

Formal Session of the Board of Trustees December 13, 2024 9:00 a.m. – 11:00 a.m. Location: MUB Ballroom B Public Meeting

- I Call to Order Steve Tomaszewski, Chair
- II. Roll Call
 Sarah Schulte, Secretary
- III. Confirm Agenda Steve Tomaszewski, Chair
- IV. Opening Remarks
 - A. Opening Remarks of the Board Chair
 Steve Tomaszewski, Chair
 Opening Remarks from Derhun Sanders, Trustee
 - **B.** Opening Remarks of the University President Richard Koubek, President
- V. Public Comment Period
- VI. Committee Reports
 - A. Academic Affairs Committee John Bacon, Committee Chair
 - **B.** Audit and Finance Committee Jeff Littmann, Committee Chair
 - C. Leadership Committee
 Jon Jipping, Board Chair
- VII. Consent Agenda
 - A. Approval of Minutes
 - B. Resignations, Retirements, and Off-Payroll
 - **C.** Funding Productivity Report

D. Contracts \$1,000,000 or more

VIII. Action and Discussion Items

A. Emeritus Rank

Andrew Storer, Provost and Senior Vice President for Academic Affairs

- Nancy Langston, Professor Emerita, Department of Social Sciences
- Iosif Pinelis, Professor Emeritus, Department of Mathematical Sciences

B. Approval of 2025-2026 Room & Board Rates for East Hall

Nick Stevens, Treasurer

C. Election of Board of Trustees Chair and Vice Chair

Steve Tomaszewski, Board Chair

IX. Reports

A. Research Presentation

Bo Chen, Associate Professor of Computer Science & Niusen Chen, PhD Student

B. Outreach Presentation

Tom Oliver, Director, Center for Science and Environmental Outreach

C. University Research and Sponsored Programs Report

Andrew Barnard, Vice President for Research

D. Undergraduate Student Government

Cole Pierucki, USG Vice-President

E. Graduate Student Government

Lauren Sprague, President

F. University Senate

Robert Hutchinson, President

X. Informational Items

- A. Analysis of Investments
- **B.** Sponsored Programs
- C. Advancement & Alumni Relations
- D. Media Coverage
- E. Employee Safety Statistics

- F. Disposal of Surplus Property
- G. Contracts from \$500,000-\$1,000,000
- XI. Date for Next Formal Meeting: February 21, 2025
- XII. Other Business
 - A. Passing of the Gavel
- XIII. Adjourn

VII. Consent Agenda

- A. Approval of Minutes
- B. Resignations, Retirements, and Off-Payroll

BOARD OF TRUSTEES OFF-PAYROLL REPORT

(September 22, 2024 – November 23, 2024)

OFF-PAYROLL						
Name Class		Department	Title	Most Recent Hire Date	Term Date	
Meg Raasakka	UF	Mechanical & Aerospace Engineering	Administrative Aide	12/13/2021	09/01/2024	
Stuart Swartz	AF	Wadsworth Hall Food Service	Food Service Helper	02/05/2024	09/14/2024	
Joseph Kowalski	AP	Residential Dining	Food Service Helper	09/03/2024	09/14/2024	
Heather Gagnon	PF	Environmental Health & Safety	EHS Support Specialist	06/12/2023	09/14/2024	
Bryan Lowney	AP	Residential Dining	Food Service Helper	08/21/2023	09/23/2024	
Ewan Beyer	PF	Athletics & Recreation Complex Operations	Athletic Equipment & Event Coordinator	07/22/2024	09/24/2024	
Robin Neubauer Lieburn	UF	Psychology & Human Factors	Office Assistant	07/08/2024	09/26/2024	
Barbara Larrow	AP	Catering	Food Service Helper	01/09/2023	09/27/2024	
Erica Krause	PF	College of Forest Resources & Environmental Science	Outreach Coordinator	09/23/2019	10/01/2024	
Tammy Ahola	UF	Business Support Center	Senior Office Assistant	08/19/1999	10/01/2024	
Thomas Tolley	PF	Student Leadership & Involvement	Assistant Director	01/08/2024	10/02/2024	
Gaurav Dhar	PP	Michigan Tech Research Institute (MTRI)	Research Engineer/Scientist	09/08/2024	10/04/2024	
Elizabeth Daavettila	UF	Financial Services & Operations	Administrative Aide	09/30/2024	10/04/2024	
Frank Jackovich	AF	Facilities Management	Custodian	09/09/2019	10/08/2024	
Linnea Mcgowan Hobmeier	PF	Van Pelt & Opie Library	Manager, Resource & Discovery Services	04/22/2013	10/11/2024	
Matthew Norrod	PF	Enrollment Management	Senior Manager of Honors & Scholars	08/09/2010	10/12/2024	
Seth Haas	PF	Michigan Tech Research Institute (MTRI)	Assistant Research Engineer	06/01/2020	11/01/2024	
Trina Sintkowski	AP	Wadsworth Hall Food Service	Food Service Helper	11/28/2022	11/04/2024	
Erica Goff	PF	Sponsored Programs Office	Director of Sponsored Programs	03/04/2024	11/05/2024	
Andrew Stockero	PF	Media Technology Services	Senior Media Systems Engineer	02/07/2022	11/08/2024	
Vanessa Barber	NP	Michigan Tech Research Institute (MTRI)	Assistant Research Scientist	01/10/2022	11/15/2024	
Kathleen Terando	PF	Sponsored Programs Office	Pre-Award Analyst	06/04/2018	11/15/2024	

C. Funding Productivity Report

Michigan Technological University Michigan Tech Fund **Fundraising Productivity Report**

Fiscal Year 2025 through 10/31/2024 Compared to Prior Fiscal Year

FY 2025

YTD Total Adjustment

\$737,648

\$472,173

\$741,203

\$814,188

\$4,380,737

\$15,681,170

\$8.535.222

\$9,745,042

4.68

15.50

2.43

2.56

5.00

13.75

43.92

36%

22.61

FY 2024 FY Goal % of Goal Source YTD Total Adjustment FY % of Goal Goal 16% Major Gifts (Over 10K) \$846.534 7.96 11% 55% Planned Gift Commitments \$4,660,588 13.35 35% 19% Annual Giving (10K or less) 2.37 27% \$640,210 43% Subtotal: Ind Giving \$6,147,332 23.68 26% 29% Corporate Giving \$891,038 2.50 36% 16% Foundation & Other Org Giving \$392,480 3.00 13% 32% Corporate Sponsored Research \$1.925.213 13.67 14%

\$9,356,063

42.85

22%

FUNDRAISING TOTAL

Source

Major Gifts (Over 10K)

Corporate Giving

Planned Gift Commitments

Annual Giving (10K or less)

Foundation & Other Org Giving

Corporate Sponsored Research

Subtotal: Ind Giving

FUNDRAISING TOTAL

D. Contracts \$1,000,000 or more

VII-D. CONTRACTS \$1,000,000 OR MORE

Board Policy 11.13 requires that all contracts with a value of \$1,000,000 or greater, with the exception of contracts for the provision or receipt of academic research services, require approval of the Board of Trustees prior to execution by the University except for sales of real property, which require Board of Trustees approval only if the fair market value is equal to or greater than \$5,000,000.

- Memorial Union Retail Dining Remodel
 - o Anticipated contract dates: Summer 2026
 - Contract type: Contract will be publicly bid in March 2025
 - Anticipated contract amount: \$1,500,000
 - Funding Source: Chartwells investment funds and Auxiliary reserves
- Wads Dining Hall Remodel
 - Anticipated contract dates: February 2025
 - Contract type: Contract will be publicly bid in January 2025
 - Anticipated contract amount: \$3,300,000
 - Funding Source: Chartwells investment funds and Auxiliary reserves

VIII. Action and Discussion Items

A. Emeritus Rank

Andrew Storer, Provost and Senior Vice President for Academic Affairs

- Nancy Langston, Professor Emerita, Department of Social Sciences
- Iosif Pinelis, Professor Emeritus, Department of Mathematical Sciences

VIII-A. EMERITUS RANK

Recommendation for the granting of faculty emerita/emeritus status originates within the retiree's academic department and proceeds through the respective college. Once approved, the recommendation is presented to the provost, and if successful, to the president of the University for presentation to the Board of Trustees.

RECOMMENDATION: It is recommended that the Board of Trustees approves the following emerita and emeritus appointments:

Dr. Nancy Langston, Professor Emerita Department of Social Sciences

Mr. Iosif Pinelis, Professor Emeritus
Department of Mathematical Sciences



OFFICE MEMO

TO: Michigan Technological University Board of Trustees

FROM: Mark Rouleau, Chair, Social Sciences Department

DATE: October 25, 2024

Approved

SUBJECT: Recommendation for Emeritus Status

The faculty of the Social Sciences Department voted on October 22, 2024 to request that the Michigan Technological University Board of Trustees name Dr. Nancy Langston as Professor Emerita upon her retirement on December 31, 2024. Dr. Langston's extraordinary contributions to the field have been recognized in numerous accolades, including nomination to Michigan Tech's first cohort of Distinguished Professors and the 2021 Distinguished Scholar Award from the American Society for Environmental History, the highest honor in the profession. Dr. Langston is the author of five critically acclaimed books, covering a broad array of environmental topics, including climate history, Great Lakes history, forest and wetland history, and the history of environmental toxins. Her most recent work, *Climate Ghosts: Migratory Species in the Anthropocene* (Brandeis University Press, 2021), examines the profound impacts of climate change on migratory species, including woodland caribou, Great Lakes sturgeon, and loons. Dr. Langston's research, funded by prestigious organizations such as the Mandel Foundation, Mellon Visiting Scholar program, Fulbright Canada Research Chair, and the National Science Foundation, exemplifies her commitment to advancing environmental scholarship. Dr. Langston is currently working on her sixth book, *Reindeer on the Run*, which investigates the translocations of reindeer and caribou across the circumpolar north. In consideration of Dr. Langston's profound impact on the fields of environmental history, climate studies, and conservation, and her academic leadership, we request she be granted Emerita status.

- Photos		
Model	10/24/24	
Department Chair	Date	
L. LaReesa Wolfenbarger Wolfenbarger Date: 2024.10.30 16:36:53 -04'00'		
College Dean	Date	
Andrew J. Storer Digitally signed by Andrew J. Storer Date: 2024.11.12 11:19:02 -05'00'		
Provost and Senior Vice President for Academic Affairs	Date	
Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2024.11.12 13:23:04 -05'00'		
President	Date	



OFFICE MEMO

TO: Michigan Technological University Board of Trustees

FROM: Melissa Keranen, Chair, Department of Mathematical Sciences

DATE: September 3, 2024

SUBJECT: Recommendation for Emeritus Status

The faculty of the Department of Mathematical Sciences voted on September 3, 2024 to request that the Michigan Technological University Board of Trustees name losif Pinelis as Professor Emeritus upon his retirement on August 25, 2024.

Dr. Pinelis joined MTU as associate professor in the Fall of 1992 and was promoted to professor two years later. He has been among the most prolific publishers in the department, with more than 140 papers published and an h-index of 29. He is a world-renowned scholar in the area of probability and statistics, especially extremal problems, inequalities, and limit theorems. He has eight times won the Mathematical Sciences Department Outstanding Research Award.

Dr. Pinelis is also a prolific contributor to MathOverflow, an online research forum for professional mathematicians. His reputation score is ranked #3 this year and #6 overall, contributing to the visibility of the department and the university. His posts have been viewed more than 1.2 million times.

Dr. Pinelis has made a significant contribution to the instruction we provide in our department by regularly teaching the difficult and specialized courses, Mathematical Statistics and Probability, at the graduate level. He won the Outstanding Teaching Award in 2019, and he appeared several times in the top 10% of Michigan Tech instructors based on student evaluation scores. He has also supervised six graduate students

Approved	
Melin Turan	9/3/24
Department Chair	Date

L. LaReesa Wolfenbarger Digitally signed by L. LaReesa Wolfenbarger Date: 2024.10.07 08:43:23 -04'00'		
College Dean	Date	
Andrew J. Storer Digitally signed by Andrew J. Storer Date: 2024.10.08 10:43:32 -04'00'		
Provost and Senior Vice President for Academic Affairs	Date	
Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2024.10.09 07:34:46 -04'00'		
President	Date	

B. Approval of 2025-2026 Room & Board Rates for East Hall Nick Stevens, Treasurer

VIII-B. FY2026 EAST HALL ROOM AND BOARD RATES

Residential Living at Michigan Tech is thrilled to be bringing East Hall on line in Fall 2025. When offered recontracting for Fiscal Year 2026 beginning January 2025, students are usually given a percentage not-to-exceed guarantee over current contract prices. In order to make contracting decisions, students will need rates for East Hall as well. A full schedule of all other room types and meal plans will be presented to the Board in alignment with our typical approval cycle at the February 2025 meeting.

RECOMMENDATION: That the Board approves the recommended East Hall housing and meal plan rates for Fiscal Year 2026.

East Hall	Annual Rate
Double full suite (4 person)	\$ 10,106
Single full suite (4 person)	\$ 11,594
Double individual suite room (2 person)	\$ 10,726
Single individual suite room (1 person)	\$ 12,121
East Hall 10 Meal Plan	\$ 4,464

C. Election of Board of Trustees Chair and Vice Chair

Steve Tomaszewski, Board Chair

VIII-C. ELECTION OF CHAIR AND VICE CHAIR

The Bylaws of the Board of Trustees record that at the last meeting of the calendar year, the Board shall elect a chair to take office at the first meeting in the following calendar year. It further states that the Board shall also elect a vice chair to preside in the absence of the chair.

FIRST R	ECOMMENDAT as Chair of the			recommends	the	election	of
SECOND	RECOMMENDA as Vice Chair o		•	e recommends	s the	election	of

IX. Reports

A. Research Presentation

Bo Chen, Associate Professor of Computer Science & Niusen Chen, PhD Student

Advancing Data Security Through Research, Education, and Outreach

Dr. Bo Chen
Associate Professor
Computer Science Department
Michigan Technological University

Dr. Niusen Chen
Assistant Professor
Computer Science Department
University of Wisconsin-La Crosse

2024 Bhakta Rath Research Award Recipients





Security and Privacy (SnP) Lab

MTU SnP lab was established in 2018

For research, we aim to tackle cutting-edge data security and privacy problems, protecting safety and assets of people from malicious attacks



For education, we are enthusiastic about broadcasting data security knowledge among graduate and undergraduate students







Our Research on Data Security











Cloud Computing Security



Embedded System /
IoT Security















CPS/Smart Vehicle Security

Our Research Funding

#PI: 8

#co-PI: 10

Selected grants:

- Bo Chen, PI; Zhenlin Wang, co-PI National Science Foundation,
 \$614K, "SaTC: CORE: Small:
 Hardware-assisted Self-repairing in
 Decentralized Cloud Storage against
 Malicious Attacks", 2022 2025.
- Bo Chen, PI National Science Foundation, \$265K, "SaTC: CORE: Small: Collaborative: Hardware-assisted Plausibly Deniable System for Mobile Devices", 2019 - 2024.



Our Research Products (since 08/2017)

#Conference publications: **31** (**3** best paper awards)

#Journal publications: 13

#Books: 3

#Book chapters: 1

#Technical reports: 4

#Open-source software tools: 7

Niusen Chen, and Bo Chen. Duplicates also Matter! Towards Secure Deletion on Flash-based Storage Media by Removing Duplicates. In ACM ASIACCS '22 (Acceptance rate: 18.4%)

Niusen Chen, and Bo Chen. HiPDS: A Storage Hardware-independent Plausibly Deniable Storage System. IEEE Transactions on Information Forensics & Security (TIFS), 2023 (top journal on cybersecurity)





2nd EAI International Conference on

Security and Privacy in Cyber-Physical Systems and Smart Vehicles

November 7-8, 2024 New Orleans, United States of America

Presented to:

Josh Dafoe, Job Siy, Niusen Chen, and Bo Chen

For the paper entitled:

Hardware-assisted Runtime In-vehicle ECU Firmware Self-attestation and Self-repair





Our Recent Research Awards/Recognitions

SmartSP

Best Paper Award from SmartSP **2024** (<u>Josh Dafoe</u>, <u>Job Siy</u>, <u>Niusen</u> <u>Chen</u>, Bo Chen)

2024-2025 MTU Century II Campaign Endowed Equipment Fund (C2E2) Award (Bo Chen)

Outstanding PC Member Award from ACM AsiaCCS 2024 (Bo Chen)



2024 MTU Bhakta Rath Research Award (Bo Chen and Niusen Chen)

2023 MTU Outstanding Scholarship Award (Niusen Chen)

ACM ASIACCS

Our Recent Research Awards/Recognitions (cont.)

2023 MTU Summer Undergraduate Research Fellowship (SURF) (<u>Josh Dafoe</u>)



2023 MTU CS Departmental Scholar Award (Ryan Klemm)

Best Paper Award from EAI AC3 2021 (Niusen Chen and Bo Chen)



2019 MTU ICC Achievement Award (Bo Chen)

Distinguished Paper Award from ACSAC 2017 (Bo Chen)



Our Students (Existing and Prior)

PhD students: 6

Master students: 19

Undergraduate students: 18

High school students: 2



Selected job placements of students after graduation are: University of Wisconsin-La Crosse, Government Accounting office, AT&T, Microsoft, Schneider, Avanade, Ford Motor Company, General Motors.





























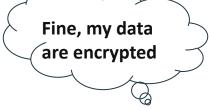




Hand over your phone



You have encrypted data, hand over your key









secret data







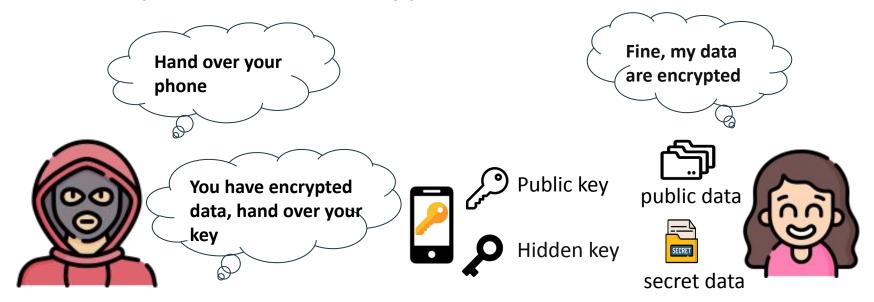




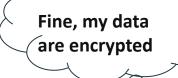














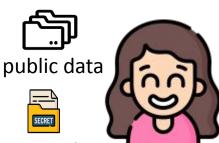
You have encrypted data, hand over your key







Hidden key



secret data



Fine, I will give up

Our Works on PDE

MobiWear: the first PDE system specifically designed for wearable devices

CrossPDE: the first PDE system that intercepts major layers of a mobile storage system

> HiPDS: the first hardware-independent PDE system that can defend against multi-snapshot attackers and mitigate data leakage within the internal memory

Plausibly Deniable Encryption - Publications (selected)

[CODASPY '24] Jinghui Liao, Niusen Chen, Lichen Xia, Bo Chen, and Weisong Shi. FSPDE: A Full Stack Plausibly Deniable Encryption System for Mobile Devices.

CODASPY

[TIFS '23] Niusen Chen, and Bo Chen. HiPDS: A Storage Hardware-independent Plausibly Deniable Storage System.

[SecureComm '22] Niusen Chen, Bo Chen, and Weisong Shi. A Cross-layer Plausibly Deniable Encryption System for Mobile Devices.

[EdgeSP '21] Jinghui Liao, Bo Chen, and Weisong Shi. TrustZone Enhanced Plausibly Deniable Encryption System for Mobile Devices.

SEC

[AC3 '21] Niusen Chen, Bo Chen, and Weisong Shi. MobiWear: A Plausibly Deniable Encryption System for Wearable Mobile Devices. (Best Paper Award).

Secure Deletion

Secure Deletion

- Retention regulations require timely and irrecoverable disposal of data
 - PIPEDA
 - Data Protection Act 1998 (DPA)



Data Retention Directive 👜



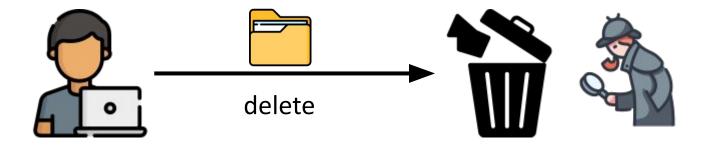
DoD 5015.02-STD



Securely delete data is of paramount importance for both individuals and organizations

Secure Deletion Guarantee

- Remove the data to be deleted
- The attacker cannot derive any sensitive information about the deleted data



Our Works on Secure Deletion

RedFlash: the first secure deletion research which handles data remnant in flash storage devices (secure deletion in local devices)

Secure Deletion





SDT: the first secure deletion design for cloud computing which supports efficient fine grained access (secure deletion in cloud servers)



Secure Deletion - Publications (selected)

[CCS '24] Bo Chen, Caleb Rother, and Josh Dafoe. Poster: A Full-stack Secure Deletion Framework for Modern Computing Devices.

ACM
CCS

[ASIACCS '22] Niusen Chen, and Bo Chen. Duplicates also Matter! Towards Secure Deletion on Flash-based Storage Media by Removing Duplicates.

ACM ASIACCS

[ASIACCS '19] Biao Gao, Bo Chen, Shijie Jia, and Luning Xia. eHIFS: An Efficient History Independent File System.

ACM ASIACCS

[ACSAC '16] Bo Chen, Shijie Jia, Luning Xia, and Peng Liu. Sanitizing Data is Not Enough! Towards Sanitizing Structural Artifacts in Flash Media.

[ASIACCS '16] Shijie Jia, Luning Xia, Bo Chen, and Peng Liu. NFPS: Adding Undetectable Secure Deletion to Flash Translation Layer.

ACM ASIACCS

Cybersecurity Education/Outreach

- MTU Women in Computer Science Summer Program (2021-2024): 70+ female K-12
- MiCUP Scholars Program (2021-2024): 4 students from community colleges of Michigan
- MTU open house showcase/preview day (2018-2023): 100+ visitors
- Gencyber cybersecurity summer camps for K-12 students/teachers (2019-2021): 90+ K-12 students/teachers



Cybersecurity Competitions

- Involved 200+ students in the National Cyber League (NCL) cyber competition since 2017
 - Fall 2024: Noah Holland ranked **5th** nationally out of 8,483 participants
 - Fall 2023: Ryan Klemm ranked **5th** nationally out of 7,930 participants
 - Fall 2022: RedTeam@MTU ranked **6th** nationally out of 3,926 teams
 - □ Spring 2021: RedTeam@MTU ranked **3rd** nationally out of 922 teams



GRETCHEN WHITMER

STATE OF MICHIGAN
OFFICE OF THE GOVERNOR

GARLIN GILCHRIST II

December 19, 2022

ATTN: Professor Bo Chen 1400 Townsend Dr Houghton, MI 49931

Dear Friends,

On behalf of the State of Michigan, I would like to offer my warmest greetings and recognition to the entire Michigan Technological University team upon placing 8th in the National Cyber League Fall 2022 Competitive Season.

I am truly grateful for all the contributions your team has made to our state. Led by your coach, Professor Bo Chen, your team has managed to succeed in the ranks and demonstrate your collaborative effort and dedication to the National Cyber League. Your accomplishments remind me how immensely proud and humbled I am to represent a state so full of heart, determination, and resilience. I have no doubt that your team will continue to surpass all expectations and continue to see lin your competitive careers. I look forward to hearing of your many accomplishments in the vears to come.

Again, congratulations. I send my best wishes for your continued success in every endeavor.

Sincerely

Gretchen Whitmer Governor of Michigan

Governor Whitmer sent Dr. Bo Chen a recognition letter for the NCL achievements of MTU in 2022







Cybersecurity Designations

- Led efforts to achieve cybersecurity designations
- In 2024, MTU has been designated by NSA as the National Center of Academic Excellence in Cyber Research (CAE-R)
- CAE-R is a joint effort among
 Departments of Computer Science,
 Applied Computing, Electrical and
 Computer Engineering
- MTU is the first and only CAE-R institute in Michigan



B. Outreach Presentation

Tom Oliver, Director, Center for Science and Environmental Outreach

Center for Science and Environmental Outreach



Connecting - Collaborating - Communicating

CSEO

- History
- Mission/Vision
- Examples of Projects
- Services



HISTORY

1991

Michigan Technological University Regional Groundwater Education in Michigan (GEM) Center

1997

Center for Science and Environmental **Outreach**

2003

Western Upper Peninsula Center for Science, Mathematics, and Environmental Education



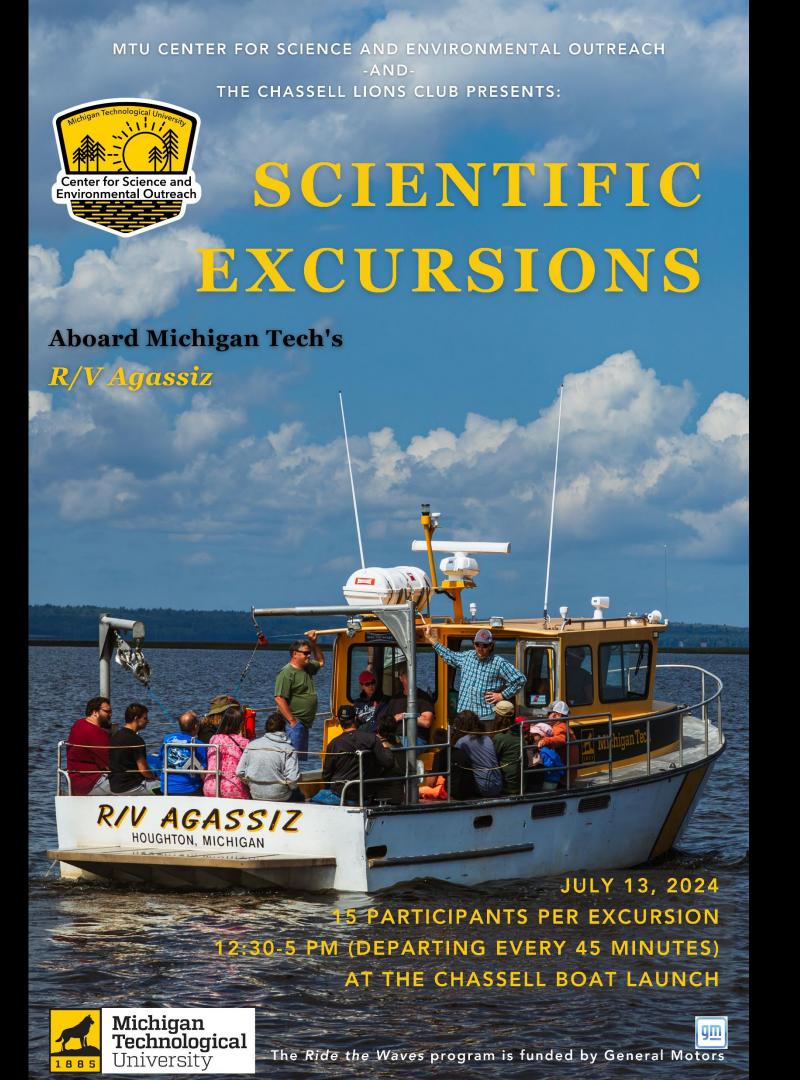
NOTABLE PROJECTS

RIDE-THE-WAVES

Scientific excursions on the R/V Agassiz for grades 4-12 science classes and community events

TEACHER WORKSHOPS

K-12 teacher professional development opportunities centered around MTU research and/or regional resources 2013–2024 4609 participants



NOTABLE PROJECTS

OUTDOOR SCIENCE INVESTIGATION FIELD TRIPS

K-12 outdoor learning experiences in science and environmental education

1999–2024 ~2700 per year

WUP AIR POLLUTION SENSOR NETWORK

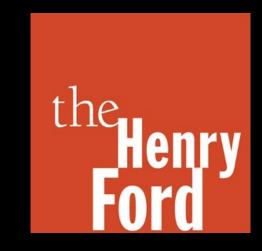
Low-cost air quality sensors for environmental education and health awareness



MTU is now the UP Hub for Invention Convention

2025 Pilot Convention ("InventCon")

Replacing "WUP STEM Fair & Festival"







...be a nationally recognized destination and force for fueling the spirit of American innovation, invention and entrepreneurship...

CSEO SERVICES

- ESTABLISHED
 RELATIONSHIP
 WITH SCHOOL
 DISTRICTS
- BROADER
 IMPACT
 STATEMENT
 DEVELOPMENT
- MTU STUDENT EXPERIENCE OPPORTUNITIES

- CCISD & GOISD
- Other schools across UP_
- Detroit-Metro schools

Developing outreach material for:

- K-12 education
- Under-represented groups
- Diverse media
- Non-scientists

- Interacting with diverse groups
- Experience with education beyond their chosen area of study

Creating a Public Engagement Plan

An infographic tool to support the development of a meaningful, community-centered engagement project.

Developed through a collaboration between the Institute for Learning & Brain Sciences at the University of Washington (I-LABS) and the Center for Advancing Research Impact in Society (ARIS).

Introduction:

There are more opportunities than ever to engage in community focused work. But with so many options, how do researchers and organizations create a focused, meaningful plan?

This tool is designed as a quick-start framework to support the initial ideation and development of a project. The tool centers audiences' needs and the importance of building partnerships in project development. It also prompts the user to consider project logistics, build a logic model, and draft plans for sharing and receiving feedback about the work. An accompanying list highlights resources from across the broader impacts and public engagement communities.

Sections:



Outlining Goals



Finding Inspiration



Understanding Audiences



Developing a Logic Model



Working in Community



Sharing & Feedback

Three ideas for using this framework:

Brainstorm a Public Engagment Plan

Whether this is your first or your tenth public engagement project, use the framework as a tool to help you think through the process of developing a community-focused plan. You can do this as a team, or as an individual.

Inform a Broader Impacts Statement

Work through this framework to explore options and avenues for public engagement that can be incorporated into a broader impacts statement.

Support Professional Development

Use this tool in workshops, trainings, or one-on-one consultations to support researchers and organizations develop public engagement plans.



CSEO NEEDS

- SUPPORTIVE UNIVERSITY, COLLEGE, & DEPARTMENTAL PARTNERS
- SUPPORTIVE INDUSTRY PARTNERS

ONGOING FUNDING SOURCES STUDENT EMPLOYEES & VOLUNTEERS





CONTACT

TOM OLIVER, DIRECTOR

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cseo@mtu.edu

Office

Website

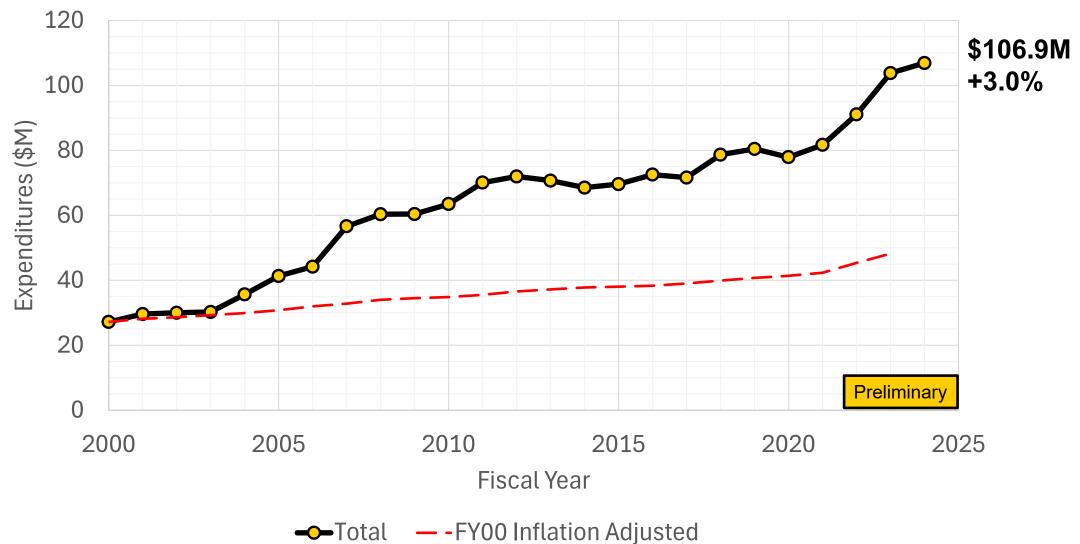
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wupcenter.mtu.edu

C. University Research and Sponsored Programs Report Andrew Barnard, Vice President for Research

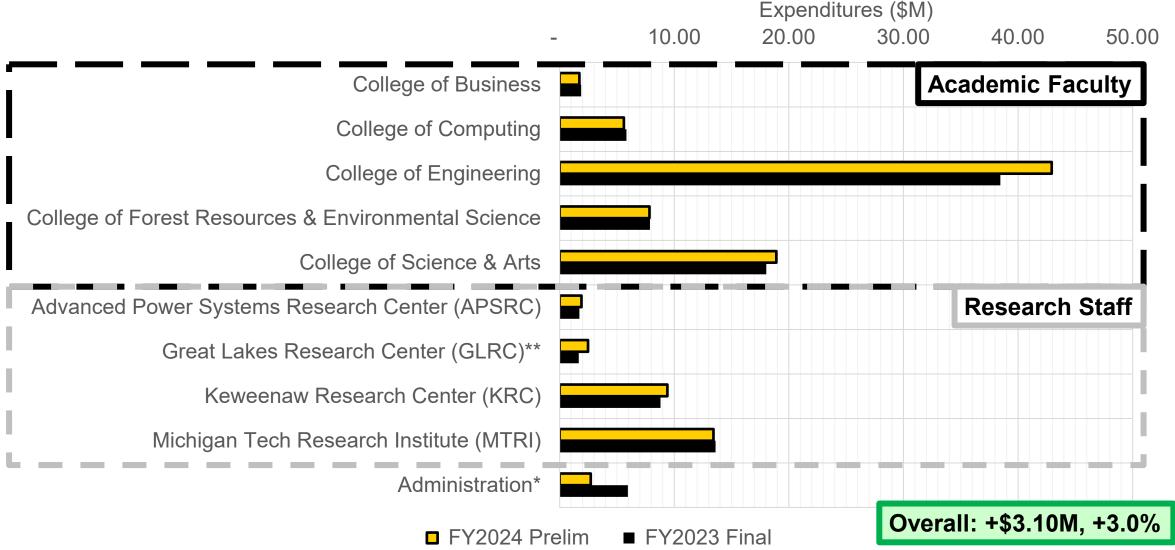


Previous Performance: FY 24 Research Expenditures Trends





Previous Performance: FY 24 Research Expenditures By Business Unit





Previous Performance: FY 24 Intellectual Property

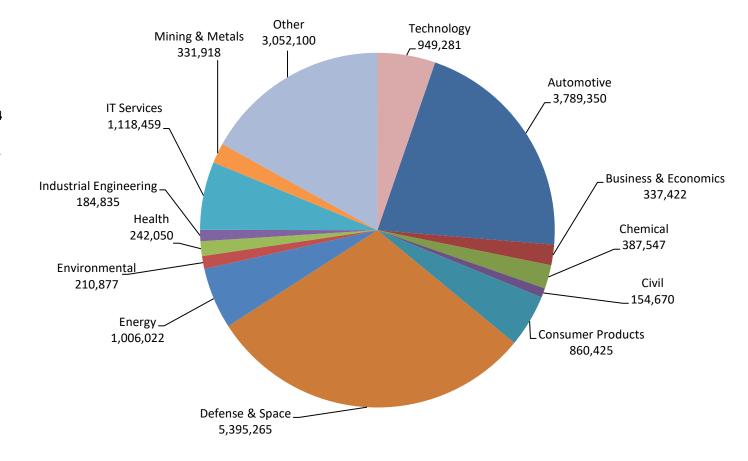
	FY24	FY23	% Change
Disclosures Received	22	18	22%
Nondisclosure Agreements	97	98	-1%
Patents Filed or Issued	14	12	17%
License Agreements	7	9	-22%
Gross Royalties	\$ 80,050	\$ 68,409	17%



Previous Performance: FY 24 Corporate Sponsorship

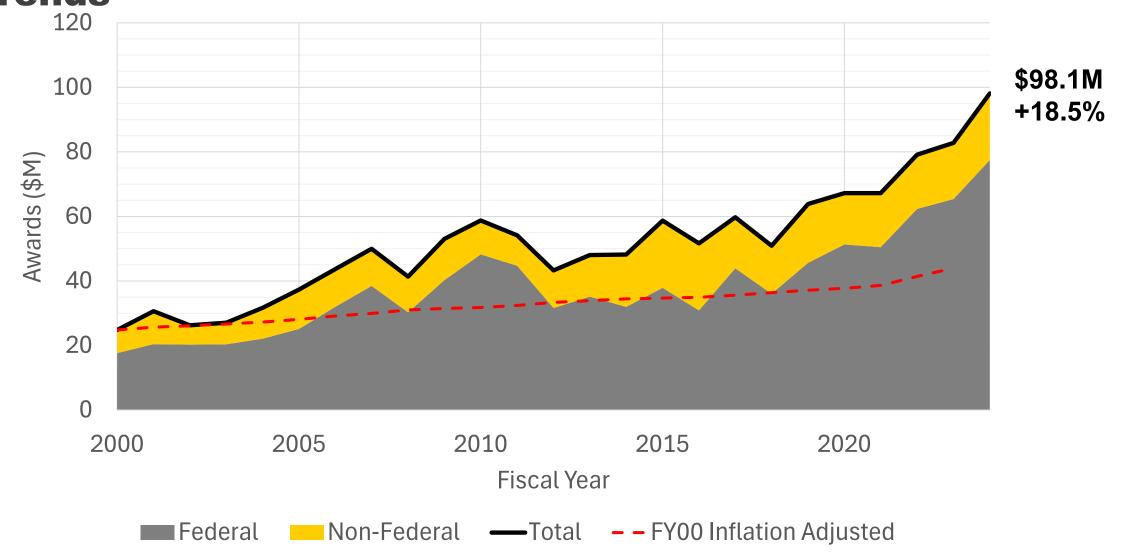
Sponsored Awards
-IndustryCOMBINED
Fiscal Year 2024
4th Quarter
Ended June 30, 2024

TOTAL: \$18,020,221





Future Performance: FY 24 Sponsored Awards Trends

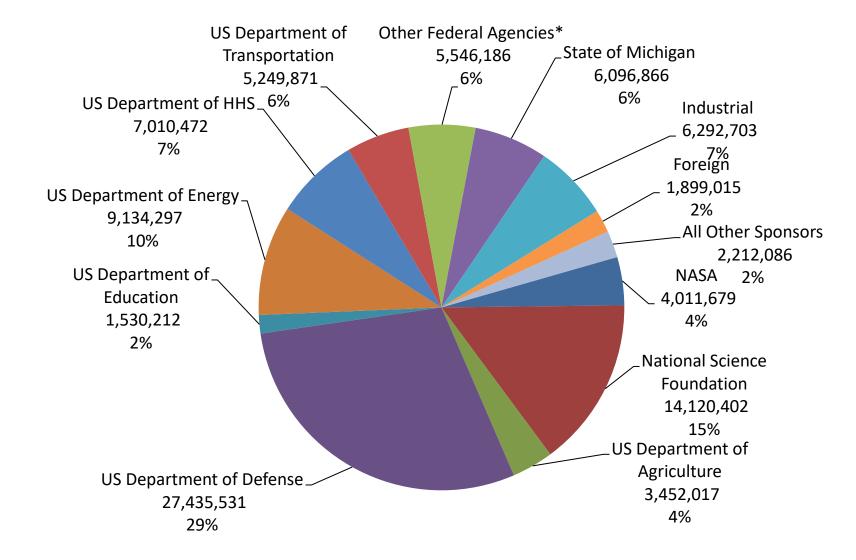




Future Performance: FY 24 Sponsored Awards Distribution

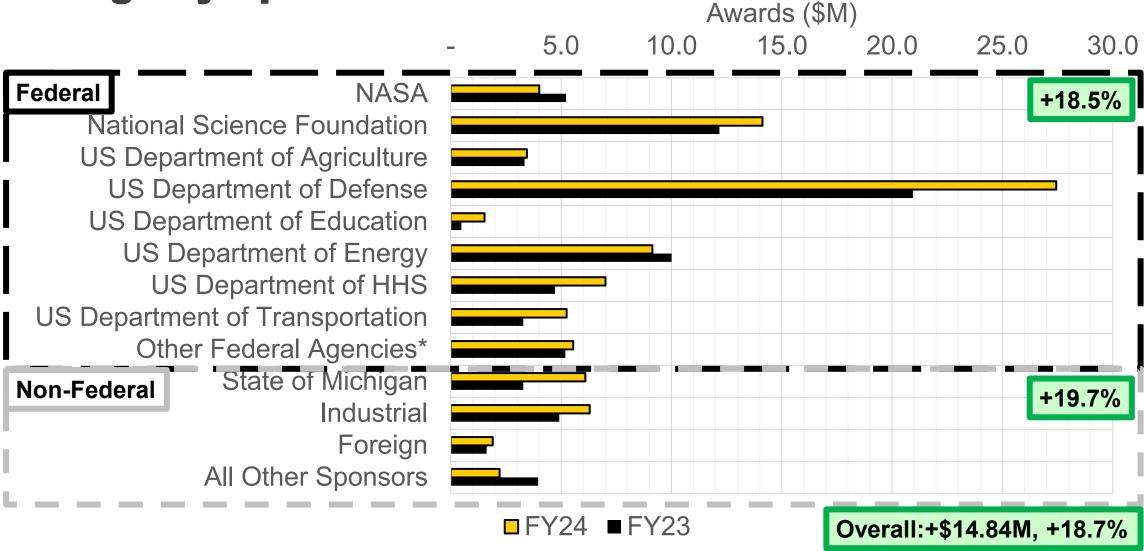
Sponsored Awards Fiscal Year 2024 4th Quarter Ended Jun 30, 2024

Preliminary Total \$98,123,966



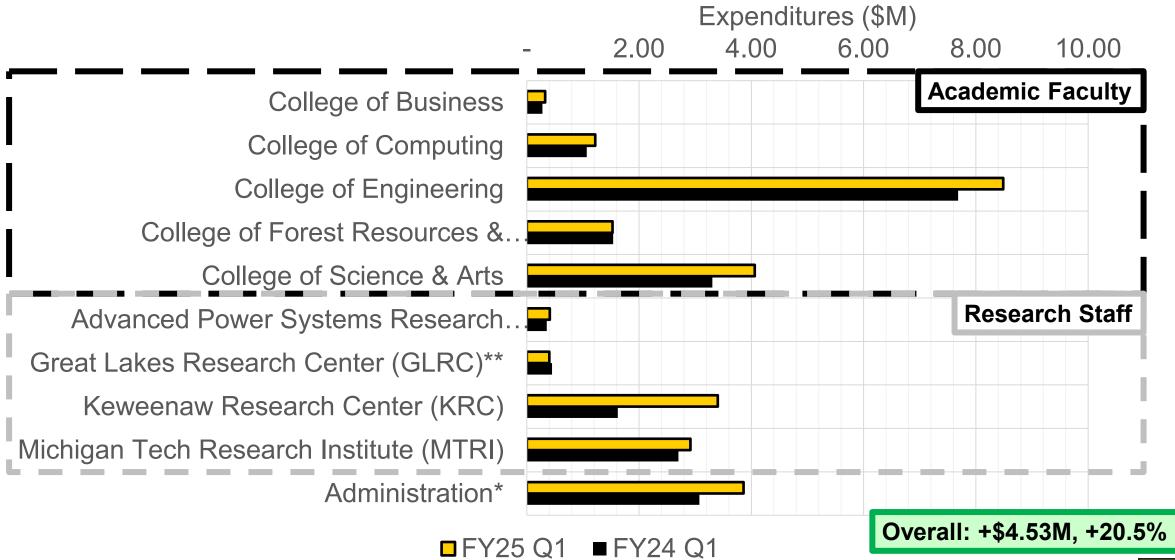


Future Performance: FY 24 Sponsored Awards Change by Sponsor



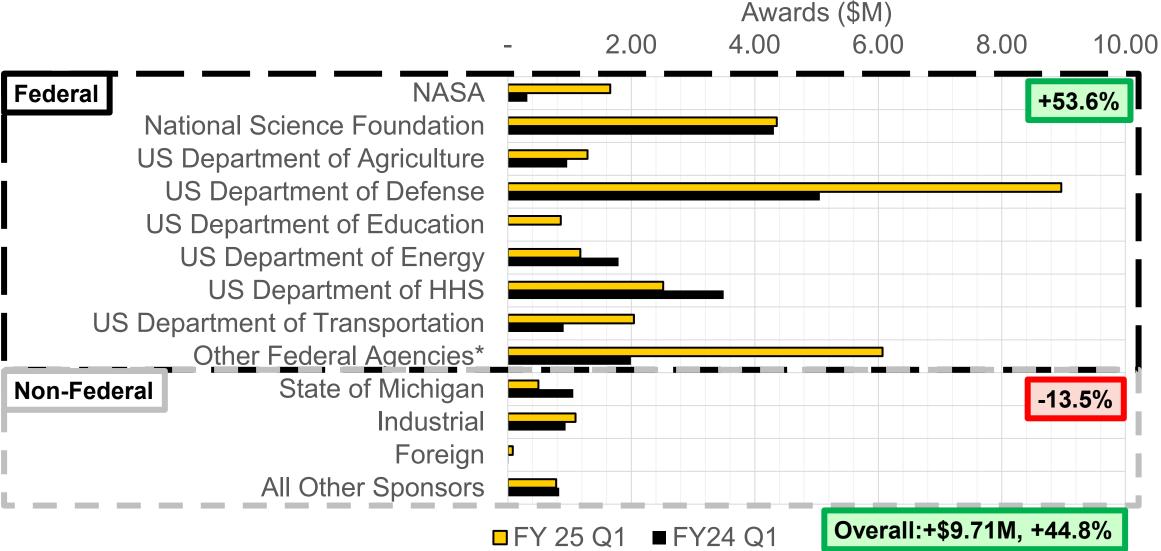


Current Performance: FY 25 Q1 Research Expenditures





Future Performance: FY 25 Q1 Sponsored Awards









Undergraduate Student Government Cole Pierucki, USG Vice-President D.



USG UPDATE

Board of Trustees Formal Session Friday, December 13, 2024

Presented by USG President Cole Pierucki







Ongoing Projects



Campus Committee Participation

- Alumni Board of Directors
- Athletic Council
- AVPA
- Committee for Accessible and Affordable Course Student Insurance Committee Materials (CAALM)
- Diversity Council
- Experience Tech Fee Committee
- Food Advisory
- Friends of the Library
- Graduate Student Government
- Houghton City Council
- Inter Residence Housing Council (IRHC)
- Interfraternity Council (IFC)
- Non-Motorized Transportation Group
- Panhellenic Council
- Parent's Fund

- Public Oversight Committee
- Senate
- Student Commission
- Student Success Council
 - Academics, Advising, Teaching
 - Physical Issues & Accessibility
 - Sense of Belonging/Campus Engagement
- Summer Orientation Task Force
- Health Research Institute
- Tech Forward Initiative on Sustainability and Resilience
- Tech Traditions Committee
- Title IX Awareness Committee
- Voter Engagement Coalition

Constitutional Convention

- A small committee (6-8 USG members) will do a thorough review of USG's governing documents
- The "convention" will start this afternoon and run through Monday
- Some main areas to explore will be:
 - Adding a GSG rep to our Ways and Means Committee
 - Revising USG E-Board election process
 - Updating the roles and responsibilities of the USG Treasurer position

Cycle Project

- USG allocated \$8400 from the Reserve Fund to continue funding the Cycle Project
- During Spring 2023, USG funded the Cycle Project to purchase and install Aunt Flow Model E sanitary product dispensers in academic buildings throughout campus
 - Initial supply of 60 500-count Pad and Tampon refills was purchased for 2023
- Renewed supply of 60 500-count Pad and Tampon refills costs \$8,4000

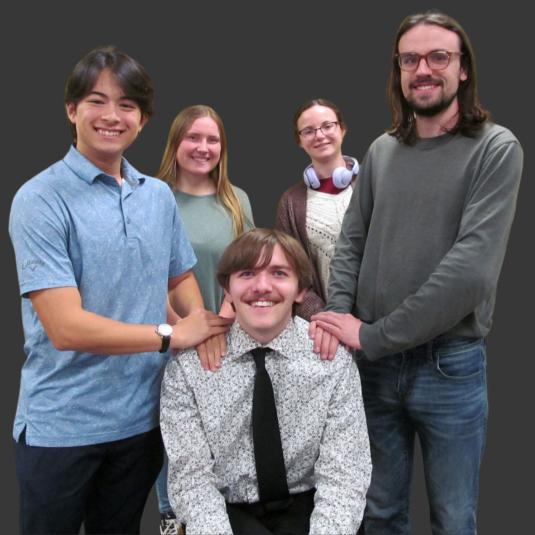
Committee Updates











Events Committee

- Fall Break Bus cycle was our most successful <u>ever!</u>
 - 3 Lower Michigan Buses sold out (165 students)
 - 1 Wisconsin/Chicago Bus sold out (55 students)
 - 220 total students served! (previous record was 188 students)
- Winter Break Bus cycle is in full swing
 - 2 Lower Michigan & 1 Wisconsin/Chicago Bus sold out (165 total students)
 - Unfortunately not enough student interest for 3rd Lower Michigan Bus
 - All buses leave campus tomorrow morning!

Political Affairs Committee

- Named a 2024 ALL IN Most Engaged Campus for College Student Voting!
 - Only 10% of post-secondary institutions in the U.S. received this honor
- Held Post-Election Stress Roundtable event on 11/21
 - Created a supportive space to discuss 2024 General Election and the election process with educated panelists



Public Relations

- Remade USG website to be more easily understood
- Working to make more consistent content on our Instagram
 - Creating "Weekly Update" posts to share our weekly business

1UP Conference USG Fall Retreat Weekly Update



Student Affairs Committee

- Helped restart Non-Motorized Transportation Committee to address cycling accidents around campus
- Exploring doing renovations and upgrades to the Student Storage Barn, which currently houses **21** student orgs
 - With more on a waitlist for storage

Ways & Means Committee

- Continuing to hold weekly Opportunity & Reserve Fund hearings for student organizations
- Preparing for budget hearings process in February
 - Committee hears budget proposals from over 150 student organizations
 - Then sets budget for next academic year

Orientation Review

- Committee created to garner undergraduate opinion and feedback on changes to undergraduate orientation
- Surveyed undergraduates about their perspective on the changes between 10/29 11/11
 - **826 total responses** (just under 14% of undergrads)
- Created final report of the committee's findings from the survey,
 direct constituent testimonies, and external university feedback
 - Shared final report with undergraduate student body and administrators



THANK YOU!

Questions?
Contact usg-president@mtu.edu

E. Graduate Student Government

Lauren Sprague, President











GSG 3MT Competition

Congratulations to our winners:

First Place: Ahmad Bshennaty (Biomedical Engineering)

"Digital Twins for Understanding Stroke in Atrial Fibrillation"

Second Place: Kwadwo Boateng (Civil Engineering)

"Recycling Scrap Tires for Road Construction"

People's Choice: Satya Sai Kumar Pilli (Mechanical & Aerospace

Engineering)

"Increasing Efficiency for a Hybrid Model"

Thank you to our judges:

William Cooke

Kayla Michelson

Jenna Sams

Maria Gencoglu

Patricia Heiden

Parth Bhatt

Andrew Storer

Chloe He

Xiaoqing Gao

Amna Mazen

Nancy Byers-Sprague

Pritam Mandal

Will Cantrell

Peter Larsen

Recordings of Preliminary Rounds & Finals on our GSG Youtube channel



Beyond Graduation Dr. Neerav Kaushal Technical Communication Humanities Pitch and Connect Application Workshop





Fall Color Tour
Halloween Costume Party
Ice Skating @ SDC
Coffee Chats VPR, McNair Scholars, Weekly with
GSG President



Updates

NEW PR CHAIR

Welcome Sindhura Repaka!

 Following a resignation, GSG held a special election on October
 29th



TRAVEL AND CAREER ENRICHMENT GRANTS

92 Travel Grants (summer and fall)
6 Career Enrichment



Updates continued

NEW SOCIAL CHAIR Nila Horner



GSG PRESIDENT ELECT Lauren Sprague





F. University Senate

Robert Hutchinson, President

University Senate Update

Robert Hutchinson, Senate President

Senate Approved Proposals

- 2-25: Proposal to Amend Senate Policy 102.1: Policy on Class Attendance
- 3-25: Syllabi Policy Revision of Assessment Statement
- 7-25: Proposal to Shelve the Master's Degree in Engineering Mechanics (EEM)
- 9-25: Proposal to Amend Senate Policy 312.1; Syllabus Requirements

Upcoming Items of Business

- Faculty referendum on Proposal 6-25: Proposed Revisions to the Faculty Handbook, Appendix I, Section 5.8
- 5-25: Defining and Implementing Digital Badges: Revision to Proposal 11-24
- 8-25: Establishment of a New Graduate Certificate in Remote Sensing for Natural Resources



B. Sponsored Programs

Sponsored Activities Summary

Fiscal Year 2025, Quarter Ended 9/30/2024

- ➤ Total awards are up 41.7% for FY25 compared to FY24.
- ➤ Gifts are down 25.9% for FY25 compared to FY24.
- Federal agency awards are up 53.6% for FY25 compared to FY24.
- ➤ Overall Industry activity increased by 105.9% over the last fiscal year.
- ➤ Preliminary research expenditures are up 20.5% over FY24. Internal research expenditures are up 18.6% while the external expenditures are up 22.1%.

Formal Session of the Board of Trustees - Agenda

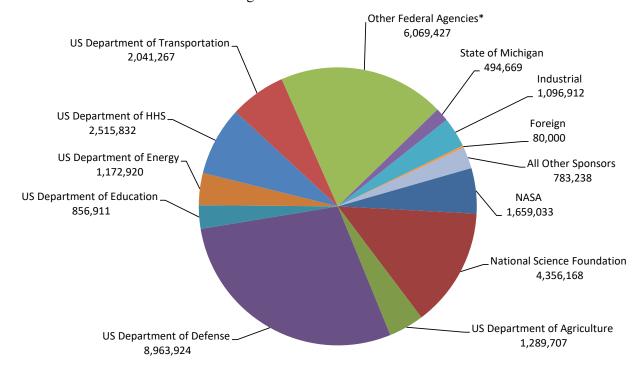
Sponsored Awards Fiscal Year 2025 1st Quarter Ended Sept 30, 2024

TOTAL: \$32,124,689

Pre-Proposals Submitted

(excluded from Proposals Submitted figures below)

> FYTD 2024: 7 FYTD 2025: 20



	Proposals Submitted		Awards F	Received	Awards Rec	eived (\$)		
	FY '25	FY '24	FY '25	FY '24	FY '25	FY '24	Variance	Variance
Sponsor	as of 9/30	as of 9/30	as of 9/30	as of 9/30	as of 9/30	as of 9/30	\$	%
NASA	4	15	27	4	1,659,033	317,512	1,341,521	422.5%
National Science Foundation	48	57	21	15	4,356,168	4,309,207	46,961	1.1%
US Department of Agriculture	15	5	10	13	1,289,707	962,286	327,421	34.0%
US Department of Defense	28	13	41	18	8,963,924	5,054,250	3,909,674	77.4%
US Department of Education	1	-	3	-	856,911	-	856,911	N/A
US Department of Energy	18	15	13	12	1,172,920	1,794,316	-621,396	-34.6%
US Department of HHS	4	5	9	11	2,515,832	3,496,735	-980,903	-28.1%
US Department of Transportation	6	3	4	4	2,041,267	905,266	1,136,001	125.5%
Other Federal Agencies*	20	24	22	11	6,069,427	1,993,015	4,076,412	204.5%
Federal Agency Total	144	137	150	88	28,925,189	18,832,587	10,092,602	53.6%
State of Michigan	13	13	6	7	494,669	1,059,692	-565,023	-53.3%
Industrial	43	47	31	32	1,096,912	936,850	160,062	17.1%
Foreign	6	1	1	1	80,000	10,060	69,940	695.2%
All Other Sponsors	30	29	10	7	783,238	831,220	-47,982	-5.8%
Subtotal	236	227	198	135	31,380,008	21,670,409	9,709,599	44.8%
Gifts**	N/A	N/A	84	69	744,635	1,004,328	-259,693	-25.9%
Crowdfunding	N/A	N/A	1	2	46	1,388	-1,342	-96.7%
Grand Total	236	227	283	206	32,124,689	22,676,125	\$9,448,564	41.7%

^{*} Institute of Museum and Library Services, National Endowment for the Arts and Humanities, US Dept of Commerce, US Environmental Protection Agency, US Dept of the Interior, US Dept of Labor, US Small Business Administration

^{**}Gifts represent non-contractual funding from corporations, foundations, associations and societies in support of academic programs, scholarships/fellowships, student design & enterprise, research, youth programs and special programs.

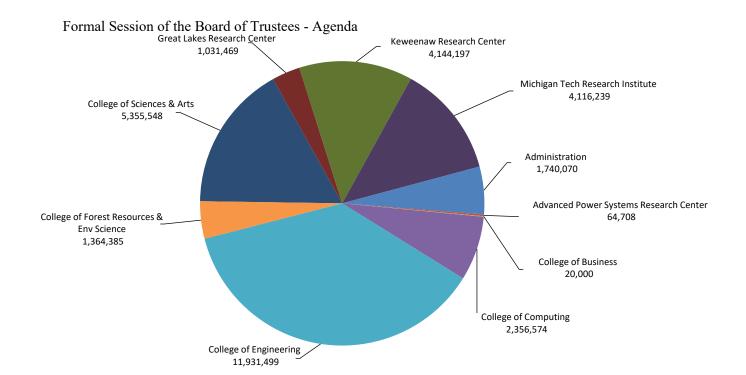
Vice President for Research Fiscal Year 2025 1st Quarter Ended Sept 30, 2024

TOTAL: 32,124,689

Percentages of Tenured & Tenure Track Faculty (as either PI or Co-PI)

Submitting Proposals since 07/01/2024 40.3%

On Active Projects as of 9/30/2024 62.4%



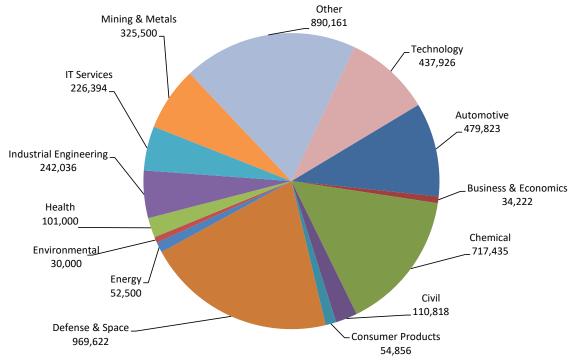
CDO 8 OIC Matrice 1	Administration	Advanced Power Systems Research	College of	College of	College of	College of Forest Resources & Env	College of Sciences & Arts	Great Lakes Research Center	Keweenaw Research	Michigan Tech Research Institute	Takala	Figure Communication	Percent
SPO & OIC Metrics ¹		Center	Business	Computing	Engineering	Science			Center		Totals	Fiscal Comparison	Change
Proposals Submitted	10	6	1	17	116	23	20	9	14	20	236	227	4.0%
Awards Received	61	2	2	15	104	20	29	12	12	26	283	206	37.4%
Federal	1,041,453	-	-	1,685,933	6,206,440	1,090,298	5,081,340	319,961	3,615,145	2,173,234	21,213,804	16,114,184	31.6%
Federal Pass-Through	185,185	-	-	550,091	3,667,372	119,201	185,562	658,247	402,722	1,943,005	7,711,385	2,718,403	183.7%
Foreign	-	-	-	-	80,000	-	-	-	-	-	80,000	10,060	695.2%
Gifts	513,432	-	10,000	23,070	162,333	4,800	31,000	-	-	-	744,635	1,004,328	-25.9%
Crowdfunding	-	-	-	-	-	-	46	-	-	-	46	1,388	-96.7%
Industry	-	2,222	-	-	865,924	72,436	30,000	-	126,330	-	1,096,912	936,850	17.1%
Other	-	-	10,000	35,000	618,988	77,650	27,600	14,000	-	-	783,238	831,220	-5.8%
State of MI	-	62,486	-	62,480	330,442	-	-	39,261	-	-	494,669	1,059,692	-53.3%
Total \$ by Division	1,740,070	64,708	20,000	2,356,574	11,931,499	1,364,385	5,355,548	1,031,469	4,144,197	4,116,239	32,124,689	22,676,125	41.7%
Fiscal Comparison	1,498,946	49,980	84,218	3,154,451	8,050,953	1,044,922	3,367,886	410,918	3,935,216	1,078,635	22,676,125		
Percent Change	16.1%	29.5%	-76.3%	-25.3%	48.2%	30.6%	59.0%	151.0%	5.3%	281.6%	41.7%		
Disclosures Received ²	-	-	-	-	40.00%	-	60.00%	-	-	-	5	4	25.0%
Nondisclosure Agreements	1	2	-	1	15	1	-	-	5	9	34	21	61.9%
Patents Filed or Issued ²	-	-	-	-	-	-	100.00%	-	-	-	1	1	0.0%
License Agreements	-	-	-	-	1	1	-	-	-	-	2	2	0.0%
Gross Royalties ²	22.22%	-	-	-	77.78%	-	-	-	-	-	57,475	6,980	723.4%

¹ Combined Metrics from both the Sponsored Programs Office (SPO) and Office of Innovation & Commercialization (OIC)

² Percentages reflect the proportional contribution from each Division (calculated by dividing the sum of the fractional contributions of all inventors for each unit by the total number of inventors).

Sponsored Awards
-IndustryCOMBINED
Fiscal Year 2025
1st Quarter
Ended Sept 30, 2024

TOTAL: \$4,672,293



	Proposals Submitted		Awards R	eceived	Awards Rece	eived (\$)		
	FY '25	FY '24	FY '25	FY '24	FY '25	FY '24	Variance	Variance
Industry Segment	as of 9/30	as of 9/30	as of 9/30	as of 9/30	as of 9/30	as of 9/30	\$	%
Automotive	10	11	13	12	479,823	302,028	177,795	58.9%
Business & Economics	2	1	9	5	34,222	79,000	-44,778	-56.7%
Chemical	2	1	11	2	717,435	28,000	689,435	2462.3%
Civil	1	6	14	5	110,818	74,000	36,818	49.8%
Consumer Products	6	7	6	13	54,856	112,269	-57,413	-51.1%
Defense & Space	7	8	10	8	969,622	847,901	121,721	14.4%
Energy	1	2	5	10	52,500	41,462	11,038	26.6%
Environmental	1	-	2	2	30,000	40,144	-10,144	-25.3%
Health	4	8	7	5	101,000	71,000	30,000	42.3%
Industrial Engineering	3	6	8	5	242,036	64,703	177,333	274.1%
IT Services	5	3	6	4	226,394	23,100	203,294	880.1%
Mining & Metals	4	6	9	8	325,500	111,965	213,535	190.7%
Other	13	4	26	17	890,161	443,978	446,183	100.5%
Technology	3	2	4	3	437,926	29,965	407,961	1361.5%
Total	62	65	130	99	4,672,293	2,269,515	2,402,778	105.9%

Michigan Technological University Total Research Expenditures by College/School/Division Fiscal Year 2025 & 2024

As of September 30, 2024 and September 30, 2023

College/School/Division	FY2025	FY2024	Variance	%
Administration*	3,862,360	3,076,161	786,199	25.6%
Advanced Power Systems Research Center (APSRC)	409,221	356,882	52,339	14.7%
College of Business	325,876	278,689	47,187	16.9%
College of Computing	1,218,480	1,066,730	151,750	14.2%
College of Engineering	8,488,336	7,683,329	805,007	10.5%
College of Forest Resources & Environmental Science	1,525,860	1,538,123	(12,263)	-0.8%
College of Science & Arts	4,060,974	3,306,606	754,368	22.8%
Great Lakes Research Center (GLRC)**	399,726	448,404	(48,678)	-10.9%
Keweenaw Research Center (KRC)	3,403,438	1,621,536	1,781,902	109.9%
Michigan Tech Research Institute (MTRI)	2,915,969	2,701,049	214,920	8.0%
Total	26,610,240	22,077,509	4,532,731	20.5%

^{*}Includes the Vice Presidents, Provost, and others who report to a VP, Provost or the President. Except for the research institutes that report to the VPR.

^{**}Includes GLRC department (non-academic researchers) expenditures only. All other GLRC center expenditures are shown in the researchers' respective colleges.

C. Advancement & Alumni Relations

Advancement and Alumni Engagement Narrative Michigan Tech Board of Trustees December 13, 2024

2024-2025 Goals and Initiatives to be achieved in collaboration with administrative and academic leadership and the Michigan Tech Fund Board of Directors.

- Advanced Training
- Naming Policy Updates
- Third party fundraising initiatives
- Public campaign phase discussions and preparation
- Gift processing and receipting
- Stewardship and annual/impact report
- Alumni Center

FY25 MTF Working Goals

- Develop an annual report documenting the impact the MTF (and the donors that support it) has on the university.
- Develop a plan setting the administrative fee beginning '26-'27 which honors donor intent and maximizes the overall benefit to the university.
- Catalog all significant contracts/agreements and recommend an appropriate review cycle and process for each.

Flagship Campaign

Flagship emphasizes world-class research and academic facilities, endowed chairs and professorships, student scholarships, and enhancing the student experience. The ultimate goal is to equip Michigan Tech to lead in the fourth industrial revolution, fulfilling its mission and addressing the world's most complex problems.

As of October 31, 2024, the leadership phase of our seven-year campaign has successfully secured over \$221.8 million or 63.4% in gifts, bringing us closer to our \$350 million campaign goal. The public phase is slated to begin when we reach \$280 million; the campaign is scheduled to conclude in June 2029.

Accomplishments as of October 31, 2024

- \$221.8 million or 63.4% to the campaign goal of \$350 million
- \$18 million in outstanding and anticipated asks
- New cash to the endowment since campaign inception: \$21.5 million
- Since campaign inception, planned gifts earmarked for the endowment \$33.84 million
- 47 illustrations, proposals and gift agreements were provided to donors
- \$8.6 million in planned gifts
- \$1.78 in realized planned gifts
- \$737,648 million in major outright gifts and pledges
- \$772,173 in annual gifts under \$10,000
- \$4,381,782 in corporate support
- \$814,188 in foundation gifts
- Continue design consultant discussion.
- Vacant position:
 - o Director for Charitable Giving
 - o Director for Annual Giving
- Campaign Executive Committee met on October 21, 2024 and plan to meet again January 2025.

Advancement and Gift Planning

- Vacant position:
 - Director for Charitable Giving, interview in process
- Frontline fundraising travel schedule includes the following for November 1, 2024 December 31, 2024:
 - o California
 - Colorado
 - o East Coast
 - o Illinois
 - Indiana
 - Lower Michigan
 - Minnesota
 - o North Carolina
 - Washington
 - Wisconsin
 - Chairs and Deans are engaged in donor visits when appropriate
- Donor Recognition:
 - Lt. Col Steve Danis '53 ribbon cutting for his gift to expand Ford Center Conference Room, Alberta, Michigan

Advancement Services and Operations

- July 1 September 30, 2024:
 - o Gifts processed: 1106
 - New gift agreements: 26
 - Executed gift agreements: 15
 - New donor proposals: 6
 - New tickets received: 294
 - Tickets Resolved: 264
 - 7 Customizations
 - 52 Support Bio updates
 - 51 Research Additional or New information

Foundations

- The Herbert H. and Grace A. Dow Foundation Managing stakeholder expectations and needs
 with the terms of the grant. Equipping frontline fundraisers with the resources and information
 needed to secure the \$2M match in collaboration with the Department of Chemistry and
 Chemical Engineering
- Leinweber Foundation establishing Leinweber Software Scholars Program
- McAllister Foundation virtual visit was held December 5, 2024
- M&M Family Foundation Endowed Professor of Practice in Geospatial Engineering proposed executed

Principal Giving

- Finalized an \$8 million estate gift.
- Working on finalizing over \$40 million in gifts to benefit scholarships, research, and athletics.
- The Principal Gift Execution committee focuses on securing gifts over \$ 1 million for the benefit
 of the Flagship Campaign. It is chaired by David Rowe '84.
 - o Working with CCS to fine-tune the wealth, likelihood, and ability of the top 70 friends/alumni who are rated as potential \$1MM+ donors.

o The members have been actively hosting events, providing guidance, and reaching out and meeting with their assigned prospective donor names.

FY 25 Campaign Donor Hosted Events

- Houghton, MI complete
- Detroit, MI in progress
- Houston, TX tentative
- Northern Michigan tentative

2nd and 3rd quarter travel

- Lower Michigan (three trips)
- North Carolina
- Colorado
- Silicon Valley
- East Coast
- Minnesota
- Texas
- Arizona
- Florida

Alumni Engagement & Annual Giving Updates

The Alumni Engagement & Annual Giving (AE&AG) team continues to execute its mission to cultivate significant, mutually beneficial, lifelong relationships with alumni through three key pillars: events, communications, and volunteerism. Updates below reflect work done under each pillar. At this time, we are still waiting on dashboards/reporting to be set up in the CRM for annual giving results, so we have limited data to share on effectiveness of appeals and progress.

• Events:

- So far this fiscal year (FY25: July 1, 2024-June 30, 2025): nearly 62 alumni events across 12 different states have been hosted or are being planned for the future. More than 20 unique alumni volunteers have engaged with us in co-hosting these events year to date (YTD).
 - A few highlights:
 - Alumni ranging from class years 1951-2024 have attended alumni events this year.
 - The fourth Traveling Tech Talks even occurred in Boston, MA on October 10, 2024:
 - o "A Journey from Bits to Qubits" Featuring Paul Juodawlkis '86
 - Looking ahead:
 - We organized another "holiday blitz" occurring this year, with volunteer alumni working with the AE Office to host holiday parties in multiple states across the country in the spirit of the season.
 - 58th Great Lakes Invitational(GLI) in Grand Rapids.
 - January 3-5, 2025: Coachella Valley Cactus Cup <u>alumni pregame social</u>

- Alumni Getaway style events: the team is starting to build a framework around a "weekend getaway" or travel-trip type event format. Exact details and first trip TBD.
- Veterans Weekend May 2-3, 2025:
- Reunion 2025: save the date for July 31-August 2, 2025.

Communications

 We recently created a new <u>Alumni Stories</u> page to share more alumni profiles, philanthropic celebrations, University news, and more.

Volunteerism highlights

- o Hosted 27 Presidential Council of Alumnae members
- Alumni Awards 2025: Nominations for the 2025 Alumni Awards are open now through Sunday, December 15.
- <u>Time & Talent:</u> Five alumni gave their time and expertise to students by coming back to campus for a week of guest lecture opportunities earlier this fall.

Annual Giving

We are conducting a search to hire a Director of Annual Giving.

- Produced and sent 15 unique mass appeals (to a variety of target audiences) soliciting alumni & friends for either specific areas on campus, or generally encouraging support to Michigan Tech.
 - Some of these solicitations have been executed in coordination with our vendor partner,
 RNL
 - Some have been produced fully in-house
 - The team carefully coordinates drop dates and target lists ensures we are following industry best practices for annual giving
- Upcoming mass appeals:
 - o Affinity appeal (Mont Ripley) email
 - o Giving Tuesday (general) email
 - o Calendar year end (general) direct mail, email, digital ads
- In partnership with CCS Fundraising, conducting a Systems Assessment to help enhance our annual giving stewardship program.
- FY25 Give Back to the Pack: Michigan Tech's 24-hour giving challenge
 - Save the Day for April 8-9, 2025.
 - Participation continues to be the focus for our 24-hour giving challenges.

D. Media Coverage

Media Report: Sept. 24 to Nov. 22, 2024

Michigan Technological University

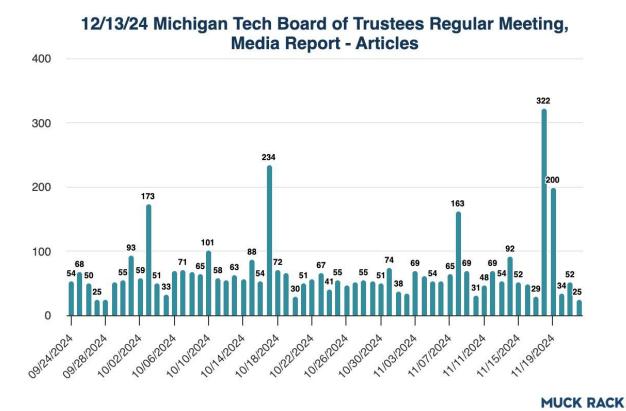
Regular Meeting of the Board of Trustees

Dec. 13, 2024

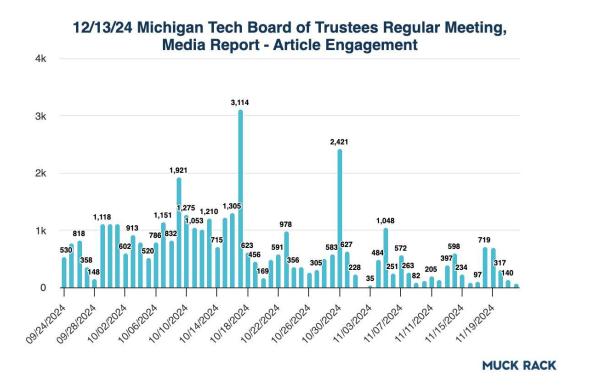
Overview

Articles	4,160
Total engagement	~ 39.9K
Average engagement	9
Journalist shares	203
Journalist reach	~ 3.01M
Average unique visitors per month (UVM)	~ 3.39 M
Total UVM	~ 14.12B

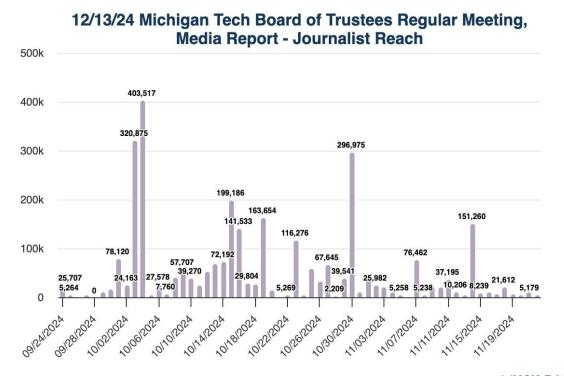
Between Sept. 24, 2024 and Nov. 22, 2024, a total of 4,160 online articles mentioned Michigan Technological University:



Those 4,160 articles were shared, commented on, or liked on social media roughly 39,900 times, for an average engagement of 9 shares, comments, or likes per article:



Journalists shared the articles 203 times, resulting in a reach of roughly 3.39 million people:



MUCK RACK

News Highlights:

Research News

The New York Times quoted Stephen Techtmann (BioSci) and Adjunct Professor Joshua Pearce (MSE) in a story about their DARPA-supported research on converting plastic waste into edible biomass using microbial processes. Pearce and his team is also exploring how this technology could be adapted for long-duration space missions, with the possibility of using asteroid materials as a future food source for astronauts.

<u>Science Daily</u> and <u>Newsweek</u> mentioned Kristin Brzeski (CFRES) in stories about <u>new research</u> published in the journal Royal Society Open House on coyotes' ability to produce "puppy dog eyes." These stories were picked up from <u>Baylor University's</u> Oct. 1 announcement.

University President Rick Koubek and Andrew Barnard (VPR) were quoted by the <u>Daily Mining Gazette</u> in a story about Michigan Tech's Keweenaw Research Center receiving the 2024 Jack Donnelly Award for Excellence in Counterintelligence, an honor from the Department of Defense's Defense Counterintelligence and Security Agency (DCSA). Tech was one of five recipients chosen from over 10,000 eligible organizations for its dedication to protecting sensitive information while driving innovation. Barnard was also quoted in stories by <u>WLUC TV6</u> and <u>My UP Now</u>.

Jared Wolfe (CFRES) was quoted by <u>MLive</u> in a story about efforts to save Michigan's bats from white-nose syndrome, a deadly fungal disease. The story highlighted a unique phenomenon at Tippy Dam, where bats infected with the disease are not dying at typical rates. Wolfe discussed the potential of ongoing research in the Western U.P. to cool old mines and help bats survive.

<u>Belt Magazine</u> mentioned Michigan Tech research on plastic resins for use in cross-laminated timber in a story about a mass timber skyscraper in Milwaukee, the benefits and potential of mass timber construction, and timber's role in the Midwest's architectural history.

<u>SciTechDaily</u> mentioned Xiaojie Wang (Physics) in a story about research from the HAWC observatory revealing that microquasars within the Milky Way can emit extremely high-energy gamma rays. Wang and fellow researchers were the first to observe these emissions.

Thomas Werner (BioSci) was quoted by <u>Lake Superior Magazine</u> in a story about his discovery of a rare Drosophila narragansett fruit fly, unseen for over 60 years and thought to be extinct. Werner captured the silver-faced fly on the Maasto Hiihto public recreation trail in Hancock. The discovery was the subject of a <u>Michigan Tech News</u> story.

<u>Freight Waves</u> mentioned Michigan Tech in a story about \$2.4 billion in grants awarded by the Federal Railroad Administration. MTU was listed as a partner on a \$14.5 million grant awarded to the University of Delaware for a Center for Hands-On Training and Learning to educate the next generation of railroad technical professionals. The center is intended to utilize the High

Tonnage Loop — a 2.7-mile track at the Transportation Technology Center in Pueblo, Colorado, used primarily to study long-term wear on train components and rail infrastructure.

Nathan Manser (GMES) was quoted by <u>Bridge Michigan</u> in a story highlighting the renewed interest in copper and nickel mining in the Upper Peninsula, driven by the demand for materials needed in electric vehicle batteries and other renewable technologies. Manser shared insights into the region's historical mining legacy and the potential for new developments as part of the global energy transition.

<u>Wired</u> mentioned Michigan Tech in a story about the UAE's Rain Enhancement Program (UAEREP), which supports global research collaborations focused on water security. The program's current grant cycle connects researchers from institutions like Michigan Tech, NASA and Columbia University to advance Al-driven and data-supported innovations in rain enhancement science.

The <u>Chicago Tribune</u> mentioned Michigan Tech in a story about Lake Michigan's declining water levels and their potential impacts. The story highlighted insights from Ph.D. candidate Miraj Kayastha (civil engineering), who co-authored a <u>2022 paper</u> projecting a 1.5-foot average increase in water levels in Lake Michigan and Lake Huron by 2040 due to increased precipitation and runoff.

General News

John Lehman (URE) was quoted by the <u>Daily Mining Gazette</u> in a story about fall enrollment discussed at Michigan Tech's Board of Trustees meeting on Friday, Oct. 11. This year's 7,430 students represent an 8% increase since 2020, with all-time highs in first- to second-year retention (88.7%), female students, and domestic diversity.

Cody Kangas (CServ) and Michigan Tech undergraduate student Klarissa Peters were quoted by the <u>Daily Mining Gazette</u> in a story about Michigan Tech's Fall Career Fair, which provided students with opportunities to connect with potential employers. Kangas was also quoted in a story by <u>WLUC TV6</u>.

<u>Bridge Michigan</u> included Michigan Tech enrollment statistics alongside a story about fewer first-year students enrolled at most Michigan public universities following a "messy" federal financial aid cycle. In the story, a table showing first-year student counts displayed a 5.5% increase at MTU over the past five years.

<u>MichAuto</u> mentioned Michigan Tech as a key partner in a story about the expansion of the Lockwood STEM Center in Hemlock, Michigan. The expanded facility now includes labs for electronics, 3D printing and computing, offering students from five school districts hands-on opportunities to explore STEM and develop skills for Michigan's tech and automotive industries.

<u>WLUC TV6</u> quoted Mike Hyslop (CFRES) and Michigan Tech undergraduate students Emma Tebo and Evan Karmis in a story about MTU's Integrated Field Practicum, known as Fall Camp. The program offers juniors in wildlife ecology, forestry, and related fields a semester-long, hands-on learning experience at the Ford Center and Forest in Alberta.

<u>The Daily Mining Gazette</u> mentioned Michigan Tech in coverage of the Houghton City Council's resolution proclaiming Sept. 28 as Betty Chavis Day. Chavis, who began her work at MTU in 1989, is recognized for helping to lead the creation of the Parade of Nations and is the namesake of the University's <u>Betty Chavis Emergency Fund</u>.

University President Rick Koubek was quoted by <u>WLUC TV6</u> in a story about the Wake Up Keweenaw breakfast, where he discussed the university's strong student attendance. Koubek emphasized maintaining traditions and community support to ensure future success.

<u>WLUC TV6</u> quoted Michigan Tech AFROTC Cadet Jonathan Willis in a story about the annual POW/MIA Memorial 5K, which took place Saturday, Oct. 5, on campus. The event supports local veterans and raises funds for the Hubbell VFW Post 4624.

Christian Montesinos (IPS) and Michigan Tech students Valentin Ravotti, Felipe Altamirano and Cate Roelant were quoted by the <u>Daily Mining Gazette</u> in a story about the 35th annual Parade of Nations, which celebrated diversity and brought together Michigan Tech students and Copper Country residents on Sept. 21. <u>My UP Now</u> and the <u>Keweenaw Report</u> also ran stories about the parade, and a recap was featured in My UP Now's <u>broadcast</u>. Leading up to the parade, interviews with Mariana Nakashima (IPS) were aired by <u>WLUC TV6</u> and <u>WZMQ 19 News</u>.

Danielle Cyrus (FSO) and William Roberts (ADV) were quoted by <u>WLUC TV6</u> in a story about Michigan Tech's celebration of the 10th anniversary of the Husky Statue and Husky Plaza. The statue, unveiled in 2014, was made possible by a \$100,000 donation from Dan and Joan Lorenzetti.

<u>The Detroit News</u> mentioned Michigan Tech in a story about the slight overall enrollment increase at Michigan's public universities this fall. <u>Michigan Tech News</u> reported in September that Tech's enrollment grew by just over 100, reaching 7,430 students.

PhD students Aritra Chakrabarty and Victoria Santillan were quoted by <u>WLUC TV6</u> in a story about Michigan Tech's Indian Student Association (ISA) Diwali Night celebration at the Rozsa Center. Chakrabarty, ISA President, shared that the event brings a sense of home with traditional food, performances and warm gestures.

<u>The Daily Mining Gazette</u> covered Michigan Tech hockey players Max Vayrynen and Elias Jansson being named CCHA Players of the Week. Vayrynen earned Goaltender of the Week honors, while Jansson was recognized as Rookie of the Week.

E. Employee Safety Statistics



EMPLOYEE SAFETY STATISTICS YEAR-TO-DATE

Jan -October 2023/2024

	Category Years Employee Classification										
	Category	1 ears	AFSCME	Faculty	Non-Exempt	POA	Professional	Student	Temporary	UAW	Total
	Injury Only w/Medical - No Lost	2023	2	1	0	0	0	3	4	0	10
	Time	2024	3	1	0	0	5	2	1	2	14
	Lost Time Cases	2023	5	0	0	0	1	1	4	0	11
Number of	Lost Time Cases	2024	5	0	0	0	2	2	1	0	10
Recordable	Restricted Work Cases	2023	0	0	1	0	0	0	0	0	1
Injuries		2024	2	0	0	0	2	1	1	1	7
	Occupational Safety and Health Administration (OSHA) Recordable Injuries (Total of above)	2023	7	1	1	0	1	4	8	0	22
		2024	10	1	0	0	9	5	3	3	31
	Injury Lost Time ³	2023	203	0	0	0	11	7	100	0	321
Number of	injury Lost Time	2024	276	0	0	0	52	49	6	0	383
Days	D 414 100 1 D 1 3	2023	0	0	17	0	0	0	0	0	17
	Restricted Work Days ³	2024	97	0	0	0	16	14	16	15	158
	Total Work Hours	2023	205,299	599,840	72,348	14,041	973,791	836,656	62,127	130,798	2,894,900
Hours	Total Work Hours	2024	213,268	613,683	71,019	14,269	1,005,169	772,755	59,895	131,584	2,881,642
Worked	Dereantage of Work Hours	2023	7.1%	20.7%	2.5%	0.5%	33.6%	28.9%	2.1%	4.5%	100.0%
	Percentage of Work Hours	2024	7.4%	21.3%	2.5%	0.5%	34.9%	26.8%	2.1%	4.6%	100.0%
	Last Time Casa Bata 1	2023	4.9	0.0	0.0	0.0	0.2	0.2	12.9	0.0	0.8
Rates	Lost Time Case Rate ¹	2024	4.7	0.0	0.0	0.0	0.4	0.5	3.3	0.0	0.7
Rates	Francisco Data ² (Dana 1111)	2023	6.8	0.3	2.8	0.0	0.2	1.0	25.8	0.0	1.5
	Frequency Rate ² (Recordable)	2024	9.4	0.3	0.0	0.0	1.8	1.3	10.0	4.6	2.2

OSHA has established specific calculations that enable the University to report the Recordable Injuries, Lost Time Case Rates and Frequency Rates. The Standard Base Rate (SBR) calculation is based on a rate of 200,000 labor hours which equates to 100 employees who work 40 hours per week for 50 weeks per year. Using the SBR allows the University to calculate their rate(s) per 100 employees.

- 1 The Lost Time Case Rate is calculated by multiplying the number of Lost Time Cases by 200,000 then dividing by the labor hours at the University.
- 2 The Frequency Rate is calculated by multiplying the number of recordable cases by 200,000 then dividing by the labor hours at the Univi
- 3 The number of days are total days for the life of the cases first reported during this period.

The Bureau of Labor Statics 2022 Injury, Illness, and Fatalities, Table 1 reports for Colleges and Universities; the average LOST TIME CASE RATE of days away from work was 0.6 and the average FREQUENCY RATE was 1.4.

F. Disposal of Surplus Property

Michigan Technological University Surplus Property Sales September 1, 2024 - October 31, 2024								
Date	Description	Α	mount					
09/13/24	2009 Ford Escape Hybrid XLT	\$	150.00					
10/18/24	1997 Chevrolet Express Cutaway Van		200.00					
Total		\$	350.00					

G. Contracts from \$500,000-\$1,000,000

X-G. CONTRACTS OVER \$500,000

Board Policy 11.13 requires that all contracts with a value of \$500,000 or greater but less than \$1,000,000 be presented to the Board of Trustees as a subsequent information agenda item.

- East Hall Market
 - o Anticipated contract dates: December 2024
 - o Contract type: Proposal has been submitted by General Contractor for East Hall
 - Anticipated contract amount: \$674,600
 - o Funding Source: Chartwells investment funds and Auxiliary reserves
- M&M Psychology and Human Factors Renovation
 - o Anticipated contract dates: December 2024
 - o Contract type: Contract will be publicly bid in December 2024
 - Anticipated contract amount: \$750,000
 - Funding Source: Deferred Maintenance and ITEMS Funding