State of the Campus

Darryll J. Pines, President March 6, 2025





### **AGENDA**

- Major Initiatives
- Indicators of Excellence
- Faculty Success
- Student Success
- Terp Pride
- Current Events



INVESTMENT	TOPIC	<u>IMPACT</u>
\$500B	Al Infrastructure	Global
Up to \$1B	Capital of Quantum	National
<b>\$10M</b>	Grand Challenge (Bioengineering)	State

### **New Al Institute: AlM**



Hal Daume, Professor of Computer Science

- Launched Spring 2024
- 25 current affiliate faculty (ARHU, BSOS, CMNS, ENGR, INFO, BMGT, SPH)
- Pending degree programs (B.A. Fall '25, B.S. Fall '26, M.S., Ph.D.) and general education "path to Al" courses
- Providing seed funding for collaborative, interdisciplinary Alrelated projects that positively impact society











# \$1B Capital of Quantum Initiative

Strategic partnership will unlock state funds, federal grants, private-sector and philanthropic contributions over next five years



# **Elements of Capital of Quantum: UMD**

- 1. Recruit top quantum scientists and engineers to join the ranks of 200-plus UMD quantum faculty members—one of the largest concentrations in the world—to usher in a new wave of discovery and innovation.
- 2. Expand access to the **National Quantum Laboratory (QLab)**, a unique UMD partnership with IonQ that provides students, researchers and entrepreneurs with global access to quantum computers and scientists.
- 3. Hire test and evaluation experts to support quantum-focused projects and construct a new building for UMD's **Applied Research Laboratory for Intelligence and Security (ARLIS)**.
- 4. Create additional facilities to house an expanded **Quantum Startup Foundry**, a business accelerator based in UMD's Discovery District that provides resources and support for entrepreneurs and startups bringing quantum technologies to market.
- Launch education, outreach and training initiatives to include high school quantum curriculum, master's and certificate programs, and workforce retraining opportunities.

## **Elements of Capital of Quantum: IONQ**

- 1. IonQ, an anchor partner in the initiative, will grow its **corporate headquarters** into a 100,000-square-foot facility with a data center, laboratories and office space within UMD's Discovery District.
- 2. IonQ also intends to double its **corporate headquarters workforce** to at least 250 people in the Maryland region over the next five years.
- 3. Once approved by the legislature, the Capital of Quantum Initiative is expected to create **high-paying and skilled jobs** in diverse fields such as construction, software and hardware engineering, operations, applied physics, networking and more.



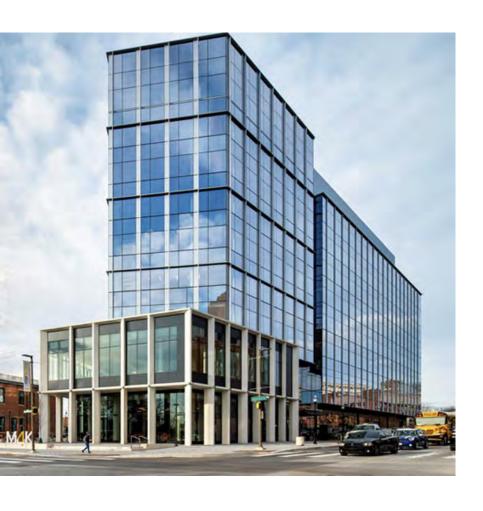
<sup>\*\*</sup>Subject to the Governor's budget being approved

# Edward & Jennifer St. John Center for Translational Engineering & Medicine



- \$10M gift to launch collaboration between UMD and UMB to drive medical innovation
- Will foster face-to-face partnerships between clinicians and engineers at UMSOM and Clark School
- Supported by a five-year, \$12.7M award from MPower





- Located on fourth floor of 4MLK, new state-ofthe-art facility in University of Maryland BioPark in Baltimore
- Will ensure real-world medical concerns of patients and professionals directly inform development of devices, diagnostics and treatments, accelerating path from research to patient care
- Gift will establish endowed and current-use professorships in bioengineering, undergraduate and graduate student awards in translational engineering and medicine, and ongoing operating funds
- Focus on creating "Physician-eers"





# **U.S. News Online Rankings**

#### **Business**

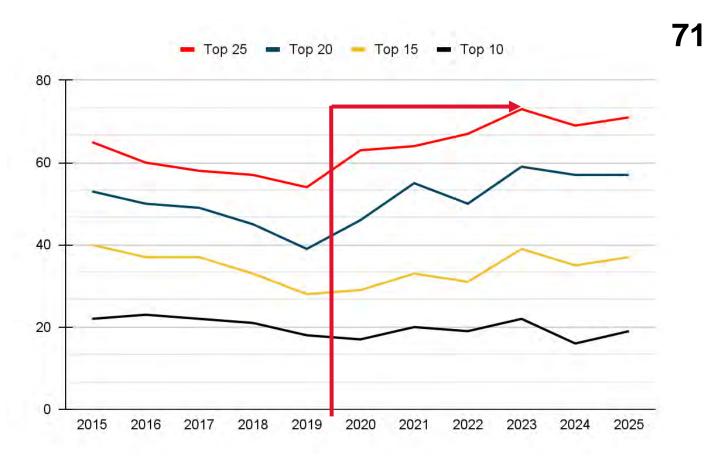
- #14: MBA Program: *Ninth consecutive year in Top 15* 
  - #6: MBA Marketing
  - #7: MBA General Management
  - #12: MBA for Veterans
  - #17: MBA Finance
  - #29: Non-MBA Master's Programs

#### **Engineering**

- #9: Master of Engineering Program
  - #6: Master's in Electrical Engineering
  - #13: Master's in Engineering Management
  - #17: Master's in Engineering Programs for Veterans



### **U.S. News Academic Program Ranking History**





### **Top Fulbright Producing Institution**

- 17 recent graduates, graduate students and alums in 2024-25
- Recognized as top institution 11 times by The Chronicle of Higher Education
- More than 500 UMD students, alums, staff and faculty have earned Fulbright awards since 1946





### **National Academies**

### 105 Total Memberships

- Education
- Engineering
- Sciences
- Inventors
- Medicine
- Public Administration
- American Academy of Arts and Sciences



Yang Tao
National Academy of
Inventors



**Uzi Vishkin**National Academy of
Inventors

# 29 New Memberships Since 2020



### **National Academies**

#### 23 Faculty with Multiple Memberships

#### **20** Faculty with Double Memberships

- Katharine Abraham (NAS, AAAS)
- Rosina Bierbaum (NAS, AAAS)
- Sean Carroll (NAS, AAAS)
- Rama Chellappa (NAE, NAI)
- Robert Fischell (NAI, NAE)
- Gerald Fallway (NAPA, NAE)
- Jim Gates (NAS, AAAS)
- Michele Gelfand (NAS, AAAS)
- Chris Jarzynski (NAS, AAAS)
- KJ Ray Liu (NAE, NAI)
- John Mather (AAAS, NAS)
- Elaine Oran (AAAS, NAE)
- William Phillips (NAS, AAAS)
- Roberta Rudnick (AAAS, NAS)
- Roald Sagdeez (AAAS, NAS)
- Ben Shneiderman (NAI, NAE)
- Richard Walker (AAAS, NAS)
- John Weeks (NAS, AAAS)
- Ellen Williams (NAS, AAAS)
- Ji-Cheng Zhao (NAE, NAI)

#### **3** Faculty with Triple Memberships



Rita Colwell (NAI, AAAS, NAS)



Alan Leshner (AAAS, NAPA, NAM)



C.D. (Dan) Mote, Jr. (NAI, AAAS, NAE)



### **PECASE Award Winners**

- 4 Presidential Early Career Award for Scientists and Engineers (PECASE)
- Highest honor for early career STEM faculty
- Recognition of impact their research could have on country's future
- Most at one time in UMD history
  - 17 total since 1997



John Beieler (ARLIS)



Soheil Feizi (Computer Science & UMIACS)



Damena Agonafer (Mechanical Engineering)



**Zohreh Davoudi** (Physics, JQI & QuICS)





# **Top 10 Again in Math Competition**

- Ranked 7th (Honorable Mention) among
   477 Universities
  - Third Year in a Row in Top 10
- Team Members: Daniel Yuan, Isaac Mammel and Clarence Lam



- Yuan ranked 26th among nearly 4,000 participants
- Mammel and Lam ranked top 200 students

A1 Determine all positive integers n for which there exist positive integers a, b, and c satisfying

$$2a^n + 3b^n = 4c^n.$$

A2 For which real polynomials p is there a real polynomial q such that

$$p(p(x)) - x = (p(x) - x)^2 q(x)$$

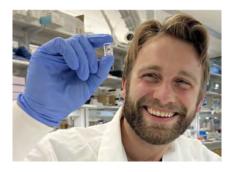


# **Scholarship and Patent**



#### **Malcolm Maas**

- Churchill Scholarship
  - 1 of 15 nationwide, 9th Terp in 7 years
- Graduating with degrees in Atmospheric and Oceanic Science and Physics and will pursue master's in math at Cambridge
- Previously won Goldwater Scholarship



#### Ian Smith

- Patented "tumor on a chip" device to help clinicians observe how cancer cells detach and invade blood vessels
- Designed in Stroka Lab, device will offer window into how cancer spreads and personalize treatment
- Bioengineering doctoral student and Clark Doctoral Fellow, earned Fischell Fellowship in biomedical engineering



## **New "Kids" on Campus**

- Department of Animal and Avian Sciences welcomed two dairy goats to start UMD's first goat herd
- 10 students will work with Sadie and Ariana in new goat management course
- Goats donated by 2024 animal science alum Cheyenne Van Echo's family
- Special display for Maryland Day, the 100th anniversary of Ag Day





### Terp Thon Dances On for Children's National Hospital







## **Giving Day Results**

- **\$5.3M** Raised
  - Highest-Ever Result
  - \$26.8M raised since 2014
- 11,794 Gifts from 8,949 Donors
- Most Raised: Hillel (\$1.1M)
- Most Donors: ODI (1,472)
- Donors represent 48 states and 19 countries







# Admissions Highlights

- 66,000 total applications
  - 11% increase
  - Most in UMD History
- 56% Applied Test Optional
- 21,000 Fall 2025 early action admits
  - 1440-1540 Average SAT
  - 4.47 Average GPA







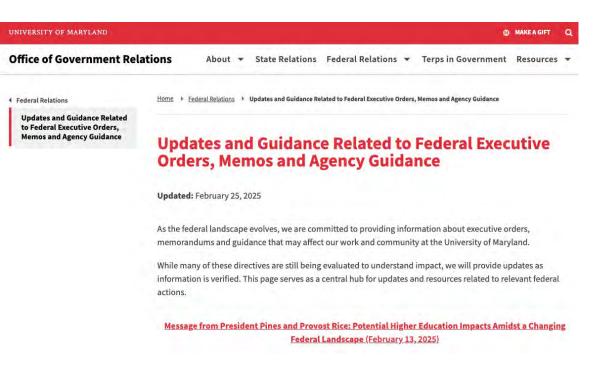
# The Situation in Washington

- The situation in D.C. represents an evolving and significant threat to higher education.
- To date, there have been a range of Executive Orders and Dear Colleague Letters that negatively affect and impact the operation of universities.





### **Campus Updates Available**



- Executive Orders by Topic
  - Research
  - Diversity
  - International Students,
     Faculty and Staff
  - Undocumented Individuals
- Campus and Partner Resources (APLU, AAU, ACE, COGR, Maryland State)
- FAQs



https://govrelations.umd.edu/federal-relations/executive-orders-memos-and-federal-regulations

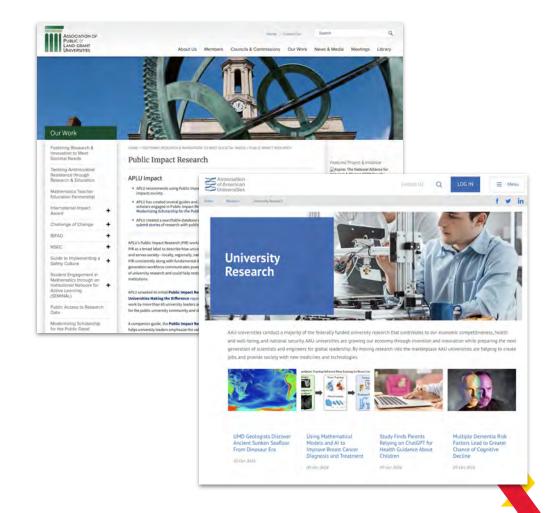


### **Our Strategic Response**

- Engage: Continuing federal advocacy with MD Delegation, Agency Heads, and in partnership with AAU, ACE and APLU
- Challenge: Following and joining court cases and litigation in partnership with OAG
- Adapt: Analyzing federal impact
  - Exploring partial assistance for some federally funded positions, when possible
  - DOE <u>does not</u> have the authority to control classroom instruction or force colleges to restrict First Amendment rights.
- Plan: Assessing state and federal budget implications and range of actions to lower expenses and increase revenues
- Listen to Community: Serving all members of our community to create environment for thriving

# Building on campaigns led by AAU and APLU...

- UMD will launch a web-based campaign on the value and impact of research.
- We will tell our story about our effect on life and lives.



UNIVERSITY OF MARYLAND RESEARCH MAKES NEIGHBORHOODS SAFER.

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MARYLAND
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LIFE-SAVING
TECHNOLOGY.

UNIVERSITY OF
MARYLAND
RESEARCH PROTECTS
OUR FOOD SUPPLY.



