UNIVERSITY SYSTEM of MARYLAND

3300 METZEROTT ROAD // ADELPHI, MD 20783
WWW.USMD.EDU // 301.445.2740

OFFICE OF THE VICE CHANCELLOR FOR RESEARCH AND ECONOMIC DEVELOPMENT

USM Board of Regents
Committee on Economic Development & Technology Commercialization
October 29, 2024, 1:00 PM – 2:30 PM
Zoom

AGENDA FOR OPEN SESSION **1:00 PM**

Call to Order **Regent William T. Wood**

1. **Review of Committee Charge** (action) – Chair Wood

2. **Research and Economic Development Highlights** – Michele Masucci, PhD, Vice Chancellor of Research and Economic Development
    - Notable achievements in research across the USM
    - Implementation of USM operations supports for Grants Management
    - USM External Engagement Strategic Planning

3. **Enterprise Research across the USM: Focus on Towson University** – Sidd Kaza, Ph.D., Associate Provost for Research and Dean of Graduate Studies

4. **Momentum Fund Update** – Mike Ravenscroft, Managing Director of the Momentum Fund
    - **Guest: HighT-Tech** — Bob Gatte, CEO of HighT-Tech

5. **Launch Fund Update** - Lindsay Ryan, MS, Executive Director of Economic Development and Managing Director of the Launch Fund

Q and A

UNIVERSITY SYSTEM of MARYLAND

Board of Regents
Committee on Research and Economic Development
October 29, 2024

Charge:

The Committee on Research and Economic Development shall provide strategic leadership for the USM's research, economic development, technology commercialization, innovation, and entrepreneurial initiatives, programs, and policies.

Role and Responsibilities:

The Committee on Research and Economic Development shall consider and report or recommend to the Board of Regents on matters concerning economic development and technology commercialization, innovation and entrepreneurial initiatives, and research, including translational research and technology transfer.

Members of the Committee on Research and Economic Development are appointed annually by the Chairperson of the Board. The Committee shall meet as needed, but no fewer than four times during the fiscal year.

Created in July 2011 in recognition of the increasing importance of translational research, entrepreneurship and innovation, and the supply of skilled workers in STEM fields for the State of Maryland, the Committee, working with the Vice Chancellor for Research and Economic Development, may expect to receive information for review in order to consider, and/or act on any of the following matters:

A. Aligning resources with market demand

B. Leveraging USM resources through collaborations

C. Enhancing partnerships with industry, state, and federal entities

D. Strengthening the USM Research and Innovation ecosystem, including engaging with research funding and commercialization partners, enhancing research administration and compliance infrastructure, and fostering excellence in scholarship, research, creative, and innovation

E. Strengthening the USM entrepreneurial ecosystem, including engaging the investment community and enhance access to capital for USM affiliated startups and innovators

2. RESEARCH AND ECONOMIC DEVELOPMENT HIGHLIGHTS ACROSS USM

Michele Masucci, Vice Chancellor for
Research and Economic Development

University System of Maryland

USM Research and Economic Development Achievements

Key Milestones:

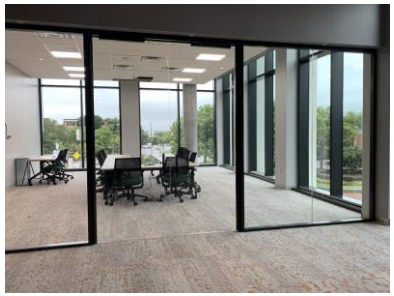
- USM Research Expenditures for FY 2023 – $1.6B*
- USM Research Awards for FY 2023 – $1.8B
- 5 Year average of 332 inventions/year in 2023
- Patents issued: USM is #21 Worldwide, #15 in US, #9 in US public institutions for FY 2024 based on 108 patents granted **
- UMB-UMD ranked 19th in FY 2022 Research expenditures based on NSF HERD released in January 2023
- Economic Development Impact of USM – $10.4B in 2021***

*Preliminary FY2023 (estimates for BSU, CSU, UMCES, and UMGC)
** National Academy of Inventors
*** https://www.usmd.edu/usm/research-economic-development/docs/USM_Economic_Impact_2021.pdf

Highlights (Continued)

- Grand Opening of 4MLK – MLK Day 2025; soft open in late 2024
  - ✓ https://www.4mlk.com/4mlk
  - ✓ 250,000 sq ft, 8 stories, Leed Gold
  - ✓ Phase 2 build to suit expansion opportunity





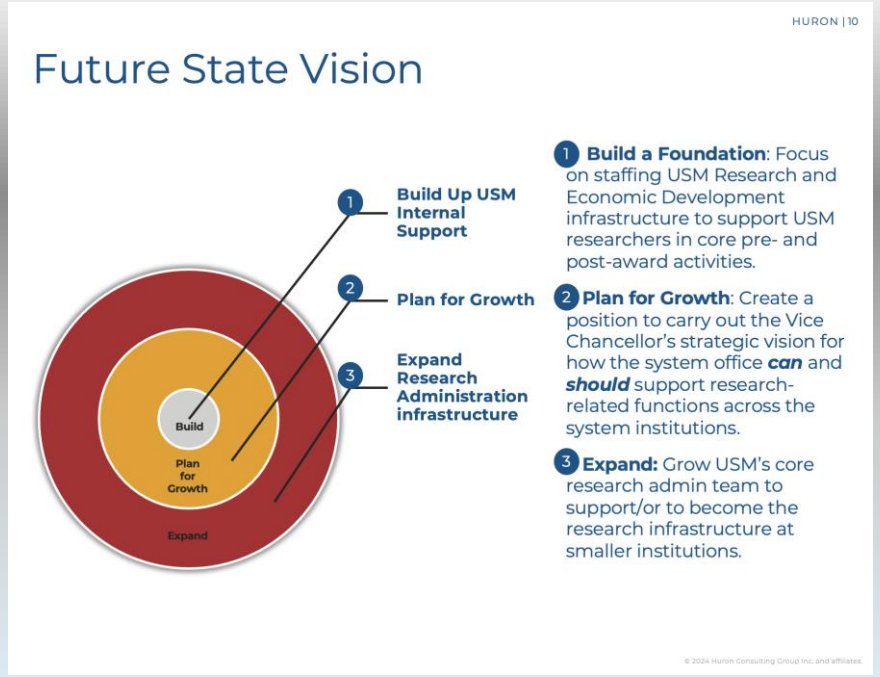
- UMD awarded Department of Energy Hydrogen grant for $10M related to hydrogen powered vehicles: https://crr.umd.edu/news/story/umd-part-of-10-million-doe-hydrogen-grant

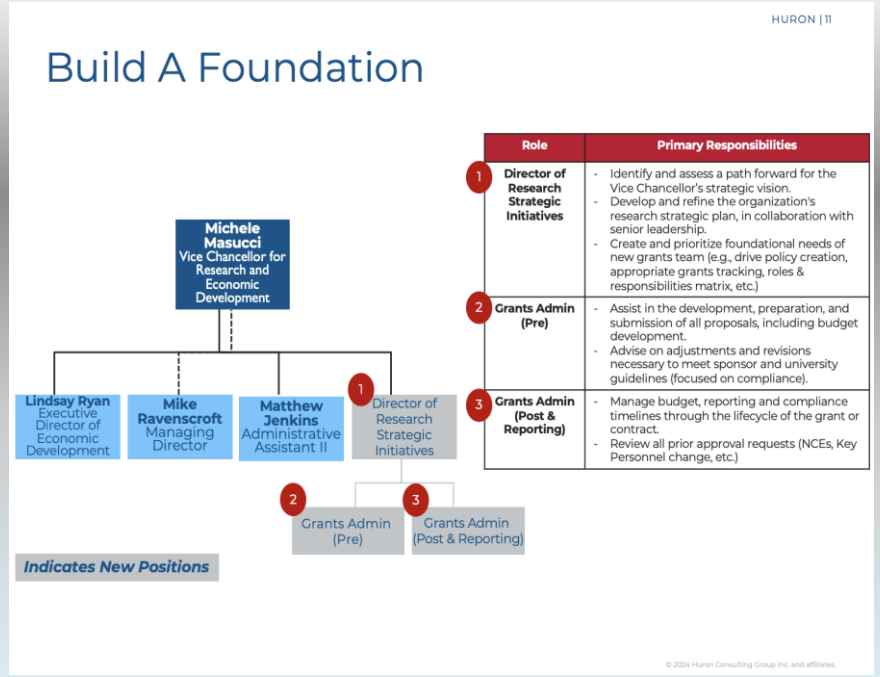
- UMCES launched Nitrogen Research fellows as part of NICCEE initiative: https://www.umces.edu/content/pioneering-nitrogen-research-and-innovations-unveiled-at-the-nitrogen-summer-institutel; https://niccee.org/about-niccee/

- UMBC GRIT-X 2024 held 10-24-24, more here: https://research.umbc.edu/grit-x/

USM OVCRED Operations Update

- Engaged Huron to assist with assessing needs and making recommendations about future directions for grants management within USMO and across USM
- Identified Future State Vision and steps to Build Foundation:





- Resulted in hiring new Director of Research Development – Julia Chadwick
- Next steps – design standard operating procedures for grant submission and tracking at USM, guidelines for compliance with federal regulations for financial and ethical/responsible conduct of research, establish USMO F & A rate

System Engagement Strategy

- **System External Engagement Strategy Task Force:**

  A step in addressing USM Strategic Plan goal of developing an Industry Advisory Board.

- **Charge:**

  Examine strategic industries of importance to Maryland – their challenges and opportunities – and to make recommendations for System-level infrastructure or initiatives that could lead to economic development and mutually beneficial partnerships in those industries. Report characterization of current landscape and recommendations.

- **Goals for System-Level External Engagement**

  - ✓ **Create Connective Tissue:** Intentional interfaces with external partners – large and small, public and private;

  - ✓ **Generate Flywheel Partnerships:** Leverage university assets (examples below) for partnerships that generate economic development and improve those assets…

System Engagement Strategy (continued)

…. at a system level, in which the whole equals to greater than the sum of parts

Adapted from the Association of Public and Land-grant Universities, accessed on 01/23/24

University System of Maryland

Bowie State University 1865

Salisbury University

Towson University

UMBC

University of Maryland

Task Force Members

Gail Bassette, Director of Economic Development and Strategic Engagement (BSU)

Michael Jensen, Executive Director of Entrepreneurship (SU)

Sidd Kaza, Associate Provost and Dean of Graduate Studies (TU)

Caroline Baker, Assistant VP, Careers & Corporate Partnerships (UMBC)

Dean Chang, Chief Innovation Officer and Associate Vice President for Innovation & Entrepreneurship and Economic Development (UMD) *co-member with* Eric Chapman, Associate Vice President for Research Development

TOWSON UNIVERSITY

www.towson.edu/research

Research and Evolution to Carnegie R2

10/63

The ***largest public institution*** in the greater Baltimore region. TU is a member of the prestigious University System of Maryland.

19,403

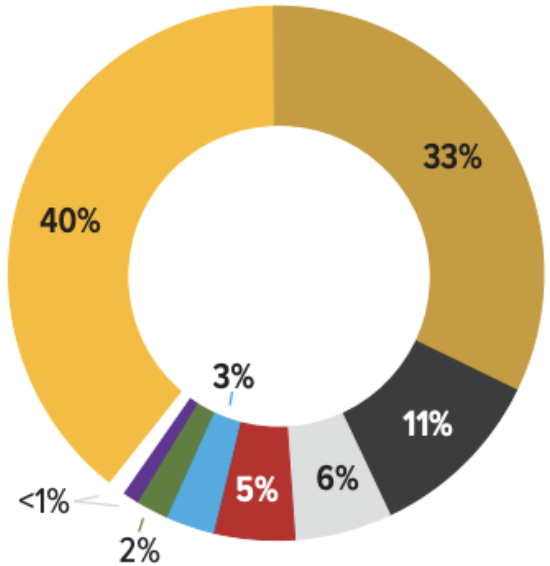
undergraduate and graduate students

67	50	40
undergraduate majors	master's programs	graduate certificates

4	7
certificates of advanced study	doctoral programs

TOWSON UNIVERSITY®

RACE / ETHNICITY*



White	7,755
Black or African American	6,318
Hispanic or Latine/x	2,049
Asian	1,237
Multi-Race	1,066

TOWSON UNIVERSITY®

RESIDENCY*	UNDERGRAD	GRAD
MD Residents	91%	86%
Out-of-State Residents	8%	8%
Foreign Students	1%	6%

GENDER	MEN	WOMEN
Undergraduate	6,735	9,531
Graduate	729	2,408
TOTAL	**7,464**	**11,939**

TOWSON UNIVERSITY®

Carnegie Classifications

- Leading framework for recognizing and describing institutional diversity in the US
- Research categories
  - Very High Research (R1), High Research (R2), Research Colleges and Universities (R3?)
- Basic Categories
  - Multi-dimensional - Master's, Baccalaureate, Associate, Special focus
- Social and Economic Mobility

https://carnegieclassifications.acenet.edu/carnegie-classification/basic-classification/

Carnegie Research Classifications

- Research Colleges and Universities (R3)
  - $2.5 million in research expenditures per year
  - New this year - # of institutions unknown

- High Research Spending and Doctorate Production (R2)
  - Confer 20 research doctorates averaged over the last three years
  - $5 million in research expenditures per year
  - 133 R2 universities in the nation (diverse set)

https://carnegieclassifications.acenet.edu/classification_descriptions/basic.php

TU to R2

A natural progression for TU

TU is an M1 (universities conferring over 200 masters)

TU conferred over 900 in 2021

TU conferred 16 research doctorates in 21-22.

TU is on path to Research University (R3) in 2024, and R2 in 2027.

Research Doctorates

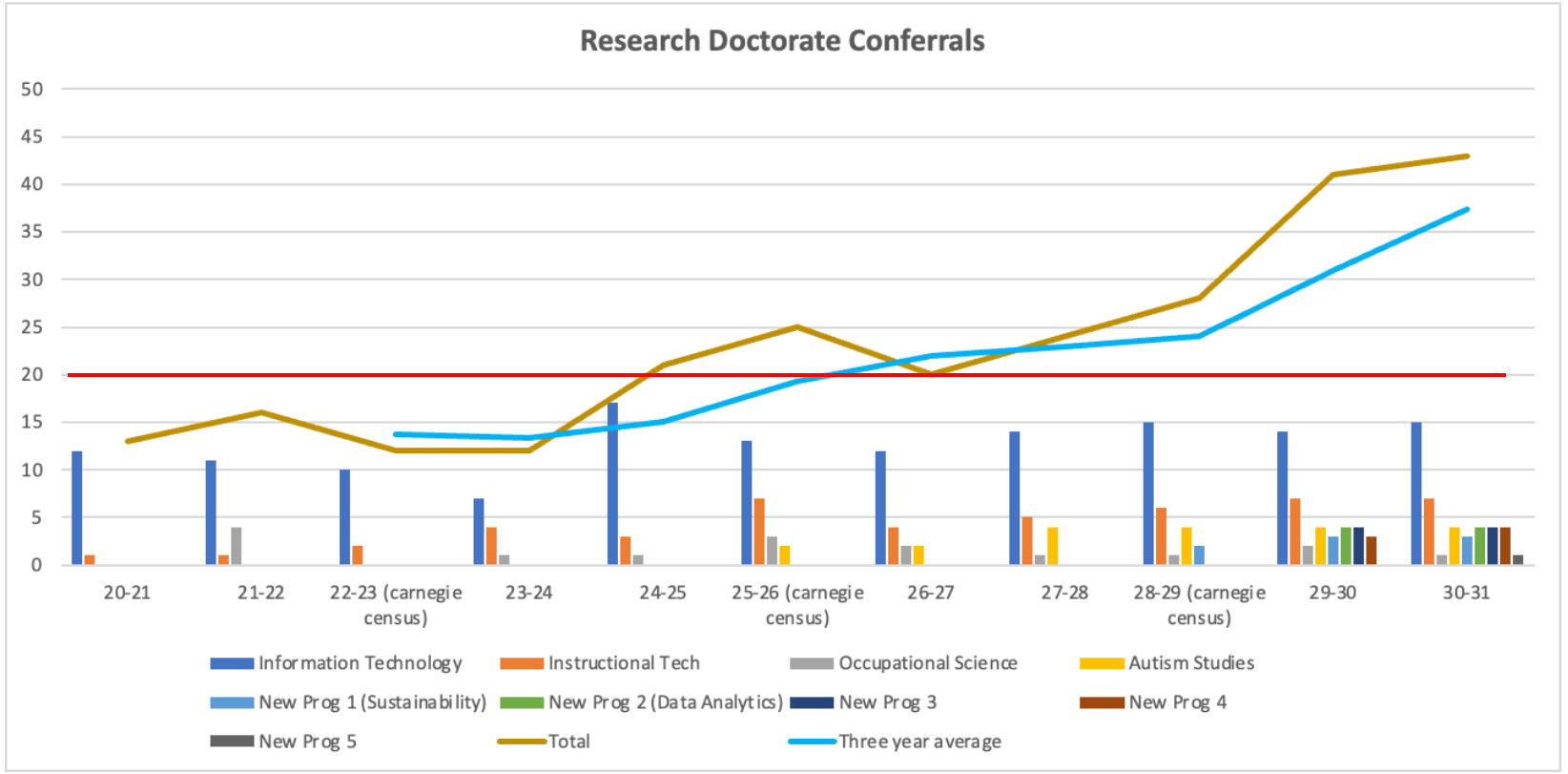
Ph.D. in Autism Studies (video link)
Ph.D. in Information Technology
Ph.D. in Instructional Technology
Ph.D. in Occupational Science

Besides Autism Studies, the bottom three have existed for over 15 years.

Over 125 students were enrolled across all, with over 25% being underrepresented minorities (excluding international students).

Doctoral Program Strategy

- Nine stable research doctoral programs by 30-31
- Currently at four, with two in advanced stages of development.
- All colleges either have or are building a program.



Red line is 20 PhD graduates – needed for R2 classification

USM Board of Regents Support

September 16, 2022

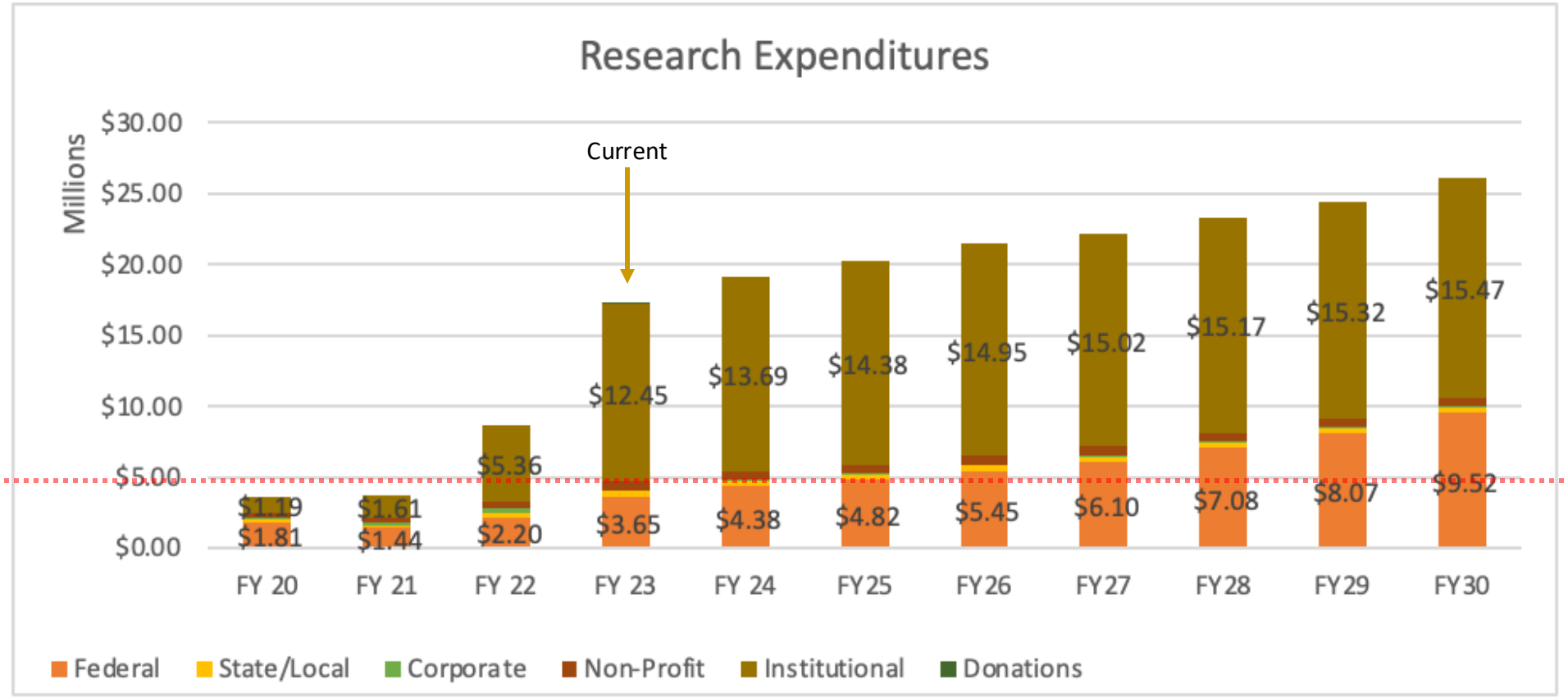
The USM Board of Regents approved the updated mission statement for TU to propose research doctoral programs including PhD.

https://www.towson.edu/about/mission/

Strategy for Increasing Research Doctorate Conferrals

- New faculty and staff lines
- Increased undergraduate research funding
- More funded research doctorate programs
  - Support for feeder MS programs into doctorates
- Increased grad student support
  - Better compensation package
  - RAs, Doctoral Scholars
  - TAs – Help faculty find more time
- Research infrastructure, space, faculty startups, staff support, internal grants

Research Expenditures



Red line is $5M – needed for R2 classification

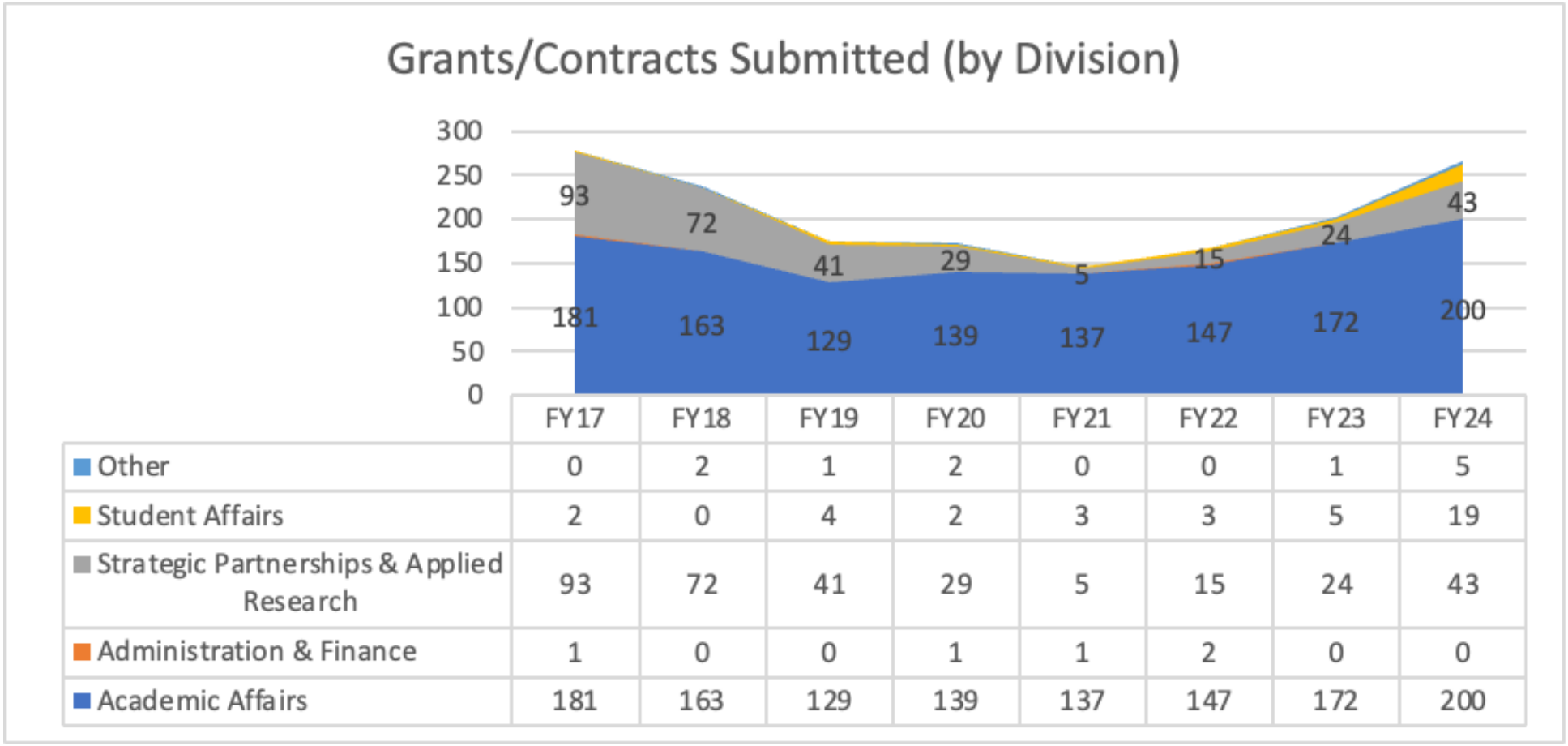
2022-23

- 99% increase
- 45% increase in grant research expenditures

2023-24

- $11.4M grant expenditures (research + non-research categories)

Grants submitted across University



	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Other	0	2	1	2	0	0	1	5
Student Affairs	2	0	4	2	3	3	5	19
Strategic Partnerships & Applied Research	93	72	41	29	5	15	24	43
Administration & Finance	1	0	0	1	1	2	0	0
Academic Affairs	181	163	129	139	137	147	172	200

32% overall increase in submissions 23-24

28% increase in grants received in 23-24

R2 Institutions

Illinois State University
Eastern Michigan University
University of North Carolina Wilmington
Montclair State University
University of North Carolina at Greensboro
William & Mary
Ball State University
James Madison University
California State – San Bernardino

Rutgers University-Camden
University of Nebraska at Omaha
Rutgers University-Newark
University of Massachusetts-Boston
Indiana University of Pennsylvania
Middle Tennessee State
Sam Houston State
California State – East Bay
Tarleton State University
West Chester University of Pennsylvania

All institutions have no medical school, and less than 1.5% of degrees are conferred in engineering. In red are MHEC peers as well.

Grow

- Faculty, undergraduate research, graduate students, post-docs
- External and internal grants

Increase and Sustain

- Student learning
- Student (and faculty/staff) retention
- Regional and National impact

Inspire

- Philanthropy
- Student participation

Why is Research important to TU?

Revel in TU Research – See what's up!

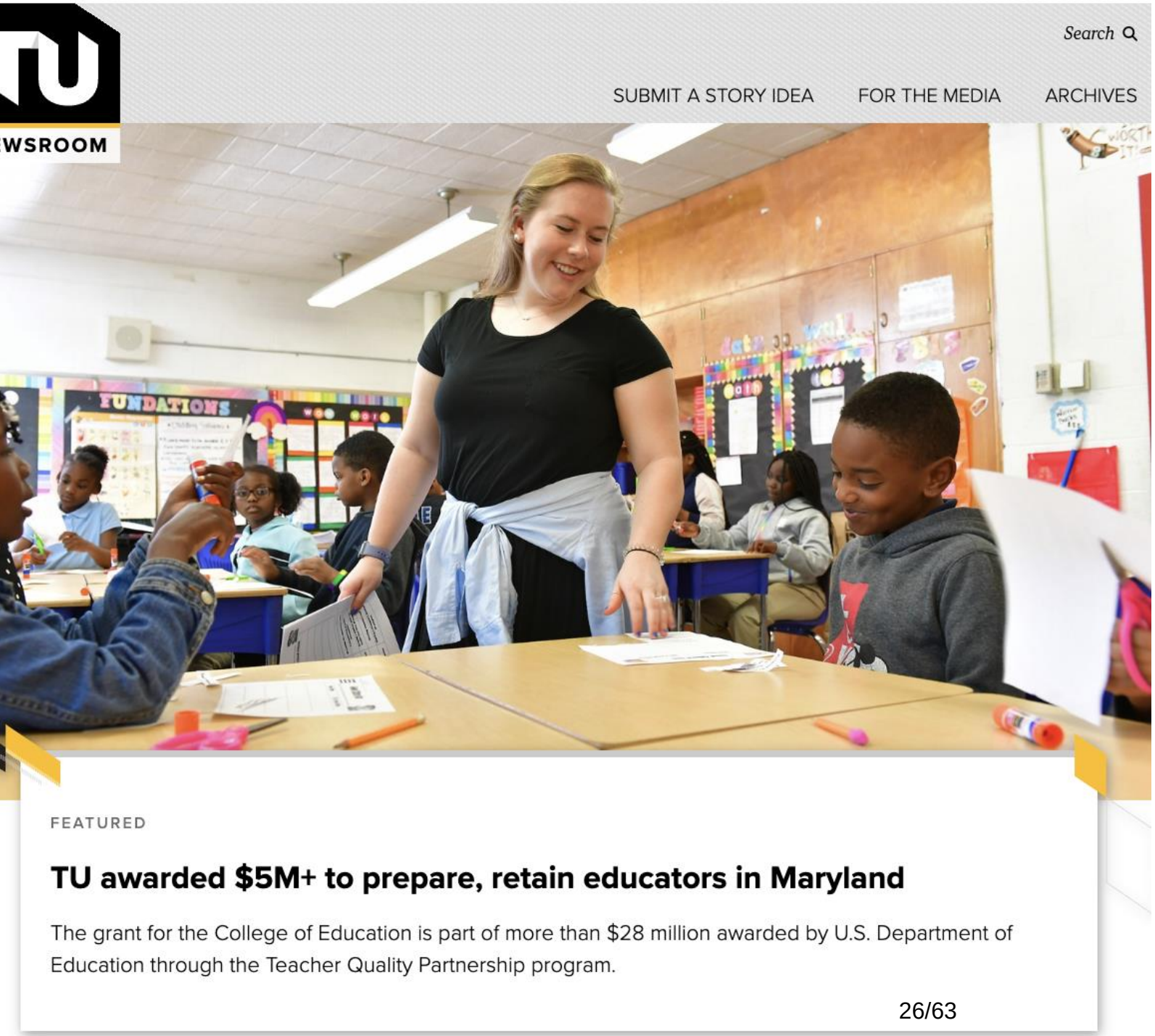
TU Newsroom – towson.edu/news

Research

Towson University faculty and students are performing bold, inclusive and impactful research with a focus on interdisciplinary collaboration and new discoveries.

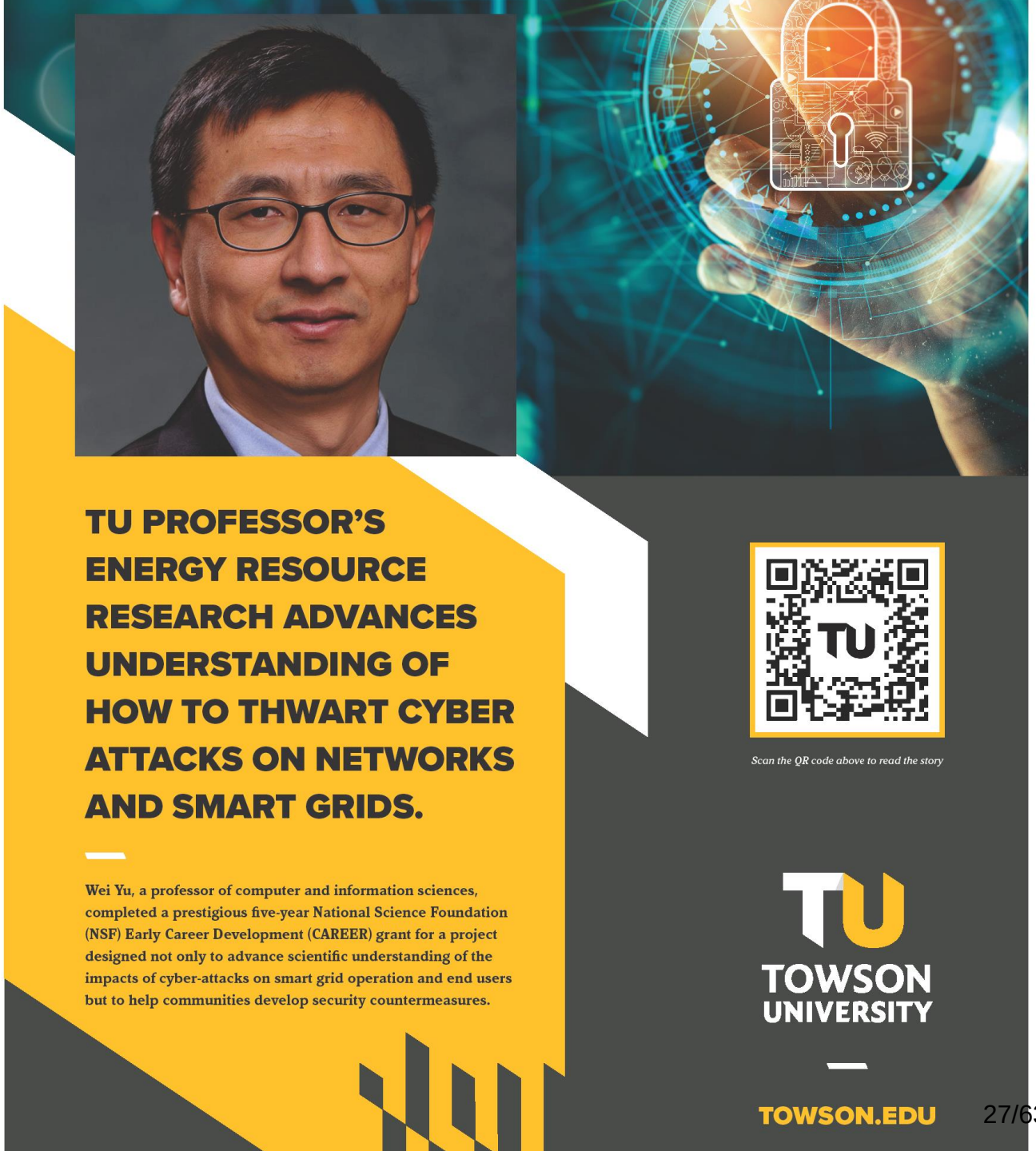
www.towson.edu/research

Towson University Research on LinkedIn
Instagram - @tu_researchandgrad



Laila Richman (PI), College of Education

Link to Article



Wei Yu (PI), Fisher College of Science and Mathematics

Link to Article

Jasmine Queen
Senior, Communication Studies

Qualitative research on the coming out experiences of LGBTQIA+ individuals

Link to Post

Joel Moore (PI), Fisher College of Science and Mathematics

Link to Article

TU PROFESSOR STUDIES THE IMPACT OF SPORTS SPONSORSHIP ON SPONSEES

Gashaw Abeza, College of Health Professions

Link to webpage

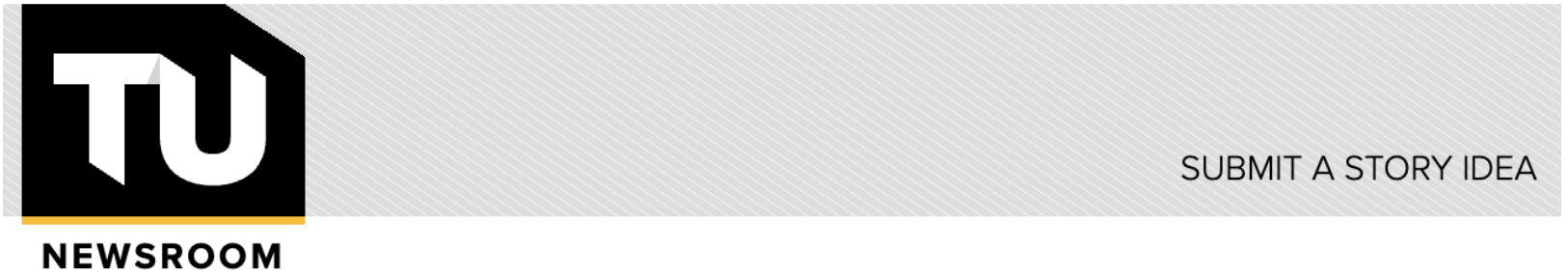
College of Health Professions

Research on autism in adulthood, especially the landscape after high-school support mechanisms are missing.

[Link to Post]

Chantal Francois,
College of Education

Link to Webpage



Blair Taylor (PI),
Fisher College of Science
and Mathematics

Link to Article

Towson University receives $1.8M grant to lead Coalition for Cybersecurity Education and Innovation

Cyber4All Center will use grant to pioneer innovative solutions in cybersecurity education

SEPTEMBER 18, 2024

Towson University today announces a $1.8 million (two-year) National Security Agency (NSA) grant award under the NCAE-C-003-2024 program to the TU Center for Interdisciplinary and Innovative Cybersecurity (Cyber4All Center) to lead the Coalition for Cybersecurity Education and Innovation (CCEI). The NSA designated TU as a Center of Academic Excellence (CAE) for defense education since 2002 and cyber operations since 2014.

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Questions?

Sidd Kaza

Associate Provost for Research & Dean of Graduate Studies

skaza@towson.edu

www.towson.edu/research

TU - R2 - One Page

RESEARCH AND INNOVATION

Towson University—Carnegie R2 Fact Sheet

The Carnegie Classification is the leading framework for recognizing and describing institutional diversity in U.S. higher education. The classification was first published in 1973 and is generally updated every three years to reflect changes among colleges and universities.

Interdisciplinary research and scholarship are a priority at Towson University. Our students and faculty break new ground and lead solutions that impact Maryland and our world. Research spans all disciplines at TU from cybersecurity and sustainability, to uncovering local history. As a result of a commitment to impact the public good, TU is evolving to an R2 Carnegie Classification: High Research Activity institution.

RECENT CARNEGIE CATEGORIZATION:

TU has been categorized as either a Master's Colleges and Universities–Larger Programs (2022, 2016) or Doctoral/Professional University (2019) in recent years. Additionally, TU is recognized with the elective classification of Community Engagement and its Graduate Programs are categorized as Research Doctoral: STEM-Dominant (one of three in Maryland with the others being UMBC and UMES). Currently, there are 133 R2 universities across the U.S.; examples include TU MHEC peers James Madison University, Montclair State University and University of North Carolina-Wilmington.

REQUIREMENTS FOR R2:

Confer 20 research doctorates per year, and have more than $5 million in research expenditures per year

TU PROGRESS TOWARD R2:

Doctoral degrees: TU offers four programs: autism studies, occupational science, instructional technology, and information technology. From these, we have 14–16 doctoral degree conferrals per year.

Research expenditures: TU is well above the $5 million threshold for R2, with expenditures of $17.1 million in FY 23. Our research administration manages an average of $40 million in external funding in a year.

WHAT IS STILL NEEDED TO REACH STABLE R2 STATUS:

Approximately 10 additional doctoral degrees conferred per year

HOW WILL TU GET THERE:

Invest in current programs

The recent opening of the Science Complex, Cyber Center and Health Professions building all support research infrastructure needs. Additionally, TU is investing in each doctoral program to ensure they thrive while addressing the state's most pressing needs.

New doctoral programs in high-demand areas

Additional programs will be interdisciplinary and designed to meet regional and national workforce needs, in areas such as sustainability and health care. We evaluate workforce guidance from state and federal sources, national consulting companies and corporate contacts to ensure program viability while serving the needs of our state and region.

For more information visit **towson.edu/r2** & **carnegieclassifications.acenet.edu/**

TOWSON UNIVERSITY

University System of Maryland

MARYLAND MOMENTUM FUND

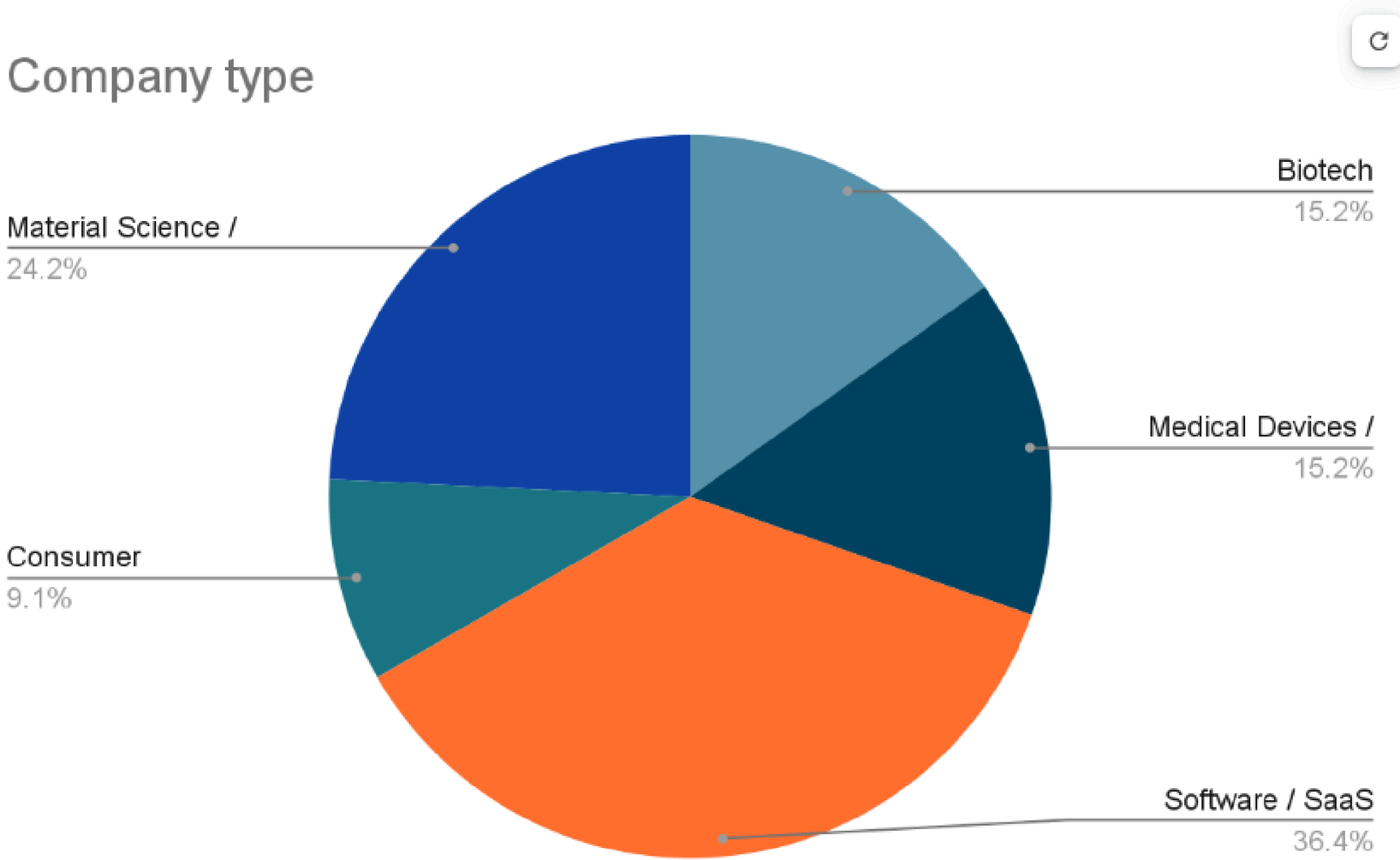
Maryland Momentum Fund

Board of Regents
Q4 2024 Fund Update

Presented By:
Mike Ravenscroft
Managing Director

Portfolio snapshot: October 2024

- 29 active
- Employ approximately 260 people on a full or part-time basis
- 50% BIPOC founders
- 25% female founders



Realized returns:

To date, Momentum Fund has exited positions in three portfolio companies

These exits returned **$1.31M** to the fund balance

VisiSonics®

Acq. by:

CEVA

InferCabulary

Acq. by:

VSS

Dynamhex

Acq. by:

Large publicly-traded company

Fund investments to date:

+$150M in leveraged capital

15X ratio

$5.95M dry powder

$10.76M invested by MMF	$3.1M invested by institutions	$7.12M in first Investments
$3.64M in Follow-On	250+ Co-investors	29 Active Portfolio Companies

How we're doing:

USM Launches $25 Million Maryland Momentum Fund to Back Start-Up Companies Formed from Campus Research

Adelphi, Md. (March 16, 2017) -- To increase new company creation and commercialization of its leading-edge research, the University System of Maryland (USM) is launching a $25 million early-stage investment fund to be known as the Maryland Momentum Fund.

The money-raising process for start-up companies typically is an uneven one. Therefore, the Maryland Momentum Fund will concentrate on filling gaps in the funding pipeline to push USM's most innovative ideas into the marketplace.

With a $10 million commitment from the USM already in place, the system is collaborating with UM Ventures and the University of Maryland, Baltimore County (UMBC) to reach out to area venture capitalists and angel investors for an additional $15 million. UM Ventures is a joint initiative of the University of Maryland, Baltimore (UMB) and University of Maryland, College Park (UMCP) to commercialize technologies and expand industry collaboration.

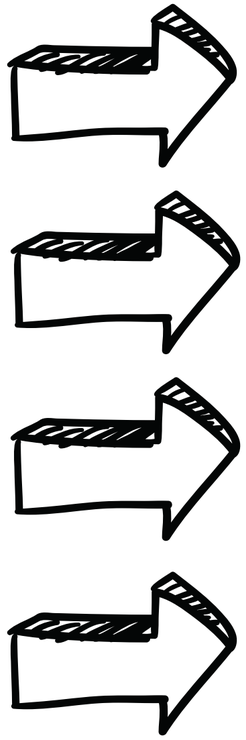
$15M -> $150M

1.5x -> 15X

250+ unique co-investors

How We’re Doing:

- Accelerate the success and profitability of USM start-ups;
- Attract promising entrepreneurs and innovators to USM institutions;
- Seize the opportunity to commercialize valuable USM intellectual property;
- Develop long-term financial returns that can be reinvested in future startups affiliated with the USM.



260+ jobs created

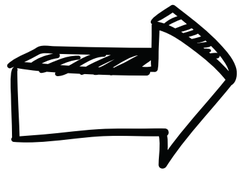
100% have hires in Maryland / >80% hired USM talent

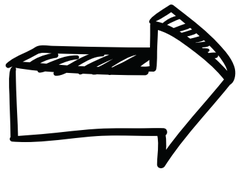
50% tech transfer

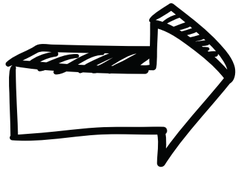
$1.31M returned to invest in new companies

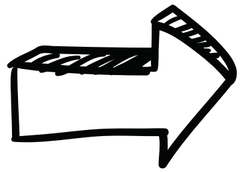
What’s Next:

- Accelerate the success and profitability of USM start-ups;
- Attract promising entrepreneurs and innovators to USM institutions;
- Seize the opportunity to commercialize valuable USM intellectual property;
- Develop long-term financial returns that can be reinvested in future startups affiliated with the USM.









Support portfolio companies’ growth

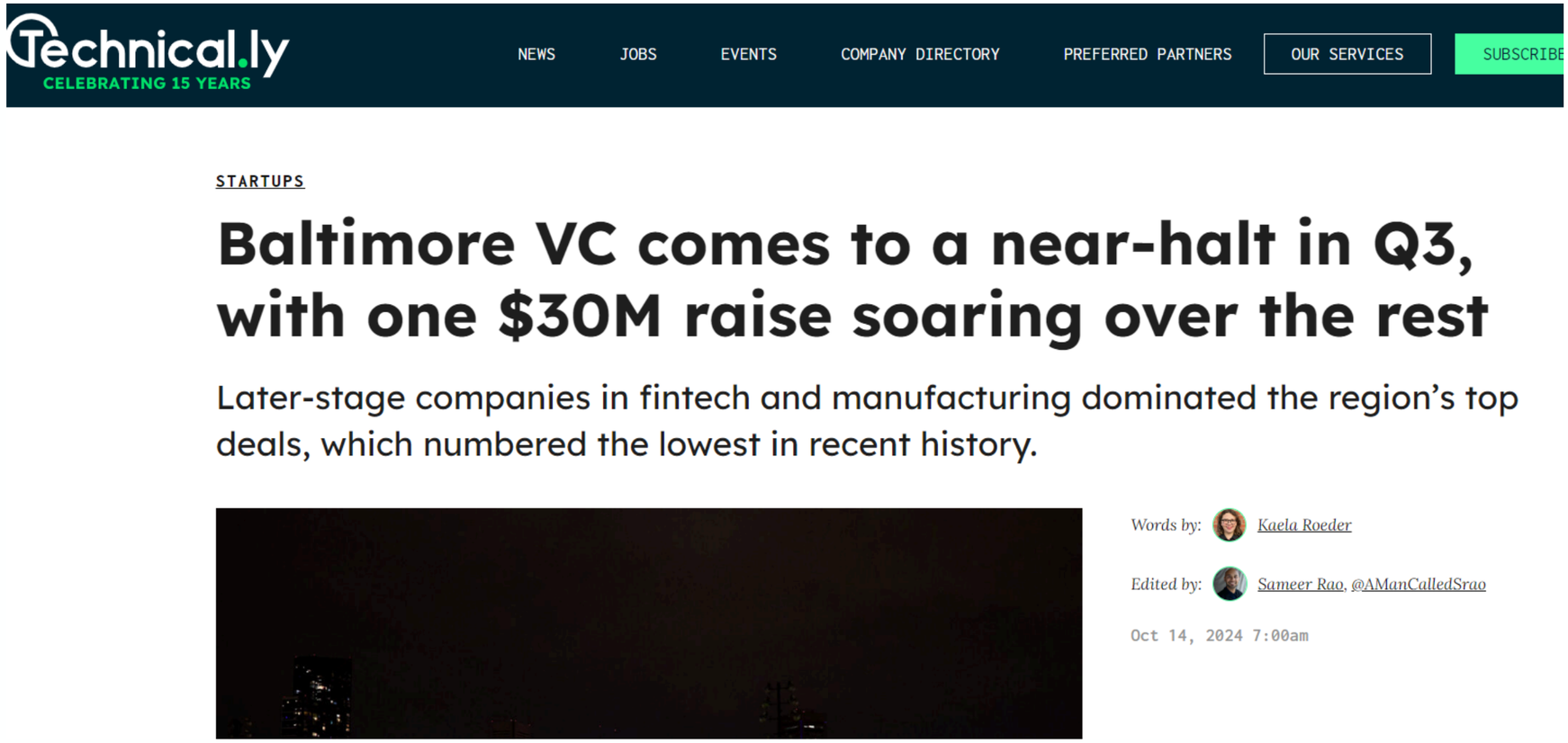
Scale hiring efforts through internships / networking

Increase tech transfer

Continue making smart investments to realize exits

Market context:

The regional funding environment has been stagnant



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STARTUPS

Baltimore VC comes to a near-halt in Q3, with one $30M raise soaring over the rest

Later-stage companies in fintech and manufacturing dominated the region's top deals, which numbered the lowest in recent history.

Words by: Kaela Roeder

Edited by: Sameer Rao, @AManCalledSrao

Oct 14, 2024 7:00am

Why VC continues to struggle:

M&A levels remain at the second-lowest level in 10 years

IPIO activity in 2024 is on track to be lower than 2023 or 2022

Lack of exits means less cash to recycle into new fundraises, many VC funds running low on cash

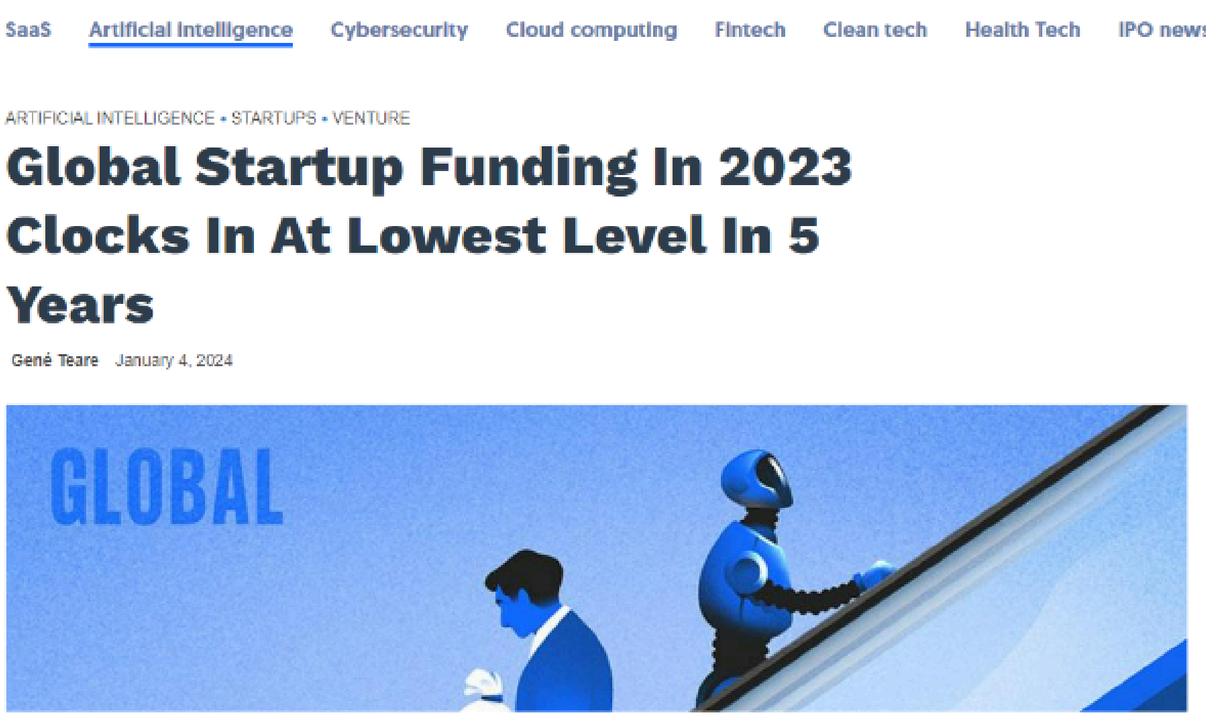
LPs remain skeptical of the asset class, interest rates remain high relative to previous decade

MMF Invested:

- $1.1M
  - $550K in new companies
  - $550K in follow-on
- 6 companies
- 5 USM Institutions

In FY23/24, activity slowed for MMF and the broader market

- MMF was approved to invest an additional $650,000 in three (3) additional companies for a total of $1.2M in new companies
- Adverse capital-raising conditions and delayed or deferred financing rounds
- Most of MMF's coinvestors had similarly low levels of capital deployment
- AI accounted for 30% of all VC dollars invested in 2023



Reasons to be optimistic:

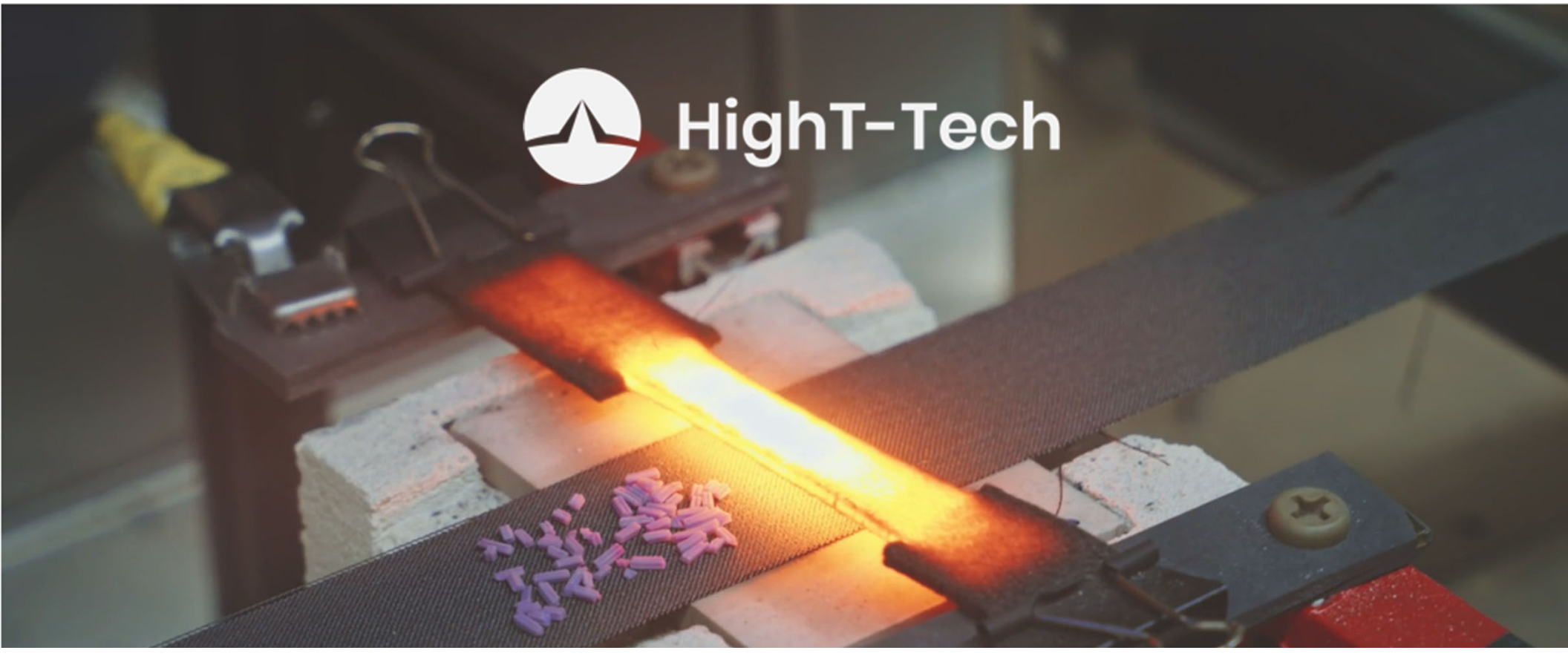
Deeptech accounts for 20% of annual VC funding (2X from 10 years ago)

Global crises in energy / climate, acceleration of AI applications, and biotech platform developments are driving interest in deeptech

IRA, federal funding (ARPA-E, DARPA), state grants / tax credits (BITC) provide capital to speed up R&D and derisk the vertical

MMF is one of the few investors regionally that invests risk capital in deeptech startups

MMF has cultivated a national network of deeptech funds and CVCs to enable the success of our portfolio companies



New Materials to Decarbonize Heavy Industries

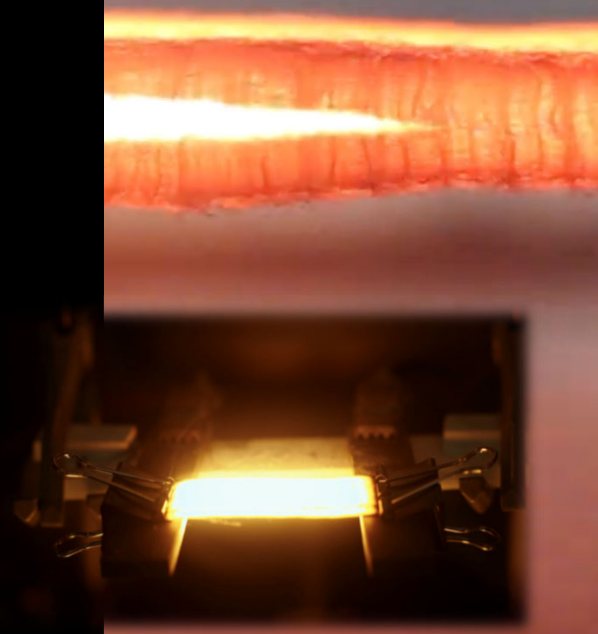
HighT-Tech Produces *Impossible* Materials

Ultra-fast High-temperature Shock (UHS) Processing

Temperatures

up to **2000 ℃**

In SECONDS



- Non-equilibrium High Temperature Process
- Multi-element High-Entropy Alloy (HEA) Catalysts
- Densest Solid Batteries and Electrolyzers Membranes

Product Development

HEA CATALYSTS

- R&D stage completed
- Pilot production in progress
- Recourses to proceed to mass production

BATTERY AND ELECTROLYZER MEMBRANES

- R&D stage
- Pilot production in plan

EXTREME BARRIER COATINGS

- Participating DOE-ARPAE project

BATTERY POWDERS AND RECYCLING

- DOE grants pending

Continued use of Federal grants to expand the UHS technology pipeline

Meet Our Team

Robert Gatte, PhD
Chief Executive Officer

- 30+ years with WR Grace, multinational catalyst company
- Led global business >$1B in revenue
- Former CTO

Prof. Liangbing Hu, PhD
Co-Founder

- University of Maryland
- Inventor of UHS technology
- Raised >$25M for his UMD group

Prof. Chao Wang, PhD
Co-Founder

- Johns Hopkins University
- Catalyst expert
- Raised >$10M for his JHU group

Yunhui Gong, PhD
Chief Technology Officer

- 15+ years R&D experience in ceramics, batteries, fuel cells
- Formerly at Nissan US

Tim Krebs, CFA
Chief Financial Officer

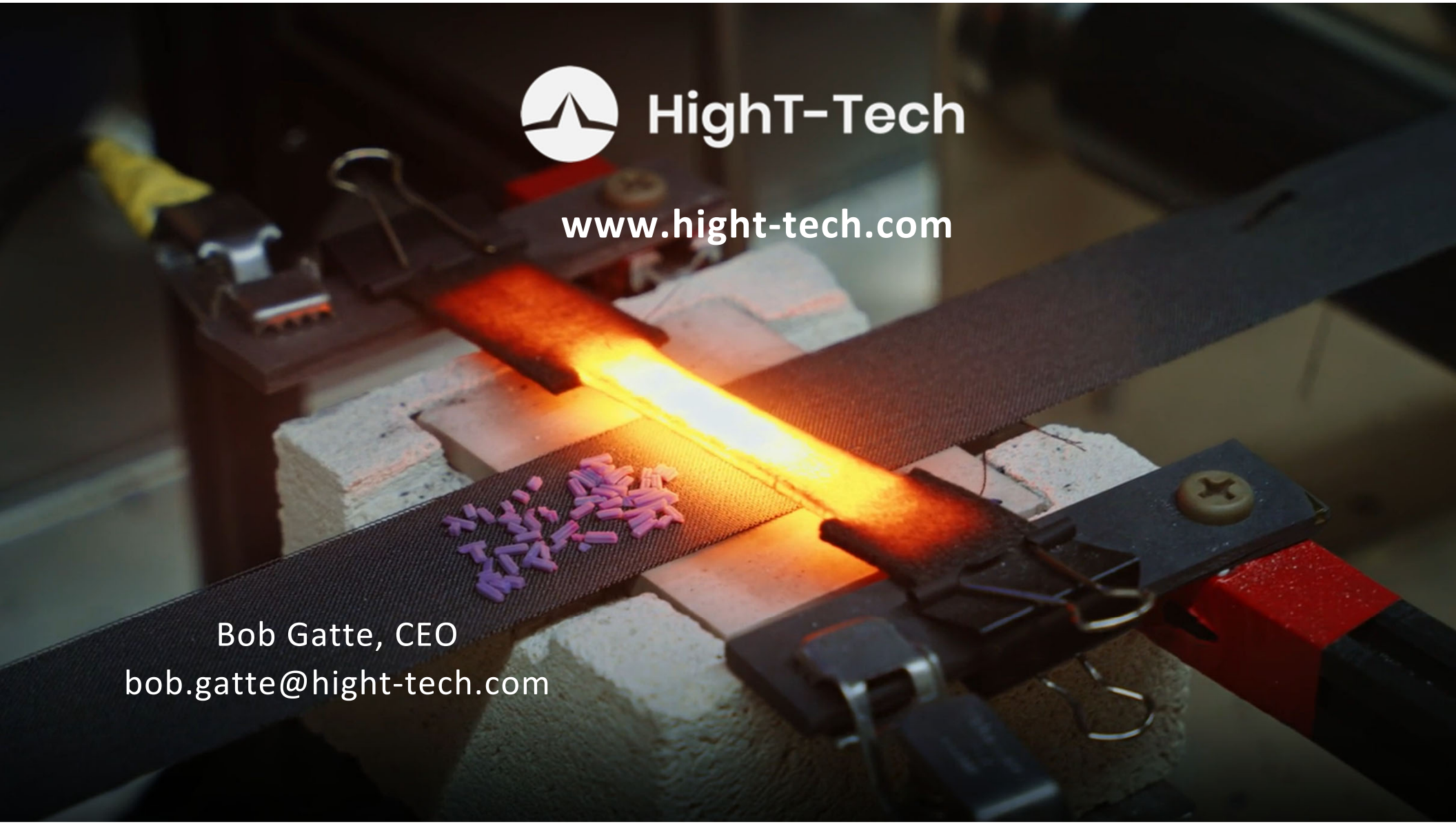
- Experienced CFO for climate and energy startups
- Engineer and investment banking

Steve Feldbauer, PhD
Advisor

- Abbott Furnace and Penn State University
- Expert in furnace design, metal powders

How Are We Doing?

- $13M in non-dilutive federal funding to date – prototype development
- Raised $1.2M in seed funding – on path to $3M by year-end
- Licensed 20 inventions from UMD in 2021 – spending $200K/yr on patents
- Leased 10K sq ft facility in Beltsville – development center/headquarters
- Hiring more staff – MD hires up from 2 to 5 by year-end
- Partnerships in place for commercialization of first catalyst product


HighT-Tech
www.hight-tech.com
Bob Gatte, CEO
bob.gatte@hight-tech.com

USM LAUNCH FUND

USM Launch Fund Update

The Launch Fund helps address barriers in access to early capital for entrepreneurs. Administered by the USM Office of Research and Economic Development, and collectively led by all USM institutions, the program supports a diverse range of USM-affiliated ventures with capital and is a connector to existing resources from USM and beyond.

The Launch Fund is part of a $600,000 pilot from fund balance, authorized in CY 2022, with a first round of funding deployed in 2023. Additional support of $100,000 has been provided by the USM Foundation.

A second round of funding has been awarded, approximately $260,000 in microgrants and grants ranging from $4,000 to $25,000. (Press Release to follow).

Program monitoring continues in order to shape the potential for its continuance and growth.

USM Launch Fund ’24 Awardees

Health and Environmental Ventures

- **NAK DesignAquatic Circle LLC** is an advanced water filtration system that provides clean water without the use of chemicals. Aquatic Circle LLC is located in Allegany County in a place-based community affiliated with Frostburg State University and is founded and led by Dr. Dung Minh Hoang.
- **NDN International LLC** is a patented efficient portable hand washing station for both indoor and outdoor use. A hands-free faucet and soap dispenser, makes it easily accessible to children, adults and wheelchair bound consumers. NDN International LLC is located in Montgomery County and was founded by Naa Nyanin, a graduate alumnus from the University of Baltimore.
- **Amron Home and Health LLC** designs unique accessories for CPAP users to remove the stigma of using a CPAP machine and provide convenience for travel. Located in Hyattsville, Amron Home and Health is led by Debora Fajer-Smith, a University of Maryland, Baltimore County alumna, and two UMBC students, Scotty Collinson and Nikos Bourazanis.
- **Sustainabli** is building an easy-to-retrofit IoT system to monitor and promote energy-efficiency and safety in labs and hospitals. Located in Baltimore City, Sustainabli is led by Kevin Tu, a University of Maryland, College Park alumnus and medical student at the University of Maryland Baltimore.

USM Launch Fund ’24 Awardees

Innovative Essentials Ventures

- **NAK Design Studio** is a bridal fashion tech agency that enhances the online bridal shopping experience. Their flagship product, MatchAGown, is an AI powered gown matchmaking tool. NAK Design Studio is located in Baltimore City and was founded by Nichole Harris, a current graduate student at the University of Maryland, Baltimore County.
- **SmartlabX** designs custom web solutions for small businesses to solve complicated business problems. SmartlabX is located in Washington D.C. and was started by Femi Adisa, a current undergraduate student at the University of Maryland, Baltimore County.
- **Nina’s Cookie Explosion** is a Black-woman owned cookie shop that delivers classic and customizable cookies and doughs. Founded by Salisbury University alumna, Nina Ross, Nina’s Cookie Explosion is located in Baltimore City.
- **Xeddy** gives college students discounts and rewards for ordering at local restaurants. Xeddy is located in Baltimore City and was founded by Basil Udo, an alumnus of the University of Maryland, Baltimore County.
- **Good + Plenty Naturals** is a Baltimore-based social enterprise on a mission to empower women to live cleaner and healthier lifestyles. Founded by Nishan Gugsa, a University of Maryland, Baltimore County alumna, offering safe and effective natural personal care products that work with your body, not against it.

USM Launch Fund ’24 Awardees

Education and Empowerment Ventures

- **The Extraordinary Library Adventure**, a children’s media company, is pioneering novel K-12 edutainment products that inspire, empower, and nurture young minds. Their vision is “a world where every child feels extraordinary.™" Located in Prince George’s County, The Extraordinary Library Adventure was founded by University of Maryland, College Park alumnus and former Bowie State University staff member, Travis Kevin.
- **Fem Equity LLC** is the leading SaaS dedicated to advancing professional women’s financial outcomes to six-figures while improving pay, career fulfillment and more. Fem Equity is located in Baltimore City and was founded by Adeola Ajani, a Towson University alumna.
- **Imagining Reality Insights & Solutions Inc.** is an edtech company developing a VR reading intervention designed to ultimately achieve reading comprehension through various modalities that place the user at the center of their experience. Led by Anne-Laurence Nemorin, a University of Maryland alumna, IRIS was founded by University of Maryland, College Park professors Donald J. Bolger, Drew Baden, and Juan Uriagereka and is located in Baltimore City.
- **Cursive Technology, Inc.** is a radically better approach to assessing writing for class by, relying on ‘proof of effort,’ transparency in the writing process, and reflecting student and AI writing without bias or false positives. Cursive Technology Inc. is located in Baltimore City and was founded by Joseph Thibault, a graduate alumnus from the University of Maryland, College Park.
- **Baltimore Venom** is a minor league, professional basketball team from Baltimore City in The Basketball League aiming to use professional sports as a vehicle for social change. Baltimore Venom is located in Baltimore City and was founded by Charles Carrington and Jacob Dennis, an alumnus of the University of Maryland, Baltimore County.
- **Fern Computing** is developing a zero code, easy-to-use AI platform designed for education and development. Inspired by brain development, Fern Computing’s algorithms excel at accuracy, interpretability, and energy efficiency. Fern Computing is located in Baltimore City and is led by Garrett Crutcher, a graduate alumnus from the University of Maryland, Baltimore.

Press Release RE Launch Fund- Maryland Entrepreneurs Get a Head Start with the USM Launch Fund - USM

Maryland Entrepreneurs Get a Head Start with the USM Launch Fund

Baltimore, Md. (Oct. 28, 2024) -- The University System of Maryland (USM) Launch Fund has awarded a series of microgrants and grants to USM-affiliated entrepreneurs, in a bid to make critical early capital more accessible. Launch Fund awardees are students, alumni, staff, faculty, and startups developing ventures that are based on USM intellectual property or are located in places affiliated with USM universities.

The program, administered by the USM Office of Research and Economic Development, connects entrepreneurs with essential resources and mentorship opportunities, and fills a gap in initial funding for start-up ventures.

“Every day, our people hatch ideas to solve some of the greatest challenges we face; that improve our quality of life; that fill a critical market need,” said USM Chancellor Jay A. Perman. “The USM ranks 9th in patents among U.S. public institutions. We’re 21st worldwide. But the most common obstacle entrepreneurs face in turning their ideas into innovations is early capital. I’m so proud that the USM Launch Fund is tackling this problem head on, so that we can make and market the products that will benefit so many.”

The Launch Fund began last year as a pilot program approved by the USM Board of Regents. Over the three-year pilot, the USM will distribute $600,000 in grants to USM ventures, and $100,000 in microgrants (funded by the USM Foundation) to advance entrepreneurship among USM students, faculty, and staff. In this round of funding, about $260,000 was awarded in microgrants and grants ranging from $4,000 to $25,000. The 2023 round distributed $280,000.

Through the Launch Fund, the USM is committed to supporting innovators who may have been historically overlooked, providing them the foundational capital necessary to overcome barriers and pursue their creative endeavors.

“At the end of a PhD, you often face the decision between academia or industry; research or product development,” said Garrett Crutcher, founder of Fern Computing, a grant recipient. “With the USM Launch Fund’s support, I’m able to turn my research into a product. The funds will be used to purchase state-of-the-art equipment and cover legal fees needed to finalize my research and begin product testing. I’m thankful the Launch Fund is providing me a ladder and support to overcome the socioeconomic barriers of starting an AI tech company.”

The following USM universities are receiving microgrants to help students, staff, and faculty advance their entrepreneurial activity: Bowie State University, Frostburg State University, Salisbury University, Towson University, the University of Baltimore (UBalt), the University of Maryland, Baltimore County (UMBC), and the University of Maryland Eastern Shore (UMES).

“Our microgrants are designed to empower underrepresented student entrepreneurs,” said Pamela Allison, PhD, endowed chair and professor of practice in Entrepreneurship and Program Innovation at UMES. “These grants provide crucial funding that was previously inaccessible, enabling students to build on the skills and knowledge gained through our workshops and seminars, as they take their business to the next level. We help them ‘build a business to soar above and beyond.’”

GRANT RECIPIENTS

HEALTH AND ENVIRONMENTAL VENTURES

Aquatic Circle LLC is an advanced water filtration system that provides clean water without the use of chemicals. Aquatic Circle LLC is located in Allegany County in a community affiliated with Frostburg State University, and is founded and led by Dr. Dung Minh Hoang.
Contact: minhdung.hoang@gmail.com

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Contact: naa.nyanin@gmail.com

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Contact: debora.fajersmith@amronhomeandhealth.com

Sustainabli is building an easy-to-retrofit IoT system to monitor and promote energy-efficiency and safety in labs and hospitals. Located in Baltimore City, Sustainabli is led by Kevin Tu, a University of Maryland, College Park (UMD) alumnus and medical student at the University of Maryland, Baltimore (UMB).
Contact: kevin@sustainabli.org

INNOVATIVE ESSENTIALS VENTURES

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Contact: info@nakdesignstudio.com

SmartlabX designs custom web solutions, helping small companies solve complicated business problems. SmartlabX is located in Washington, DC, and was started by Femi Adisa, a UMBC undergraduate.
Contact: Info@smartlabx.com

Nina's Cookie Explosion is a Black-woman-owned cookie shop that delivers classic and customizable cookies and doughs. Founded by Salisbury University alumna Nina Ross, the company is located in Baltimore City.
Contact: info@ninascookieexplosion.com

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Contact: basil@xeddy.app

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Contact: info@goodplusplenty.com

EDUCATION AND EMPOWERMENT VENTURES

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Contact: MediaRelations@ExtraordinaryLibrary.com

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Contact: anne_nemorin@iris-xre.com

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Contact: info@ferncomputing.com

Contact: Mike Lurie
Phone: 301.445.2719
Email: mlurie@usmd.edu