list-style-type: none"> • Puppione Soccer will utilize University facilities pursuant to the standard Department of Intercollegiate Athletics sports camp facilities use contract and operate soccer camps/clinics. • In FY23, Mason has paid \$0 to Puppione Soccer. Puppione Soccer has paid \$948 to Mason. 	
19	Justin Ross-Walker, Head Coach Softball	Justin Walker Softball Camp	<ul style="list-style-type: none"> • Walker has 100% ownership and over \$5,000 annual income from Justin Walker Softball Camp. • Justin Walker Softball Camp will utilize University facilities pursuant to the standard Department of Intercollegiate Athletics sports camp facilities use contract and operate a summer sports camp. • In FY23, Mason has paid \$0 to Justin Walker Softball Camp. Justin Walker Softball Camp has paid \$4,344 to Mason. 	8/20/2021–5/18/2024

III. Waivers due to income from contracting entities unrelated to Mason employment

#	Employee	Other Interest	Nature of COI	Waiver Period
20	Susan Allen, Professor, Carter School	Apple, Inc.	<ul style="list-style-type: none"> • Allen has over \$5,000 annual income from stock ownership in Apple. • Apple, Inc. is a vendor of goods to Mason, but Allen has no involvement in Mason’s contractual relationship with Apple. (Note: If Allen were to request to purchase an Apple product at a uniform price available to the general public through Mason’s ordinary purchasing process, this would be permissible under the terms of a COI waiver.) • In FY23, Mason has paid \$489,656 to Apple. 	6/3/2021–5/18/2024
21	Brian Benison, Director of Graduate Admissions and International Initiatives, Scalia Law School	Ernst & Young	<ul style="list-style-type: none"> • Benison has over \$5,000 annual income from spouse’s employment at Ernst & Young. • Ernst & Young has a contract with Mason for academic consulting services, but Benison has no involvement in Mason’s contractual relationship with Ernst & Young. • In FY23, Mason has paid \$322,075 to Ernst & Young. 	8/20/2021–7/30/2024
22	Brian Davern, Financial	SP Plus Corporation (SP+)	<ul style="list-style-type: none"> • Davern over \$5,000 annual income from approved Outside Employment at SP+ as a parking enforcement technician. 	3/16/2022–4/30/2024

	Specialist, Student Accounts		<ul style="list-style-type: none"> • SP+ contracts with Mason to oversee parking and transportation enforcement on campus, but Davern has no involvement in Mason’s contractual relationship with SP+. • In FY23, Mason has paid \$2,466,227 to SP+. 	
23	Nancy Dunham, Grants Project Coordinator, University Accreditation	University of Pennsylvania The Wharton School	<ul style="list-style-type: none"> • Dunham has over \$5,000 annual income from approved Outside Employment at the University of Pennsylvania as an auxiliary application reader for the Wharton MBA Admissions office. • Mason and the University of Pennsylvania have contracts and business interactions related to library database access. Dunham has no involvement in Mason’s contractual relationship with the University of Pennsylvania. • In FY23, Mason has paid \$246,763 to the University of Pennsylvania. 	10/11/2021–9/18/2024
24	Jolie Gaspard, Transformation Manager, Office of the Provost	Gartner, Inc.	<ul style="list-style-type: none"> • Gaspard has over \$5,000 annual income from spouse’s employment at Gartner. • Mason has a contract with Gartner for access to their Higher Education Reference Library (Core Research), but Gaspard has no involvement in Mason’s contractual relationship with Gartner. • In FY23, Mason has paid \$380,379 to Gartner. 	11/30/2022—11/30/2023
25	Adrienne Jones, Performance Management and Engagement Specialist, HR	Amazon Web Services	<ul style="list-style-type: none"> • Jones has over \$5,000 annual income from spouse’s employment at Amazon Web Services. • George Mason University has business interactions with Amazon Web Services related to computing, but Jones has no involvement in Mason’s contractual relationship with AWS. • In FY23, Mason has paid \$2,856 to AWS. 	12/13/2021–1/31/2024
26	Matthew Karush, Professor of History, College of Humanities and Social Sciences	University of Oxford, Oxford University Press	<ul style="list-style-type: none"> • Karush has over \$5,000 annual income from Outside Employment as an Editor for OUP for under 1 day per week. • George Mason University and OUP have contracts and business interactions related to the purchase of books and textbooks, but Karush has no involvement in Mason’s contractual relationship with OUP. (Note: the Virginia COI Act in §2.2-3106(C)(5) exempts personal interests in contracts for textbooks or other educational materials for students, so if Karush were to assign OUP texts to his students that would not require waiver.) • In FY23, Mason has paid \$56,441 to Oxford University. 	1/6/2022–10/31/2024
27	Joe McCaffrey, Adjunct Faculty, School of Business	Baker Tilly US, LLP	<ul style="list-style-type: none"> • McCaffrey has over \$5,000 annual income from Outside Employment at Baker Tilly, where he is a Partner. 	11/28/2022–11/1/2023*

			<ul style="list-style-type: none"> • George Mason University has contracts with Baker Tilly for auditing and consulting services, but McCaffrey has no involvement in Mason’s contractual relationship with Baker Tilly. • In FY23, Mason has paid \$255,442 to Baker Tilly. 	
28	Lisa Sechrest-Ehrhardt, Adjunct Faculty, Honors College	Sechrest Diversity	<ul style="list-style-type: none"> • Sechrest-Erhardt has 100% ownership of Sechrest Diversity. • Sechrest Diversity consults with Virginia SBDC to provide Diversity, Equity, and Inclusion (DEI) training to branches across Virginia. • This consultation is not related to Sechrest-Ehrhardt's responsibilities as an adjunct faculty member at Mason. • In FY23, Mason has paid \$6,325 to Sechrest Diversity. 	10/21/2021–9/30/2024

* These waivers are in active review, have been approved by the COI Committee, and/or are awaiting signature.

** Mason’s Outside Employment Policy applies to Administrative/Professional Faculty and Classified Staff. Those employees require approval before engaging in Outside Employment (as defined by that Policy). Mason’s Faculty Handbook and Conflict of Commitment Policy apply to Instructional/Research Faculty and require approval of certain Outside Professional Activities, including when they exceed one day per work week. Wage employees and Adjunct Faculty do not require approval for Outside Employment or Outside Professional Activities.

Appendix D: Immediate Family Waivers

1. Jessica (Jessi) Adams, Assistant Director, Knowledge Management, Fiscal Services; and Robert (Wayne) Adams, Director Academic Admin, PH Dean's Office Admin, PH
2. Pouyan Ahmadi, Assistant Professor, CEC Information Tech Program, CEC; and Azadeh Eskandari, Adjunct Faculty, School of Business
3. Friba H Alizai, Strat Bdg and Plng Ops Mgr Co, Budget and Planning; and Omar Alizai, Classroom Support Tech, FFX Classroom Support, ITS
4. Eric G. Anderson, Associate Professor of English, CHSS; and E. Shelley Reid, Executive Dir of Engaged Teaching, Stearns Center
5. Ann Ardis, Dean, CHSS; and Phillip Mink, Term Assistant Professor, Director of Pre-Law Advising/Instructor, Business, Schar School
6. Deliah Arrington, PSC Site Coordinator, SciTech Campus Executive Office; and Amy Fowler, Associate Professor, Environ Sci & Policy Instruction, COS
7. Giorgio Ascoli, Professor, Bioengineering, CEC; and Rebecca Goldin, Professor, Mathematical Sciences, COS
8. Benjamin Ashworth, Sculpture Supervisor, School of Art & Design, CVPA; and Jennifer Ashworth, Gmu Worker, Fairfax Galleries, CVPA
9. Eric Auld, Instructor, English Instruction, CHSS; and Anastasia (Stasia) Kemp, Administrative Assistant, CEC Undergrad Student Services, CEC
10. Ivan Avramovic, Assistant Professor, Computer Science, CEC; and Sanja Avramovic, Associate Professor, Health Administration and Policy, PH
11. Pamela Baker, Director, Special Education and disAbility Research/Associate Professor, CEHD; and Robert Baker, Professor, Sport Recreation and Tourism Mgmt, CEHD
12. Sophia Balakian, Assistant Professor, School of Integrative Studies Instr, CHSS; and Michael Don, Assistant Professor, English Instruction, CHSS
13. Foteini Baldimtsi, Associate Professor, Computer Science, CEC; and Socrates Dimitriadis, Term Assistant Professor, Computer Science, CEC
14. Kenneth Ball, Dean, College of Engineering and Computing; and Sandra Ball, GMU Worker, Safety Emerg Ent Risk Mgmt Admin
15. Laura Balmaceda, Research Assistant Professor, Physics and Astronomy, COS; and Fernando Mut, GMU Worker, Bioengineering, CEC
16. Stephanie Barnett, Academic Advisor, Undergraduate Advising; and Thomas (Ryan) Barnett, Assoc Dir Military Services, Office of Military Services
17. Stephanie Benassi, Assistant Professor, School of Art & Design, CVPA; and Jeffrey M. Kenney, Gallery Assistant, Arlington Galleries, CVPA
18. Lee Black, Assistant Professor, Health Administration & Policy, PH; and Heather Vough, Associate Professor, Management Instruction, School of Business
19. RaShall Brackney, Dstg Visit Prof of Practice, African and African AM Studies Ins, CHSS; and Stefan Wheelock, Associate Professor, English Instruction, CHSS
20. Kurt Brandhorst, Assistant Professor, Philosophy, CHSS; and Rachel Jones, Associate Professor, Philosophy, CHSS
21. Joan Bristol, Associate Professor, History and Art History, CHSS ; and Randolph Scully, Associate Professor, History/M.A. History Program Director, History and Art History, CHSS

22. Amanda Bryan, Assistant Professor, English Instruction, CHSS; and Timothee W Bryan, Assistant Professor, Mathematics Instruction, COS
23. Zofia Burr, Dean, Honors College; and Alok Yadav, Associate Professor of English, CHSS
24. Chris Burrell, Production Manager, Hylton Performing Arts Center, CVPA; and Diane Burrell, Operations Manager, Hylton Performing Arts Center, CVPA
25. Xiaomei Cai, Associate Professor, Department of Communication, CHSS; and Xiaoquan Zhao, Professor, Department of Communication, CHSS
26. Amanda Caswell, Professor, School of Kinesiology, CEHD; and Shane Caswell, Professor, School of Kinesiology, CEHD
27. Tracy L Cator-Lee, Assessment and Data Coordinator, Office of Accreditation and External Reporting, CEHD; and Alexander Lee, GMU Worker, Freedom Ctr Member Svcs
28. Ebrima N Ceesay, Adjunct Faculty, CEC; and Yolanda (Elizabeth) Delgado Garcia, Strat Modeling Data Analyst, CEC Dean's Office Admin
29. Ylenia Chiari, Assistant Professor, Biology, COS; and Scott Ryan Glaberman, Assistant Professor, Environmental Science and Policy, COS
30. Elena Chiru, Director Career Advising, Career Services; and John McShea, IT Project Manager, Project Management Office, ITS
31. Myunghwa Cho, Adjunct Faculty, CHSS; and Byunghwan (Ben) Son, Associate Professor, Global Affairs Program, CHSS
32. John Cicchetti, Associate Director, Support and Community Outreach, University Life ; and Kaitlin Cicchetti, Director of Advancement, University Life
33. Sara Clifton, Project Implementation Specialist, Student Success Coaching, University Life; and Samantha Greenberg, GMU Worker, Potomac Env Research and Edu Ctr
34. Caroline (Carrie) Cox, Technical Director, Arts Support Umbrella, CVPA ; and Sean Cox, Assistant Director of Event Services, Student Centers
35. Arie Croitoru, Professor, Computational and Data Sciences, COS; and Natalie Lapidot-Croitoru, Finance and HR Analyst, Environ Sci & Policy Dept, COS
36. Mary Curby, GMU Worker, Center for Psychological Services, Psychology, CHSS; and Timothy Curby, Professor, Psychology, CHSS
37. Christopher D'Amboise, Heritage Professor in Dance, School of Dance, CVPA; and Kelly D'Amboise, Adjunct Faculty, Dance Instruction, CVPA
38. Rick Davis, Dean, CVPA; and Julie Thompson, Executive Director, Center for the Arts
39. Rachel M Debuque, Associate Professor, School of Art & Design, CVPA; and James Justin Plakas, Assistant Professor, Film & Video Studies, CVPA
40. Mark DelVecchio, Sr Research Portfolio Mngr, Rapid Prototyping Research Ctr (RPRC), CEC; and Mollie DelVecchio, Registered Nurse, Student Health Center, University Life
41. Desiree Desierto, Assistant Professor, Economics, CHSS; and Mark Koyama, Associate Professor, Economics, CHSS
42. Nikki Dinh, Senior Database Analyst, Database Middleware and ERP Support, ITS ; and Robert Peraino, Advisory Systems Engineer, Enterprise Infrastructure Ops, ITS
43. Carlotta Domeniconi, Professor, Computer Science, CEC; and Sean Luke, Professor, Computer Science, CEC
44. Kevin Dunayer, Associate Professor, School of Theater, CVPA; and Laurel Dunayer, Costume Shop Supervisor, CFA

45. Elisabeth Epstein, Assistant Professor, Biology, COS; and Neil Epstein, Associate Professor, Mathematical Sciences, COS
46. Cory Faber, Telecom Technician, Telecom Admin, ITS; Elizabeth (Lee) Faber, IT Logistics Spc Mgmt Coord, ITS Finance; Jody Faber, Gmu Worker, FFX Desktop Support, ITS; and Robert (Rob) B Faber, Fiscal Svcs Program Director, Finance
47. Anne Firth, Academic Scheduling Manager, Office of the Registrar; and Taryn Firth, GMU Worker, Office of the Registrar
48. Joyce Bland-French, Director, Office of Risk Management; and Roderick French, Adjunct Professor, School of Business
49. Alexandria Frisch Kinory, Assistant Professor, Religious Studies Instruction, CHSS; and Ethan Kinory, Assistant Professor, Accounting Instruction, School of Business
50. Boris Gafurov, Assistant Professor, Special Ed & disAbility Research, CEHD; and Anya Evmenova, Professor, Special Ed & disAbility Research, CEHD
51. Lei Gao, Associate Professor, Finance Instruction, School of Business; and Lily Wang, Professor, Statistics, CEC
52. Christian Garcia, Program Support Specialist, Safety Emerg Ent Risk Mgmt Admin; and Lei An Ilan-Garcia, Industrial Hygiene Specialist, Environmnt Health and Safety Admin
53. Daniel Garrison, Assistant Professor, IST Department, CEC ;and Victoria Garrison, Associate Professor, Student Health Center
54. Colby Grant, Assoc Dir of Operations, SciTech Campus Executive Office; and Megan Grant, Fiscal and Administrative Specialist, Biomedical Research Lab, COS
55. Matthew Green, Assistant Director, Undergrad Student Svc, Schar School of Policy and Government; and Alice Magelssen-Green, Assoc Dir Watershed Lit, English Instruction, CHSS
56. Jesse Guessford, Director Curriculum Initiatives, Office of the Provost; and Jill Nelson, Associate Professor, Electrical and Computer Engineering, CEC
57. John Hanks, Advisory Network Engineer, Enterprise Infrastructure Ops, ITS; and Tammy Hanks, Admin and Office Spec 3, Facilities Mgmt Admin
58. Nabiha Hasan, Senior IT Sec Ops Engineer, ITS Security; and Ubaidul Khan, Computer Systems Engineer, Cloud Compute & Storage Operations, ITS
59. Donald (Paul) Haspel, Associate Professor of English, CHSS; and Linda H. Mason, Professor and Director Helen A. Kellar Inst for Human disAbilities, CEHD
60. Greta Ann Herin, Associate Professor, Interdisciplinary Prog in NeuroScience, COS; and Diek Wheeler, Research Associate Professor, Bioengineering Department, CEC
61. Brittany Hupp, Assistant Professor, Atmosph Oceanic and Earth Sci Dept, COS; and Daniel Segessenman, Postdoctoral Research Fellow, Atmosph Oceanic and Earth Sci Dept, COS
62. Douglas Irvin-Erickson, Assistant Professor, Carter School ; and Yasemin Irvin-Erickson, Assistant Professor, Criminology, Law & Society Department, CHSS
63. Farhana Islam, Acad Unit Admin Spec/Adm Asst, Sociology and Anthropology Instruction, CHSS; and Khondkar Islam, Professor, Information Sciences and Technology, CEC
64. Kristen V Jennette, Computer Systems Engineer, ITS-AE Support, ITS; and Shawn Jennette, Computer Systems Engineer; Cloud Compute & Storage Engineering, ITS
65. Weiwen Jiang, Assistant Professor, ECE Department, CEC; and Lei Yang, Assistant Professor, IST Department, CEC

66. Laurie A Juliana, Faculty RPT Ops Mgr, CEHD; and Hugh McIntosh, Adjunct Faculty, CEHD
67. Cing-Dao (Steve) Kan, Professor, Center for Collision Safety and Analysis, COS; and Chi Yang, Professor, Department of Physics and Astronomy, COS
68. Pilgyu Kang, Assistant Professor, Mechanical Engineering Dept, CEC; and Mirae Kim, Associate Professor, Schar School
69. Erdogan Kaya, Assistant Professor, Elem Lit and Sec Ed, CEHD; and Eter Mjavanadze, Graduate Research Assistant, CEHD
70. John Keady, Adjunct Faculty, Physics & Astronomy Instruction; and Kathleen (Kelly) Keady, Assist Dir Transfer Admissions, Admissions Operations
71. Sarah G Keith, Professor, English Instruction, CHSS; and Juana Medina Rosas, Assistant Professor, School of Art & Design, CVPA
72. Setarra Kennedy, Assistant Director, Arts Management, CVPA; and Charles Nicholson, Social Media Director, Office of University Branding
73. David Kepplinger, Assistant Professor, Statistics, CEC; and Alexandra Patzak, Assistant Professor, Educational Psychology, CEHD
74. Maryam (Mary) Kheirollah, GMU Worker, Academic Administration; and Amir Tofighi, Sr Systems Analyst Devel Lead, Enterprise App Support & Develop, ITS
75. Dae Yong Kim, Term Instructor, Modern and Classical Lang Instr, CHSS; and Woomee Kim, Postdoctoral Research Fellow, CEE Teacher Enrichment Program, CEHD
76. Karen King, Assistant Professor, Business Foundations, School of Business; and Michael (Mike) Allen King, Assistant Professor, ISOM, School of Business
77. Brenda Kling, Admin Assoc, Marketing Instruction, School of Business; and Jeffrey L Kling, Assist Dir CaLT Class Support, Classroom Technologies, ITS
78. Christopher Koper, Professor, Criminology, Law and Society, CHSS; and Cynthia Lum, Professor a, Criminology, Law and Society, CHSS
79. Evgenios Kornaropoulos, Assistant Professor, Computer Science Department, CEC; and Mary Righi, Clinical Operations Coord, School of Nursing
80. Davis Kuykendall, Assistant Professor, Philosophy, CHSS; and Lauren Kuykendall, Associate Professor, Psychology, CHSS
81. Alison Landsberg, Professor, History and Art History/Cultural Studies, CHSS; and Matthew Karush, Professor and Department Chair, History and Art History, CHSS
82. Clare Laskofski, Executive Director of Accounting Operations and Student Accounts, Finance; and Mike Laskofski, Associate Vice President of Research Services, Office of Sponsored Programs
83. Yi-Ching Lee, Associate Professor, Department of Psychology, CHSS; and Benoit Van Aken, Associate Professor, Department of Chemistry and Biochemistry, COS
84. Stephanie Lessard-Pilon, Associate Professor, Smithsonian-Mason School of Conservation ; and James (Jim) McNeil, Associate Professor, Smithsonian-Mason School of Conservation
85. Fei Li, Associate Professor, Computer Science, CEC; and Qi Wei, Associate Professor, Bioengineering, CEC
86. Huwy-min Liu, Assistant Professor, Sociology and Anthropology, CHSS; and Matthew E West, Assistant Professor, Global Affairs Program, CHSS
87. Mingrui Liu, Assistant Professor, Computer Science Dept, CEC; and Jingya Yan, Instructor, Mathematical Sciences Department, COS

88. April Zoraida Lopez, Admin Asst to Dir, Special Ed & disAbility Research, CEHD; and Eduardo Lopez Atencio, Assistant Professor, Comp & Data Sciences Instr, COS
89. Anton Lukyanenko, Assistant Professor, Mathematical Sciences, COS; and Cynthia Lukyanenko, Assistant Professor, English Instruction, CHSS
90. Lannan (Lisa) Luo, Associate Professor, Computer Science Department, CEC; and Qiang Zeng, Associate Professor, Computer Science Department, CEC
91. Terrence Lyons, Professor, Carter School; and Agnieszka Paczynska, Professor, Carter School
92. Tamara Maddox, Term Associate Professor, Computer Science, CEC; and John Otten, Senior Instructor, Computer Science, CEC
93. Gordon Maginness, HVAC Tech I, Zone 3 Maintenance, Facilities; and Karen Maginness, Lead Housekeeper, Facilities Custodial Services
94. Michael Malouf, Professor, English, CHSS; and Kristina Olson, Associate Professor of Italian, Modern and Classical Languages, CHSS
95. Brian Mark, Professor, Electrical and Computer Engineering, CEC; and Karen Sauer, Professor, Physics and Astronomy, COS
96. Wassim Masri, Professor, Computer Science Dept, CEC; and Rima Nakkash, Professor, Global & Community Health, PH
97. Robert Matz, Dean, Mason Korea; and Teresa Michals, Professor, English, CHSS
98. Joshua Maze, Grants and Programs Coord, English Instruction, CHSS; and Kimberly Maze, Reporting and Systems Admin, Sponsored Programs Admin
99. Daniel Meehan, Adjunct Faculty, CEHD; and Kelly Reid Meehan, Assoc Dir Comm Mktg Prgm Dev, Student Centers Admin
100. Janette Muir, Vice Provost Academic Affairs; and Star Muir, Associate Professor, Communication Department, CHSS
101. Kelly Nam, Assistant Professor, School of Music, CVPA; and Sang Nam, Associate Professor, Computer Game Design, CVPA
102. Vivek Narayanan, Assistant Professor, English Instruction, CHSS; and Rashmi Sadana, Associate Professor, Sociology and Anthropology Instruction, CHSS
103. Subodh Nayar, GMU Worker, SBDC; and Tracy Nayar, Assist Dir VA SBDC Operations, SBDC
104. Donielle Nolan, Sustainability Program Manager, University Sustainability; and Matthew Nolan, Assistant Professor of Game Sound, CVPA
105. Olivia O'Neill, Associate Professor, Management, School of Business; and Tiago Requeijo, Assistant Professor, Finance, School of Business
106. Cindy Parker, Associate Professor, Management Instruction, School of Business; and Jack Parker, Student Support Specialist, Mason Autism Supp Initiative
107. Audra Parker, Professor, Division of Elem, Lit, & Sec Ed, CEHD; and Kristien Zenkov, Professor, Division of Elem, Lit, & Sec Ed, CEHD
108. Allison Ward Parsons, Associate Professor, Elem, Lit, & Sec Ed, School of Education, CEHD; and Seth Parsons, Professor, Elem, Lit, & Sec Ed, School of Education, CEHD
109. Erion Plaku, Associate Professor, Computer Science, CEC; and Amarda Shehu, Associate VP of Research for IDIA and Assoc Dean for AI Innovation for CEC
110. Alison Price, Senior Associate Dean, Antonin Scalia Law School; and Timothy Price, Adjunct Faculty, Antonin Scalia Law School

111. Anthony Pulis, GMU Worker, Facilities Management Warehouse; and Steven Andrew Pulis, Facilities Purchasing Manager, Facilities Mgmt Admin
112. Hemant Purohit, Associate Professor, IST Department, CEC; and Apoorva Vyas, Administrative Coordinator, Main UL Central, University Life
113. Ken Randall, Dean, Antonin Scalia Law School; and Susan Randall, Event Planner, Arlington Operations
114. David K Rehr, Research Professor, Public Policy and Public Admin, Schar School; and Emily Rehr, Student Wage Employee, Orientation, University Life
115. Ronald Resmini, Adjunct Faculty, Geography Geoinformation Sci Dept, COS; and Marilyn Ryan-Resmini, HR and Fiscal Specialist, Geography Geoinformation Sci Dept, COS
116. Claudia Rich, Administrative Assistant, Environmental Science and Policy, COS; and Colleen Rich, Editorial Dir, Marketing, University Branding
117. Ellen Rodgers, Associate Dean, Student and Academic Affairs, CEHD; and R.V. Pierre Rodgers, Associate Professor GSE, Sport Recreation and Tourism Mgmt, CEHD
118. James Russell, Director of Purchasing, Purchasing Office; and Rhett Russell, Application Analyst, Finance Technology Services
119. Amanda Sanchez, Assistant Professor, Psychology, CHSS; and Michael Ward, Assistant Director, Student Success Coaching, University Life
120. Evelyn Sander, Professor, Mathematical Sciences, COS; and Thomas Wanner, Professor, Mathematical Sciences, COS
121. Amber Saxton, Sustainability Program Manager, Campus Efficiency, University Sustainability; and Regis Saxton, Manager Pre-Award Administration, Office of Sponsored Programs
122. Laura Scott, Professor, English Department, CHSS; and Dean F. Taciuch, Professor, English Department, CHSS
123. John Sherman, Manager Sci Tech Library, Learning Research and Engagement; and Sarah Tomsyck, Events & Comm Coord, Ofc Community College Partnerships
124. Blake R Silver, Associate Professor, Honors College; and Nader Silver, Adjunct Faculty, Honors College
125. Daniel (Dann) Sklarew, Professor, Environmental Science and Policy, COS; and Jennifer Sklarew, Assistant Professor, Environmental Science and Policy, COS
126. Allegra Solitario, Administrative Assistant (Student Wage), SBDC; and Tom Solitario, Senior Business Counselor (GMU Worker), SBDC
127. Kelly Hayward Stone, Facilities Billing Coordinator, Facilities; and Rebecca Hayward Stone, Project Coordinator, Learning Space Design, ITS
128. Heather Streckfus-Green, Assistant Professor, School of Art & Design, CVPA; and Peter Streckfus-Green, Associate Professor, English, CHSS
129. Erienne Sutherell, Adjunct Faculty, Scalia Law School; and Shaun Sutherell, Assoc Dean Strategic Initiativ, Law Strategic Initiatives, Scalia Law School
130. Alex Tabarrok, Professor, Economics, CHSS; and Monique van Hoek, Professor, School of Systems Biology, COS
131. Christopher Troiano, Historical Ensembles Prog Mgr, Pep Band, CVPA; and JennaMarie Warfield, Adjunct Faculty, Pep Band, CVPA

132. Petrus J. van Oevelen, Professor of Practice, Atmosph Oceanic and Earth Sci Dept, COS; and Fernande P Vervoort, Research Manager, Atmosph Oceanic and Earth Sci Dept, COS
133. Ken Walsh, Interim Provost and Executive Vice President; and Tobi Walsh, Assistant Vice President, Capital Strategy and Planning, Office of the Senior Vice President
134. Fei Wang, Assistant Professor, Chemistry and Biochemistry Dept, COS; and Peiyu Yang, Assistant Professor, Modern and Classical Lang Instr, CHSS



Information Technology Services

George Mason University
Information Security Program and Compliance Status Report

Annual Update for the Board of Visitors
Audit, Risk, and Compliance Committee

November 2023

Prepared by

Curtis McNay, Director – IT Security Office

Charlie Spann, Interim Vice President and Chief Information
Officer

Noor Aarohi, Director - IT Risk and Compliance

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Executive Summary

The following report has been authored for the Board of Visitors – Audit, Risk, and Compliance Committee, to provide the annual briefing on the overall status of the Information Security Program at the George Mason University. This report fulfills the Gramm-Leach-Bliley Act requirement for the university to report to its governing body the overall status of its information security program and any material matters related to the program. (16 CFR 314.4(i)).

Information Security Program Overview

George Mason University (GMU) has incorporated and accepted security control baselines in alignment with the requirements defined within the Level 3 Autonomy Legislation. These control baselines are derived from NIST 800-53 moderate baseline, scoped and tailored to the context of institutions of higher education. The control baselines are tiered to High-Risk, Moderate-Risk, and Low-Risk classification, to which applicable controls are applied towards minimizing the risks. The Information Security team is led by Director, IT Security Office Curtis McNay, who reports to Charlie Spann, the Interim Vice President and Chief Information Officer.

Context

The U.S Department of Education Electronic Announcement dated Feb 9, 2023, prescribed requirements for institutions of higher education to comply with Federal Trade Commission (FTC) issued [final regulations](#) (Final Rule) to amend the Standards for Safeguarding Customer Information (Safeguards Rule), an important component of the Gramm-Leach-Bliley Act's (GLBA) requirements for protecting the privacy and personal information of consumers. The effective date for most of the changes to the Safeguards Rule was June 9, 2023. Among the requirements in Final Rule are:

That the institution designates a qualified individual responsible for overseeing and implementing the institution's or servicer's information security program and enforcing the information security program (16 C.F.R. 314.4(a)).

- For an institution or servicer maintaining student information on 5,000 or more consumers, addresses the requirement for its Qualified Individual to report regularly and at least annually to those with control over the institution on the institution's information security program (16 C.F.R. 314.4(i)).
- The purpose of this report is to apprise the Board of Visitors of Mason's information security program and in doing so also comply with the annual reporting requirement under GLBA.

The full text of the announcement can be accessed at: [Updates to the Gramm-Leach-Bliley Act Cybersecurity Requirements | Knowledge Center](#)

Enforcement Process When Non-compliance with GLBA has been Identified

The changes to the Safeguards Rule are effective June 9, 2023. Any GLBA findings identified through a compliance audit, or any other means, after the effective date will be resolved by the Department during the evaluation of the institution's or servicer's information security safeguards required under GLBA as part of the Department's final determination of an institution's administrative capability. GLBA related findings will have the same effect on an institution's participation in the Title IV programs as any other determination of non-compliance.

In cases where no data breaches have occurred and the institution's or servicer's security systems have not been compromised, if the Department determines that an institution or servicer is not in compliance with all of the Safeguards Rule requirements, the institution or servicer will need to develop and/or revise its information security program and provide the Department with a Corrective Action Plan (CAP) with timeframes for coming into compliance with the Safeguards Rule. Repeated non-compliance by an institution or a servicer may result in an administrative action taken by the Department, which could impact the institution's or servicer's participation in the Title IV programs.

The following sections describe the security program and associated compliance activities towards fulfillment of the requirement under the Gramm-Leach-Bliley Act (GLBA) as applicable to institutions of higher education. The report has been prepared by Mason's IT Services team with inputs from Office of the University Audit, and is presented by the designated Qualified Individual Curtis McNay, Director – IT Security Office. Certain matters were communicated to members of the Board's Audit, Risk, and Compliance Committee in a separate document under Section 2.2.3705.2 of the Code of Virginia due to its description of certain security mechanisms.

High-level Requirements

§ 314.3 Standards for safeguarding customer information.

(a) **Information security program.** You shall develop, implement, and maintain a comprehensive information security program that is written in one or more readily accessible parts and contains administrative, technical, and physical safeguards that are appropriate to your size and complexity, the nature and scope of your activities, and the sensitivity of any customer information at issue. The information security program shall include the elements set forth in [§ 314.4](#) and shall be reasonably designed to achieve the objectives of this part, as set forth in [paragraph \(b\)](#) of this section.

(b) **Objectives.** The objectives of section 501(b) of the Act, and of this part, are to:

- (1) Insure the security and confidentiality of customer information;
- (2) Protect against any anticipated threats or hazards to the security or integrity of such information;
- and
- (3) Protect against unauthorized access to or use of such information that could result in substantial harm or inconvenience to any customer.

[[67 FR 36493](#), May 23, 2002, as amended at [86 FR 70307](#), Dec. 9, 2021]

§ 314.4 Elements and Compliance Status

In order to develop, implement, and maintain your information security program, you shall:

	Requirement	GMU Response
(a)	(a) Designate a qualified individual responsible for overseeing and implementing your information security program and enforcing your information security program (for purposes of this part, “Qualified Individual”). The Qualified Individual may be employed by you, an affiliate, or a service provider. To the extent the requirement in this paragraph (a) is met using a service provider or an affiliate, you shall:	Curtis McNay (Director – IT Security Office), is a Mason employee and is the designated “Qualified Individual”. Curtis reports to Charlie Spann (Interim Vice President and Chief Information Officer, Information Technology Services).
(a) (1)	Retain responsibility for compliance with this part;	
(a) (2)	Designate a senior member of your personnel responsible for direction and oversight of the Qualified Individual; and	
(a) (3)	Require the service provider or affiliate to maintain an information security program that protects you in accordance with the requirements of this part.	
(b)	Base your information security program on a risk assessment that identifies reasonably foreseeable internal and external risks to the security, confidentiality, and integrity of customer information that could result in the unauthorized disclosure, misuse, alteration, destruction, or other compromise of such information, and assesses the sufficiency of any safeguards in place to control these risks.	The Risk Assessment Process (I ITS.ITSO-PRS004) references NIST SP 800-37, Risk Management Framework for Information Systems and Organizations: A System Life Cycle Approach for Security and Privacy. Mason has adopted security control baselines derived from NIST SP 800-53 which is an industry standard followed by the federal agencies and is considered to be one of the most comprehensive controls requirements in the United States.
(b) (1)	The risk assessment shall be written and shall include:	
(b) (1) (i)	Criteria for the evaluation and categorization of identified security risks or threats you face;	The evaluation and categorization of the risk and threats are based on a documented Risk Assessment Process (I ITS.ITSO-PRS004).
(b) (1) (ii)	Criteria for the assessment of the confidentiality, integrity, and availability of your information systems and customer information, including the adequacy of the existing controls in the context of the identified risks or threats you face; and	Criteria for assessment and categorization of systems is based on FIPS PUB 199 , Standards for Security Categorization of Federal Information and Information Systems. Categorization is based on “high water mark”. If any of the three levels of potential impact (e.g., confidentiality, integrity, or availability) is rated high, then the information system is categorized as “High”. Data sensitivity level is determined in accordance with University Policy 1114, Data Stewardship.

(b) (1) (iii)	Requirements describing how identified risks will be mitigated or accepted based on the risk assessment and how the information security program will address the risks.	Once identified, risks are tracked in the system Plan of Action and Milestones (POA&M) for appropriate risk treatment decision. If the risk treatment decision is to remediate, then the appropriate remediation steps, activities, and project dates are documented.
(b) (2)	You shall periodically perform additional risk assessments that re-examine the reasonably foreseeable internal and external risks to the security, confidentiality, and integrity of customer information that could result in the unauthorized disclosure, misuse, alteration, destruction, or other compromise of such information, and reassess the sufficiency of any safeguards in place to control these risks	High-risk systems are those systems that have Protected categories (Highly Sensitive Data and Restricted Data) of data. Such data includes Personally Identifiable Information (PII), Personal Health Information (PHI), data subject to FERPA, and data subject to contracts such as in research. High category systems are evaluated annually, or when there are major changes such as in architecture or usage.
(c)	Design and implement safeguards to control the risks you identify through risk assessment, including by:	
(c) (1)	Implementing and periodically reviewing access controls, including technical and, as appropriate, physical controls to:	Access grant, revocation, reviews and user authentication are governed by documented policies and procedures (i.e., Procedures for Requesting, Changing, or Removing Access to Banner Products, Banner and Related Administrative Systems Security Policy, Responsible Use of Computing Policy, Banner Database Account Management Standard), and Remote User Access Standard, and Remote Access Device Standard. Controls are designed on physical, network and application levels to follow the principle of least-privilege.
(c) (1) (i)	Authenticate and permit access only to authorized users to protect against the unauthorized acquisition of customer information; and	
(c) (1) (ii)	Limit authorized users' access only to customer information that they need to perform their duties and functions, or, in the case of customers, to access their own information	
(c) (2)	Identify and manage the data, personnel, devices, systems, and facilities that enable you to achieve business purposes in accordance with their relative importance to business objectives and your risk strategy;	ITS has identified systems that are subject to GLBA requirements and are prioritized for control assessment activities in support of the risk strategy. Access at the application level and then within the applications is based on personnel's roles and upon approval. Physical access to critical physical infrastructure is controlled by card access.
(c) (3)	Protect by encryption all customer information held or transmitted by you both in transit over external networks and at rest. To the extent you determine that encryption of customer information, either in transit over external networks or at rest, is infeasible, you may instead secure such customer information using effective alternative compensating controls reviewed and approved by your Qualified Individual;	University Policy Number 1114 Data Stewardship requires that Data Custodians must employ encryption as a means of protecting highly sensitive data. The centrally managed encryption program is required for storing any highly sensitive data on any type of device or media.

(c) (4)	Adopt secure development practices for in-house developed applications utilized by you for transmitting, accessing, or storing customer information and procedures for evaluating, assessing, or testing the security of externally developed applications you utilize to transmit, access, or store customer information;	All changes to the centrally managed Enterprise Resource Planning (ERP) Banner Core are documented within Team Dynamix (TDX), the IT Service Management (ITSM) tool.
(c) (5)	Implement multi-factor authentication (MFA) for any individual accessing any information system, unless your Qualified Individual has approved in writing the use of reasonably equivalent or more secure access controls;	Enterprise infrastructure including Mason’s ERP system and Virtual Private Network for example, require Mason Single Sign-On system with MFA.
(c) (6) (i)	Develop, implement, and maintain procedures for the secure disposal of customer information in any format no later than two years after the last date the information is used in connection with the provision of a product or service to the customer to which it relates, unless such information is necessary for business operations or for other legitimate business purposes, is otherwise required to be retained by law or regulation, or where targeted disposal is not reasonably feasible due to the manner in which the information is maintained; and	George Mason University is required to adhere to all schedules published by the Library of Virginia including but not limited to the General Schedule GS-111 for Virginia Colleges and Universities . University Policy 1102 Records Management provides governance in this area and Mason systems and data retention are managed to requirements therein. The Records Management Policy defines roles and responsibilities, record destruction processes, permanent and vital record handling, as well as definitions of different types of records.
(c) (6) (ii)	Periodically review your data retention policy to minimize the unnecessary retention of data;	The University Policy 1102 Records Management, and any related procedures, are required to be reviewed every three years or more frequently as needed.
(c) (7)	Adopt procedures for change management; and	ITS Change and Configuration Management Policy and supporting procedure define the change management process.
(c) (8)	Implement policies, procedures, and controls designed to monitor and log the activity of authorized users and detect unauthorized access or use of, or tampering with, customer information by such users.	The IT Security Standard defines the requirements for logging and monitoring. Monitoring responsibilities are shared between the IT Security Office (ITSO) and applicable system administrators. Database audit records for Banner are logged in Oracle Audit Vault and reviewed by the DBA team. These logs are also sent to Splunk for review and analysis. Server and network layer logs are also sent to Splunk for review and analysis and are monitored by the ITSO.

(d) (1)	Regularly test or otherwise monitor the effectiveness of the safeguards' key controls, systems, and procedures, including those to detect actual and attempted attacks on, or intrusions into, information systems.	Audits are done by Office of University Audit, as well as external audits and assessments are conducted by APA on an annual basis. Annual Incident Response exercises are conducted to test the effectiveness of the procedures and controls.
(d) (2)	For information systems, the monitoring and testing shall include continuous monitoring or periodic penetration testing and vulnerability assessments. Absent effective continuous monitoring or other systems to detect, on an ongoing basis, changes in information systems that may create vulnerabilities, you shall conduct:	
(d) (2) (i)	Annual penetration testing of your information systems determined each given year based on relevant identified risks in accordance with the risk assessment; and	File integrity monitoring, secure configuration baselines, and weekly vulnerability scans are conducted to maintain continuous monitoring.
(d) (2) (ii)	Vulnerability assessments, including any systemic scans or reviews of information systems reasonably designed to identify publicly known security vulnerabilities in your information systems based on the risk assessment, at least every six months; and whenever there are material changes to your operations or business arrangements; and whenever there are circumstances you know or have reason to know may have a material impact on your information security program.	Vulnerability scans are being performed on a weekly basis. Anomalous activity is monitored by ITSO via Security Incident and Event Monitoring (SIEM) system.
(e)	Implement policies and procedures to ensure that personnel are able to enact your information security program by:	
(e) (1)	Providing your personnel with security awareness training that is updated as necessary to reflect risks identified by the risk assessment;	Per the IT Security Awareness training process, all University employees undergo General IT Security Awareness training. Additionally, Role-Based technical training, as well as Role-Based Highly Sensitive Data (HSD) Custodian training is required for certain users on an annual basis (accessed via MasonLEAPS). The General IT Security Awareness training is assigned to all employees, including contractors, affiliates, and student wage workers. The Role-Based Technical training is assigned to staff such as system administrators, database administrators, AD administrators, Human Resource Information Systems (HRIS), Finance, Business Intelligence etc. Lastly, the Role-Based HSD Custodian training is assigned to all users who may have access to HSD in Banner Core applications.

(e) (2)	Utilizing qualified information security personnel employed by you or an affiliate or service provider sufficient to manage your information security risks and to perform or oversee the information security program;	The information security, risk, and compliance functions are staffed with personnel with industry standard certifications such as CISSP, GSEC, CISA, CISM, CRISC.
(e) (3)	Providing information security personnel with security updates and training sufficient to address relevant security risks; and	Mason uses SANS, Gartner, security vendor-specific product training and LinkedIn Learning, for information security and risk domain training. Additionally, security updates and information sharing are available through industry sources and threat-feeds, as well as Ren-ISAC and VASCAN.
(e) (4)	Verifying that key information security personnel take steps to maintain current knowledge of changing information security threats and countermeasures.	Mason information security personnel stay informed of current intel, threats, technologies and issues through various industry sources including but not limited to Ren-ISAC and the Virginia Alliance for Secure Computing and Networking (VASCAN), Educause Security Forum, participate in federal sharing communities such as FBI, CISA etc.
(f)	Oversee service providers, by:	
(f) (1)	Taking reasonable steps to select and retain service providers that are capable of maintaining appropriate safeguards for the customer information at issue;	External information systems and services to be acquired must effectively integrate with Mason’s information security architecture. This is determined during the initial Architectural Standards Review Board (ASRB) review, and must be revalidated with security reviews when the system is modified or updated.
(f) (2)	Requiring your service providers by contract to implement and maintain such safeguards; and	Contracts for external information systems and services that are categorized as high-risk must include a Data Security Addendum detailing information security requirements and responsibilities.
(f) (3)	Periodically assessing your service providers based on the risk they present and the continued adequacy of their safeguards.	Suppliers of external information systems and services that are categorized as high-risk are required to provide security assessment reports annually, in accordance with the Third-Party Risk Management Process. The IT Risk and Compliance office tracks and reviews the assessment reports, and escalates exceptions and issues to the ITSO for determination of next steps.

(g)	Evaluate and adjust your information security program in light of the results of the testing and monitoring required by paragraph (d) of this section; any material changes to your operations or business arrangements; the results of risk assessments performed under paragraph (b)(2) of this section; or any other circumstances that you know or have reason to know may have a material impact on your information security program.	Annual Incident Response and Disaster Recovery exercises are conducted to evaluate and adjust processes supporting the information security program. Additionally, control assessments and audits help discovery of control weaknesses and gaps that are then addressed through risk treatment.
(h)	Establish a written incident response plan designed to promptly respond to, and recover from, any security event materially affecting the confidentiality, integrity, or availability of customer information in your control. Such incident response plan shall address the following areas:	The University has an overarching Emergency Operations Plan/Continuity of Operations Plan (EOP/COOP) which covers multiple units organization-wide including Information Technology Services. Additionally, the University maintains an ITS Disaster Recovery Plan (DRP), AD Disaster Recovery Procedure, Production Database Backup Standard, Security Incident Response Procedures, and Incident Response Plan (IRP) for PCI DSS which establish standard disaster recovery/back-up, and incident response procedures, respectively.
(h) (1)	The goals of the incident response plan;	
(h) (2)	The internal processes for responding to a security event;	
(h) (3)	The definition of clear roles, responsibilities, and levels of decision-making authority;	
(h) (4)	External and internal communications and information sharing;	
(h) (5)	Identification of requirements for the remediation of any identified weaknesses in information systems and associated controls;	
(h) (6)	Documentation and reporting regarding security events and related incident response activities; and	
(h) (7)	The evaluation and revision as necessary of the incident response plan following a security event.	
(i)	Require your Qualified Individual to report in writing, regularly and at least annually, to your board of directors or equivalent governing body. If no such board of directors or equivalent governing body exists, such report shall be timely presented to a senior officer responsible for your information security program. The report shall include the following information:	In addition to the quarterly program areas of focus reporting, beginning 2023 and to meet the GLBA requirements, the designated Qualified Individual will present this report to the Audit, Risk, and Compliance Committee on an annual basis.
(i) (1)	The overall status of the information security program and your compliance with this part; and	Provided in the section titled: Information Security Program Overview
(i) (2)	Material matters related to the information security program, addressing issues such as risk assessment, risk management and control decisions, service provider arrangements, results of testing, security events or violations and management's responses thereto, and recommendations for changes in the information security program.	Updates are provided on a quarterly basis to the Board of Visitors. The update for the current quarter is being provided under separate cover titled: George Mason University Information Technology Risk and Control Infrastructure Program Update for the Board of Visitors Audit, Risk, and Compliance Committee (November 2023)

Questions regarding this report can be addressed to Curtis McNay (cmcnay@gmu.edu).



Office of University Audit

**Report to the Audit, Risk, and Compliance Committee
of the Board of Visitors**

November 30, 2023

EXECUTIVE SUMMARY

- Audit Staffing:
 - We continue to search for viable applicants to fill the open Senior Auditor position. There were 35 applicants since June 1, 2023 (33 applicants did not meet qualifications; one candidate was interviewed and determined not to meet requirements, and another candidate is being scheduled for interview).
 - We continue to utilize a hybrid organizational model to provide assurance services for Mason. The model blends full time professional staff with co-sourced professionals from national and local accounting firms that bring specialized expertise to execute specific audit engagements. As of November 15, 2023, the full-time staff consists of four professionals. Seeking the right balance of audit professionals who are Mason employees and those who are co-sourced professionals is being managed continuously by University Audit leadership.
 - Co-sourced resources being utilized to complete the following audit engagements:
 - Information technology process infrastructure monitoring.
 - Financial administration of sponsored research programs.
 - Intercollegiate Athletics: Compliance.
 - Additional projects are being planned for later in 2023 and in 2024.
- One audit report was issued since the last meeting.
 - The audit report concluded that the controls, processes and systems over individual student billings are operating effectively to generate accurate and timely billings.
- Remediation of 10 audit issues is in progress as of November 15, 2023.
- Audit Plan status:
 - Planned audit work remains consistent with the 3+6 Audit Plan reviewed at the prior meeting. However, the timing of planned audit work continues to be reevaluated in consideration of the use of co-sourced audit resources.
- Status of fraud, waste, and abuse investigations:
 - There are no investigations in progress.

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- 5 STAFFING
- 6 APPENDIX:
 - Audit Issue Details

SUMMARY OF AUDIT REPORTS

- Student Accounts.



INTERNAL AUDIT REPORT

Report Title:	Student Accounts	Report Date:	October 12, 2023
Responsible Manager:	Clare Laskofski, Executive Director, Accounting Operations and Student Accounts		

EXECUTIVE SUMMARY:

Background:

The Student Accounts Office (SAO) is responsible for the accurate and timely billing to student accounts of tuition, fees, and other services provided by Mason, including, among others, housing and dining.

The SAO processes are intertwined with other offices across the University, including the Office of Student Financial Aid, Admissions, Office of the University Registrar, Housing and Residence Life, and Mason Dining. As such, effective internal controls regarding the flow of data to and from student accounts is critical to SAO’s ability to achieve its mission. The Banner Student module is the system of record, and is integrated with other university systems, such as StarRez for housing charges and Atrium Connect for dining charges.

Charges (C) and payments (P) processed by the SAO to student accounts during the Spring 2023 semester included:

Student Charges	Amount
Tuition	\$221,616,987
Mandatory Student Fees	\$ 50,875,141
Refunds	\$ 43,205,609
Housing	\$ 25,362,711
Course Fees	\$ 12,680,381
Dining	\$ 11,593,363

Student Payments	Amount
Financial Aid	\$161,799,297
Outside Scholarships	\$ 22,348,927

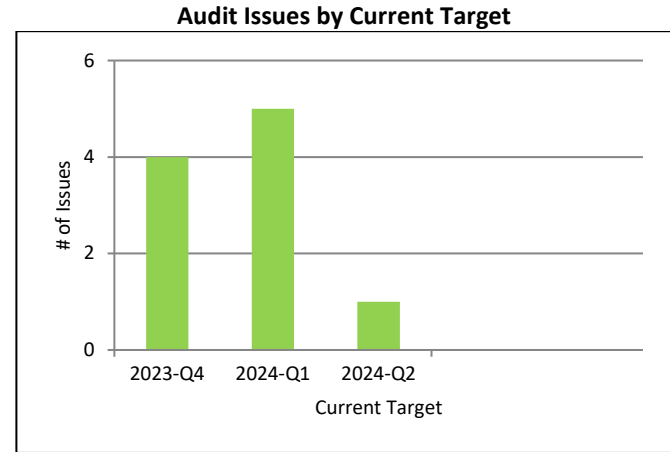
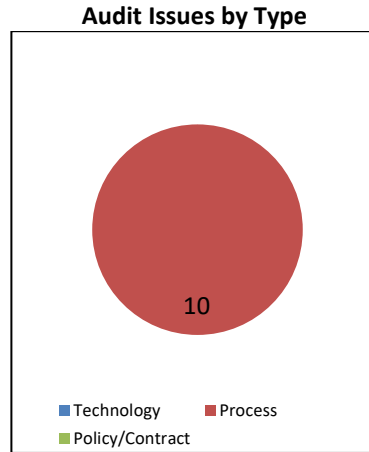
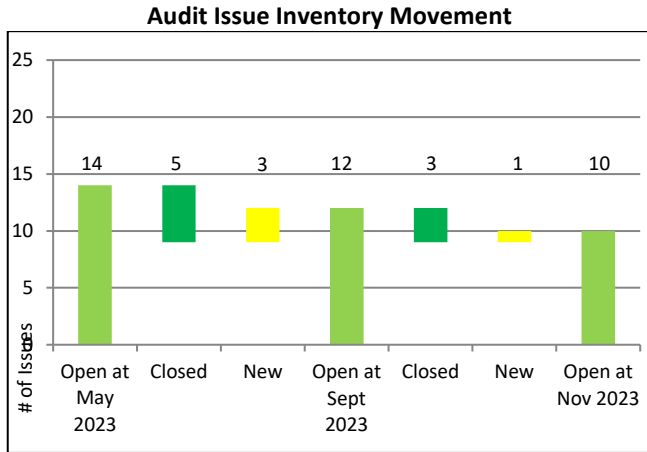
The Director of Student Accounts leads 17 employees and reports to the Executive Director, Accounting Operations and Student Accounts, through the Fiscal Services organization to the Executive Vice President for Finance and Administration.

Audit Conclusion:

In our view, student accounts processes and controls over individual student billings are operating effectively to ensure accurate and timely billings. Controls regarding the accuracy, completeness, and integrity of data from department-specific systems (e.g., Atrium Connect, StarRez) to Banner Student through Banner Finance are designed and operating effectively. Approved tuition, housing and dining rates, and fees are posted accurately and timely to student accounts, and the related financial transactions are accurate and proper records are maintained. The tuition and fee rate table is complete and accurate, and table changes are documented, approved, and monitored. Controls surrounding outside scholarships and manual refunds are documented and functioning effectively. Policies and procedures for key functions and activities are documented and staff are cross trained to help ensure continuity and operating effectiveness of critical processes. Banner access controls were effectively implemented, and adequate separation of duties were present. Housing and Residence Life should perform timely reconciliations to confirm completeness and accuracy of housing charges to student accounts; this was satisfactorily addressed during the audit.

SUMMARY STATUS OF AUDIT ISSUES AS OF NOVEMBER 15, 2023













Three audit issues were closed since the last meeting. There were 10 open audit issues as of November 15, 2023. Target dates for several issues were extended.



Audit Report	Report Date	Open at May 2023	New	Closed	Open at Sept 2023	New	Closed	Open at Nov 2023
Student Accounts	10/12/23	-	-	-	-	1	1	0
IT Third Party Service Providers	9/13/23	-	3	-	3	-	-	3
Background Investigations	4/20/23	3	-	1	2	-	-	2
Office of University Registrar	12/20/22	1	-	-	1	-	-	1
Academic Integrity	8/29/22	1	-	-	1	-	-	1
Student Financial Aid	11/10/21	2	-	-	2	-	-	2
Employee Disclosures and Evaluation of Personal Interests	12/13/19	4	-	1	3	-	2	1
Faculty Study Leave Programs	4/18/19	3	-	3	0	-	-	0
		14	3	5	12	1	3	10

STATUS OF AUDIT PLAN AS OF NOVEMBER 15, 2023

The 3+6 Audit Plan as of November 15, 2023 (bottom bars) is compared with the status as of the prior report to the Committee (top bars). (Note: The status of work is shown as follows: completed = orange bars, in progress = green bars, and planned = yellow bars)

Topic	Description	9/30	12/31	3/31	6/30
Aligned with University-Level Risk Areas					
IT Risk and Control Infrastructure Program	<ul style="list-style-type: none"> Monitor ITS program workstreams to strengthen the risk and control infrastructure and improve technology service delivery. 				
Information Security Program	<ul style="list-style-type: none"> Monitor projects to further strengthen security of Mason's entire technology environment. 				
Financial Administration of Sponsored Research Programs	<ul style="list-style-type: none"> Assess administrative management of sponsored program awards, including financial risk management, and evaluate redesigned processes incorporating automation. 				
Research Computing Security	<ul style="list-style-type: none"> Monitor cybersecurity assessments of research computing environments and preparations to implement NSPM-33 expectations. 				
Construction Payments and Change Orders	<ul style="list-style-type: none"> Monitor and assess payments related to planned campus construction projects. 				
Additional Areas					
Student Financial Accounts	<ul style="list-style-type: none"> Assess business and compliance processes relevant to student billing activities. 				
Intercollegiate Athletics	<ul style="list-style-type: none"> Assess processes for ensuring compliance with NCAA requirements related to recruitment, eligibility and financial aid. 				
Non-Employee Identities	<ul style="list-style-type: none"> Assess processes for approving, supervising, controlling, and overseeing non-employees who have an identity relationship ("G number") with Mason. 				
Issue Validation Procedures	<ul style="list-style-type: none"> Validate management has remediated audit issues in a comprehensive and sustainable manner. 				
Hotline Investigations Referred by OSIG	<ul style="list-style-type: none"> Investigate allegations of fraud, waste, or abuse received from the Commonwealth's Office of the State Inspector General. 				

STATUS OF INVESTIGATIONS AS OF NOVEMBER 15, 2023

Nature of Allegation	Type	Status	Remarks
None.			

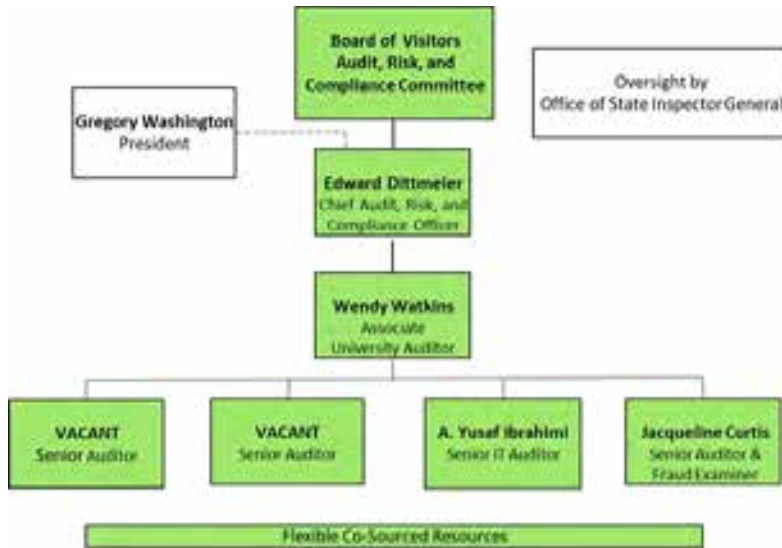
Summary of Types:

- **Fraud** = Intentional deception which could result in a benefit to the perpetrator, others, or the Commonwealth or could cause detriment to others or the Commonwealth. Fraud includes a false representation of a matter of fact, whether by words or by conduct, by false or misleading statements, or by concealment of that which should have been disclosed, which deceives or is intended to deceive. E.g., falsifying financial records to cover up theft.
- **Waste** = Careless expenditure, mismanagement, use, or squandering of Commonwealth resources to the actual or potential detriment of the Commonwealth. Includes unnecessary costs due to inefficient or ineffective practices, systems, or controls. E.g., unnecessary spending of state funds for no business purpose.
- **Abuse** = Excessive or improper use of something contrary to natural or legal rules for its use. Intentional destruction, diversion, manipulation, misapplication, mistreatment, or misuse of Commonwealth resources. Excessive use as to abuse one's position or authority. E.g., use of state assets for non-state business.

STAFFING

University Audit utilizes a hybrid organizational model to provide assurance services for Mason. The model is designed to blend full time professional staff with co-sourced professionals from national and local accounting firms that bring specialized expertise to execute specific audit engagements under the Associate University Auditor’s direction and supervision. As of November 15, 2023, the full-time staff consists of four professionals.

Staffing



	Plan	Actual	
		a/o July 2023	Avg to Nov 2023
Core Audit Team			
Audit Leadership	2.0	2.0	2.0
Auditors by Expertise:			
Operational Audit	2.5	0.5	0.5
IT Audit	1.0	1.0	1.0
Fraud Audit	0.5	0.5	0.5
Total Audit Professional Employees	6.0	4.0	4.0
Co-sourced FTE* Supported by Permanent Budget	0.7		0.7
Total Audit Professionals Supported by Permanent Budget	6.7	4.0	4.7

Note: * = Co-sourced FTE are estimated based on actual hours provided by co-sourced resources and a 1,500 hour/FTE rate.

APPENDIX: AUDIT ISSUE DETAILS AS OF NOVEMBER 15, 2023

#	Audit Report	Audit Issue	Status of Management Action	Original Target	Current Target
1	<p>Report Name: Employee Disclosures and Evaluation of Personal Interests</p> <p>Report Date: 12/13/19</p> <p>Management: Vincent Lacovara, Associate Vice President for Institutional Compliance</p>	<p>Implement a Monitoring Program for Employee Disclosures: Monitoring and oversight programs provide assurance that policy expectations are being met and procedures are functioning as intended. Once policy, governance, and reporting adjustments have been considered and implemented, management should develop monitoring programs to evaluate the completeness and accuracy of employee submissions. Where possible, separately (e.g., employee evaluation data or Virginia Statements of Economic Interests) and/or publicly available (e.g., IRS data) documents should be compared to self-reported employee disclosures to further support the completeness and accuracy of data provided.</p>	<p>Institutional Compliance, with assistance from individual units, will continue to monitor employee disclosure completion (i.e., that they are submitted) and review the substance of submissions when circumstances warrant. An updated policy and other changes (necessitated by the new COI module) was implemented in May 2023 for annual disclosures for research faculty, administrative and professional faculty, and classified staff; an updated policy for annual disclosures for instructional faculty was implemented in August 2023. A more robust monitoring program to evaluate the completeness and accuracy of employee submissions, including both reviews of internal and publicly available information, will be developed and implemented by December 2023.</p>	11/30/21	12/15/23
2	<p>Report Name: Student Financial Aid</p> <p>Report Date: 11/10/21</p> <p>Management: David Burge, Vice President for Enrollment Management, Office of the Provost</p>	<p>Document All Financial Aid Policies, Processes and Procedures: The Office of Student Financial Aid (OSFA) should document all key processes and procedures. The documents should define the roles and responsibilities of each employee and detail the procedures and processes performed. The OSFA should prioritize creating the following policies and procedures: <ul style="list-style-type: none"> •Return to Title IV calculations •Applicant information verification •Exception reporting The documents should be reviewed periodically to keep the documentation current</p>	<p>OSFA has made updates to the Policy and Procedures Manual, but a failed search for a Business Analyst has delayed completion of this effort. A new search was initiated and the work to complete documenting processes and procedures is expected by the end of 2023.</p>	6/30/22	12/31/23
3	<p>Report Name: Student Financial Aid</p> <p>Report Date: 11/10/21</p> <p>Management: David Burge, Vice President</p>	<p>Evaluate Staffing Needs and Opportunities to Increase Efficiencies in Award Processing and Monitoring: The Office of Student Financial Aid (OSFA) and Enrollment Management Leadership should determine the critical financial aid activities that could benefit from additional staff. Additionally, evaluate opportunities to</p>	<p>The Office has automated several processes over the years, however, there will always be a need for human effort to review and perform oversight. We have staffed eight of the nine counselor positions and are actively seeking to hire one additional counselor.</p>	6/30/22	12/31/23

#	Audit Report	Audit Issue	Status of Management Action	Original Target	Current Target
	for Enrollment Management, Office of the Provost	automate manual processes to provide current staff the capacity to take on other critical tasks.	The Office has fully implemented Campus Logic Student Forms to help automate and streamline the verification process; and has also made progress with implementing TD Client which will automate the movement of files to and from the Department of Education. Full implementation is expected by 12/31/23.		
4	<p>Report Name: Office of University Registrar (OUR)</p> <p>Report Date: 12/8/22</p> <p>Sanagement: Janette Muir, Vice President for Academic Affairs, Office of the Provost</p>	<p>Share Enhanced Data to Improve Course Scheduling and Registration:</p> <p>Coordinating with the academic departments to review and analyze course data, should enable academic departments to more strategically adjust course offerings and classrooms to meet student needs; reducing the number of manual overrides by faculty and risk of students being unable to take required courses if required course is at capacity. Additionally, the University's Academic Course Catalog is not consistently updated to remove inactive course offerings.</p>	<p>Requirements-based reporting is a critical university need that the OUR hopes to meet using data captured in the new degree audit system. The office is committed to partnering with the academic units in order to give them actionable information related to the schedule of classes offered.</p> <p>Mason faculty own the course curriculum. The OUR is responsible for the administration of the curriculum process and will continue to communicate each year with the Associate Provosts of Undergraduate and Graduate Education and the academic units regarding courses that have not been offered in the previous five years; as well as newly approved courses not offered in the previous three years. The Associate Provosts will engage their respective Councils and the academic units to implement a process to inactivate courses that exceed the three-year and five-year criteria for newly approved and older courses respectively if adequate justification to keep the course in the catalog is not provided by the academic unit and/or faculty.</p>	12/31/23	12/31/23
5	<p>Report Name: Academic Integrity</p> <p>Report Date: 8/29/22</p> <p>Management: Rose Pascarell, Vice</p>	<p>Ensure Consistency in University Academic Integrity Guidance and Recommended Sanctions:</p> <p>The Vice President, University Life (including the Office of Academic Integrity) and the Vice Provost, Academic Affairs should convene a working group comprised of key leaders, faculty, students, and administration to evaluate the potential value of consistency across the colleges and schools surrounding</p>	The Vice Provost, Academic Affairs and the Vice President, University Life assembled a taskforce of key stakeholders which developed a holistic approach to academic integrity university-wide with specific recommendations to address the inclusion and enforcement of an academic integrity statement in all course syllabi; adopting a university-wide sanctioning matrix; and	8/15/23	1/30/24

#	Audit Report	Audit Issue	Status of Management Action	Original Target	Current Target
	President, University Life	the university's academic integrity program guidance and recommended sanctions.	<p>defining and communicating faculty and student roles and responsibilities, among other things. The feasibility of the taskforce recommendations will be assessed, and next steps and implementation plans will be developed.</p> <p>The Office of Academic Integrity (OAI) will support the implementation of the working group recommendations and implement enhancements to ensure consistency in student and faculty guidance.</p>		
6	<p>Report Name: Third-Party Service Providers</p> <p>Report Date: 9/14/23</p> <p>Management: Charles Spann, Interim Vice President and Chief Information Officer</p>	<p>Document Architecture Standards Review Board (ASRB) Requirements:</p> <p>The Director IT Risk and Compliance should document and review ASRB process procedures, including criteria for ASRB reviews by each functional group that makes up the ASRB.</p>	The Director IT Risk and Compliance will document current process and procedures and establish a review frequency for these documents.	2/15//24	2/15/24
7	<p>Report Name: Background Investigations</p> <p>Report Date: 4/19/23</p> <p>Management: Whitney Owen, Interim Vice President of Human Resources</p>	<p>Improve Background Investigation Procedures:</p> <p>Comprehensive procedures and defined roles and responsibilities will help ensure compliance with the university's background investigation processes and procedures.</p>	University Policy 2221 (Background Investigations) and associated procedures and frequently asked questions have been analyzed and updated. Standard operating procedures for the Background Specialist's day-to-day job functions have been documented and will be utilized for cross training and/or new hire training. Pending review by University Counsel and Senior Leaders, this policy will be communicated campus-wide by February 28, 2024.	9/30/23	2/28/24
8	<p>Report Name: Background Investigations</p> <p>Report Date: 4/19/23</p> <p>Management: Whitney Owen, Interim Vice</p>	<p>Ensure All Employees Have Completed Required Background Investigations:</p> <p>Central HR should ensure all current and prospective employees have completed background investigations prior to beginning work; establish communication mechanisms to inform hiring departments of the status of a prospective employee's background investigation; develop automated procedures for ensuring regular integration of Truescreen background investigation data</p>	All current employees hired on or after July 1, 2016 have a background investigation on file. Since Mason's policy prior to this date did not require all employees to have a background investigation, the Executive Vice President of Finance and Administration decided to focus efforts on ensuring background investigations are on file for all employees hired on or after the all-encompassing policy was implemented on July 1,	9/30/23	2/28/24

#	Audit Report	Audit Issue	Status of Management Action	Original Target	Current Target
	President of Human Resources	into Banner; implement a continuous monitoring program; and create a central repository of all completed background investigations.	<p>2016. Central HR is evaluating the feasibility of completing background investigations for employees hired before July 1, 2016.</p> <p>IT enhancements now halt the employee onboarding process if there is no background investigation on file. A dashboard to assist the Background Specialist with monitoring background investigations status/data. An additional initiative is underway to fully integrate Banner and Truescreen (background investigation vendor) to ensure near real time updates of background investigation status.</p> <p>Finally, processes and procedures are being finalized to ensure timely background investigations for adjunct faculty, as this population may or may not maintain consistent employment.</p>		
9	<p>Report Name: Third-Party Service Providers</p> <p>Report Date: 9/14/23</p> <p>Management: Charles Spann, Interim Vice President and Chief Information Officer</p>	<p>Enforce Architecture Standards Review Board (ASRB) Requirements:</p> <p>While controls surrounding purchases of software and information services that will use Mason data or integrate with Mason's administrative systems over \$5,000 are effective, purchases equal to or less than \$5,000 can occur by a purchase card, potentially bypassing established review and approval processes.</p>	The Director IT Risk and Compliance will work with the Purchasing Office and the ASRB to establish a means to monitor IT third-party service providers that meet the criteria for ASRB review within University Policy 1307, are reviewed and approved in accordance with ASRB requirements.	3/15//24	3/15/24
10	<p>Report Name: Third-Party Service Providers</p> <p>Report Date: 9/14/23</p> <p>Management: Charles Spann, Interim Vice President and Chief Information Officer</p>	<p>Enhance IT Third-Party Service Provider Risk Review Process:</p> <p>Annual security assessment reports for all high-risk IT third-party service providers and their subcontractors that have the potential to handle or exchange protected data or information should be obtained, and findings assessed for potential impact to the university and remediated accordingly.</p>	Information Technology Services (ITS) will review and update the third-party risk management document to align to current procedures and recommendations to require reviews of IT third-party service providers that utilize Mason protected data. ITS will require future vendors that involve, or have the potential to involve, the exchange of protected data, to have annual security reports; continue to monitor the annual security assessment report status of current vendors; and work with our current	4/15/24	4/15/24

#	Audit Report	Audit Issue	Status of Management Action	Original Target	Current Target
			contracting partners to ensure any weaknesses or vulnerabilities are communicated and pursued for appropriate risk treatment. ITS will also work with Procurement to implement a process for subcontractors for all high-risk service providers.		



Office of Institutional Compliance

**Report to the Audit, Risk, and Compliance Committee
of the Board of Visitors**

November 30, 2023

EXECUTIVE SUMMARY

This report summarizes Institutional Compliance activities since the prior Committee meeting:

- Compliance assessment activity:
 - Inventory: 429 laws and regulations applicable to Mason tracked.
 - Risk ownership has been identified for 412 laws and regulations (96%); risk ownership was confirmed for 409 of the laws and regulations for which ownership was identified (99%).
 - Guided, granular regulatory risk assessments for priority risk areas continue:
 - In Progress: FAR/DFARS, institutional privacy.
 - Planning: Emergency planning, student safety, occupational safety
 - Guided, program maturity self-assessments of distributed compliance programs continue:
 - In Progress: Laboratory Safety, Registrar (pending report), Student Health Services privacy (reported), institutional privacy, MAPS Clinic privacy, records management.
 - External reviews: Two new external reviews were announced since the prior meeting and are in progress. Two reviews in progress as of the last report remain in progress.
- Status of reported compliance matters:
 - Four potential compliance matters were reported to Institutional Compliance since the prior meeting. Since the last report, Institutional Compliance has closed three matters and two matters remain under review. None of the matters appear significant to Mason.
 - Coordination of investigations and investigative protocols continues to occur with units such as Research Integrity and Assurance; Diversity, Equity, and Inclusion; Human Resources; and Information Technology Services.
 - The potential for additional reporting capabilities is being evaluated.
- Additional institutional compliance activities:
 - Institutional Compliance continues to support substantial university-wide efforts to strengthen conflict of interest and related disclosure and management processes. Ongoing work includes: improving workflows, establishing new review committees and processes, additional communications and training, and ongoing development of an organizational conflict of interest policy and process.

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COMPLIANCE ASSESSMENTS AND MONITORING

The Audit, Risk, and Compliance Committee of the Board has a Charter responsibility to oversee the effectiveness of institutional compliance processes for monitoring compliance with laws and regulations, including policies and processes related to ethics and conflicts of interest.

Institutional Compliance supports the Committee’s accomplishment of this responsibility through planning, facilitating, and overseeing regular university-wide assessments of compliance risks guided by the elements of effective compliance programs in the *US Federal Sentencing Guidelines for Organizations* and related guidance from the Department of Justice; ensuring management ownership for monitoring and managing compliance risks; evaluating the effectiveness of risk-owner programs to monitor and manage compliance risks; and ensuring communication to leadership and the Committee.

INVENTORY STATUS:

As of November 10, 2023, an inventory of 429 laws and regulations applicable to Mason has been compiled, and was reviewed with the Office of University Counsel for completeness and applicability. Personnel likely to be responsible for managing and monitoring compliance with these laws and regulations (“risk-owners”), as well as risk mitigation activities in place, are identified on an ongoing basis. Risk owner identification and confirmation continues for the remaining laws and regulations. Ownership confirmations are summarized below:

Regulatory Category		Number of Laws and Regulations			Number of Requirements for which Ownership Confirmed		
		9/28/23	11/10/23	Change	9/28/23	11/10/23	Change
1	Compliance and Ethics Program	2	3	1	2	3	1
2	Copyright and Intellectual Property	9	9	-	-	9	9
3	Employment	92	92	-	91	91	-
4	Environmental Health and Safety and Occupational Health & Safety	52	52	-	50	50	-
5	Facilities, Construction, and Renovation	4	4	-	1	1	-
6	Finance and Tax	41	41	-	40	41	1
7	Information Management and Security, and Privacy	48	47	(1)	41	41	-
10	Procurement and Contracting	21	21	-	20	20	-
11	Research	62	65	3	61	65	4
12	Students and Academic Policy	92	93	1	65	91	26
13	Miscellaneous	3	2	(1)	-	-	-
Totals		426	429	+3	371	412	+41

ASSESSMENT PRIORITIZATION AND STATUS:

Institutional Compliance, in coordination with University Counsel, University Audit, and Enterprise Risk Management, periodically refreshes the prioritization of regulatory risks facing large, public research universities that are similar to Mason. The prioritization revision was completed using the inventory of laws and regulations by category and subcategory.

The prioritization does not represent an assessment of specific risks or risk levels at Mason; it is solely intended to provide a basis for identifying and prioritizing future Mason-specific compliance assessment and other compliance activities. The refreshed prioritization is reviewed with senior leaders periodically, and their input used to prioritize further assessment work.

EMPLOYEES	Industry Risk	Mason Timing	Status
EO/Non-Discrimination	High	Nearer Term	DONE 9/23/22
Hiring Administration	Low	Longer Term	DONE 9/23/22
Benefits	Low	Longer Term	DONE 9/23/22
Reporting/Notices Disclosures	Low	Longer Term	DONE 9/23/22

BUSINESS PRACTICES	Industry Risk	Mason Timing	Status
Anti-Corruption	High	Mid Term	
Procurement Equal Opportunity	Moderate	Mid Term	
Procurement Ethics Integrity	Moderate	Mid Term	
Compliance and Ethics Program	Moderate	Mid Term	DONE 10/26/22
Financial Accounting/Management	Moderate	Mid Term	
Procurement Contracting	Low	Longer Term	
Facilities Construction/Renovation	Low	Longer Term	
Procurement Purchasing	Low	Longer Term	
Reporting/Notices Disclosures	Low	Longer Term	
Tax	Low	Longer Term	

RESEARCH	Industry Risk	Mason Timing	Status
Award Management Costing	High	Longer Term	
Human Subjects	High	Nearer Term	
Animal Welfare	High	Nearer Term	
Export Control	High	Nearer Term	DONE 12/1/22
Biosafety Facilities Lab Safety	High	Nearer Term	In Progress
Ethics Integrity	High	Nearer Term	In Progress
FAR/DFARS	High	Nearer Term	In Progress
Reporting/Notices Disclosures	Low	Longer Term	

INFORMATION & PRIVACY	Industry Risk	Mason Timing	Status
Information Security/Privacy	High	Mid Term	In Progress
Reporting/Notices Disclosures	Moderate	Mid Term	
Information Management Practices	Moderate	Mid Term	Planning
Copyright/Patent/Trademark	Low	Longer Term	
Electronic Communication Privacy	Low	Longer Term	Planning
Telecom	Low	Longer Term	

STUDENTS	Industry Risk	Mason Timing	Status
EO/Non-Discrimination	High	Nearer Term	DONE 8/10/22
Health & Safety	High	Nearer Term	Planning
Visiting Students/Scholars	Moderate	Mid Term	
Education Policy	Low	Longer Term	
Grants, Aid, & HEA	Low	Longer Term	
Reporting/Notices Disclosures	Low	Longer Term	
Veterans/Service-members	Low	Longer Term	

HEALTH & SAFETY	Industry Risk	Mason Timing	Status
Hazards/Hazardous Substances	High	Mid Term	Planning
Occupational Health Safety	High	Mid Term	Planning
Emergency Planning	Low	Longer Term	Planning
Pollution Control/Sustainability	Low	Longer Term	

	Industry Risk	Mason Timing	Status
MISC	Low	Longer Term	

IN-PROGRESS ASSESSMENTS:

Assessments of distributed, risk-specific programs are planned and facilitated based upon the prioritization of risk areas, as well as upon request by distributed program owners. The assessment of the level of regulatory risk in a given category indicates the expected robustness of the associated mitigation activities, including the formality and maturity of the related distributed risk-area compliance program. Assessment activities completed, in progress, and planned are summarized in the following chart:

Summary of Assessment Activity	As of 9/12/23	As of 11/10/23
--------------------------------	------------------	-------------------

<i>Regulatory Risk Assessments:</i>		
Office of the Registrar	DONE	DONE
Institutional Privacy	IP	DONE
Emergency Planning	NS	Planning
Student Health and Safety	Planning	Planning
Occupational Health and Safety	Planning	Planning
Federal Contracting (FAR/DFARS)	Planning	IP

<i>Program Maturity Guided Self-Assessments:</i>		
Office of the Registrar	Draft	Draft
Student Health Services Privacy	Draft	DONE
MAPS Clinic Privacy	IP	IP
Records Management	IP	IP
Institutional Privacy Program	IP	IP
Student Health and Safety	Planning	Planning
Occupational Health and Safety	Planning	Planning
Federal Contracting (FAR/DFARS)	Planning	Planning

(Legend: DONE=completed; Draft = report draft; IP=in progress; NS=not started.)

EXTERNAL REVIEWS:

The Committee has a Charter responsibility to “review and discuss with management the results of significant reviews by regulatory agencies or other external entities, or summaries thereof, and management’s responses.” University policy requires that all notices of any external review be reported to the Institutional Compliance Leader for tracking, reporting, and follow-up.

Two new external reviews, announced since the last report, are in progress. Two reviews in progress as of the last report remain in progress. Below is the status of the external reviews as of November 10, 2023:

Reviewing Entity	As of 9/12/23	As of 11/10/23	Remarks
Defense Counter-intelligence and Security Agency (DCSA)	Not Announced	In Progress	Regular review of Mason's security clearances program for classified research
Virginia Joint Legislative Audit & Review Commission (JLARC)	Not Announced	In Progress	Statutory review of Mason's Tier 3 management authority
Office of the State Inspector General (OSIG)	In Progress	In Progress	Performance review related to higher education institution security programs for responding to cyber-attacks. Includes all Commonwealth universities and VCCS
Virginia Small Business Development Commission (SBDC)	In Progress	In Progress	Virginia SBDC on-site financial examination FY 2023 of the SBDC's PY 2021 grant award.

REPORTING MECHANISMS AND MATTERS

Institutional Compliance conducts, oversees, coordinates, and/or monitors investigations of allegations of non-compliance or ethical misconduct. The office utilizes up-to-date, detailed guidelines for conducting compliance investigations, which are incorporated into the Institutional Compliance and Ethics Program operating manual. A process also was implemented for tracking the disposition of certain reported matters; additional processes are being developed to monitor the disposition of certain reported matters referred to other units.

To encourage reporting, a new landing website was created that links to reporting mechanisms for various constituencies and issue types across campus. Further communications plans are being developed, which may include additional, anonymous reporting channels.

Institutional Compliance received four new allegations of non-compliance or ethical misconduct since the last Committee report, two of which are under review by Institutional Compliance and two of which were closed. Since the last report, one additional matter was closed. None of the matters appear to have significant compliance implications for Mason.

The table below shows the status of matters reported to Institutional Compliance, and whether referred to other units for handling or handled directly by Institutional Compliance.

Status	4/18/23 to 9/12/23	9/12/23 to 11/10/23	Total
Matters Reported to Institutional Compliance in Period	1	4	5
Matters Referred to Other Units for Handling in Period	1	-	1
Matters Reported in Period Investigated by Institutional Compliance or University Audit	1	4	5
In Progress of Investigation	1	2	3
Closed - Non-Compliance Not Substantiated	-	3	3
Closed where Non-Compliance Substantiated	1	-	1
Closed where Non-Compliance was Significant	-	-	-

The table below lists the number of reported matters by topic area.

Topic Area	#
Conflict of Interest or Commitment	4
Privacy	1
Total	5

ADDITIONAL COMPLIANCE ACTIVITIES

Policies and Standards Activities

The revised university policy process, recently combined with the Policy Management Group (PMG) administered by the Office of the Provost, continues to meet and to review university-wide policies as well as academic policies. Further policy program improvements are in the planning stage.

Institutional Compliance is supporting the Office of Research Integrity and Assurance (ORIA) with development of an Organizational Conflict of Interest Policy and review process to meet federal regulatory requirements.

Institutional Compliance supported Human Resources in drafting a new, stand-alone, institutional Reporting Suspected Misconduct and Non-Retaliation Policy so as to promote consistent policy language across multiple policies; the draft is undergoing additional review by Counsel, and will be re-reviewed by the PMG prior to submission to leadership to approve.

Training and Communication Activities

Additional Mason-specific compliance awareness training content is in development, which also will be used for new employee and new faculty orientations. With implementation of the RAMP COI module and the related guides, training, and resources made available through that platform, Institutional Compliance is evaluating whether and where additional conflict of interest training might be needed.

In order to improve tracking and enforcement of all training required for all employees (e.g., ethics, information security, student privacy, Title IX, and others), Institutional Compliance worked with Human Resources to obtain access to completion data, and has begun the process of developing metrics for providing training data to leadership. A process for sending automated reminders for ethics training, consistent with reminders sent for other required trainings has been developed, and it is anticipated that automated reminders will be sent early in 2024 in advance of the performance review cycle.

The draft compliance communications calendar, setting forth key compliance deadlines and information about common compliance risks, continues to be refined and expanded. Once implemented, the calendar and cadence will assist Mason in meeting compliance communication expectations, as well as socialize Institutional Compliance and Program resources with the campus community.

Activities Related to Efforts to Exclude Bad Actors from Positions of Trust

Institutional Compliance continues to supporting Human Resources as they formalize and strengthen the existing, central process for reviewing prior employees' employment records for ethical misconduct prior to re-hire at Mason. Implementation of the revised Review-Before-Rehire Process remains on track for Winter 2024.

INSTITUTIONAL COMPLIANCE STAFFING

There have been no changes to Institutional Compliance staffing since the last Committee report. Below are professional biographies for the two team members.

Vin Lacovara, Associate Vice President for Institutional Compliance

vlacovar@gmu.edu

Vin Lacovara joined Mason to establish and lead the Institutional Compliance function in February 2021. His responsibilities are to implement and manage an effective, institution-wide compliance and ethics program for Mason; oversee and coordinate the efforts of numerous distributed, area-specific compliance programs across campus; and provide senior leadership and the Committee with information to fulfill their oversight of compliance processes.

Prior to joining Mason, Vin implemented and managed the compliance and ethics program for Catholic University for ten years. For seven years prior to joining Catholic, he worked alongside George Washington University's compliance officer in managing all aspects of its compliance and ethics program, and was in the private practice of law for seven years prior to becoming a compliance professional. Vin earned bachelor's degrees in English and political science from Duke University, and a law degree from Catholic University's Columbus School of Law. He is also a Certified Compliance and Ethics Professional[®], and has presented at national industry conferences on the topics of compliance program implementation, compliance assessment frameworks, and compliance investigations.

Elizabeth Woodley, University Ethics Officer and Outside Interests Manager

ewoodley@gmu.edu

Elizabeth Woodley joined OAC in March 2021 to assist in establishing a more robust ethics program for Mason; oversee Mason's Conflict of Interest policies, disclosures, and waiver processes; investigate complaints related to ethical conduct; and develop and track ongoing communications, training, and education activities.

After serving as a Robert F. Kennedy Public Service Fellow with the University Counsel's Office, Elizabeth joined Mason's Compliance, Diversity, and Ethics office in 2013 as the University Policy Manager. She later added responsibilities as the FOIA Compliance Officer in 2014 and the Ethics Officer in 2016. Elizabeth earned a bachelor's degree in history and art history from the University of Virginia, and a law degree from the University of Virginia School of Law. She is also a Certified Compliance and Ethics Professional[®].

APPENDIX

This Appendix provides a schedule of compliance assessments completed since the Program's inception in 2021, and the Student Health Privacy Maturity Assessment Report issued since the last meeting.

Topic

- 1 Schedule of Completed Assessments
- 2 Student Health Privacy Maturity Report

Schedule of Completed Compliance Assessments Since 2021:

The following regulatory risk assessments and program maturity guided self-assessments have been completed since the establishment of Institutional Compliance in 2021:

Summary of Assessment Activity	Date Completed
<i>Regulatory Risk Assessments:</i>	
Equal Opportunity and Title IX (DEI)	12/8/2021
Equal Opportunity (HR)	3/30/2022
Human Resources Benefits	3/30/2022
Human Resources Hiring and Administration	3/30/2022
Office of the Registrar	10/12/2022
Research: Lab Safety	5/1/2023
Institutional Privacy	10/10/2023
<i>Program Maturity Guided Self-Assessments:</i>	
Equal Opportunity and Title IX (DEI)	8/12/2022
Research: Export Control	12/9/2022
Office of the Registrar	10/10/2023



ASSESSMENT REPORT

Report Title:	Student Health Services Privacy Program Maturity Self-Assessment
Responsible Manager:	Mary Davis, Nurse Practitioner, Student Health Services

Report Date:	October 10, 2023
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EXECUTIVE SUMMARY:

Background

Distributed Compliance Programs should evaluate regularly whether their design is tailored to Mason’s operations and level of risk, and whether they are working effectively in practice. In May 2023, the Office of Institutional Compliance facilitated a self-assessment of the maturity of Mason’s Privacy Program administered by the Office of Student Health Services. The self-assessment evaluated the design adequacy and operating effectiveness of each of the elements necessary for an effective program.

The Health Insurance Portability and Accountability Act (HIPAA), the Health Information Technology for Economic and Clinical Health (HITECH) Act, and the Virginia Health Records Act, impose privacy and security requirements on institutions that collect, use, store, and/or share Protected Health Information¹. Such requirements include privacy notices to consumers and a right to access their records, data encryption, a formal security plan with administrative, physical, and technical safeguards, and breach notification protocols. These requirements can overlap with certain Family Educational Rights and Privacy Act (FERPA) privacy provisions.

Fines and penalties for non-compliance with HIPAA and HITECH can reach \$4 million per year, and the Acts provide for private rights of action for individuals.

The Office of Student Health Services (SHS) reports to the Office of the Vice President for University Life, and is composed of 45 staff members at three campus locations. SHS’ mission is to provide high quality, accessible, and affordable health care, counseling, health education, and prevention services to current George Mason University students, including diagnosis and treatment, physical exams, lab tests, immunizations, and prescriptions.

Conclusion

The overall self-assessment concluded that the SHS Privacy Program well-defined and working well in practice. The Program has a designated leader with a clear role, skilled staff, detailed and current

¹ Protected Health Information (PHI) is individually-identifiable health information, including demographic data, that 1. relates to the individual's past, present, or future physical or mental health or condition; health care; or payment for health care; and 2. that identifies the individual or provides a reasonable basis to identify the individual. Identifiable health information that is protected includes many common identifiers (e.g., name, address, birth date, Social Security Number). See [Department of Health and Human Services, Summary of the HIPAA Privacy Rule](#)

policies and procedures, required and current training, risk-based assessments, and a culture of continuous improvement. Collaboration with relevant units (e.g., counseling, athletics, disability services, student affairs, others) is effective.

Assessment

The SHS Privacy Program has a skilled and designated leader, and designated privacy and security officers within the unit. All roles in the unit are clearly documented and reviewed at least annually. SHS staff undergo central background checks through Human Resources, as well as additional credential checks by the SHS Continuous Quality Improvement Coordinator for staff who are medical providers. Credential checks also occur during 3-year accreditation reviews. To improve the maturity of the Program further, the level of senior leadership engagement with the Program, and the enforcement authority of the Program lead, should be reviewed to confirm responsibilities and expectations.

Standards for the Program include formal Bylaws supported by manuals and policies covering privacy, security, reportable events, breach notification, and administrative responsibilities. Standards are clear and complete, reviewed every two years for accuracy, and support continuity of operations. To improve the maturity of the Program, policies and processes should be evaluated for potential simplification where possible.

New SHS staff complete a tailored, on-line SHS privacy presentation and test, are required to review and affirm that they will follow all unit standards, complete institutional Information Security Training, and attend a follow-up meeting with the unit's privacy officer to reinforce privacy and confidentiality requirements and expectations. Both unit and institutional training content is clear and current and reviewed at least annually. All staff must complete all trainings every year. A process is being developed to more regularly and formally track and report staff training completion. Additionally, the SHS website effectively communicates to students the necessary services, policies and processes, resources, reporting mechanisms, and contact information for effective use of the Program. To improve Program maturity further, consider more regular tracking of training completion rates and reporting to leadership those staff who are not current.

SHS staff use a risk-based and continuous approach to planning, assessing, and improving the Program, and considers issues and trends in real-time. This is coupled with a culture of continuous improvement, which positions the Program to pivot more effectively in the event of unforeseen events or regulatory changes. To improve Program maturity, assessment schedules should be more regularized and documented in Program standards. Reviews also should be accompanied by additional documentation of the issues, approaches, and outcomes.

Investigations into instances of potential non-compliance, as well as initiatives and activities that overlap with other units' responsibilities, are well coordinated and effective due to the collaborative relationships in place with relevant units. To improve the Program further, an escalation process for potentially-significant issues should be implemented.



Information Technology Services

George Mason University
Information Technology Risk and Control Infrastructure Program
Update for the Board of Visitors
Audit, Risk, and Compliance Committee

November 2023

Prepared by

Charlie Spann, Interim Vice President and Chief Information Officer

Noor Aarohi, Director - IT Risk and Compliance

Curtis McNay, Director - IT Security Office

Executive Summary

The following November 2023 update provides a report of activities and accomplishments for FY24 Q2. This is a summary of activities for maturing technical capabilities and controls with a focus on specific program areas. Since December 2021, with the input of the Office of University Audit (OUA), Information Technology Services (ITS) has established a multi-year program to strengthen the risk and control infrastructure at Mason and improve the quality of technology services it delivers. The purpose of this report is to update the Audit, Risk, and Compliance Committee on the status of these efforts as the planned improvement activities are undertaken and the progress therein.

The program is comprised of six areas of focus designed to guide the adoption and implementation of a set of controls derived from NIST 800-53 moderate baseline, scoped and tailored to the context of institutions of higher education as well as to help support the academic and research efforts while maintaining a strong information security posture. This will strengthen policies, standards, processes, and procedures related to Mason's Quality Management Systems (QMS) and Information Security Management programs with a goal to improve Information Technology (IT) service quality, reliability, and security. The overall program includes the following areas of focus:

- [Mason-Tailored NIST 800-53-Based Security Compliance Framework](#)
- [Portfolio and Project Management](#)
- [Information Security Program Management](#)
- [Risk Assessment and Remediation](#)
- [Change and Configuration Management](#)
- [Identity Management and Access Control](#)

Each area is comprised of many activities, which are tied to projects and assigned priority and ownership. This report outlines the status of projects and activities in each of the six program areas. Please note that these projects are only a subset of the technology investments that are currently being made at the university. All ITS managed and administered information technology projects (including those related to these focus areas) are available for review online at <https://its.gmu.edu/working-with-its/ppmo/projects-dashboard/>.

The previous update was provided for the September 28th Audit, Risk, and Compliance Committee meeting. Since the next meeting for this committee is scheduled on November 30th, which is less than a full quarter schedule, the update in this report is pertinent to activities that occurred from mid-September through mid-October 2023.

Fiscal Year (FY) 2024 Q2 Accomplishments and FY 2024 Q3 Planned Activities

Mason-Tailored NIST 800-53-Based Security Compliance Framework

Adoption of a NIST 800-53 controls set that has been scoped and tailored to the context of institutions of higher education and to help support the academic and research efforts while maintaining a strong information security posture. Supporting policy and standards underpin our internal Quality Management System for Central ITS and our distributed partners.

FY24 Q2 Accomplishments:

- The initial comments from the Banner Core environment control assessment based on control owner assertions, have been made available and are being reviewed by the ITS Risk and Compliance and Information Security directors. An updated version of the Banner System Security Plan (SSP) and associated Plan of Actions and Milestones (POA&M) documents have been drafted and will align with the finalized outcomes of this assessment. This work contributes to providing understanding of end-to-end processes and controls for the Banner Core environment which is considered high-risk from a compliance documentation perspective. The effort also provided a template and framework (repeatable process) for conducting future control assessments for other high-risk environments.
- Project #853: Socialization efforts are underway for the proposed updates to the IT Security Standard. This Standard has been drafted to align to the security baselines adopted in Spring 2023, that are based on NIST 800-53 moderate threshold and tailored to Mason requirements. Information sessions have been held for the ITS staff and the university stakeholders. Workshop sessions are being conducted with each of the IT directors to solicit feedback and suggestions on the changes. This feedback is being used to align the control implementation requirements within the Standard before it is finalized and published (currently estimated to be in the FY24 Q3). An informational SharePoint site is operational at <https://gmuedu.sharepoint.com/sites/grc> for users to review and provide feedback on the proposed Standard.
- Project #842:
 - ITS is working with the Office of Emergency Management (OEM) to upload the Banner Core DR and ITS Continuity of Operations (COOP) plan information attributes and documents to RSA Archer – the Governance, Risk, and Compliance (GRC) tool. The estimated completion date for this task is by November 30.
 - The Disaster Recovery (DR) and Business Continuity application has been moved to production in RSA Archer. This is part of the transition strategy from Kuali, the previous system of record for storing the DR and COOP plans. Consolidating the DR and COOP process into Archer contributes towards creating a holistic GRC view of the technology controls. The OEM and ITS have been collaborating on this project and information sessions have been scheduled by OEM to help onboard users and plans.

FY24 Q3 Planned Activities:

- Finalize the control self-assessment report for the Banner Core environment and supporting artifacts i.e., incorporate these results into the Banner Core SSP and POA&M.
- Project #853:
 - Continue developing ITS Risk and Compliance SharePoint webpage and socializing the controls set and compliance strategies to the IT administrators and distributed IT stakeholders.
 - Conduct additional information sessions for IT personnel to review control requirements and solicit feedback.
 - Publish the finalized IT Security Standard based on Mason scoped and tailored NIST 800-53 baselines.
- Project #842: Complete the transition of the Banner Core DR and ITS COOP plans into RSA Archer tool.

Portfolio and Project Management

Enhancements to the Portfolio and Project Management processes to align with investment lifecycle and towards better program/project artifact management.

FY24 Q2 Accomplishments:

- The ITS Program and Project Management Office (PPMO) team continued the efforts that began last quarter, towards establishing the Financial Services Domain Council pilot. The purpose of each Domain Council is to be accountable for setting domain specific portfolio strategy and priorities, approving domain area projects into portfolio from project intake requests, approving Project Criteria Prioritization Scoring and placement within portfolio, developing prioritized list of initiatives for the domain (aligned with business goals) for Senior Leadership approval and maintain on-going tracking, re-balance, and resolve funding issues at the domain level while also updating domain leadership on status.
- Operationalized the Information Technology Domain Council. As of October 2023, ITS has conducted three monthly IT Domain Council meetings to help discuss new project requests, and conduct gate reviews for prioritization and approvals.
- The PPMO has engaged with the Provost's Academic Administration leadership to further define steps for establishing a domain council for that area. To this end, currently the PPMO team is working on a process to gather project requests for this function.
- Through the current FY24 Q2, the team is continuing to update the [Project Dashboard](#) to incorporate Domain Council operations as well as general project and portfolio reporting.
- Project #847: Team Dynamix Project Module. Requirements gathering and scoring were done to plan prioritization of tasks. The purpose of this project is to implement enhancements to the current project intake process, using Team Dynamix. This project is estimated to be completed by the end of FY24 Q3.

FY24 Q3 Planned Activities:

- The PPMO will develop and track performance metrics over the course of fiscal year 2024. These metrics will assess department achievement against goals to improve methodology and processes.

- Develop a Team Dynamix intake process for the Office of the Provost and Executive Vice President.
- Create methods to set up the Finance Administration projects in Team Dynamix.
- Continue the effort to help develop and establish the Domain Council for the Executive Vice-President for Finance and Administration.
- Create a Standard Communication Package for project intake. This will help streamline the socialization of the project intake process.
- Project #847: Continue work towards delivering the Team Dynamix Project Module by the end of FY24 Q3.

Information Security Program Management

Program enhancements for maturing the information security program at Mason, including protecting the confidentiality, integrity, and availability of data and systems while balancing access and productivity for the Mason community.

FY24 Q2 Accomplishments:

- A combined Incident Response (IR) and Disaster Recovery (DR) tabletop exercise was conducted on September 22. The exercise scenario was based on a ransomware attack, involving response and recovery objectives and focus on identifying areas of improvement. The draft After-Action Reports (AARs) are being circulated to the lead participants and observers for feedback and edits.
- Project #854: Design for updates to the password reset page was approved and the code is being developed. The purpose of this update is to automate the enforcement of mandatory trainings compliance through NetID password reset process. The project involves updating the password change process to require users complete their assigned mandatory security training prior to resetting their passwords. Target implementation is estimated to be in Jan 2024.
- Project #861: M365 Security, Optimization, Assessment, and Remediation project was approved by the IT Domain Council. This program is inclusive of the task to build Data Loss Prevention (DLP) capabilities in support of control enhancements especially for the sensitive data storage and use on Mason systems.
- Outreach initiated with external vendor for conducting a penetration test towards aligning with industry best practices as well as compliance requirements under the Gramm-Leach-Bliley Act.

FY24 Q3 Planned Activities:

- To meet requirements under GLBA, Mason's 'Qualified Individual' will submit a written report to the Audit, Risk, and Compliance committee for the Nov 30 meeting. This report will provide the overall status of the information security program, compliance, and brief of any material matters related to the information security program.
- Update the incident response process documents and investigate prioritization to use the RSA Archer workflows for this process.
- Define scope for the penetration test and initiate engagement contract.
- Project #861: Define tasks and apply resources to support M365 Security, Optimization, Assessment, and Remediation project. This work serves towards Data Loss Prevention control enhancements especially for the sensitive data storage and use on Mason systems.
- Project #854: Implement the password reset page code and process to enforce mandatory IT Security Awareness trainings.

Risk Assessment and Remediation

Program enhancements to mature the risk assessment and remediation processes at Mason, including a Governance, Risk, and Compliance (GRC) program.

FY24 Q2 Accomplishments:

- ITS operationalized the pilot ITS Risk Register forum. Members of the ITS senior leadership meet on a monthly basis to report, evaluate, and prioritize items for risk treatment.
- A lightweight Risk Assessment template is being tested in RSA Archer development environment to aid risk assessments for all IT systems in Mason and establish their risk profile (High, Moderate, Low), so that commensurate applicable security controls can be selected, applied, and documented, as required by the IT Security Standard. The plan would be to move this template to production and operationalize the process potentially by FY24 Q4 (beginning).
- The IT Risk and Compliance team created a FAR 52-204.21 compliance security plan template for use cases where the researcher wants to use a Mason managed endpoint for the project. This template serves as a standard compliance pattern that the research project team and Office of Sponsored Research can use to gain assurance that the right controls are in place when the project involves use of Mason managed user endpoints and the research has been designated as fundamental research but requires FAR 52-204.21 compliance. FAR 52-204.21 are fifteen (15) basic cybersecurity requirements that apply to any information system that is owned or operated by a contractor or a sub that processes, stores, or transmits Federal Contract Information (FCI) or may potentially do so in the future.

FY24 Q3 Planned Activities:

- Continue to configure and operationalize the risk assessment, issues, action plans, and exceptions management functionality in RSA Archer tool.

Change and Configuration Management

Establish a Quality Management Program to improve the delivery of IT Services at Mason, with a first area of focus in asset management and change/configuration management across the service portfolio.

FY24 Q2 Accomplishments:

- Project #617: ITS has an operational pilot with one team in Team Dynamix (TDX) towards moving the Change Management platform from the current Change Management Database (CMDB) to TDX. As part of the training and socialization effort to transition the Change Management process from the current CMDB system to TDX, the team has been working to bring the ITS Enterprise Collaboration team into TDX. Estimated timeframe to onboard these users is end of FY24 Q3. Training documentation to help transition the teams, is being built out. Knowledge Articles are in place, but are being reviewed for updates.
- The Change Management Procedure, Configuration Management and Change Management Process, and Change and Configuration Management Policy were reviewed and the drafts have been shared with Office of University Audit (OUA) for feedback and inputs.

FY24 Q3 Planned Activities:

- Receive feedback from OUA and finalize the Change Management Procedure, Configuration Management and Change Management Process, and Change and Configuration Management Policy documents.
- Continue to socialize and work towards implementing the Banner advisory board before end of FY24 Q3.
- Under a proposed project that is currently undergoing Domain Council approvals and prioritization, the ITS team will be working to redesign the development operations (DevOps) practice. This will help streamline and enhance the current Software Development Lifecycle (SDLC) to align with latest industry best practices. The request was cleared in ITS Domain Council for internal resource capacity and impact checks. Next, it is to be reviewed for final approval and prioritization.

Identity Management and Access Control

Continuously improve and mature the processes that support identity and access management (IAM) at Mason.

FY24 Q2 Accomplishments:

- Project #799: CDW (the consultant) was provided inputs and feedback to incorporate into their proposed IAM roadmap. The feedback incorporated Mason's perspective on the recommendations made by CDW at the end of their engagement earlier this year.

FY24 Q3 Planned Activities:

- Submit two separate project intake requests, one for an overall multi-year and high-investment program to establish a mature IAM service at Mason. The second project request is for the immediate tool/solution to replace the legacy Account Management System (AMS). Both projects will be discussed at the November IT Domain Council meeting. Approvals will also depend on resource and funding availability.

Information Technology Strategic Plan

The ITS service and technology roadmaps have been shared with ITS senior staff for review and updates to their respective functional roadmaps. This will facilitate top-down cascade on the tenets of the plan and any misalignments on planned projects and priorities can be identified early on.

All ITS managed/administered information technology projects (including those related to these focus areas) are available for review online at <https://its.gmu.edu/working-with-its/ppmo/projects-dashboard/>. Questions regarding projects in the portfolio can be addressed to Charlie Spann (cspann2@gmu.edu).

**BOARD OF VISITORS
GEORGE MASON UNIVERSITY**

**Meeting of
Thursday, September 28, 2023
Merten Hall, Hazel Conference Room (1201)**

MINUTES

PRESENT: Rector Horace Blackman, Vice Rector Jon Peterson, Secretary Michael Meese, Visitors Armand Alacbay, Reginald Brown, Lindsey Burke, Anjan Chimaladinne, Dorothy Gray, James Hazel, Dolly Oberoi, Robert Pence, Nancy Prowitt and Robert Witeck.

PRESENT VIRTUALLY: Visitor Jeffrey Rosen and Erin Iacangelo, Previous Staff Liaison.

ABSENT: Visitor Marquez.

ALSO, PRESENT: Melissa Broeckelman-Post, Faculty Representative; Will Gautney, Staff Liaison; Paul Wyche, Undergraduate Student Representative, Vikas Velagapudi, Graduate Student Representative; Gregory Washington, President; Ken Walsh, Executive Vice President for Strategic Initiatives and Chief of Staff; Mark Ginsberg, Provost and Executive Vice President; Deb Dickenson, Executive Vice President for Administration and Finance; Anne Gentry, University Counsel; and Sarah Hanbury, Secretary pro tem.

I. Call to Order

Rector Blackman called the meeting to order at 2:21 p.m.

Rector Blackman relayed that in accordance with the Electronic Meeting Policy, Visitor Rosen requested to participate remotely due to a personal matter. Due to Visitor Rosen's need to be in Boston as a Fall 2023 IOP Fellow at Harvard's Kennedy School, the Rector approved his remote participation request and due to this voting would be accomplished by roll call.

Rector Blackman stated that the board is accepting public comments at this session and that registration for making oral comments was open until 9:30 a.m. on Monday, September 25 through the form on the Board of Visitors website. No registrations for oral comments were received. Two written comments were received, they were provided to the Board and will be made a part of the public record of this meeting. In addition, written comments will be accepted on the same form until the full board meeting adjourns this afternoon.

II. Recognition

A. Appreciation Plaque Presentation to Outgoing Staff Liaison

Rector Blackman recognized Erin Iacangelo who served as the staff liaison to the board from 2021-2023. Ms. Iacangelo thanked the Board for the recognition and apologized that she could not attend in person. Ms. Iacangelo expressed that serving as the Staff Senate Chair was a pleasure and an incredible opportunity. Ms. Iacangelo stated that at times staff can feel invisible, especially at a large university, and being seen and heard by the Board means so much. Ms. Iacangelo learned a lot about the inner workings of Mason and the crucial role this Board serves. Ms. Iacangelo thanked the Board for their work and the time they have put in for the betterment of Mason. Ms. Iacangelo is pleased to have Will Gautney as her successor. Ms. Iacangelo concluded by thanking the Board Members, Rector Blackman and President Washington.

Rector Blackman presented Ms. Iacangelo with a plaque of appreciation for her contributions to the Board.

III. Approval of Minutes

- A. Planning Conference Minutes for July 27, 2023 (ACTION ITEM)**
- B. Annual Meeting Minutes for July 28, 2023 (ACTION ITEM)**

Rector Blackman called for any corrections to the minutes for the Planning Conference on July 27, 2023 and the Annual Meeting on July 28, 2023, that were provided for review in the board meeting materials. Hearing no corrections, Rector Blackman **MOVED** to approve the minutes. The motion was **SECONDED** by Secretary Meese. **MOTION CARRIED UNANIMOUSLY BY ROLL CALL VOTE.**

Yes – 15

Absent – 1 – Visitor Marquez

IV. Rector's Report

Rector Blackman reported the following items:

- The 2023 SCHEV BOV Orientation is scheduled for Tuesday and Wednesday, November 14-15, 2023 at the Lewis Ginter Botanical Garden in Richmond. He noted that attendance fulfills the requirements for new board members along with the continuing education obligation for board members with two or more years of service.
- Each Board member is required to file an annual financial disclosure through the Virginia Conflict of Interest and Ethics Advisory Council portal. The filing period to submit the financial disclosure through the portal is January 1 through February 1, 2024, covering the reporting cycle of January 1 through December 31, 2023.
- Upon entering a new academic and board year, it would be helpful when Board members have requests of the Mason leadership to provide those directly to the Rector, Vice Rector or Secretary and they will follow through with coordination. This approach is an attempt to streamline the request process and will hopefully assist with avoiding duplication.
- Encouraged participation in the Mason Now: Power the Possible Reception following this meeting on the Merten lawn.
- The Board of Visitors, Board of Trustees and Alumni Association Board Recognition Reception is Wednesday, October 18 at the Mathy House beginning at 6:30 p.m.
- Winter Commencement is Thursday, December 14, 2023, at EagleBank Arena and the ceremony begins at 9:30 a.m.
- Recognized Visitor Rosen for an announcement confirming the nature of his service to the Board as required by the policies of his law firm, Cravath, Swaine & Moore LLP (**ATTACHMENT 1**).
- Visitor Burke was invited to address the Board. She relayed that as director of the Center for Education Policy at the Heritage Foundation, she oversees research on early childhood, elementary, secondary and higher education. When Dr. Jay Green approached her about conducting research on the diversity, equity and inclusion (DEI) infrastructure in Virginia, as an extension of his existing research on the topic across the country, she immediately recused herself from the process of reviewing or editing the paper. A different vice president at Heritage reviewed and edited the report. She played no role in the development or publication of the report. The authors are eager to discuss the research with Mason's leadership.

This concluded the Rector's Report.

V. President's Report

- A. FY 2024 Goals Discussion (ACTION ITEM)**

Dr. Washington provided the following highlights:

- Who we are:
 - Graduated and enrolled the largest and most diverse classes ever. Mason is bringing in and graduating high-level students with a large percentage of them getting jobs upon graduation.

- About 30% of Mason's students come from an impoverished background which is changing Virginian families' lives.
- From a cost perspective, Mason is operating more efficiently than any other four-year institution in Virginia.
- Mason managed 27 small business development centers in Virginia and last year these centers had a \$3.36 billion economic impact on the state.
- A Great Year, So Far:
 - In FY 24 Mason has the highest enrollment of all time with the smartest and most diverse student body which typically doesn't coincide.
 - Mason had the best ranking performance in the history of this campus. Next to going to the final four, the increase in rankings is going to have the biggest impact on enrollment.
 - FY 23 had the best research award growth and was the best fundraising year.
 - Launched Mason's first billion-dollar campaign.
 - FY 23 had the best athletics performance with Mason winning three A10 Conference championships.
- Unprecedented Rankings Performance:
 - US News Rankings:
 1. Mason 105 against all universities which is a 32-spot increase from where Mason was. Mason jumped 32 institutions in one year.
 2. Mason is now ranked 51 against public universities which is a 13-spot increase.
 - Wall Street Journal Rankings:
 1. Mason is up 84 spots among all institutions and up 62 spots among public universities.
 - Forbes Rankings:
 1. In alignment with the rankings of the US News and Wall Street Journal.
 - Washington Monthly Rankings:
 1. Mason has the smallest ranking movement here.
 - FIRE Rankings:
 1. Their rankings are focused on how institutions manage free speech. Mason moved up seven spots to break the top 10.
 2. Mason was ranked number one in Virginia but is now number two, behind the University of Virginia (UVA).
 - Social Mobility:
 1. Many ranking entities now include social mobility which centers around how well institutions are helping people move from one economic stratification to another.
 2. All ranking organizations rank Mason first in Virginia.
- Our Plan for Success – FY 2024:
 - Engage Everyone:
 1. Mason Virginia Promise, which is the ADVANCE program, will extend to more institutions across the state. About 18% percent of students who graduate from a community college receive a four-year degree. At Mason, 86% of the students who enter through the ADVANCE program leave with a four-year degree within six years.
 2. Engaging Spanish language students.
 3. Currently launching the Direct Entry program. Within the next five years, it is believed that every university will utilize direct entry to engage students.
 - Manage Cost Uncertainty:
 1. Implemented a plan to improve Mason's budget situation by \$10 million this year, with \$7 million reductions made to date.
 - Partner or Perish:
 1. Moving forward will be talking about two external partnerships.
 2. Will continue to invest in Mason's faculty and staff.
 - FY 2024 Goal Additions:
 1. \$10 million in cost reductions.

2. Maintenance of FIRE and LGBTQ rankings.
- Project Overview – West Campus Expansion
 - Mason’s athletic facilities need an update and state support is not expected; the goal is to partner with private industry to expand West Campus.
 - Why Expand West Campus?
 - The current facilities are obsolete.
 1. The field house was built in 1982 which is obsolete structurally as are the facilities within it.
 2. The baseball field doesn’t have lights.
 3. The track needs work.
 4. Lacking soccer and training facilities.
 - There are 192 acres of undeveloped land, which is the largest undeveloped plot of land closest to Washington D.C. Because of this there are private industries interested in partnering with Mason.
 - Market Opportunity Study:
 - Brailsford & Dunlavy was brought in to take a look and talk to developers across the region to determine what type of markets make sense. All of the following markets were strong except for office:
 1. Rental Housing
 2. For-Sale Housing
 3. Retail
 4. Venues
 5. Hotel and Conference
 6. Office
 - Optimal Partnership Structure:
 - Traditional Development:
 1. Money, people and time are necessary to follow the traditional development route. This framework wouldn’t work for Mason as it has challenges in all three categories.
 - Concessionaire Development and Equity Development:
 1. Either concessionaire development or equity development makes the most sense for Mason.
 2. Concession development is university owned, privately operated and developer financed.
 3. Equity development is developer owned, privately operated and financed through a ground lease.
 4. These development structures do not require much money from the academic institution but do require Mason to share the facilities with external entities.
 - Baseball/Major League Cricket Stadium:
 - Entered into a memorandum of understanding (MOU) with entrepreneur Sanjay Govil to start investigating if a stadium is feasible.
 - Cricket is the second most popular sport in the world and in India it is the most popular sport. 45% of Mason’s international graduate students are from India.
 - If adding cricket is successful, Mason will have the best baseball stadium in the Atlantic 10 Conference.
 - Process of Evaluation:
 - Mission – Is the project in alignment with our basic values and ideals? Does it ultimately support our students, faculty and staff?
 - Leverage – Given that the campus is resource constrained, does the project have the proper fiscal support to not burden the university?
 - Resource Generation – Can this be a source of revenue generation? Have a number of potential partners lined up that President Washington would like to begin introducing to the Board for their input.
 - The Heritage Foundation Controversy:
 - Last week the Heritage Foundation issued a report accusing Virginia and in particular Mason, of “dangerous DEI bloat.”
 - There are three challenges with the report:
 1. Indexing DEI staff to tenured/tenure-track faculty instead of students. The DEI staff serves the students and they should be indexed and not tenure track faculty.

2. Classification of the number of DEI staff at Mason. The Heritage Foundation sent Mason a list of all the individuals who are listed as DEI staff on Mason's website. Upon checking the list, more than half of those entities are students. Mason has work study and federally funded programs that are work study programs and student interns that are going through experiential learning in on-campus, part-time jobs. These students were considered full-time DEI staff, which they are not, and accounted for more than half of the list.
 3. Focus on Power 5 athletic conference schools and Mason. Mason was the only non-Power 5 school in the cohort that was examined.
 - o Advocated to create a university committee to review these results and would like to provide names to Rector Blackman for consideration.
- Dr. Washington presented a table that outlines the data/numbers from the Heritage Foundation. Please refer to the meeting materials and video for specifics: <https://vimeo.com/showcase/8557205/video/870393383>.

This concluded Dr. Washington's first report of the 2023-2024 academic year. Rector Blackman requested that Visitor Burke participate on the university committee which will perform an analysis of Mason's DEI staff, provided there were no objections from the Board, which there were not. Visitor Witeck and Dr. Melissa Broeckelman-Post volunteered to serve on the committee. Paul Wyche spoke to DEI and the West Campus expansion. Significant discussion ensued, please refer to the video for specifics: <https://vimeo.com/showcase/8557205/video/870393383>.

Rector Blackman **MOVED** to approve Dr. Washington's updated FY 2024 Goals. The motion was **SECONDED** by Visitor Chimaladinne. There was no discussion. **MOTION CARRIED UNANIMOUSLY BY ROLL CALL VOTE.**

Yes – 15

Absent – 1 – Visitor Marquez

VI. Faculty Action Process

Rector Blackman invited Provost Ginsberg to provide a review of the tenure process due to the significant discussion regarding the faculty action process at the Annual Meeting. Rector Blackman relayed that this process was also reviewed at the Academic Programs, Diversity and University Community Committee meeting earlier that day. Provost Ginsberg began by noting the tenure review process is comprehensive, clear, and transparent and continued with the following overview:

- Tenure Faculty Promotion:
 - o There are three ranks for tenure-line professors:
 1. Assistant or Associate Professor (Pre-Tenure)
 - Hired on qualification, achievement and potential for growth on an initial three-year contract.
 - They are evaluated toward the middle part of their second year about the possibility of returning for a second three-year contract.
 - Most are awarded a second contract but some individuals leave the university after the initial three-year contract.
 2. Associate Professor (Without Term):
 - Towards the middle of the fifth year of their second contract, faculty members have the opportunity to prepare a dossier for tenure which can take several forms:
 - o Assistant or associate professors in the pre-tenure period who stand for tenure.
 - o An associate professor who is an associate professor without term. They have the opportunity to stand for promotion to full professor. This is usually six or seven years after being awarded tenure but is not a requirement.

- There is no explicit requirement for an associate professor to stand for promotion to full professor. Most do, but there are some who remain at the associate level.
 - In order to be promoted to associate professor, they must demonstrate genuine excellence in teaching or in research/scholarship and evidence of university service.
 - Provide evidence that their contributions have an impact that goes beyond the boundaries of this university.
- 3. Full Professor (Without Term):
 - Demonstrate genuine excellence in teaching or research/scholarship and evidence of university service.
 - Provide evidence of significant impact beyond the boundaries of the university must be much more substantial than in cases involving tenure or promotion to the rank of associate professor without term.
- Promotion and Tenure Portfolio, Required Materials:
 - Provide a comprehensive statement about teaching/mentoring and research, including future plans.
 - Employment chronology, particularly at Mason and before.
 - Current curriculum vita, to include clear evidence about research and scholarship.
 - Evidence for research and scholarly achievement, as well as teaching effectiveness, student evaluations and external letters of review.
 - Mason seeks a minimum of five external letters and other materials including an evaluation of teaching that speaks to the impact of the candidate's research, scholarship, and/or creative work. These letters are sent to Mason on a confidential basis, not to be provided by nor reviewed by the candidate. These external letters are reviewed internally by the university.
- Promotion and Tenure, Process:
 - Is minimally a year-long review process with seven steps:
 1. Departmental review by the LAU first-level promotion and tenure committee.
 2. All materials are reviewed by the LAU Chair of the candidate's college/school.
 3. Review conducted by second-tier college/school-level review committee.
 4. All materials are reviewed by the dean of the candidate's college/school.
 5. The complete dossier is reviewed by the provost who recommends actions to the President.
 6. After review of the dossier, the president makes a recommendation to BOV.
 7. The BOV confers promotion/tenure or promotion of tenured faculty to the rank of professor.

Dr. Provost Ginsburg concluded that this process is undertaken with great care. Following Provost Ginsberg's presentation brief conversation ensued, please refer to the video for specifics:

<https://vimeo.com/showcase/8557205/video/870393383>.

Given that this is Provost Ginsberg's last report before transitioning to the presidency of Towson University, Rector Blackman thanked him for his service, commitment and dedication to Mason. Provost Ginsberg thanked Rector Blackman and replied that it has been the greatest honor of his professional life to serve as Provost and a great honor to serve with a great colleague and a dear friend in President Gregory Washington. Applause ensued.

VII. Committee Reports

A. Development Committee

Visitor Chimaladinne briefed the board on the topics presented and discussed during the Development Committee meeting, which included:

- Board of Trustees (BOT) – Michael E. Stievater, Foundation Chair

- The foundation was happy to report that the endowment returned a positive 15%, and the market value on June 30 was \$179 million. The endowment paid out \$5 million in support for university students, faculty, and programs.
- Advancement and Alumni Relations – Ms. Trishana Bowden, Vice President, Advancement and Alumni Relations/President
 - In FY 2023, Mason had a historic fundraising year, amassing \$139.3M by the end of June. This fiscal year, we have already raised over \$18.4 million, and two of the colleges, the College of Engineering and Computing and the College of Public Health are over 50 percent of the way towards their FY 2024 goal.
 - In conjunction with the Office of the President, invitations were extended to each BOV member to the following events.
 1. ARTS by George!, will be held on Saturday, September 30. This signature College of Visual and Performing Arts event benefits student scholarships and our community arts programs.
 2. On November 30, Mason will mark a meaningful transformation for the School of Business with the official renaming celebration of the Donald G. Costello College of Business.
 3. The kick-off of the Mason Now campaign for faculty and staff engagement occurs after this meeting. BOV members were encouraged to attend.
- Foundation Overview – Ms. Beth Cantrell, Chief Financial Officer of the Mason Foundation, Inc.
 - Shared an overview of the George Mason University Foundation, Inc. with the committee, covering its mission, history, structure, function, and financial highlights from the 2023 fiscal year.
- Campaign Priorities – Dean Ken Randall, Antonin Scalia Law School
 - Presented the law school's Mason Now campaign priorities. The dean discussed the school's progress, rankings, graduate enrollment, development income, and campaign support for the school's next era of growth.

There were no action items from the committee to bring before the full board.

B. Audit, Risk, and Compliance Committee

Visitor Oberoi briefed the board on the topics presented and discussed during the Audit, Risk and Compliance Committee meeting, which included:

- The Committee was briefed by Senior Vice President Jackie Ferree and Vice President Frank Strike on Mason's program to assess the condition of facilities and determine action priorities and plans:
 - The Facilities Condition Assessment program maintains a comprehensive inventory of Mason's facilities. The condition of facility components, such as exterior closure, roofing, plumbing, HVAC, fire protection, and many more, are inspected at least once every three years. Based on these inspections, and assessments, component conditions are managed based on risk to the facility function. Condition thresholds are in place to inform 'repair or replace' actions. Annual action plans, in conjunction with three, five, and ten-year roadmaps, are developed and prioritized in consideration of health and safety; support for mission; student experience; sustainability and resiliency; and continuity of operations. They discussed the application of the program for three recent projects: Horizon Hall, Harris Theatre, and the Aquatic and Fitness Center.
- The Committee completed its annual review and approval of the Committee's Charter and the Office of Audit and Compliance Charter.
 - Minor revisions to the Committee charter were made to reflect the Committee's May 2023 action to adjust the Office of Audit and Compliance charter to reflect the resumption of the enterprise risk management program as an integral component of the Finance and Administration organization reporting to the Executive Vice President. The Committee Charter continues to align with the Board's bylaws.
 - Received the annual confirmation of the organizational independence of the Office of Audit and Compliance. The Committee concurred with this conclusion.

- The Committee reviewed the reports covering audit, audit planning, compliance, and management’s program to strengthen the IT control infrastructure included in the materials on BoardEffect:
 - The audit team continues to make satisfactory use of co-sourced professionals to accomplish audit work while continuing their searches to fill open Senior Auditor positions. The Committee will continue to monitor audit resourcing carefully.

There were no action items from the committee to bring before the full board.

C. Academic Programs, Diversity and University Community Committee

Visitor Burke briefed the board on the topics presented and discussed during the Academic Programs, Diversity and University Community Committee meeting, which included:

- Provost Mark Ginsberg provided an update for the fall 2023 semester and a retrospective of his time as provost as he departs Mason this fall to become president of Towson University. He gave an overview of the provost’s office and its efforts to enhance access to excellence and opportunity for Mason students. In Fall 2023, Mason enrolled over 40,000 students and welcomed new students during move-in and convocation. Provost Ginsberg gave a review of the modality of instruction, detailed that Mason's rankings have seen an upward trajectory, and highlighted faculty honors. He discussed faculty promotion and tenure policies and then reflected on accomplishments during his tenure as provost across many critical domains, including students, faculty, and administrative leadership.
- David Burge, Vice President for Enrollment Management, and Alan Byrd, Dean of Admissions, reported on Admissions and Enrollment for the Fall 2023 semester. At the time of their report, Mason’s overall enrollment reached over 40,000 students. They also provided a brief overview of Mason’s admissions processes. Those processes are race-neutral and efforts are made to find reasons to include someone in the Mason community, welcoming everyone who is academically prepared for the rigors of study. When students apply to Mason, they are evaluated on their high school academic performance, extracurricular and community activities, and personal essays. Mason reports an admission rate of approximately 90 percent for undergraduates.
- Before making a motion to approve the action items, Visitor Burke gave the floor to Dr. Washington to say a few words about Provost Ginsberg. Dr. Washington stated that there is a reason why Provost Ginsburg is going to be the next president of Towson University, when looking across Virginia and the region he has no peer. Dr. Washington concluded by congratulating Provost Ginsburg. Applause ensued.

Visitor Burke **MOVED** to approve the following two (2) action items, en bloc, as provided in the meeting materials:

1. Resolution to appoint Mike Meese as the Board of Trustee Member for the Online Virginia Network Authority for George Mason University (**ATTACHMENT 2**) and;
2. Faculty Actions
 - a. Conferral of Emeritus/Emerita Status (**ACTION ITEM**)

The motion was **SECONDED** by Visitor Hazel. **MOTION CARRIED UNANIMOUSLY BY ROLL CALL VOTE.**

Yes – 15

Absent – 1 – Visitor Marquez

D. Finance and Land Use Committee

Visitor Pence briefed the board on the topics presented and discussed during the Finance and Land Use Committee meeting, which included three (3) action item that require full Board approval:

- The Committee voted to approve the Amended FY 2024 Budget, which amends the baseline budget scenario that was approved in May to reflect the following changes:
 - The final FY24 State budget granted additional General Fund allocations for affordable access and operations, financial assistance, and an increase in the cost-share for the 2% salary increase.
 - Mason also projects higher Fall 2023 enrollment growth, improved interest income, and a net positive financial impact from anticipated real estate acquisitions.
 - The net result of these changes is a \$23 million improvement in Mason’s All Funds Operating Budget shortfall, reducing it to \$9 million, and an improvement of \$6.3 million in the projected E&G Operating Budget shortfall to \$35.1 million.
 - The FY24 amended budget will not result in a deficit, as the amended budget shortfalls will be mitigated with cost containment, operating efficiencies, and other strategies.
 - Per the committee's direction the Antonin Scalia Law School will be exempted from budget reduction in the FY24 budget with the offset coming from Mason’s Reserves.
 - The FY24 Capital Budget amendment would increase the planned drawdown of fund balances to \$129 million, from the approved \$22 million, in preparation of the acquisition of Vernon Smith Hall. The final FY24 State budget also allocated an additional \$1.2 million in capital appropriations for Maintenance Reserves.
- The Committee voted to approve a new Incentive Retirement Plan to encourage the voluntary retirement of eligible tenured faculty as a standing policy for this and future retirement incentive offerings.
 - The FY24-FY25 plan has been enhanced from previous offerings to encourage participation while providing budget relief and flexibility for colleges and schools.
 - For FY24-FY25, a threshold exception will be requested of up to seven percent of the General Fund appropriation for faculty salaries and associated benefits.
 - The plan must be approved by the Attorney General and Governor before taking effect.
- The Committee also voted to approve the required annual Land Use Certification submission to the Department of General Services showing present and planned uses of each property owned. The significant changes since last year’s report are the acquisition of additional property across Fairfax Drive from the Mason Square Campus and the addition of the Masonvale improvements as Commonwealth assets.

Visitor Pence **MOVED** to approve the following three (3) action items, en bloc, as they are provided for review in the meeting materials:

1. Financial Matters
 - a. Amended FY 2024 Budget (**ACTION ITEM**)
2. Operational Matters
 - a. Incentive Retirement Plan (**ACTION ITEM**) (**ATTACHMENT 3**)
3. Capital Matters
 - a. Land Use Certification (**ACTION ITEM**)

The motion was **SECONDED** by Visitor Prowitt. **MOTION CARRIED UNANIMOUSLY BY ROLL CALL VOTE.**

Yes – 14

Absent – 2 – Visitors Marquez & Chimaladinne

E. Research Committee

Visitor Prowitt briefed the board on the topics presented and discussed during the Research Committee meeting, which included:

- Vice President for Research, Innovation, and Economic Impact, Andre Marshall, reported continued strong advancement in Mason’s research enterprise with 55% YoY growth in research awards followed by early

indicators of increased research activity reflected in the 34% YoY increase in July through August research expenditures. A dashboard was also provided aligned with the framework for describing research in terms of scholarship, partnership, and translational research activities; and infrastructure, services, and research culture support.

- Dr. Parag Chitnis, Associate Professor in the College of Engineering and Computing and PhD Student Erica King provided an overview of their work on Wearable Ultrasound Systems for Assessment of Musculoskeletal Injury and Recovery. A multidisciplinary team of Mason researchers led by Dr. Parag Chitnis, is developing novel wearable-ultrasound technologies for achieving these objectives. This presentation provided an overview of these efforts and perspectives of Bioengineering Doctoral student, Ms. Erica King, who is spearheading validation of these ultrasound-based methods against conventional clinical and biomechanical approaches.

There were no action items from the committee to bring before the full board.

VIII. Closed Session

- A. Honorary Degrees and Special Awards (Code of VA: §2.2-3711.A.11)
- B. Personnel Matter (Code of VA: §2.2-3711.A.1)
- C. Consultation with Legal Counsel pertaining to actual or probable litigation (Code of VA: §2.2-3711.A.7)
- D. Consultation with Legal Counsel regarding specific legal matters requiring the provision of legal advice (Code of VA: §2.2-3711.A.8)

Vice Rector Peterson **MOVED** that the Board go into Closed Session under the provisions of Section 2.2-3711.A.11, for Honorary Degrees and Special Awards; Section 2.2-3711.A.1 to discuss President Washington's contract and a university investigation; Section 2.2-3711.A.7, for Consultation with legal counsel pertaining to actual or probable litigation including briefings on:

Agrawal v. GMU
Amison v. GMU et al
Ganley and Surber v. GMU et al.
Jeong v. GMU et al
Kinuani v. GMU
Morrison v. GMU et al.
Ukor v. GMU

and Section 2.2-3711.A.8 for Consultation with Legal Counsel regarding specific legal matters requiring the provision of legal advice concerning the aforementioned items, a university review and admissions policies and the personnel exemption to discuss the performance of the school. The motion was **SECONDED** by Secretary Meese. **MOTION CARRIED UNANIMOUSLY BY ROLL CALL VOTE.**

Yes – 13

Absent – 3 – Visitors Marquez, Oberoi & Witeck

Following closed session, Vice Rector Peterson **MOVED** that the board go back into public session and further moved that by roll call vote the board affirm that only public business matters lawfully exempted from the open meeting requirements under the Freedom of Information Act were heard, discussed or considered in the closed meeting, and that only such business matters that were identified in the motion to go into a closed meeting were heard, discussed or considered in the closed meeting. Any member of the board who believes that there was a departure from the requirements as stated, shall so state prior to taking the roll call, indicating the substance of the departure that, in his or her judgment, has taken place. The **MOTION** was seconded by Secretary Meese. **ALL PRESENT BOARD MEMBERS RESPONDED IN THE AFFIRMATIVE BY ROLL CALL.**

Yes – 10

Absent – 6 – Visitors Burke, Chimaladinne, Marquez, Oberoi, Pence & Rosen

Rector Blackman confirmed that Visitor Rosen was no longer present virtually. Rector Blackman then **MOVED** to approve the following two (2) items en bloc:

- The awarding of Honorary degrees at a future date to the individuals discussed in closed session for that purpose and;
- The written resolution of the Board of Visitors of George Mason University authorizing an increase in base salary for President Washington (**ATTACHMENT 4**).

The motion was **SECONDED** by Secretary Meese. There was no discussion. **MOTION CARRIED UNANIMOUSLY BY VOICE VOTE.**

IX. Public Comments

No registrations for oral comment were submitted and two written public comments were received (**ATTACHMENT 5**).

X. Adjournment

Rector Blackman called for any additional business to come before the board. Visitor Brown wanted the record to state that the written comment that was received regarding diversity, equity and inclusion does not reflect what happened. Rector Blackman relayed that he supports Visitor Burke and that it's important for the Board to stand shoulder-to-shoulder in that regard. Rector Blackman adjourned the meeting at 5:12 p.m.

Prepared by:

Sarah Hanbury
Secretary pro tem

Attachment 1: Letter from Visitor Rosen to Rector Blackman (1 page)
Attachment 2: Resolution: Online Virginia Network Authority (1 page)
Attachment 3: Resolution: Incentive Retirement Plan (1 page)
Attachment 4: Resolution: Increase in Base Salary for President Washington (1 page)
Attachment 5: Public Comment Registrations (2 pages)

CRAVATH

Jeffrey A. Rosen
jrosen@cravath.com
T+1-202-869-7724
Washington, D.C.

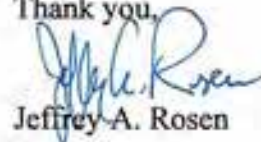
September 11, 2023

Dear Rector Blackman:

I have been pleased to serve on the George Mason University Board of Visitors (the "Board"). I am writing in accordance with the internal policies of Cravath, Swaine & Moore LLP ("Cravath"), to confirm the following regarding my service on the Board:

1. I will not request nor accept payment for my Board service.
2. I will not perform legal work or provide legal advice to the Board or George Mason University.
3. In serving on the Board, I will act in my individual capacity and not as an attorney or other representative of Cravath.

Thank you,



Jeffrey A. Rosen

Rector Horace Blackman
Board of Visitors, George Mason University
4400 University Drive, MSN 3A1
Fairfax, VA 22030

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New York, NY 10019-7475
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LONDON

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London EC2Y 9HR
T+44-20-7453-1000
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WASHINGTON, D.C.

1601 K Street NW
Washington, D.C. 20006-1682
T+1-202-869-7700
F+1-202-869-7600

CRAVATH, SWAINE & MOORE LLP

**RESOLUTION
OF THE
BOARD OF VISITORS OF GEORGE MASON UNIVERSITY**

WHEREAS, pursuant to Code of Virginia §23.1-3136 the Board of Visitors must appoint a non-legislative citizen member to the Board of Trustees of the Online Virginia Network Authority, for a term of four (4) years:

NOW, THEREFORE BE IT RESOLVED:

The Board of Visitors hereby appoints Michael Meese to be a member of the Board of Trustees of the Online Virginia Network Authority, for a term of four (4) years.

Adopted: September 28, 2023



Horace Blackman, Rector,
Board of Visitors
George Mason University

**RESOLUTION OF
THE BOARD OF VISITORS OF
GEORGE MASON UNIVERSITY
TO APPROVE A FACULTY INCENTIVE RETIREMENT PLAN**

WHEREAS, Code of Virginia §23.1-1302 permits the Board of Visitors of George Mason University (the "Board") to establish a compensation plan designed to provide incentives for voluntary early retirement of teaching and research staff employed in non-classified, faculty positions; and

WHEREAS, the proposed Faculty Incentive Retirement Plan ("IRP") meets the requirements of Code of Virginia §23.1-1302; and

WHEREAS, Code of Virginia §23.1-1302 provides that any such voluntary early retirement compensation plan must be approved by the Governor, and reviewed for legal sufficiency by the Office of the Attorney General; and

WHEREAS, the 2023 Appropriation Act, §4-6.01, paragraph m.1, provides that the total cost in any fiscal year for a voluntary early retirement incentive plan shall be set forth by the governing body in the compensation plan, for approval by the Governor and review for legal sufficiency by the Office of the Attorney General;

NOW, THEREFORE BE IT RESOLVED:

1. Subject to and following the approval of the Governor, and review for legal sufficiency by the Office of the Attorney General, the Board hereby authorizes the University to establish a Faculty Incentive Retirement Plan (IRP), consistent with the terms presented to the Board, and specifically authorizes the President or the Provost to execute IRP agreements with tenured faculty; and
2. The Board hereby approves the total cost for such IRP as provided in the terms of such plan presented to the Board; and
3. This resolution shall take effect immediately upon its approval by the Board.

Adopted: September 28, 2023


Secretary
Board of Visitors
George Mason University

**RESOLUTION OF THE BOARD OF VISITORS OF GEORGE MASON UNIVERSITY
AUTHORIZING INCREASE IN BASE SALARY FOR PRESIDENT WASHINGTON**

WHEREAS, President Dr. Gregory Washington entered into an employment agreement with George Mason University ("University") first dated March 3, 2020, as amended ("Employment Agreement"), and has served as University president since July 1, 2020;


WHEREAS, in accordance with Section D.1. of the Employment Agreement, any increase in Base Salary requires approval by the Board of Visitors; and

WHEREAS, at its July 28, 2023, meeting, the Board of Visitors approved an increase of 2.5% to President Washington's annualized Base Salary, to \$753,375, to be paid from state funds and Other Funds as specified in Section D.1 of the Employment Agreement, in conformance with the University's across-the-board salary increases for faculty. This increase did not include consideration of a 2.5% performance-based merit increase to his Base Salary which was an oversight;

NOW, THEREFORE, BE IT RESOLVED:

Effective June 10, 2023, the Board of Visitors approves a performance-based merit increase of 2.5% to President Washington's annualized Base Salary to \$772,209.38, to be paid from State and Other Funds as specified in Section D.1 of the Employment Agreement.

Approved by the Board of Visitors on September 28, 2023.


Signature
Mike Meese
Secretary of the Board of Visitors

Public Comments
George Mason University
Board of Visitors Meeting
September 28, 2023

1. Name: James H. Finkelstein (Written Comment Only) **Mason Affiliation:** Professor

Comment: I am submitting this public comment to ask that the BOV publicly rebuke one of its members, Dr. Lindsey Burke. As the Director of the Center for Education Policy at the Heritage Foundation, she sponsored a report released on September 21, 2023—"The Dangerous DEI Bloat at Virginia's Public Universities." This report directly aims at Mason, stating, "George Mason University, which has a reputation as a right-of-center institution, has 7.4 DEI personnel per 100 tenure-track faculty, which is the highest of any public university in the country analyzed in this Backgrounder."

This report is fatally flawed in several ways, not the least of which is that Mason was not included in the original sample to which it is being compared; that is, it is not a "like institution" to the others. Second, the data for Mason appears to have been collected at a different point in time, at least two years later than the rest of the sample to which it is being compared. In addition, the authors assume that Mason is a "right-of-center institution" but provide no evidence for making this claim. They use this claim as a "straw man" to suggest that promoting diversity undermines the university's reputation.

Most importantly, nowhere in this report do the authors or the Heritage Foundation disclose Dr. Burke's membership on the BOV and that she chairs the Academic Programs, Diversity & University Community Committee. Nor is it disclosed that she is a frequent coauthor with the report's first author, Dr. Jay Greene. I urge the BOV to request that the State Inspector General investigate Dr. Burke's role in producing this report, including what information or direction she gave to Dr. Greene.

Over three decades ago, Ed Meese, Ed Fulner, Bill Kristol, Rich Fink, and Jim Miller were members of the BOV. These were all nationally known conservatives. In late 1999 and early 2000, I worked closely with Mr. Meese and Dr. Miller in creating the School of Public Policy despite our significant political differences. Dr. Fulner was the founder of Heritage. Mr. Meese was the Ronald Reagan distinguished Fellow at Heritage. To the best of my knowledge, neither ever commissioned a study by Heritage staff to criticize Mason. Mr. Kristol did not use the Weekly Standard to do so, nor did Dr. Miller have Citizens for a Sound Economy attack the university.

The BOV should ask Ms. Burke to step down as chair of the committee and issue an apology to the Mason community. Further, the BOV should request that the Heritage Foundation retract the report.

2. Name: Sophie Wagner (Written Comment Only) **Mason Affiliation:** Student

Comment: Democracy onAir is coordinating a Meet Your Candidates night. This event will occur in Dewberry Hall and Lobby at the GMU Fairfax campus this October 24. See this link <https://vagov.onair.cc/meet-your-candidates-fairfax/> for more information on the event including the 6 Republican and 6 Democratic candidates participating in town halls.

Public Comments
George Mason University
Board of Visitors Meeting
September 28, 2023

The Fairfax County Republican and Democratic Committee and the College Republicans at Mason are supporting this event (I am in discussion with the Democrats at Mason). We have invited Senator Kaine to lead a town hall for the Democratic candidates at 7:00. We have invited Governor Youngkin to lead a similar town hall with the Republican candidates at 7:30.

We are livestreaming and recording the event. We will be reaching out to local and national networks once we finalize the Republican and Democratic leaders for the 7 and 7:30 town halls.

We will be launching the Virginia Government Hub at this event as well as promoting the early next year launch of the US Government Network.

We have also reserved Dewberry Hall and Lobby on October 22, 2024 to have a similar event at Mason prior to the November elections with a focus on the NoVA congressional races.

We would appreciate your assistance in promoting the event in Mason News and Mason Spirit. Thank you for supporting the Mason alumni and students who are leading Democracy onAir's efforts to engage voters in their democracy.!



**Washington
Freedom**



**George Mason
University**

**Board of Visitors
November 30, 2023**



Introduction

Sanjay Govil (Owner – Washington Freedom)



SANJAY GOVIL

- ✓ Owner, Washington Freedom
- ✓ Founder & Chairman, Infinite
- ✓ Founder & Chairman, Zyter
- ✓ Washington D.C. based



NEW SOUTH WALES

- ✓ High performance partner of the Washington Freedom
- ✓ Responsible for coaching, sports science and sports medicine, performance analysis and team operations



Major League Cricket (MLC) is the first professional T20 league in the U.S.

League Overview

- Operated by American Cricket Enterprises (ACE) and sanctioned by USA Cricket
- Features top-class domestic and international talent across franchises representing six major cities: Dallas, San Francisco, New York City, Seattle, Los Angeles and Washington D.C.
- The inaugural season was played in July 2023 with 15 regular season matches. The four teams with the best regular season records qualified for the playoffs to decide a champion

Teams





**Cricket debuting
at 2028 OLYMPICS
in Los Angeles**

**Over 30 Million
Cricket Fans in
the U.S.!**



Our Mission

- Support and elevate the game of Cricket in the US and locally
- Host Major League Cricket games and International Cricket Matches
- Engage the next generation of youth and cricketers
- Provide opportunities for diverse cultural events



2023 Washington Freedom Highlights





Why George Mason University?

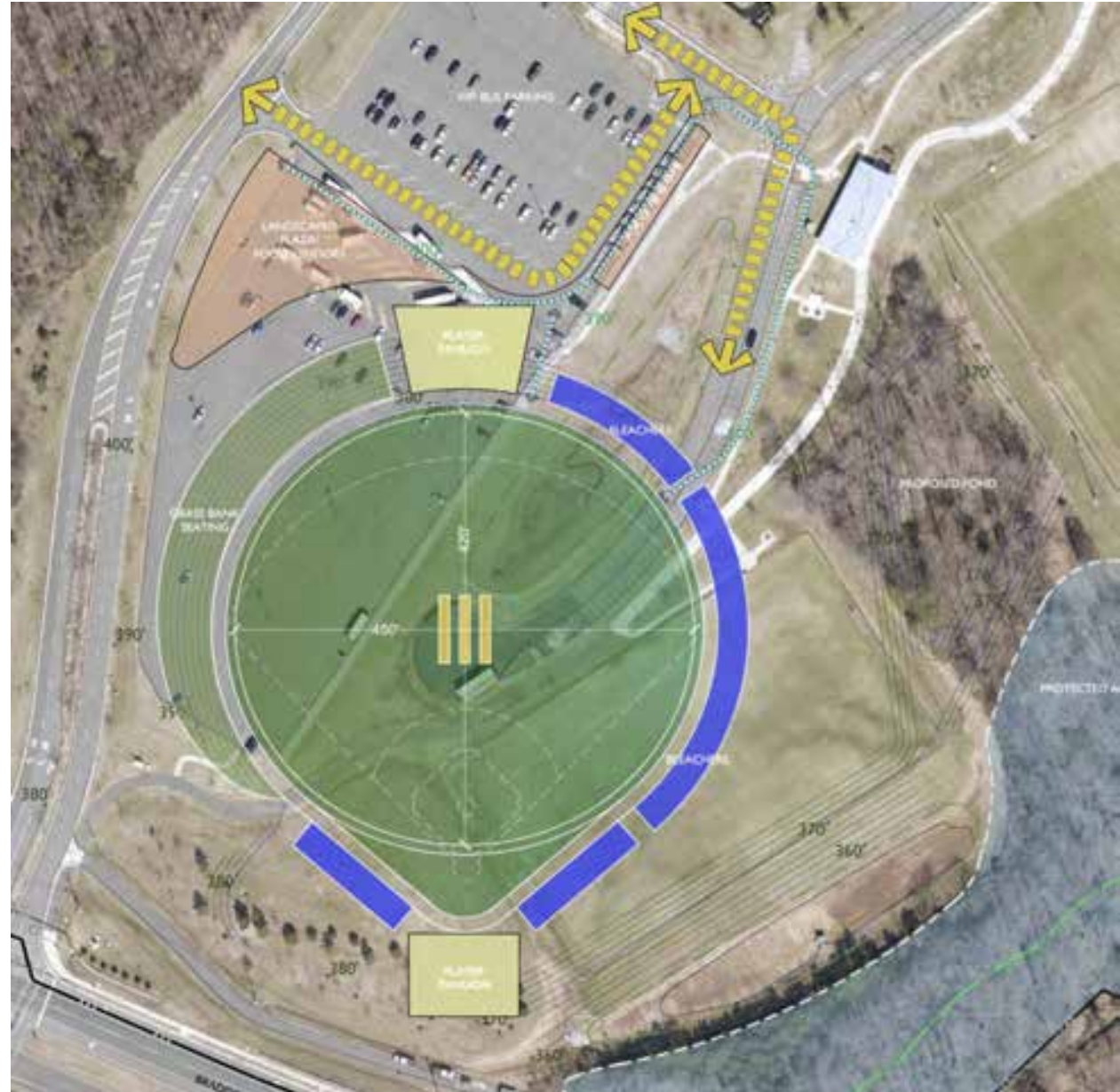
- Shared goal of connecting the community with their heritage
- Exceptional Diverse Student Population
- Athletic Fields and existing supporting infrastructure for practices, sports medicine, and strength & conditioning
- Centrally located with proximity to major transportation hubs
- Growing University and diverse/international student body



2024 ICC T20 World Cup Events & MLC Season

Proposed Pop-up Stadium Concept

Design is in progress





Additional Benefits for the GMU Community

- Exclusive tech recruitment program between GMU and Infinite Computer Solutions
- Robust paid internship program between GMU Career Services Office and Infinite Computer Solutions
- International recognition and media with an audience of 1.5 billion people - showcasing collaboration between Washington Freedom + GMU with a focus on the Indian subcontinent

QUESTIONS / DISCUSSION

WASHINGTON
Freedom





BOARD OF VISITORS

Sharnnia Artis, VP for Diversity, Equity, and Inclusion and Chief Diversity Officer
Rose Pascarell, VP for University Life

November 30, 2023

DEI Committee Report

During the September 28th BOV Meeting, President Washington established a Diversity, Equity, and Inclusion (DEI) committee.

The committee was formed to:

- Examine Mason's diversity, equity, and inclusion (DEI) staffing levels, the programs they support and provide additional clarity as it relates to the Heritage Foundation report
- Provide DEI metrics and impact on Mason's internal and external communities
- Identify DEI benefits and risks
- Highlight Mason's approach to DEI

Committee Members

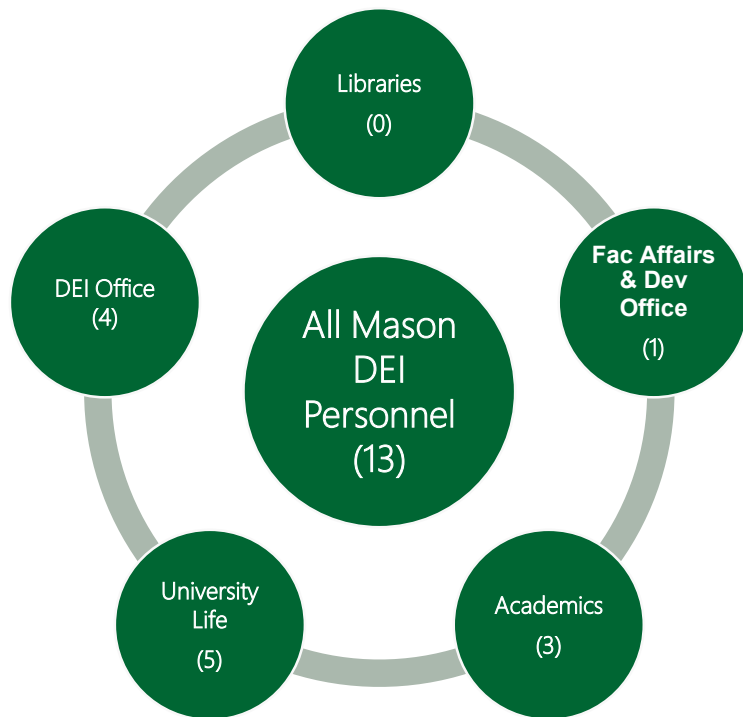
Committee Member Title & Office	Name
VP for University Life and Committee Chair, APDUC Committee	Rose B Pascarell
VP for Diversity, Equity, and Inclusion and Chief Diversity Officer, APDUC Committee	Sharnnia Artis
Interim Vice President for Human Resources	Whitney Owen
President of the Faculty Senate, Board of Visitors (BOV) Member	Melissa Broeckelman-Post
Senior, Public Administration, Student Government Advisor	Zayd Hamid
Board of Visitors	Visitor Bob Witeck
University Business Consulting	University Business Consulting

The background is a dark green color with a faint, low-angle photograph of a building and trees. The building is a multi-story structure with a grid of windows, and the trees are in the foreground, partially obscuring the building. The overall image has a moody, atmospheric feel.

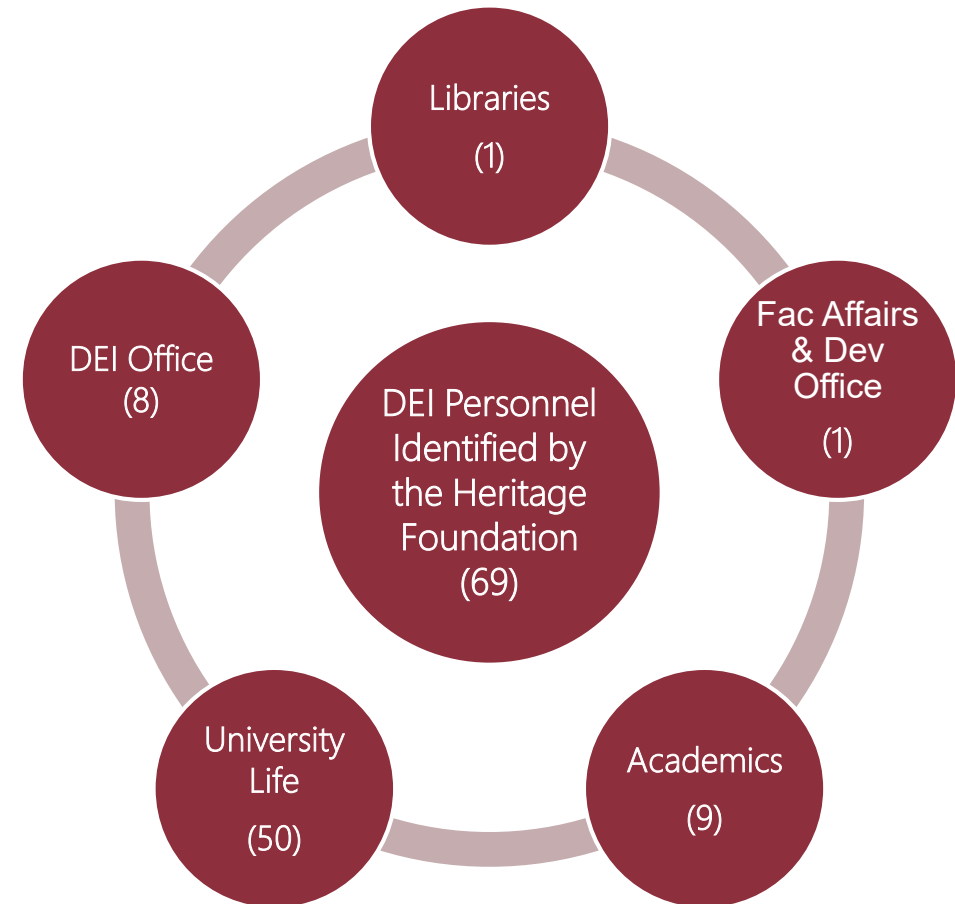
DEI Staffing Study

DEI Staff at Mason

The visuals below show the difference between Mason current DEI staff and the staff count reported in the Heritage Foundation report¹.



MicroStrategy Position by Labor Distribution Org Report, 10/25/2023



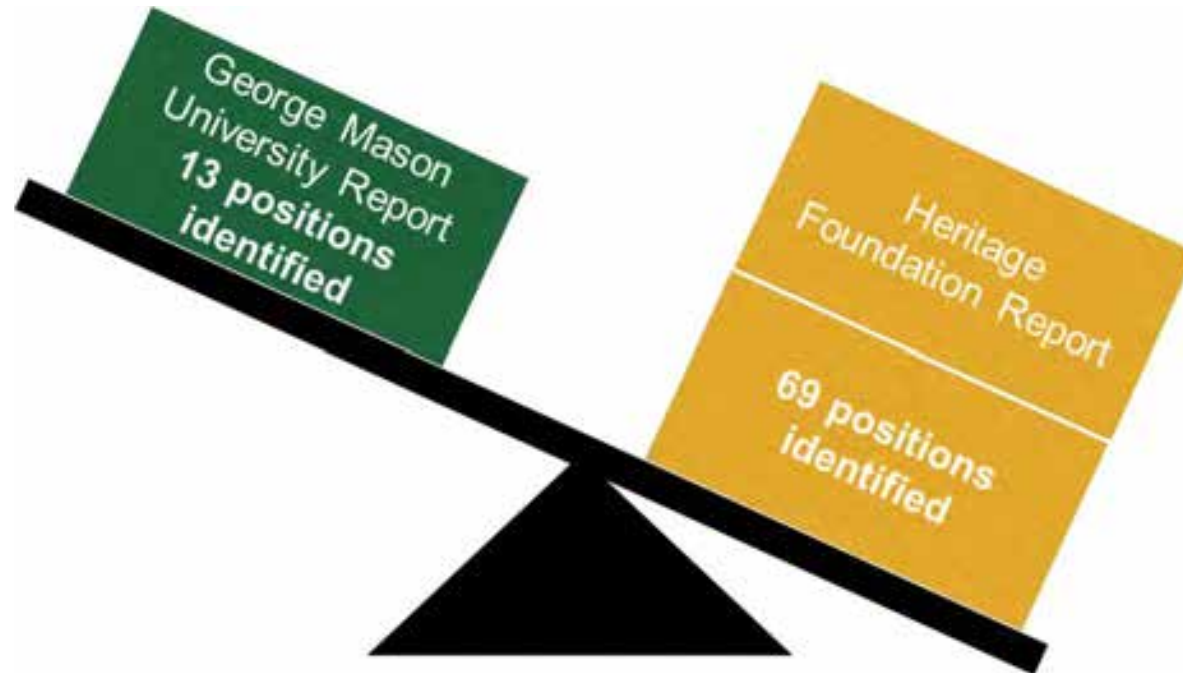
Heritage Foundation Report, The Dangerous DEI Bloat at Virginia's Public Universities, 9/1/2023

¹Heritage Foundation Report, The Dangerous DEI Bloat at Virginia's Public Universities, [The Dangerous DEI Bloat at Virginia's Public Universities | The Heritage Foundation](#)

Staffing Analysis Outcomes

Our staffing analysis¹ helped us identify similarities and differences between Mason's current DEI personnel and the DEI personnel counted in the Heritage Foundation report.

Mason's analysis identified **13** staff dedicated to DEI



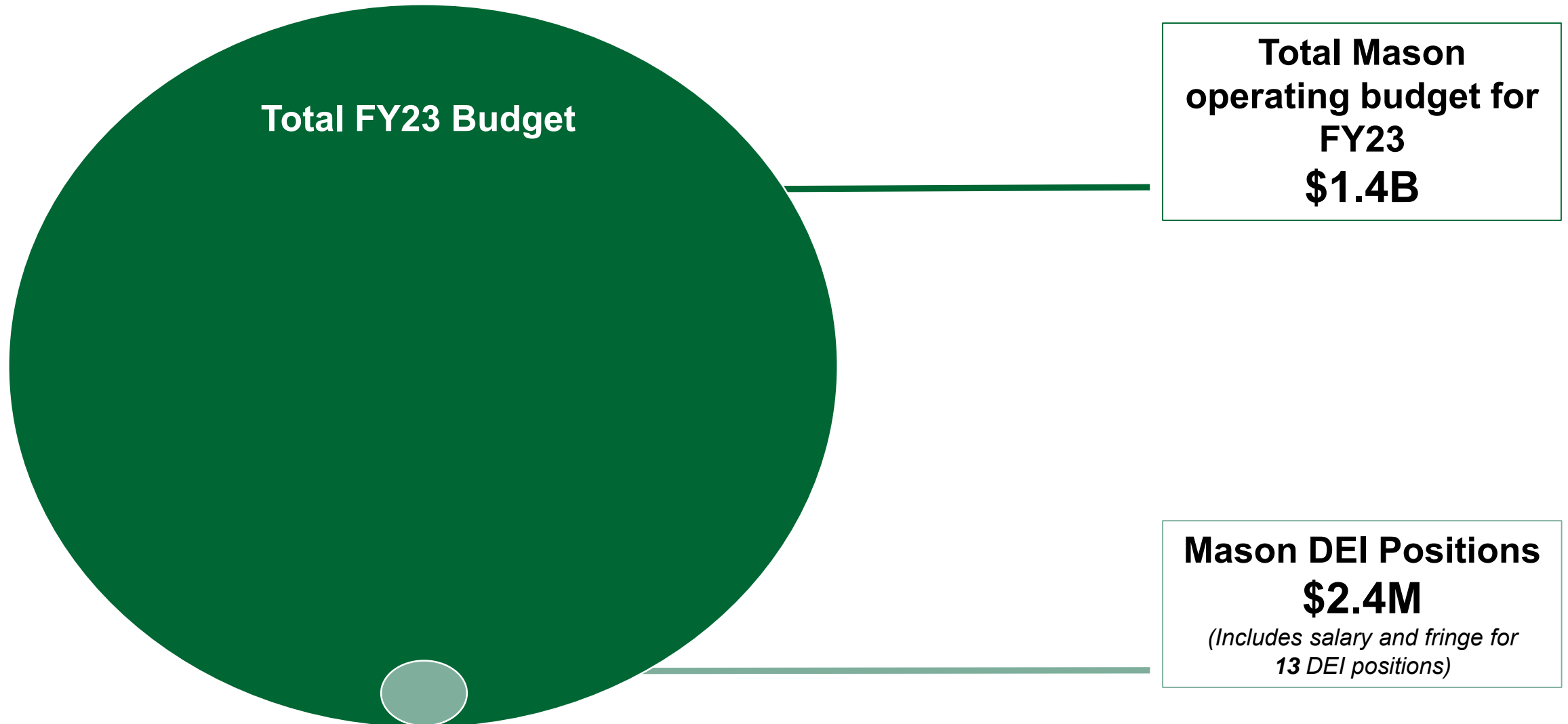
Positions not counted due to the following reasons:

- Student Positions
- Faculty Positions
- Positions do not exist
- Vacant Positions
- Primary job function not DEI-related

¹The full analysis on Mason's DEI positions and the positions identified in the Heritage Report can be found on slides [24-26](#)

How much does DEI cost Mason?

Mason's DEI cost made up ~0.16% of the total FY23 budget.



**Total Mason
operating budget for
FY23
\$1.4B**

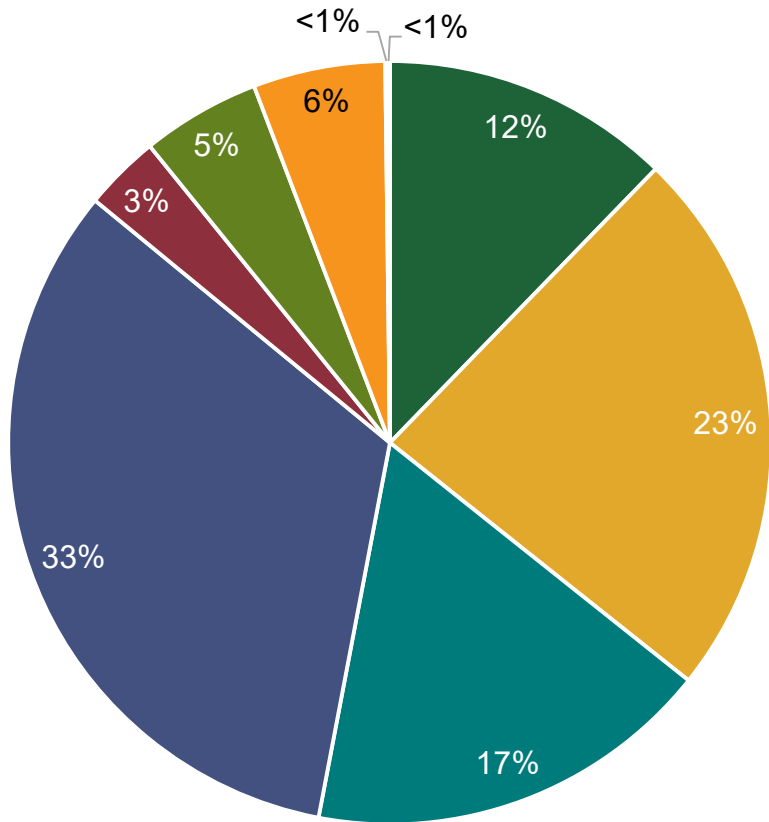
**Mason DEI Positions
\$2.4M**
*(Includes salary and fringe for
13 DEI positions)*



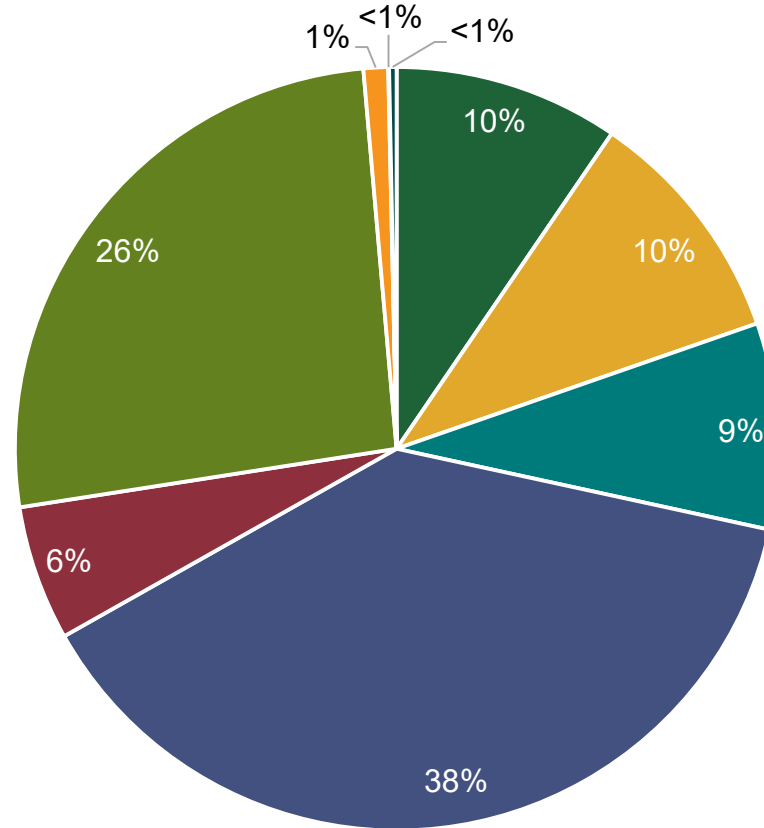
Student Success

Student Demographic Profile

Fall 2023 Undergraduate Ethnicity



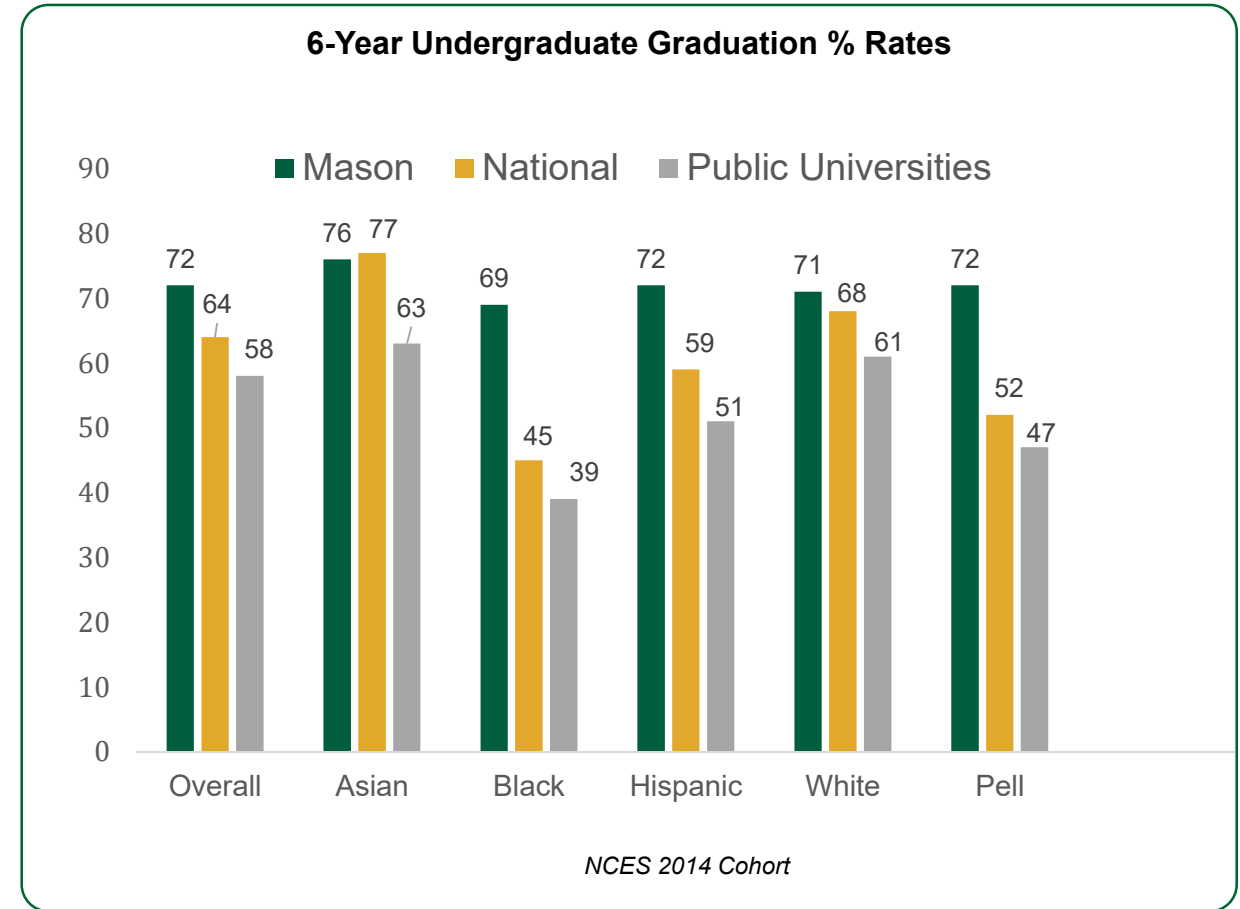
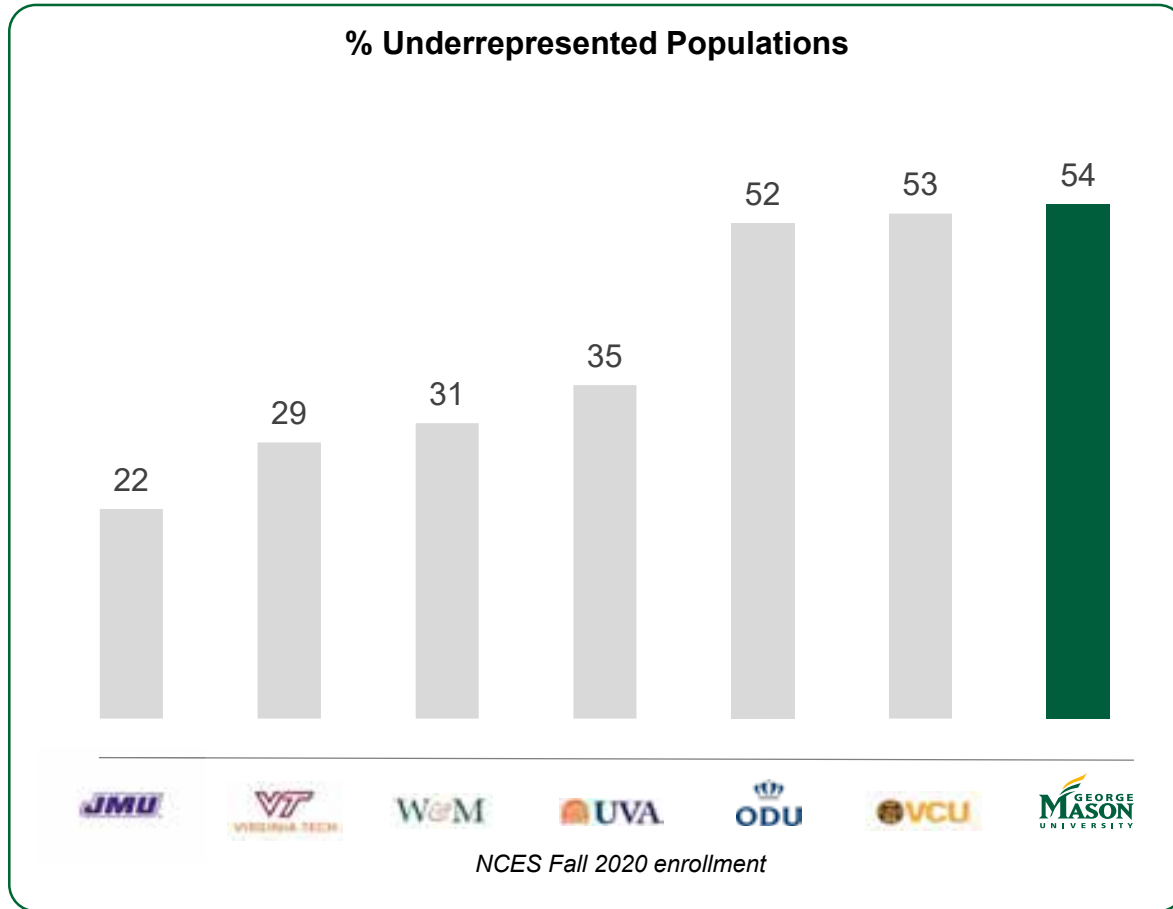
Fall 2023 Graduate Ethnicity



- African Am
- Asian Am
- Hispanic Am
- White Am
- Race Not Reported
- Non Resident Alien
- Two or More
- Pacific Islander
- Native Am

Measuring Student Success

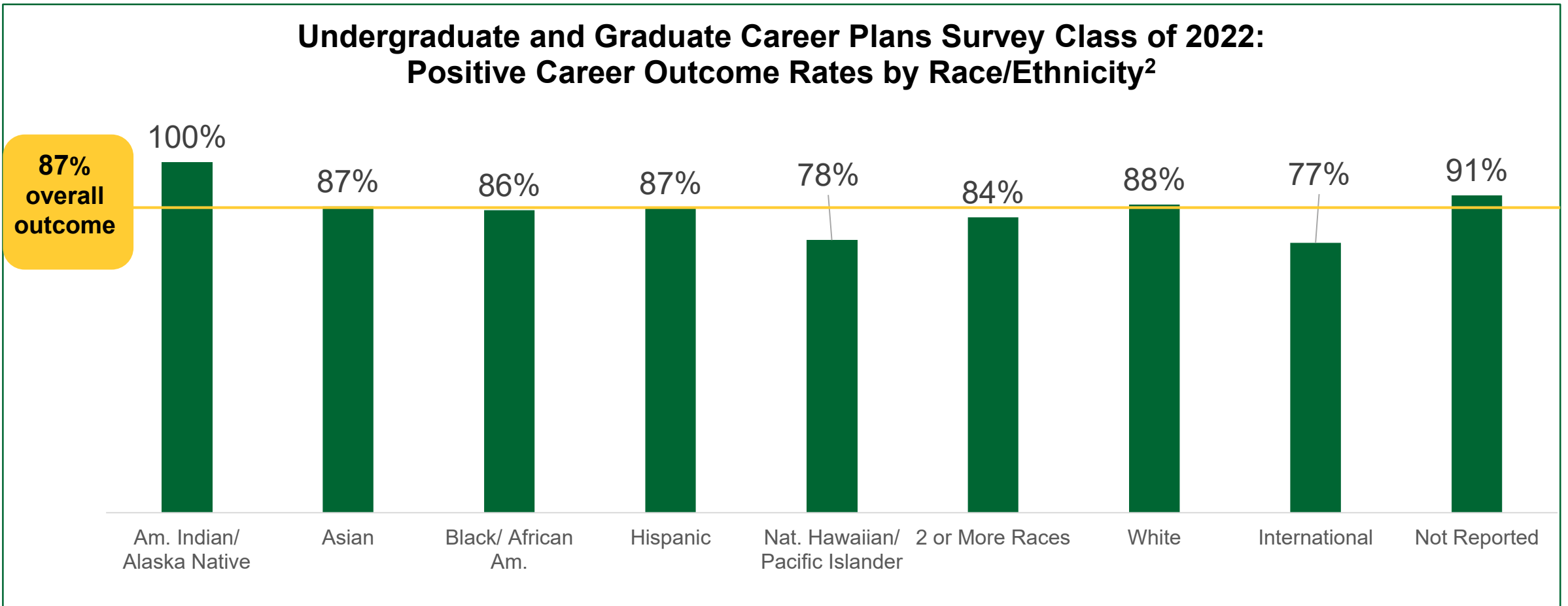
Mason is the most diverse four-year public university in Virginia and our graduation rates exceed national and public university graduation rates.



Career Success Outcomes

Mason's commitment to producing career-ready professionals is reflected in the class of 2022's **87%** positive career outcomes¹.

**Undergraduate and Graduate Career Plans Survey Class of 2022:
Positive Career Outcome Rates by Race/Ethnicity²**



¹Positive Career Outcomes – Outcome rates of UG and graduate students within six months of graduation (includes employment, graduate school, military, or volunteer work)


²Graph based on available data from 4,575 undergraduate and graduate students out of the 9,154 who graduated in August and December 2021 and May 2022; percentages for American Indian/Alaska Native students based on <15 graduates and Hawaiian/Pacific Islander <10 graduates.

Underrepresented Minorities (URMs) Graduation Rates in Virginia

Mason confers the highest number of URM bachelors and masters degrees for public four-year institutions in Virginia.

Institution	Bachelors (2022-2023) ¹		Masters (2022-2023) ¹	
	# of Degrees Conferred	% of Total	# of Degrees Conferred	% of Total
George Mason University	1955	19%	687	26%
Virginia Commonwealth University	1699	16%	394	15%
Old Dominion University	1488	14%	346	13%
Virginia Tech	1303	12%	298	11%
University of Virginia	828	8%	230	9%
James Madison University	732	7%	193	7%
Norfolk State University	722	7%	108	4%
Virginia State University	426	4%	97	4%
Radford University	414	4%	88	3%
William & Mary	335	3%	61	2%
University of Mary Washington	183	2%	60	2%
Christopher Newport University	182	2%	23	1%
Longwood University	149	1%	18	1%
Virginia Military Institute	62	1%	0	0%
University of Virginia's College at Wise	17	0%	0	0%
Total Public Four-Year Institutions	10,495	100%	2,603	100%

¹SCHEV 2022-2023 Graduation Data



Demographic Profile of College Students is Changing

- The profile of college students is rapidly becoming more ethnically diverse and female dominant (NCES, WICHE, College Board)
- Future projections show more first-generation students, ethnic minorities and non-native students whose first language is not English (WICHE)
- Future students have lower household incomes and will require more financial aid and student loans to complete a degree (WICHE)

The background is a dark green color with a faint, low-angle photograph of a building and trees. The building is a multi-story structure with a grid of windows, and the trees are in the foreground, partially obscuring the building. The overall image has a moody, atmospheric feel.

Mason's DEI Programs

Mason's DEI Programs in Action



Office for Diversity, Equity, and Inclusion (DEI)

Ensure that all people can work and study at Mason without boundaries

To champion inclusive excellence through an environment that is safe and welcoming for everyone; one that is free of all discrimination and harassment; and one where all perspectives are valued and encouraged.

- **Compliance**
- **Access and Accessibility**
- **Student, Faculty, and Staff Support**
- **Monitor and Assess Climate**
- **Community Partnerships and Outreach**
- **Professional Development/Constructive Dialogue**



Center for Culture, Equity, and Empowerment (CCEE)

We envision a campus environment where every community member takes an active role in cultivating a space; that is grounded in the fundamental understanding that all identities are prioritized, respected, celebrated, and supported. where members are comfortable to voice perspectives, engage in critical and cross-cultural dialogue, and are free from harm.

- **Student Support**
- **Freedom of Expression**
- **Constructive Dialogue/Creating Community**
- **Community/Civic Engagement**
- **Co-Curricular/Experiential Learning**
- **Leadership Development**

Mason's National Rankings

The success of Mason's DEI programs has gained the university national recognition in social mobility, free speech, and diversity.

Social Mobility

Social mobility measures the ability for students to move from one economic class to another.



Free Speech

Rights include freedom of speech, freedom of association, due process, legal equality, religious liberty, and sanctity of conscience — the most essential qualities of liberty.



#8
2024 College Free Speech Ranking

Diversity

Colleges where students are most likely to encounter undergraduates from racial or ethnic groups different from their own.

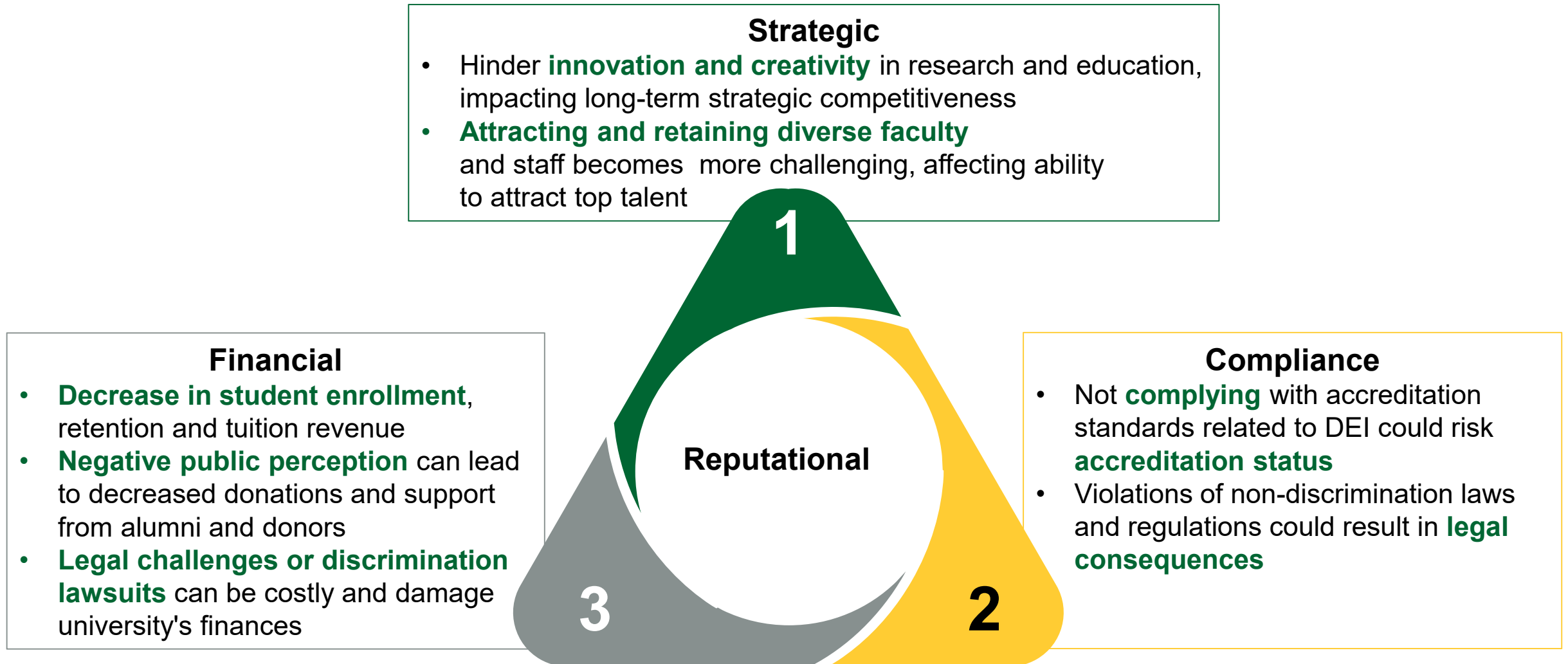




Risks

Risks

Mason's reputation and brand can suffer due to public backlash and negative media attention from strategic, compliance, and financial risks.

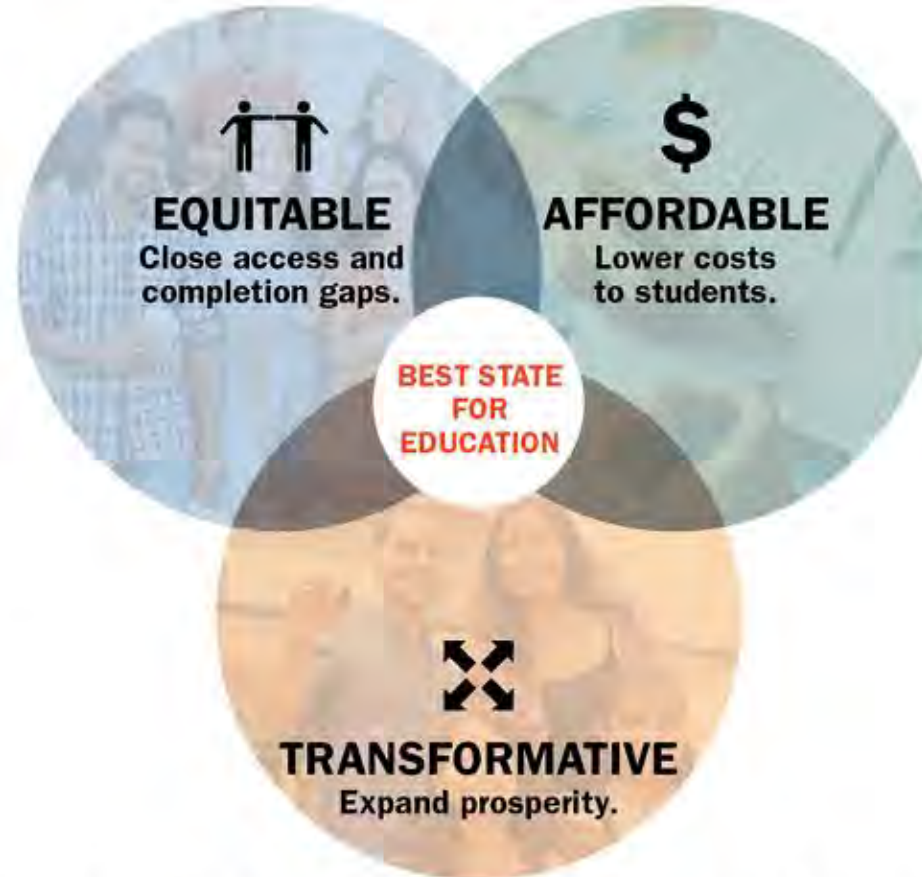


The background is a dark green color with a faint, low-angle photograph of a building and trees. The building is a multi-story structure with a grid of windows, and the trees are in the foreground, partially obscuring the building. The overall image is semi-transparent, allowing the text to be clearly visible.

Mason's Approach to DEI

Pathways to Opportunity: The Virginia Plan for Higher Education

Remove barriers to access and attainment, especially for Black, Hispanic, Native American and rural students; students learning English as a second language; students from economically disadvantaged backgrounds; and students with disabilities.



Invest in and support the development of initiatives that provide cost savings to students while maintaining the effectiveness of instruction.

Increase the social, cultural and economic well-being of individuals and communities within the Commonwealth and its regions.

Mason Strategic Direction

Mason's commitment to DEI is incorporated across the university's strategic priorities published in the 2023 Strategic Direction.

Mason Student Experience



Student Support



Admissions



Alumni Engagement



Campus Climate

Research



Research



Teaching & Learning

Promote recognition of Mason's research, scholarship, and creative enterprises.

Partnerships



Community Partnerships



Workforce

Strengthen and build relationships with partners to support workforce demands and drive economic growth.

DEI



Compliance



Accreditation

Refine Mason's governance structure, policies, and accountability measures to ensure diverse, equitable, and inclusive practices.

Faculty and Staff



Professional Development & Training

Enable faculty and staff success through effective modernization of Mason's technology, process, and sustainable infrastructure.

DEI at Mason

“ Mason's DEI efforts have supported me as a faculty member to learn how to serve the needs of students **from different backgrounds and walks of life.** ”

“ My student came in through the Guaranteed Admissions program, did two years of Community College. They chose George Mason University because of the diversity and the support that is offered for LGBTQ student. ”

“ Being an international student, it was a difficult transition for me to settle in a foreign land, but the DEI efforts of Mason made the transition easier and accessible for me. ”

“ GMU students are **poised to succeed in diverse settings** as Mason's classroom environment highlights the melting-pot of identities that has made Northern Virginia a cultural hub. **-KPMG** ”

“ We visited a lot of universities before my daughter decided to come to George Mason and the tipping factor for her was the environment of the open environment and the feeling and **sense of belonging.** And the community of inclusion that she felt when she came... ”

“ As someone who is a **child of immigrants and first generation** American, diversity is very important to me. In fact, diversity was my deciding factor in where I went to university. **Diversity efforts on campus have made me feel seen and appreciated and like a true patriot in this community.** ”



Appendix

Our Methodology

We utilized MicroStrategy¹ to conduct a search for central office and college/school-level DEI positions using the keyword search criteria below:

- “Diversity,” “Equity,” “Inclusion,” “DEI,” “ARIE,” “Multicultural Affairs,” “African American Culture,” “Asian Culture,” “Latino Culture,” “Native American Culture,” “Women’s Center,” and “LGBTQ Center.”

We excluded the categories below from the final count to ensure our count was accurate:

- **Compliance staff** whose primary responsibility is to ensure compliance with legal obligation
- **Women and Gender Studies professionals** whose primary responsibility is to provide research and teaching on gender issues
- **Faculty and staff in academic centers** dedicated to research and teaching (professors, researchers, etc..)
- **Students**
- **Vacant positions**
- **Primary job function not DEI-related**

Mason personnel who spend **51%** or more of their time on DEI were included in the count.

¹An internal application that interfaces with Banner to analyze internal and external data in order to make informed business decisions.

Positions Correctly Identified

Position Title	Office
Vice President for Diversity, Equity, and Inclusion & Chief Diversity Officer	Office of Diversity, Equity and Inclusion
Inclusive Education Manager	Office of Diversity, Equity and Inclusion
Director of DEI Strategic Partnerships and Initiatives	Office of Diversity, Equity and Inclusion
Equity, Engagement, and Belonging Manager	Office of Diversity, Equity and Inclusion
Director, Center for Culture, Equity, and Empowerment	Center for Culture, Equity, and Empowerment
Assistant Director, Coalition Building and Diversity Education	Center for Culture, Equity, and Empowerment
Assistant Director, Student Engagement For Racial Justice	Center for Culture, Equity, and Empowerment
Director, LGBTQ+ Resources Center	LGBTQ+ Resources Center
Associate Director	LGBTQ+ Resources Center
College of Science Director of Diversity, Equity and Inclusion	College of Science
Associate Dean for Diversity, Outreach, and Inclusive Learning, College of Engineering	College of Engineering and Computing
Director of Faculty Diversity, Inclusion and Well-Being, (FA&D)	Faculty Affairs and Development Office
Total Count: 12	

The position below is a Mason DEI position not included in the Heritage Foundation report count

Position Title	Office
Director of Diversity CVPA	College of Visual and Performing Arts
Total Count: 1	

Positions Incorrectly Identified

Position Title	Office	Reason not included
Executive Assistant & Office Manager	Office of Diversity, Equity and Inclusion	Primary job function not DEI-related
Office Assistant	Office of Diversity, Equity and Inclusion	Primary job function not DEI-related
DEI Coordinator	Office of Diversity, Equity and Inclusion	Vacant Position
DEI Case Coordinator for Community Engagement	Office of Diversity, Equity and Inclusion	Primary job function not DEI-related
Assistant Dean, Director of Diversity and Inclusion	University Life	Position does not exist
Business Manager	Center for Culture, Equity, and Empowerment	Primary job function not DEI-related
Assistant Director, Office of Diversity, Inclusion and Multicultural Education	Center for Culture, Equity, and Empowerment	Vacant Position
Officers, Coalition Building and Diversity Education (3)	Center for Culture, Equity, and Empowerment	Positions do not exist; Student Organization Positions
Office Liaison	Center for Culture, Equity, and Empowerment	Part-time Wage Worker
IT Tech Support Specialist	Center for Culture, Equity, and Empowerment	Part-time Wage Worker
Business Manager, Diversity, Equity, and Inclusion	LGBTQ+ Resources Center	Primary job function not DEI-related
Faculty-in-Residence, LGBTQ+ Resources	LGBTQ+ Resources Center	Faculty Position/Primary job function not DEI-related
Director, Women and Gender Studies Center	Women Gender Studies Center	Faculty Position/Primary job function not DEI-related
Associate Director	Women Gender Studies Center	Vacant Position
Director, Office of Diversity and Inclusion, College of Education and Human Development	College of Education and Human Development	Faculty Position/Primary job function not DEI-related
ARIE Faculty Member	College of Education and Human Development	Faculty Position/Primary job function not DEI-related
Talent Equity Advisor	College of Education and Human Development	Faculty Position/Primary job function not DEI-related
Student Recruitment and Retention	College of Education and Human Development	Primary Job function not DEI-related
Associate Professor & Director of Faculty Diversity (CHSS)	College of Humanities and Social Sciences	Faculty Position/Primary job function not DEI-related
Diversity Associate	College of Engineering and Computing	Vacant Position
Director, Corley Institute for Diversity and Inclusion Education (Law)	Law	Vacant Position
Student Success and Inclusion Librarian	Libraries	Primary job function not DEI-related
Total Count: 24		

Positions Incorrectly Identified - Students

Position Title	Unit	Reason not included
Graduate Assistants (5)	Center for Culture, Equity, and Empowerment	Student; 1 duplicate position
Student Ambassadors (5)	Center for Culture, Equity, and Empowerment	Student; 2 student ambassadors were double counted in report
Office Coordinator	Center for Culture, Equity, and Empowerment	Student
Lead Student IT Coordinator	Center for Culture, Equity, and Empowerment	Student
IT Associate	Center for Culture, Equity, and Empowerment	Student
Front Desk Receptionist (2)	Center for Culture, Equity, and Empowerment	Student
Staff in Black Male Success Initiative (7)	Center for Culture, Equity, and Empowerment	Student; 2 students in black male success initiative were double counted in report
Graduate Assistant, LGBTQ+ Resources Center	LGBTQ+ Resources Center	Student
BSW Intern, LGBTQ+ Resources Center	LGBTQ+ Resources Center	Student Intern
Lead Center Mentor	Women Gender Studies Center	Student
Center mentors (3)	Women Gender Studies Center	Student
Lead Program Adviser	Women Gender Studies Center	Student
Program Advisers (4)	Women Gender Studies Center	Student
Total Count:33		