



Formal Session of the Board of Trustees
April 26, 2024
9:00 a.m. – 11:00 a.m.
Location: MUB Ballroom B
Public Meeting

- I. Call to Order
- II. Roll Call
- III. Confirm Agenda
- IV. Opening Remarks
 - A. Opening Remarks of the Board Chair
 - B. Opening Remarks of the University President
- V. Public Comment Period
- VI. Committee Reports
 - A. Academic Affairs Committee
 - B. Audit and Finance Committee
 - C. Leadership Committee
- VII. Consent Agenda
 - A. Approval of Minutes
 - B. Resignations, Retirements, and Off-Payroll
 - C. Funding Productivity Report
 - D. Michigan Council for the Arts and Cultural Affair
 - E. Contracts - Board Policy 11.13
- VIII. Action and Discussion Items
 - A. Tenure-Track Appointments Not Involving Tenure and/or Promotion
 - B. Appointments Involving Tenure and/or Promotion
 - C. Promotions
 - D. Emeritus Rank
 - E. MS in Wildlife Ecology & Conservation
 - F. Silver Medal - Chang Park
 - G. Silver Medal - Anthony "Tony" Esposito
 - H. Revisions to Board Policy 9.24 Enrollment of Senior Citizens
 - I. Approval of FY25 General Fund Operating Budget
 - J. Resolution for Approval of External Auditor
 - K. Revisions to Board Policy 8.9 Experience Tech Fee

Formal Session of the Board of Trustees - Agenda

- IX. Reports
 - A. Provost Report
 - B. Undergraduate Student Government
 - C. Graduate Student Government
 - D. University Senate
- X. Informational Items
 - A. Analysis of Investments
 - B. Research & Sponsored Programs
 - C. Advancement & Alumni Relations
 - D. Media Coverage
 - E. Employee Safety Statistics
 - F. Disposal of Surplus Property
 - G. Contracts 500K
 - H. Summary of Scholarships, Awards, and Grants (Board Policy 9.3)
- XI. Other Business
- XII. Date for Next Formal Meeting: August 1, 2024
- XIII. Adjourn

Agenda Details

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

BOARD OF TRUSTEES OFF-PAYROLL REPORT
 (February 4, 2024 – March 30,2024)

OFF-PAYROLL					
Name	Class	Department	Title	Most Recent Hire Date	Term Date
Jenna Wuorinen	AF	Residential Dining	Food Service Helper	11/05/2014	01/30/2024
David Juarez	CF	General Athletics	Assistant Women's Soccer Coach	06/27/2022	02/03/2024
Whitney Boroski	PP	Center for Student Mental Health & Wellbeing	Assistant Director for Health Promotion & Prevention	01/02/2013	02/09/2024
Mattison Brady	PF	College of Forest Resources & Environmental Sciences	Climate Adaptation Specialist	12/12/2022	02/16/2024
Jacob Smith	PF	Michigan Tech Research Institute	Assistant Research Engineer	07/26/2021	02/16/2024
Wyatt Bastion	AP	Residential Dining	Food Service Helper	11/27/2023	02/18/2024
Yongchao Yang	FF	Mechanical Engineering-Engineering Mechanics	Assistant Professor	08/19/2019	02/23/2024

C. Funding Productivity Report

Michigan Technological University
Michigan Tech Fund
Fundraising Productivity Report
 Fiscal Year 2024 through 3/31/2024
 Compared to Prior Fiscal Year

FY 2024

FY 2023

Source	YTD Total	Adjustment	FY Goal	% of Goal	Source	YTD Total	Adjustment	FY % of Goal Goal	FY Total
Major Gifts (Over 10K)	3,061,120.46		7.96	38%	Major Gifts (Over 10K)	4,937,159		6.92 71%	5,444,018.85
Planned Gift Commitments	16,699,553.90		13.35	125%	Planned Gift Commitments	17,177,817.26		12.04 143%	11,718,599.04
Annual Giving (10K or less)	2,151,991.20		2.37	91%	Annual Giving (10K or less)	2,356,750.84		2.31 102%	8,181,044.88
<i>Subtotal: Ind Giving</i>	<i>21,912,665.56</i>		<i>23.68</i>	<i>93%</i>	<i>Subtotal: Ind Giving</i>	<i>24,471,726.91</i>		<i>21.27 115%</i>	<i>25,343,662.77</i>
Corporate Giving	2,007,992.66		2.50	80%	Corporate Giving	2,195,195.09		2.05 107%	3,066,298.76
Foundation & Other Org Giving	5,796,393.26		3.00	193%	Foundation & Other Org Giving	818,629.23		5.13 16%	2,202,536.90
Corporate Sponsored Research	9,054,409.00		13.67	66%	Corporate Sponsored Research	14,936,289.00		13.33 112%	16,309,474.00
FUNDRAISING TOTAL	38,771,460.48		42.85	90%	FUNDRAISING TOTAL	42,421,840.23		41.77 102%	46,921,972.43

D. Michigan Council for the Arts and Cultural Affair

VIII-D MICHIGAN ARTS AND CULTURE COUNCIL

The Rozsa Center for the Performing Arts is preparing a proposal for submission to the Michigan Arts and Culture Council. The funds requested in this proposal will support the costs associated with artist fees for the annual Presenting Series that will include the following:

- Gina Chaves - Latin Grammy Awards Nominee (September 6, 2024)
- Sharon McMahon - podcast host and author (September 19, 2024)
- Manuel Cimena's production of Leonardo!, based on the book by acclaimed author Mo Williams (October 17-19, 2024)
- The Muppet Christmas Carol, film (December 14, 2024)
- Waterstreet Dance Milwaukee (February 5-8, 2025)
- Yamato; The Drummers of Japan (March 8, 2025)
- Zarna Garg, comedian (March 22, 2025)

The amount of the grant request is \$30,000.

The Michigan Arts and Culture Council requires that proposals submitted to them for funding be authorized by the Board of Trustees.

RECOMMENDATION: That the Board of Trustees endorse the proposal from the Rozsa Center for the Performing Arts for submission to the Michigan Arts and Culture Council.

E. Contracts - Board Policy 11.13

VII-E. CONTRACTS

Board Policy 11.13 states 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. The University recommends that the Board authorize the Treasurer and Chief Financial Officer and General Counsel and Secretary to negotiate and execute, should it be in the best interests of the University, the following agreement:

- Prime Vendor for Custodial Supplies: Supply and delivery of custodial cleaning chemicals, paper products, and equipment.
 - Anticipated contract dates: July 1, 2024 – June 30, 2027
 - Contract type: Request for proposals.
 - Anticipated contract amount: \$1,100,000 – \$1,500,000
 - Funding source: General Fund/Auxiliary Fund (Housing)

RECOMMENDATION: that the Board of Trustees approves the Prime Vendor for Custodial Supplies as presented.

VIII. Action and Discussion Items

A. Tenure-Track Appointments Not Involving Tenure and/or Promotion

VIII-A. TENURE-TRACK APPOINTMENTS NOT INVOLVING TENURE AND/OR PROMOTION

The departments, with support from the respective colleges, have requested that the individuals identified in this section be granted the indicated appointments. The administration supports the recommendations of the departments and colleges regarding these appointments.


RECOMMENDATION: It is recommended that the Board of Trustees approves the appointments listed in this section. The appointments do not include tenure or promotion.



Office of the Provost and
Senior Vice President for Academic Affairs

Phone: (906) 487-2440
Fax: (906) 487-2935

TO: Richard Koubek, President

FROM: Andrew Storer, Provost and Senior Vice President for Academic Affairs 

DATE: March 4, 2024

SUBJECT: Tenure-Track Faculty Appointment Recommendations

In accordance with Board of Trustees Policy 2.2, Duties and Powers of the President, I am submitting the following faculty appointment recommendations for your review and subsequent approval by the Board of Trustees at their meeting on April 26, 2024.

**Appointment without Tenure for Two Years
Effective August 12, 2024**

Sουλchan Lee	Assistant Professor	College of Business
Xin Li	Assistant Professor	College of Business
Ashraf Saleem	Assistant Professor	Applied Computing
Briana Bettin	Assistant Professor	Computer Science
Leo Ureel	Assistant Professor	Computer Science
Hoda Hatoum	Assistant Professor	Biomedical Engineering
Muhammad Rizwan	Assistant Professor	Biomedical Engineering
Yousef Darestani	Assistant Professor	Civil, Environmental & Geospatial Eng.
Jae Sung Kim	Assistant Professor	Civil, Environmental & Geospatial Eng.
Mohammad Sadeghi	Assistant Professor	Civil, Environmental & Geospatial Eng.
Flavio Bezerra Costa	Assistant Professor	Electrical & Computer Engineering
Tan Chen	Assistant Professor	Electrical & Computer Engineering
Kaichen Yang	Assistant Professor	Electrical & Computer Engineering
Michelle Jarvie-Eggart	Assistant Professor	Engineering Fundamentals
David Labyak	Assistant Professor	Manufacturing & Mechanical Eng. Tech.
Vinh Nguyen	Assistant Professor	Mechanical Eng. – Eng. Mechanics
Paulus van Susante	Assistant Professor	Mechanical Eng. – Eng. Mechanics
Shangyan Zou	Assistant Professor	Mechanical Eng. – Eng. Mechanics
Tara Bal	Assistant Professor	College of Forest Resources & Env. Sci.
Tao Liu	Assistant Professor	College of Forest Resources & Env. Sci.
Jared Wolfe	Assistant Professor	College of Forest Resources & Env. Sci.
Yinan Yuan	Assistant Professor	College of Forest Resources & Env. Sci.
Erich Petushek	Assistant Professor	Cognitive & Learning Sciences
Jason Archer	Assistant Professor	Humanities
Stephanie Carpenter	Assistant Professor	Humanities

Kelly Kamm	Assistant Professor	Kinesiology & Integrative Physiology
Fan Dai	Assistant Professor	Mathematical Sciences
Robert Schneider	Assistant Professor	Mathematical Sciences
Elena Giusarma	Assistant Professor	Physics
Kartik Iyer Keshava	Assistant Professor	Physics
Mark Rhodes	Assistant Professor	Social Sciences
Jeffrey Sherwood	Assistant Professor	Visual & Performing Arts

**Appointment without Tenure for One Year – Extension to Tenure Clock
Effective August 12, 2024**

Nathir Rawashdeh	Assistant Professor	Applied Computing
Daniel Dowden	Assistant Professor	Civil, Environmental & Geospatial Eng.
Gordon Paterson	Assistant Professor	Biological Sciences
Trista Vick-Majors	Assistant Professor	Biological Sciences
Carolyn Duncan	Assistant Professor	Kinesiology & Integrative Physiology

**Appointment without Tenure for One Year
Effective August 12, 2024**

Josue Reynoso Vallejo	Assistant Professor	College of Business
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Formal notification of these decisions will be sent to each individual Wednesday, May 8, 2024.

APPROVED:



Richard Koubek, President

3/18/24

Date

B. Appointments Involving Tenure and/or Promotion

VIII-B. APPOINTMENTS INVOLVING TENURE AND/OR PROMOTION

The policy for granting tenure and/or promotion to faculty members requires that the process begin with deliberations in the candidate's home unit and proceed through additional review at multiple levels. Recommendations are reviewed by the provost, and the provost makes a recommendation to the president of the University. The president has accepted the provost's recommendation regarding tenure and/or promotion for the candidates listed in this section.

RECOMMENDATION: It is recommended that the Board of Trustees approves the appointments involving tenure and/or promotion listed in this section.



Office of the Provost and
Senior Vice President for Academic Affairs

Phone: (906) 487-2440

Fax: (906) 487-2935

TO: Richard Koubek, President

FROM: Andrew Storer, Provost & Senior Vice President for Academic Affairs

DATE: March 16, 2024

SUBJECT: Appointment with Tenure Recommendation or Tenure and Promotion Recommendations

In accordance with Board of Trustees Policy 6.4, Academic Tenure and Promotion, the following faculty members have been recommended for appointment and/or promotion with tenure. I have reviewed and support these recommendations and request that the Board of Trustees be asked to approve them at their April 26, 2024 meeting. If approved, the promotions will be effective August 12, 2024.

**Promotion from Assistant Professor without Tenure to
Associate Professor with Tenure**

Ulrich Schmelzle College of Business

Sangyoon Han Biomedical Engineering

Kristin Brzeski College of Forest Resources & Environmental Sci.

Sarah Bell Humanities
John Gruver Mathematical Sciences
Xiao Zhang Mathematical Sciences

APPROVED:

3/18/24

Richard Koubek, President

Date

INFORMATION SHEET FOR BOARD OF TRUSTEES
ULRICH SCHMELZLE
Michigan Technological University

Ulrich Schmelzle, who is currently an assistant professor of supply chain and operations management without tenure in the College of Business, is being considered for promotion to associate professor of supply chain and operations management with tenure in the College of Business.

Academic Degrees:

Ph.D.	2017	Business Administration (Supply Chain Management), The University of Tennessee, Knoxville, TN
MBA	1995	Supply Chain Management, Arizona State University, Tempe, AZ
B.S. (equiv.)	1993	Industrial Engineering and Management, University of Hamburg, Hamburg, Germany

Professional Record:

2017 – present	Assistant Professor (without tenure), College of Business, Michigan Technological University
2002 – 2013	Project Engineer and Project Manager, Team Leader, Department Chair, Airbus Operations GmbH, Bremen, Germany, and Sevilla, Spain
1999 – 2002	Founder and CEO, Logistics Planning and Plant Design Consulting, FabOptima GmbH, Jork, Germany
1996 – 1999	Project and Site Manager for Germany, Austria, and Switzerland, TEFEN Management Consultants, London, UK
1995 – 1996	Industrial Engineer & Project Manager, TEFEN Management Consultants, Tempe, AZ

Summary of Accomplishments:

• Teaching

Schmelzle is repeatedly recognized for his teaching effectiveness:

- College of Business Teacher of the Year Award (based on student votes) in spring 2023;
- Nominated for the Distinguished Teaching Award at Michigan Tech in the category of Assistant Professors, Lecturers, and Professors of Practice in both spring 2022 and spring 2020;
- Awarded the Dean’s Teaching Showcase for the College of Business in spring 2021;
- From 2018 through 2022, he was recognized for exceptional teaching evaluations by the provost (scoring in the Top 10% of student evaluations at Michigan Tech);
- Student teaching evaluations: "Average of 7 Dimensions" rubric: Results for last 12 semesters (24 sections; 683 students): Average = 4.66; Median = 4.68;
- Student teaching evaluations: "Instructor Enthusiasm" score: Results for last 12 semesters (24 sections; 683 students): Average = 4.85; Median = 4.88;
- Recognition by the Provost for shifting effectively to remote learning during the spring 2020 semester during the pandemic.
- Teaching peer evaluation (Fall 2021): "Overall, Dr. Schmelzle’s teaching is outstanding, innovative, student-learning oriented, practical, and inspiring... Using this innovative method, Dr. Schmelzle naturally had students engaged in a very complex ethical problem in the supply chain management field. Students did a great job as I saw how emotionally as well as seriously students debated with each other." (Dr. Junhong Min, Associate Professor of Marketing, Richard and Joyce Ten Haken Faculty Fellow in Business)

- Research/Scholarly Activity

Schmelzle contributes to the profession and Michigan Tech with his research:

- In 2022 and 2023, Schmelzle published three papers in quality academic journals.
- One paper in the Journal of Purchasing and Supply Management introduces a purchasing-innovation framework using a theory elaboration methodology based on case study data. The subsequent quantitative study was published in the Journal of Global Operations and Strategic Sourcing. The study empirically confirmed the impact of purchasing orchestration on organizational performance using a moderated mediation analysis methodology and cross-sectional survey data.
- In the International Journal of Logistics Management, Schmelzle and his co-author investigated the operational performance implications when suppliers select specific relationship configurations by using the secondary data method. In a post-publication workshop session, industry experts confirmed the study's value and the research impact.
- At the MBAA International Conference in the spring 2023, Schmelzle received the Distinguished Research Award for the Operations Management and Entrepreneurship Association (OMEA) Division for his paper "A Research Agenda for Analytical Modeling Support for Buyers." The study investigates the use of analytical tools such as metaheuristics or simulation modeling to support buyers in their data-driven decision-making when facing environmental changes such as economic downturns. It highlights the total cost implications for purchasing managers making contracting and inventory management decisions when considering the influence of environmental factors.

- Service

Schmelzle serves in committees to support the college, university, and supply chain discipline:

- For the last five years, Schmelzle developed, promoted, and implemented a new study-abroad program for Michigan Tech, taking students to Germany to experience 'real-world' supply chain and operations management in different industries and explore a new culture and language. He organizes field trips and excursions as an experiential learning opportunity for students.
- At the College of Business, Schmelzle served on the Graduate Programs Committee (2017-2021) and the Strategic Planning Committee (2021 to date). He was instrumental in developing and implementing the new, fast-growing Master's in Engineering Management (MEM) program.
- Schmelzle serves as faculty-lead and inaugural member of the Industry Advisory Board for Supply Chain and Engineering Mgt. to support curriculum development and gather vital input from industry experts.
- Schmelzle serves as a faculty advisor in an IT Oxygen Enterprise project. This cross-disciplinary initiative engages engineering, business, and data science students in an applied business project. The students developed an analytical model to enhance decision-making in supply chain management.
- Schmelzle served as OMEA co-program and Operations and Supply Chain track chair for the 2023 MBAA International Conference in Chicago, IL. Since March 2023, he has served as OMEA President for an annual term.
- Schmelzle also received a service award from the president of the MBAA International Conference.

- Recent and Significant Publications/Exhibitions/Performances/Etc.

(1) Schmelzle, Ulrich, Daniel A. Pellathy, Wendy L. Tate, and Junhong Min. 2023. "The Conductor Matters: The Impact of Purchasing Orchestration on Organizational Performance." Journal of Global Operations and Strategic Sourcing.

(2) Schmelzle, Ulrich, and Prabhjot S. Mukandwal. 2023. "The Impact of a Supplier's Sourcing Relationship Configuration on its Operational Efficiency – An Investigation in the Aerospace Industry." The International Journal of Logistics Management 34(5), 1301-1321.

(3) Schmelzle, Ulrich, and Wendy L. Tate. 2022. "Purchasing Orchestration Practices – Introducing A Purchasing-Innovation Framework." Journal of Purchasing and Supply Management 28(2), 100756.

INFORMATION SHEET FOR BOARD OF TRUSTEES

Sangyoon J. Han
Michigan Technological University

Sangyoon J. Han, who is currently an assistant professor without tenure in the Department of Biomedical Engineering in the College of Engineering, is being considered for promotion to associate professor with tenure in the Department of Biomedical Engineering in the College of Engineering.

Academic Degrees:

Ph.D.	2012	University of Washington, Seattle, WA
M.S.	2004	Seoul National University, Seoul, Korea
B.S.	2002	Seoul National University, Seoul, Korea

Professional Record:

2017 – present	Assistant Professor (without tenure), Department of Biomedical Engineering, Michigan Technological University
2014 – 2017	Postdoctoral Scientist, Department of Bioinformatics, University of Texas Southwestern Medical Center, Dallas, TX
2012 – 2013	Postdoctoral Scientist, Department of Cell Biology, Harvard Medical School, Boston, MA
2007 – 2012	Graduate Research Assistant, Department of Mechanical Engineering, University of Washington, Seattle, WA
2006 – 2007	Project Manager, Applied Robotics, Korea Institute of Industrial Technology (KITECH), Ansan, Gyeonggi-do, Korea
2004 – 2006	<i>Research Engineer</i> , Digital Multimedia R&D Center, Daewoo Electronics Corp, Gunpo, Gyeonggi-do, Korea

Summary of Accomplishments:

• Teaching

As a common philosophy, Dr. Han has progressively have learned that a traditional one-way teaching should occupy the class time in a minimal manner and let it be used for more interactive activities that provoke student participation and active-thinking. First, to promote such interactive environment, Dr. Han has employed a **worksheet** in every class of an undergraduate course, Bio-fluid mechanics and bio-heat transfer (BE3550). Students left positive remarks about this method, with continued increase in the evaluation score over years. To boost student’s computational literacy, he has created computational projects for all of my courses. For fluid mechanics (BE3550), he created a **term-project that uses COMSOL**, a finite element analysis software, to simulate a blood flow along a diseased artery. For a graduate-level cell mechanics course (BE4930), Dr. Han introduced low-stake-to-medium-stake, **programming of a cell mechanics model**. For a computer vision for microscopic images class (BE4870), he gives programming-based assignments and a team-based term project that solves a research-related problem. Students liked these hands-on computational components, as reflected in the student evaluation. Finally, he gave students in my cell mechanics class a term-project to write a review article that involves mechanobiology. It generates interesting perspective from each student regarding the topic he/she has chosen. One of the review articles was followed up and ended up being published as a review paper in *Frontiers in Cell Biology* (1).

• Research/Scholarly Activity

Main direction: The main mechanism his group is interested in is how adherent cells sense the stiffness

of the extracellular matrix (ECM). For this, he specifically focuses on the role of nascent adhesions in ECM stiffness sensing. With this idea, Dr. Han received two NIH AREA awards, one in 2019, the other in early 2023 as a renewal with a new idea on how sensed force can be transduced to biochemical signaling. The findings from the first funding period are well-described in his recent manuscript (2). An abstract containing this work has been awarded a Travel Award from Cellular and Molecular Biomedical Engineering Conference (CMBE 2022). His main method of research is traction force microscopy (TFM), for which he developed software (3) and used it to reveal the role of specific proteins talin and vinculin in traction development (4). With his students, Dr. Han published a detailed protocol about how to use it (5) and an upgrade in displacement tracking of beads on a gel (6). He is also poised to submit another manuscript about a specific mechanical and surface properties of the silicone gel used for TFM.

Mechanobiology involved in Ehlers-Danlos Syndrome: Shaina Royer, Dr. Han's first undergraduate student, had a genuine interest in classical type Ehlers-Danlos Syndrome (cEDS), which is characterized by stretchy skin and hyper-mobile joints. After becoming a graduate student in the lab, she proposed an idea, which was put together as a review article (1). This article drew attention in the EDS community, and a private funder, the Wallas Research Foundation (WRF), invited Dr. Han to submit a grant proposal. After quick writing and review in December 2022, WRF awarded Dr. Han \$250K in 2023 to evaluate our idea. This foundation recently awarded Dr. Han \$280K for year 2024 for follow-up studies. Dr. Han will present the findings from the awarded work, collected by four more MTU BME undergrad students, in late October at American Society of Matrix Biology Biennial Meeting, Salt Lake, Utah.

Other research accomplishments and future direction: Another direction that Dr. Han has been pursuing is to find a fundamental mechanism in endothelial shear mechanotransduction. His manuscript in this direction was just accepted (7), from which he plans a resubmission of previously-discussed NIH R01 grant in June 2024. Moreover, via various collaborations, Dr. Han was able to use our numerical skills to address questions in cell and cancer biology with three recent publications (8-10) with four more working manuscripts in preparation. Most importantly, an internal collaboration with Rizwan Muhammad in the BME department was recently awarded an NIH R01 grant for studying corneal endothelial cell tissue engineering. In conclusion, Dr. Han's research has created a sustaining framework for both independent and collaborative research activities with abundant student research opportunities.

• **Service**

Dr. Han is the department-representing Senator, which he has been serving as since 2021. He was in the Information Technology Committee until Spring 2023, and he is now on the Committee for Promoting and Facilitating Equity and Understanding as a Committee Co-Chair. Before 2021, he served on the BME Department Graduate Committee. For national and international academic society, Dr. Han served as a session chair in Biomedical Engineering Society Meeting in year 2018-2021, peer-reviewed at least 15 manuscripts, served as a topic editor of two journals, and solid-mechanics committee member for the Summer Bioengineering Conference.

• **Recent and Significant Publications/Exhibitions/Performances/Etc.**

- [1] Royer SP, Han SJ. *Front Cell Dev Biol* 2022; 10: 874840.
- [2] Mittal N, *et al.* *Communications Materials* 2024; 5(1): 6.
- [3] Han SJ, *et al.* *Nat Methods* 2015; 12(7): 653-6.
- [4] Han SJ, *et al.* *eLife* 2021; 10.
- [5] Mittal N, Han SJ. *Curr Protoc* 2021; 1(9): e233.
- [6] Haarman SE, *et al.* *PLoS One* 2022; 17(6): e0268614.
- [7] Chandurkar MK, *et al.* *Am J Physiol Heart Circ Physiol* 2024.
- [8] Carney KR, *et al.* *Mol Biol Cell* 2023: mbcE23080314.
- [9] Wang J, *et al.* *Cancer letters* 2022; 536: 215641.
- [10] McGowan SE, *et al.* *Am J Respir Cell Mol Biol* 2024; 70(4): 308-21.

INFORMATION SHEET FOR BOARD OF TRUSTEES

Kristin E. Brzeski

Michigan Technological University

Kristin E. Brzeski, who is currently an assistant professor of wildlife science and conservation at the College of Forest Resource and Environmental Science, is being considered for promotion to associate professor of wildlife science and conservation at the College of Forest Resource and Environmental Science.

Academic Degrees:

Ph.D.	2015	Louisiana State University, Baton Rouge, LA
M.S.	2010	Humboldt State University (now Cal Poly Humboldt), Arcata, CA
B.S.	2005	Loyola University Chicago, Chicago, IL

Professional Record:

2018 – present	Assistant Professor (without tenure), College of Forest Resource and Environmental Science, Michigan Technological University
2016 – 2018	Postdoctoral fellowship. Ecology and Evolutionary Biology, Princeton University

Summary of Accomplishments:

• Teaching

Dr. Brzeski’s instruction at MTU has been exemplary, as evident from student teaching evaluations from 2018-present where she received an average of 7-dimensions of 4.7/5.0 from her two undergraduate courses: Mammalogy (4 credits) and Conservation Genetics (3 credits). As additional confirmation of her high quality of teaching, Dr. Brzeski has received two prestigious MTU campus-wide teaching awards: The Dean’s Teaching Showcase Award and the Innovative and Out of Class Teaching Award. These recognitions were based on her efforts to improve MTU’s osteology teaching collection and develop a new wet-lab component for Conservation Genetics. In total, she raised \$8,000 to enhance wildlife education at MTU. Further, she integrated her partnerships with the Michigan Department of Natural Resources (DNR) into her classroom instruction, where students generate data that is presented directly to DNR biologists. Through this process, students get hands-on field and lab-based training while actively translating research to wildlife managers. During the global Covid-19 pandemic MTU instituted remote teaching. This was a challenge for all instructors and students, but Dr. Brzeski remained adaptive and was recognized by MTU’s Provost for having done an outstanding job based on a university-wide survey to gauge students’ perceptions of the remote learning experience. While Dr. Brzeski has excelled to date as an instructor, she continues to develop and grow her courses, attending teaching workshops hosted by the Center of Teaching and Learning, and she looks forward to developing a graduate class in her discipline over the next several years.

• Research/Scholarly Activity

Dr. Brzeski has a steep upward career trajectory both in regards to research funding and publications. Throughout her career, she has raised over \$1,800,000 as PI, with \$955,000 as PI since starting at MTU in 2018. Dr. Brzeski has published 28 articles in peer-reviewed journals and has an h-index of 15 with over 700 citations. These metrics have exponentially increased since Dr. Brzeski started as an assistant professor at MTU, where in 2018 she had an h-index of 7 with 96 citations. This improvement is reflected in her growing publication record and increased collaborative research. Further, Dr. Brzeski’s research is gaining both national and international attention. For instance, Dr. Brzeski’s Gulf Coast Canine Project has

become a high-profile research program, where her research has been featured in the New York Times, PBS docuseries EcoSense for Living, ABC News, CNN, CBS News, and the Atlantic. She is further impacting wildlife conservation and management through partnerships with state and federal agencies including Michigan DNR, Montana DNR, Department of the Interior, US Fish and Wildlife Service, Louisiana Department of Wildlife and Fish, and TX Parks and Wildlife. Through these partnerships Dr. Brzeski is developing novel, cutting-edge genetic tools to improve natural resource management and decisions making, all of which increase MTUs' reputation as a leader for innovating and creating solutions for our most wicked conservation challenges. To date, Dr. Brzeski has advised or co-advised 3 PhD students, 8 MS students, and 5 undergraduate SURF or URIP awardees.

- Service

Dr. Brzeski has contributed to her professional community through service to the MTU Ecosystem Science Center, presenting at MTU recruiting events, serving on her College's Curriculum and Seminar Committees, and mentoring undergraduate students. She has also served her professional society, where she was a founding board member of The Wildlife Society's Molecular Ecology Working Group in 2014, and since served as Chair and now Past-Chair-elect. Dr. Brzeski is particularly proud of her involvement as an early key member of MTU's Covid-19 testing lab which became one of the few MI high-throughput Covid-19 testing facilities. She assisted with the establishment of the lab and spent substantial time in the spring and summer of 2020 helping with equipment acquisition, lab certification, and molecular testing protocol development. She also provided her molecular lab equipment (e.g. pipettes, centrifuges, thermomixers) to initial lab setup, which slowed her own research program given it took time to replace equipment, but it was a small personal cost compared to the ability to help her community during the global Covid-19 pandemic.

- Recent and Significant Publications/Exhibitions/Performances/Etc.

Over the last 1.5 years, Dr. Brzeski has published two research papers in Science Advances (impact factor = 15.4), demonstrating her growing research impact. One of the largest impacts of Dr. Brzeski's research is the development of a new Protected Area in Equatorial Guinea. The biodiversity assessments she led provided key data for outlining and creating a new national park that will serve as a habitat corridor for some of the regions most endangered wildlife, including forest elephants, Western lowland gorillas, giant pangolins, and chimpanzees. Recently, Dr. Brzeski has become more involved in zoonotic disease sampling in the Upper Peninsula of MI as Senior Personnel on the MI SAPPHIRE initiative (\$4,300,000 grant to MTU for genomic disease surveillance). She is co-PI on zoonotic disease monitoring and helped develop a citizen science program to collect ticks. The crowd-sourced program, 'Tick-Talk' was recently featured in local news and is growing in efficacy for both monitoring tick-borne pathogens and communicating with the public via a web dashboard of real-time results.

INFORMATION SHEET FOR BOARD OF TRUSTEES
SARAH A. BELL
Michigan Technological University

Sarah A. Bell, who is currently an assistant professor of digital media without tenure in the Department of Humanities in the College of Sciences and Arts, is being considered for promotion to associate professor of digital media with tenure in the Department of Humanities in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2015	University of Utah, Salt Lake City, UT (Communication)
M.L.I.S	2004	University of Washington, Seattle, WA
M.A.	2003	Boise State University, Boise, ID (English)
B.A.	1995	Boise State University, Boise, ID (English)

Professional Record:

2016 – present	Assistant Professor (without tenure), Department of Humanities, Michigan Technological University
2014 – 2015	Visiting Assistant Professor, Professional Communication, Westminster College, Salt Lake City, UT
2011 – 2014	Graduate Technical Writing Consultant, College of Engineering, University of Utah, Salt Lake City, UT
2005 – 2011	Assistant Librarian (without tenure), J. Willard Marriott Library, University of Utah, Salt Lake City, UT

Summary of Accomplishments:

- Teaching

Dr. Bell has made significant contributions to teaching at both the undergraduate and graduate level. Nearly half of her teaching assignments have been courses that meet General Education core requirements in Critical & Creative Thinking, and in Communication & Composition. Her teaching evaluation mean scores of the seven dimensions are almost always above 4. As instructor for HU 2810, Research & Writing in Communication, for six years, she redesigned the course to incorporate Quantitative Literacy (USLG 2.4) into the writing assignments. She designed a new course called Writing with Numbers that was approved in fall 2023 that will meet the new Essential Education Essential Abilities to communicate quantitatively, communicate contextually, and foster collaboration. Additionally, she is the instructor of Introduction to Digital Media, a required course for many Humanities majors. Bell redesigned the course when she arrived at Michigan Tech and continually updates it to include emerging technologies students will need experience with when they enter their media careers. Bell is also a key member of the Humanities graduate faculty and regularly teaches the Rhetoric, Theory, and Culture (RTC) groundwork course in Theoretical Perspectives on Technology. She currently advises one doctoral candidate and three doctoral students, as well as serving on three other doctoral committees. She previously served on two doctoral and two masters committees of students who have graduated.

- Research/Scholarly Activity

In line with the thematic focus of the Department of Humanities, *technology and communication in the public interest*, the purpose of Bell’s scholarship is to encourage engagement with human values in the design of technologies to support human flourishing. Her book, *Vox ex Machina: A Cultural History of*

Talking Machines, in production at The MIT Press, is the first history of voice synthesis technologies to be published for a non-technical audience. Bell was awarded a prestigious, internationally competitive Digital Studies Fellowship from the John W. Kluge Center at the Library of Congress in 2017, which funded a ten-month residency to conduct research for this project from November 2017 – September 2018 (\$45,000). She also received funding from the Lemelson Center for the Study of Invention and Innovation at the Smithsonian National Museum of American History (\$1,500), the Brian Sutton-Smith Library at the Strong Museum of Play in Rochester, NY (\$1,000), and the Michigan Tech Research Excellence Fund (\$6,500). Six published, peer-reviewed articles and three in-process articles further demonstrate the interdisciplinary strands of her research and contributions to her field. Additionally, while an assistant professor, Bell has given fourteen research presentations at national and international conferences of societies for history of technology (SHOT), science and technology studies (SSSS), communication (NCA and ICA), media studies (SCMS), rhetoric (RSA), and others. Her next book project is called *The Inhumane Interface: How People Became Users* and reconceives the history of human-computer interaction to include the efforts of early interface design innovators from marginalized communities.

- Service

In her time at Michigan Tech, Bell has served the Humanities department on several committees including the Scientific and Technical Communication Steering Committee that oversees the curriculum, alumni relations, and student success in the STC major. She was appointed chair of this committee in August 2023. She has previously been elected by her colleagues to serve on two department chair search committees and four times as at-large member of the department steering committee. She serves the university community on the Assessment Working Group who are contributing to the University's transition to the new Essential Education undergraduate program. Bell's primary service to her disciplines has been as a reviewer for journals, conferences, the MIT Press, and the Kluge Digital Studies Fellowship. Her service work attests to her commitment to fostering interdisciplinary collaborations. She was co-convenor of an international symposium held in Germany and online in spring 2023 that brought together researchers from linguistic anthropology, science and technology studies, and natural language processing/computer science to share projects, questions, and discussion of language models in AI systems.

- Recent and Significant Publications/Exhibitions/Performances/Etc.

Vox ex Machina: A Cultural History of Talking Machines (monograph in production at The MIT Press, <https://mitpress.mit.edu/9780262546355/vox-ex-machina/>)

INFORMATION SHEET FOR BOARD OF TRUSTEES
John Gruver
Michigan Technological University

John Gruver, who is currently an assistant professor of mathematics without tenure in the Department of Mathematical Sciences in the College of Sciences and Arts, is being considered for promotion to associate professor of mathematics with tenure in the Department of Mathematical Sciences in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2016	University of California, San Diego and San Diego State University, San Diego, CA
M.S.	2011	Brigham Young University, Provo, UT
M.A.	2010	Brigham Young University, Provo, UT
B.S.	2008	Brigham Young University, Provo, UT

Professional Record:

2016 – present	Assistant Professor (without tenure), Department of Mathematical Sciences, Michigan Technological University
2015 – 2016	Graduate Teaching Assistant, Department of Mathematics, San Diego State University, San Diego, CA
2013 – 2015	Graduate Research Assistant, University of California, San Diego, San Diego, CA
2011 – 2013	Graduate Research Assistant, Department of Mathematics, San Diego State University, San Diego, CA
2008 – 2011	Graduate Teaching Assistant, Department of Mathematics Education, Brigham Young University, Provo, UT

Summary of Accomplishments:

- Teaching

Since coming to Michigan Technological University, John Gruver has taught Calculus with Technology, Elementary Linear Algebra, Statistical Methods, Mathematical Experimentation, College Geometry with Technology, Methods of Teaching Math, and Theory of Numbers with Technology. He consistently receives high student ratings and actively involves his students in both whole class and small group discussions. Successful students in his class go beyond learning mathematical procedures, but also develop deep conceptual understanding and ways of thinking mathematically. He supports students in developing this type of understanding by enacting pedagogy that is consistent with educational research, including his own.

- Scholarly Activity

John Gruver’s research has significantly contributed to researchers’ understanding of how to support students in developing deep conceptual understanding of mathematics in discourse-rich environments (e.g., environments where students need to actively make sense of complex mathematical problems as they evaluate and further develop others’ ways of reasoning). This has included both classroom-based research and studying how students learn as they engage with innovative instructional videos his team created that feature the authentic discourse of peers. This latter component of his work is supported by a four-year

grant from the National Science Foundation. Greater understanding of how engaging with others' mathematical reasoning has provided insight into how to design learning experiences (both in classrooms and by using instructional videos) to support a wide variety of students' learning. Next, he plans to apply for a grant to develop instructional videos to support the success of first-year college students in mathematics courses and further investigate the nature of students' learning as they use these videos. This has the potential to support student retention efforts at Michigan Technological University.

- Service

John Gruver has served on the undergraduate committee and chaired the coordinated courses committee in the Mathematical Sciences department at Michigan Technological University. While chairing the coordinated courses committee, he supported efforts that resulted in lowering the DFW rate in Calculus 1 from about 50% to about 18%. He has also served on committees for the state-wide organization Mi-AMTE. Finally, he has mentored a post-doctoral scholar, graduate students, and undergraduates in mathematics education research.

INFORMATION SHEET FOR BOARD OF TRUSTEES
XIAO ZHANG
Michigan Technological University

Xiao Zhang, who is currently an assistant professor of statistics without tenure in the Department of Mathematical Sciences in the College of Sciences and Arts, is being considered for promotion to associate professor of statistics with tenure in the Department of Mathematical Sciences in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2004	University of California at Los Angeles, Los Angeles, CA, USA
M.S.	1997	Beijing University, Beijing, China
B.S.	1994	Shandong Normal University, Jinan, Shandong, China

Professional Record:

2017 – present	Assistant Professor (without tenure), Department of Mathematical Sciences, Michigan Technological University
2016 – 2017	Biostatistician, Kite Pharma, Los Angeles, CA, USA
2013 – 2015	Research Scientist, Cedars-Sinai Medical Center, Los Angeles, CA, USA
2007 – 2012	Research Assistant Professor, The University of Alabama at Birmingham, Birmingham, AL, USA
2005 – 2007	Postdoctoral Fellow, University of Alabama at Birmingham, Birmingham, AL, USA
2004 – 2005	Postdoctoral Fellow, University of California at Los Angeles, Los Angeles, CA, USA

Summary of Accomplishments:

- Teaching

Dr. Zhang has been actively involved in teaching since she joined Michigan Tech in the Fall of 2017. During the last seven years from the Fall of 2017 to the Spring of 2023, she has taught 9 undergraduate courses and 12 graduate courses in statistics. These courses include not only introductory statistical courses that generally involve a large number of undergraduate students or graduate students such as MA3710 – Engineering Statistics (generally > 40 students per section) and MA5701 – Statistical Methods (generally > 40 students per section) but also high-level advanced statistical courses for graduate students such as MA5741 – Multivariate Analysis. In these courses, Dr. Zhang’s utilized innovative and active learning strategies to help students build a solid statistical foundation for their future career. For introductory statistical courses, such as MA3710 – Engineering Statistics and MA5701 - Statistical Methods, she constructed detailed notes to help students to have adequate statistical training for their future pursuit in statistics and related subjects. For advanced statistical courses, such as MA5741 - Multivariate Analysis, which is an extremely theoretical yet highly applied course that includes rigorous theoretical proof, complicated computations, and proficient use of statistical software packages, Dr. Zhang illustrated tough concepts in three dimensions using the R graphic-package and stimulated students to discuss concepts and theorems, ask questions, draw conclusions and visualize using computers. For MA5741 – Multivariate Statistics in the Spring of 2021, she received the top 10% instructor award at Michigan Tech. The excellence of Dr. Zhang’s teaching is also evidenced by her Outstanding Teaching Award of the Department of Mathematical Sciences in 2022 and her teaching evaluation scores. Dr. Zhang’s average teaching evaluation score is 4.30 in last two years.

- Research/Scholarly Activity

Dr. Zhang's research includes developing novel and efficient statistical methods and tools and applying them to address scientific problems in health-related fields. Her current work on statistical methodological developments mainly focuses on the developments of Bayesian methods for the analysis of multivariate data that contains different types of variables. Such data are routinely collected in human health-related studies but are extremely challenging to analyze. To this end, Dr. Zhang has made some significant contributions. She has proposed a number of methods that overcome limitations of existing methods and result in more accurate estimation of model parameter. In addition, she also developed the corresponding software packages so researchers who need to analyze multivariate data can readily use them for their projects. For her work on developing Bayesian methods to analyze multivariate diverse data, Dr. Zhang received a \$425,790 research and development grant from the National Institutes of Health as the single principal investigator (PI). The R15 grant is titled "Bayesian modeling of multivariate mixed longitudinal responses with scale mixtures of multivariate normal distributions." This is a potential three-year project starting on August 1st, 2023. The main aim of this grant is to develop innovative statistical methods for the analysis of multivariate data with diverse measurements.

During the last 6 years since Dr. Zhang joined Michigan Tech in 2017, Dr. Zhang has published 10 papers, 3 of which are single authored publications in prestigious statistical journals such as *Statistics in Medicine* and *Journal of Mathematics and Statistics* and *American Journal of Theoretical and Applied Statistics*. Currently, she has one single authored paper under minor revision and two one single authored papers under review. Dr. Zhang are collaborating with researchers from other scientific fields, such as researchers are cardiovascular disease, breast cancer and anesthesiology, and has 6 published and 1 submitted collaborated papers during the last 6 years. During Dr. Zhang's research career, she has 53 peer-reviewed journal publications. From google scholar, her overall citations, h-index, and i10-index are 2758, 24, and 38, respectively and her citations, h-index, and i10-index after 2018 are 1373, 19, and 29, respectively.

- Service

Dr. Zhang has been actively involved in serving the university and the research community. She has graduated 2 master's students and is currently mentoring 1 master's student in statistics and 2 PhD students in statistics. She is serving as a member of the dissertation committee for eight graduate students. Dr. Zhang also served as undergraduate committee for two years and graduate committee for four years in Department of Mathematical Sciences at Michigan Tech. Dr. Zhang has been serving as a reviewer for several statistical journals, including *Biometrics*, *Statistics in Medicine*, *Journal of Computational and Graphical Statistics*, *Journal of Mathematics and Statistics* and *Communications in Statistics - Simulation and Computation*.

- Recent and Significant Publications/Exhibitions/Performances/Etc.

1. **Zhang X. (Single-PI).** Bayesian modeling of multivariate mixed longitudinal responses with scale mixtures of multivariate normal distributions. **R15GM151700. NIH/NIGMS.**
Period: 08/01/2023 - 07/31/2026. **Total Direct Cost:** \$300,000. **Total Cost:** \$425,790.
2. **Zhang X.** Parameter-expanded data augmentation for analyzing correlated binary data using multivariate probit models. *Statistics in Medicine*, 2020; 39: 3637–3652.
3. **Zhang X.** Bayesian analysis of longitudinal ordinal data using non-identifiable multivariate probit models. *Journal of Mathematics and Statistics*, 2022; 18: 163-175.
4. **Zhang X.** Bayesian analysis of multivariate longitudinal ordinal data using multiple multivariate probit models. *American Journal of Theoretical and Applied Statistics*, 2023; 12: 1-12.

C. Promotions

VIII-C. PROMOTIONS

The policy for granting promotion to faculty members requires that the process begin with deliberations in the candidate's home unit and proceed through additional review at multiple levels. Recommendations are reviewed by the provost, and the provost makes a recommendation to the president of the University. The president has accepted the provost's recommendation regarding promotion for the candidates listed in this section.

RECOMMENDATION: It is recommended that the Board of Trustees approves the appointments involving promotion listed in this section.



Michigan Tech

Office Memo

Office of the Provost and
Senior Vice President for Academic Affairs

Phone: (906) 487-2440
Fax: (906) 487-2935

TO: Richard Koubek, President
FROM: Andrew Storer, Provost & Senior Vice President for Academic Affairs
DATE: March 16, 2024
SUBJECT: Promotion Recommendations

In accordance with Board of Trustees Policy 6.4, Academic Tenure and Promotion, the following faculty members have been recommended for promotion. I have reviewed and support these recommendations and request that the Board of Trustees be asked to approve them at their April 26, 2024 meeting. If approved, the promotions will be effective August 12, 2024.

**Promotion from Associate Professor with Tenure to
Professor with Tenure**

Charles Wallace Computer Science

Xiaoqing Tang Biological Sciences

Marina Tanasova Chemistry

APPROVED:

Richard Koubek, President

3/18/24

Date

**INFORMATION SHEET FOR BOARD OF TRUSTEES
CHARLES WALLACE
Michigan Technological University**

Charles Wallace, who is currently an Associate Professor with tenure in the Department of Computer Science in the College of Computing, is being considered for promotion to Professor with tenure in the Department of Computer Science in the College of Computing.

Academic Degrees:

Ph.D.	1999	The University of Michigan, Ann Arbor, MI
M.A.	1992	The University of California Santa Cruz, Santa Cruz, CA
B.A.	1989	The University of Pennsylvania, Philadelphia, PA

Professional Record:

2019 – present	Associate Dean for Curriculum & Instruction, College of Computing, Michigan Technological University, Houghton, MI
2006 – present	Associate Professor, Department of Computer Science, Michigan Technological University, Houghton, MI
2019	Visiting Professor, Department of Engineering, Quinnipiac University, Hamden, CT
2010	Visiting Professor, Department of Computer Science, Pontificia Universidad Catolica de Chile, Santiago, Chile
1999-2000	Visiting Assistant Professor, Department of Computer & Information Sciences, University of Delaware, Newark, DE

Summary of Accomplishments:

• Teaching

Dr. Wallace has been an innovative and enthusiastic instructor, teaching in a wide range of contexts: large introductory classes on mathematical foundations of computer science, upper-level courses in software engineering and ethics, and graduate classes in theory of computation. He has presented some of his teaching innovations at international conferences on computer science education. He has also developed opportunities for Michigan Tech students to learn by teaching, through the outreach programs *BASIC (Building Adult Skills in Computing)* and *Copper Country Coders*. He has been deeply involved with the design and assessment of the undergraduate Computer Science and Software Engineering degree programs through his whole career at Michigan Tech, and he now serves to guide the new College of Computing in matters of curriculum and instruction through his position as Associate Dean.

• Research/Scholarly Activity

Dr. Wallace’s research is interdisciplinary in nature and involves the intersection of computing, language, and learning. Three recent NSF-supported projects are representative of his interests:

- *Agile Communicators*, focused on building communication skills within computer science and software engineering courses, leveraged the work of educators in writing and multimedia.
- *Breaking Digital Barriers*, seeking to strengthen competencies among digital newcomers, includes perspectives from human factors psychologists, sociologists, and gerontologists.
- *FEWConscious*, exploring patterns, costs, and perceptions of household food, energy, and water (FEW) consumption, combines digital sensing and human-computer interaction with expertise in climate science, life cycle analysis, and sociology.

Some new projects further illustrate the diverse and interdisciplinary nature of Dr. Wallace's research: automated analysis to anticipate the effects of changes in statutory law, an interdisciplinary hybrid learning approach to challenge student perspectives on ethics and encourage true critical thinking, and development of a universal data schema for the robust, long-term use of marine sensor data.

- Service

Two programs that Dr. Wallace founded, BASIC (Building Adult Skills in Computing) and Copper Country Coders, have engaged the greater Houghton area (and beyond) in profound ways and provided valuable experiential learning for Michigan Tech students. BASIC builds competence and confidence among digitally marginalized citizens, while Coders gives young people an early view of computer science and programming. Dr. Wallace received the University Distinguished Service Award in 2014 for these efforts. Dr. Wallace has a strong record as a bridge-builder within Michigan Tech through his academic and administrative service: on the University Senate, in numerous standing and ad hoc committees, in his current position as Associate Dean, and earlier as Interim Department Chair.

Dr. Wallace is also committed to service within his profession, as program chair and reviewer for a great number of conferences and journals, and as co-editor of the *SIGCSE Bulletin*, a forum for conversation among the community of computer science educators.

- Recent and Significant Publications/Exhibitions/Performances/Etc.

- N. Englehart, I. Kothari, A. Ebnebasir, S. Peters, and C. Wallace (2024). Exploring interpretations and consequences of statutory law through computational modeling: A case study in criminal justice reform. ACM Symposium on Computer Science & Law, Boston MA.
- A. Ciminski and C. Wallace (2023). The role of dialogue as disruptor in critical ethical analysis for computing students. IEEE Frontiers in Education Conference, College Station TX.
- Z. Wang, C. Wallace, A. Bifet, X. Yao, and W. Zhang (2023). Fairness-aware Graph Generative Adversarial Networks. European Conf. on Principles of Data Mining and Knowledge Discovery.
- J. Daignault, C. Wallace, D. Watkins, R. Handler, Y. Yang, D. Heaney, and S. Ahamed (2023). A household-scale life cycle assessment model for understanding the food-energy-water nexus. *Frontiers in Environmental Science* 11.
- A. Morrison and C. Wallace (2022). Making it strange: Disrupting assumptions about technology and ethics in engineering and computing education. *IEEE Technology and Society* 41(3).
- Bettin, M. Jarvie-Eggart, K.S. Steelman, and C. Wallace (2022). Preparing first year engineering students to think about code: A guided approach. *IEEE Transactions on Education* 65(3).
- K.S. Steelman and C. Wallace (2021). Breaking barriers, building understanding: A multigenerational approach to digital literacy instruction for older adults. *ACM SIGCAS Computers and Society* 49(1).
- L.C. Ureel and C. Wallace (2019). Automated critique of early programming antipatterns. ACM SIGCSE Technical Symposium on Computer Science Education, Minneapolis MN.
- L.E. Brown, A. Feltz, and C. Wallace (2018). Lab Exercises for a Discrete Structures Course: Exploring Logic and Relational Algebra with Alloy. ACM Conference on Innovation and Technology in Computer Science Education, Larnaca, Cyprus.
- Technology and the Future of Aging. White House Conference on Aging, Washington DC, 2015.
- Fighting Fraud Against the Elderly. Testimony before the U.S. House of Representatives Subcommittee on Commerce, Manufacturing and Trade, Washington DC, 2015.
- Agile Communicators: Cognitive Apprenticeship to prepare students for communication-intensive software development. Symposium on Assessing Hard-to-Measure Cognitive, Intrapersonal and Interpersonal Competencies, National Acad. of Science, Washington DC, 2015.

INFORMATION SHEET FOR BOARD OF TRUSTEES

Xiaoqing Tang
Michigan Technological University

Xiaoqing Tang, who is currently an associate professor with tenure in the Department of Biological Sciences, is being considered for promotion to full professor of human physiology with tenure in the Department of Biological Sciences in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2003	Weizmann Institute of Sciences, Israel
M.S.	1993	Anhui Agricultural University, China
B.S.	1990	Anhui Agricultural University, China

Professional Record:

2016 – present	Associate Professor, Department of Biological Sciences, Michigan Technological University
2011 – 2016	Assistant Professor, Department of Biological Sciences, Michigan Technological University
2007 – 2010	Research Assistant Professor, Department of Molecular and Cellular Biochemistry, College of Medicine, University of Kentucky
2005 – 2007	Post-Doctoral Fellow, Department of Molecular and Cellular Biochemistry, College of Medicine, University of Kentucky
2003 – 2005	Post-Doctoral Fellow, Program in Molecular Medicine, University of Massachusetts Medical School

Summary of Accomplishments:

• Teaching

Dr. Xiaoqing Tang has consistently exhibited a profound commitment to teaching. Over the past 14 years, Dr. Tang has primarily taught five different courses: Introduction to Genomics (BL3300), Molecular Biology (BL4030/5030), Molecular Biology Techniques (BL4840), Molecular Diagnostics (BL4800/5800), and Modern Biochemistry/Molecular Biology (BMB) Laboratory (BMB6030) for undergraduate and graduate students. Notably, Molecular Diagnostics is a new course that she conceived and developed specifically for the Medical Laboratory Science (MLS) program to attain first-time accreditation by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Dr. Tang has proven herself to be an enthusiastic and responsible instructor and her student teaching evaluations have averaged above 4.2. The Provost's office recognized her exceptional efforts in smoothly transitioning from in-person to remote instruction and she was ranked among the top 10% of instructors University-wide.

• Research/Scholarly Activity

Dr. Tang is a human physiology scientist. Her research focuses on human obesity and diabetes, aiming to identify novel microRNA (small RNA) biomarkers for beta-cell loss in diabetes patients and to provide therapeutic targets for diabetes treatment. Since joining MTU, Dr. Tang has secured over \$1,443K in external grants, including four highly competitive grants from NIH. Notably, following her tenure in 2016, she received two NIH/R15 research awards, one as PI (\$404K in 2023) and another as co-PI (\$435K in 2020). Additionally, she received two internal PHF-REF-MC awards and one Pandemic Impact Mitigation grant, totaling \$74K.

Dr. Tang has published 18 peer-reviewed papers during her time at MTU and edited one book (including 10 peer-reviewed papers since achieving tenure). These publications have appeared in top journals including Endocrinology, Nutrition & Metabolism, Journal of Biological Chemistry and Scientific Reports. Her citation indices are impressive, with over 3993 total citations, an h-index of 24 and an i10-index of 28. Dr. Tang has been actively presenting her research at national and international conferences such as American Diabetes Association Scientific Sessions and annual Midwest Islet Club conference. Moreover, her graduate students are actively engaged in presenting at both local and national meetings."

Dr. Tang's research has been attracting graduate and undergraduate students to work in her laboratory. She has been the primary supervisor for 12 graduate students (4 PhD and 8 MS) at MTU, and 9 of them have successfully graduated. In addition to supervising graduate students, over 21 undergraduate students have participated in research in her lab. Some of them have subsequently been accepted into graduate school or medical school.

- Service

Dr. Tang is an active member of both the American Diabetes Association and the Endocrine Society. She has received consistent invitation to evaluate grants from prominent institutions like NIH and American Alzheimer's Association, as well as from international Diabetes Association such as Diabetes UK. Dr. Tang also contributes as a judge or coordinator for professional conferences and reviews manuscripts for various international journals annually. Currently, she is invited by the journal 'Frontiers in Endocrinology' to serve as a guest editor, leading an impactful research topic on "pancreatic beta-cell dedifferentiation".

Furthermore, Dr. Tang actively participates in various public services on campus for the University, College, and Department. She has been serving University biosafety council, Faculty Early Career Management (ECM) committee and the College Promotion & Tenure Review (PTR) committee. She frequently engages in reviewing REF proposals, Summer Undergraduate Research Fellowship (SURF) applications and the Leading Scholar Program. She also serves on M.Sc. and Ph.D. student advisory committees across various departments including Biology, Kinesiology and Integrative Physiology (KIP), Chemistry and Biomedical Engineering. Additionally, she has actively served on various department committees including Charter committee, Faculty search committee and PTR committee. She currently serves as the Director of Graduate Program and works with the graduate committee to handle student applications and provide support to current graduate students.

- Recent and Significant Publications/Exhibitions/Performances/Etc.

(* Corresponding author, †denote student advisee)

1. Matson K[†], Macleod A[†], Mehta N[†], Sempek E[†], **Tang X*** (2023) Impact of microRNA-483 on diabetes pathogenesis and complications. *Non-Coding RNA*, 2023, 9(4), 37.
2. Mao Y[†], Schoenborn J[†], Wang Z[†], Chen X[†], Mohan R[†], Zhang S[†], Tang XH, Arunagiri A, Arvan P and **Tang X*** (2022) Overexpression of microRNA-30d in pancreatic beta-cells progressively impairs beta-cell identity. *Scientific Reports*, 2022 Jul;12:11969.
3. Marinelli I, Parekh V, Fletcher P, Thompson B, Ren J, **Tang X**, Saunders TL, Ha J, Sherman A, Bertram R, Satin LS. (2022) Slow oscillations persist in pancreatic beta cells lacking phosphofructokinase M. *Biophysical Journal* 2022 Mar 1;121(5):692-704.
4. Wang Z[†], Mohan R[†], Chen X[†], Matson K[†], Waugh J[†], Mao Y[†], Zhang S[†], Li W[†], Tang XH, Satin LS, **Tang X*** (2021) microRNA-483 Protects Pancreatic Beta-Cells by Targeting ALDH1A3. *Endocrinology*. 2021 May 1;162(5)
5. Liu W[†], Mao Y[†], Schoenborn J[†], Wang Z[†], Tang G, **Tang X*** (2019) Whole blueberry protects pancreatic beta-cells in diet-induced obese mouse. *Nutrition Metabolism*. 2019 May 22;16:34.

INFORMATION SHEET FOR BOARD OF TRUSTEES**MARINA TANASOVA****Michigan Technological University**

Marina Tanasova, who is currently an Associate Professor of Chemistry in the Department of Chemistry in the College of Sciences and Arts, is being considered for promotion to Full Professor of Chemistry with in the Department of Chemistry in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2009	The Michigan State University, Chemistry, East Lansing, MI
M.S.	1999	The Georgian Technical University, Chemistry, Tbilisi, Georgia
B.S.	1996	The Georgian Technical University, Chemistry, Tbilisi, Georgia

Professional Record:

2020-2023	Associate Professor, Department of Chemistry in the College of Sciences and Arts, Michigan Technological University
2013 – 2020	Assistant Professor (without tenure), Department of Chemistry in the College of Sciences and Arts, Michigan Technological University
2010 – 2013	Post-Doctoral Fellow, Swiss Federal Institute of Technology, Zurich, Switzerland
2009 – 2010	Post-Doctoral Associate, The University of Minnesota, Minneapolis, MN
2002 – 2008	Graduate Teaching Assistant, Department of Chemistry, Michigan State University, East Lansing, MI

Summary of Accomplishments:

- Teaching

Dr. Tanasova has taught five different chemistry courses ranging from undergraduate to graduate level and interdisciplinary courses for graduate students in chemistry and biology. She has created three new courses (Mechanistic Organic Chemistry (CH2430), Synthetic Organic Chemistry (CH2440), and Bioorganic Chemistry (CH6490)) and restructured existing courses. She has enhanced students' hands-on experience by establishing a laboratory section for her Spectroscopy of Organic Compounds class and after acquiring the critical instrumentation through the NSF-MRI grant. Dr. Tanasova has contributed to the interdisciplinary BMB program by modernizing students' laboratory training by implementing state-of-the-art flow cytometry equipment (REF-Infrastructure Enhancement Grant). Over several years, Dr. Tanasova led the extracurricular Chemistry Club for chemistry students at different levels. Dr. Tanasova has earned exceptional teaching evaluations from her students at all levels.

- Research/Scholarly Activity

Tanasova's fields of expertise are organic chemistry and chemical biology. Her research focuses on understanding sugar transporters (GLUTs) and exploring them as biomedical targets for diagnosing and treating various metabolic disorders, including cancer. Dr. Tanasova's research group is actively exploring the differences between 14 transporters of the GLUT family and developing specific molecular probes that can target particular disease-relevant transporters. Recent research advancements include enabling the targeting of cancer-relevant fructose transporters GLUT5, GLUT2, and GLUT12 for early-stage cancer diagnostics. This work has been supported by the NIH R15 awards, T3N awards, ADVANCE GRANT (MSU), led to several IP applications, and a commercial license with Kerafast Inc. to ensure the availability of GLUT-specific fluorescent molecular probes for biochemical and biomedical research. Since beginning her

scholarly career, Dr. Tanasova has published 42 research papers in peer-reviewed journals, of which 36 were published during her appointment at Michigan Tech. Dr. Tanasova's publication h-index is 18, corresponding to about 600 literature citations. Her research team has presented over 60 posters and talks at international, national, and local conferences. Dr. Tanasova has submitted research development proposals to NIH, NSF, and DoD and has filed one patent application and four IP disclosures.

Dr. Tanasova has mentored researchers at various levels. She mentored two postdoctoral associates with whom she published five peer-reviewed papers. She graduated two MS students and five Ph.D. students. Her graduate students received various grants, including Portage Health Research Assistantships, Health Research Institute Graduate Fellowships, Songer Research Awards for Human Health Research, Finishing Fellowships, Outstanding Graduate Student Awards, Outstanding Teaching awards, and numerous travel grants. In addition, Dr. Tanasova has mentored 20 undergraduate students from different departments at Michigan Tech. Her undergraduate students have been awarded SURF, Songer, and Sandretto Awards, presented at national, regional, and local conferences, and co-authored peer-reviewed research papers. Most of Dr. Tanasova's undergraduate mentees pursued education at the graduate level within the US and abroad.

- Service

Dr. Tanasova contributed to the University and Department by advancing education and research. In 2022, she was selected as a Faculty Fellow by the Vice President for Research (VPR) office to streamline equipment access, use, and maintenance for the Human Health Institute. In 2021, Dr. Tanasova was awarded the NSF-MRI grant to advance the University NMR facility with the new 500 MHz NMR spectrometer. Dr. Tanasova services as a Graduate Program Director and the Graduate Program Committee member for Department of Chemistry. Her service accomplishments encompass a review of the graduate curriculum and implementation of new graduate-level courses, implementation of a Qualifying Examination (QuE), development of the Graduate Student Progress evaluation forms for qualifying examinations (QuE, ORP, and Thesis Defense) in compliance with Graduate Learning Outcomes assessment metrics, and implementation of the Graduate Student Handbook containing a description of degree programs, degree requirements, policies, student evaluation criteria, and assessment metrics. Dr. Tanasova also contributed to developing a Chemistry Graduate Student Outcomes Assessment Plan and a course-based MS degree in Chemistry. Dr. Tanasova serves as a mentor for graduate students in Chemistry and BMB programs and on advising committees for MS and Ph.D. students within and outside the department. Dr. Tanasova is actively involved in the peer-reviewing of manuscripts for several scientific journals and serves as a reviewer for NSF and NIH.

- Recent and Significant Publications/Exhibitions/Performances/Etc.

- Gora, N.; Weselinski, L. J.; Begoyan, V. V.; Cooper, A.; Choe, J.; Tanasova, M.* "Discrimination of GLUTs by Fructose Isomers Enables Simultaneous Screening of GLUT5 and GLUT2 Activity in Live Cells." *ACS Chem. Biol.* **2023**, *18*, 1089-1100.
- Oronova, A.; Tanasova, M.* "Late-Stage Functionalization through Click Chemistry Provides GLUT5-Targeting Glycoconjugate as a Potential PET Imaging Probe." *Int. J. Mol. Sci.* **2023**, *24*, 173.
- Nahrjou, N.; Tanasova, M.* "Targeting of GLUT5 for transporter-mediated drug-delivery is contingent upon substrate hydrophilicity." *Int. J. Mol. Sci.* **2021**, *10*, 5073.
- Begoyan, V.; Xia, S.; Khanan, S.; Ferrier, A.; Rao, S.; Tanasova, M. "Multicolor GLUT5-Permeable Fluorescent Probes for Fructose Transport Analysis." *Chem. Commun.*, **2018**, *54*, 3855-3858.
- Kannan, S.; Begoyan, V.; Fedie, J.; Xia, S.; Weselinski, L. J.; Tanasova, M.;* Rao, S.* "Metabolism-driven High Throughput Cancer Identification with GLUT5-specific Molecular Probes." *Biosensors*, **2018**, e39.

D. Emeritus Rank

VIII-D. 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/emeritus appointments:

Dr. William Breffle, Professor Emeritus
College of Business

Dr. Ibrahim Miskioglu, Professor Emeritus
Department of Mechanical Engineering – Engineering Mechanics

Mr. Douglas Oppliger, Teaching Professor Emeritus
Department of Engineering Fundamentals

Dr. David Reed, Professor Emeritus
College of Forest Resources & Environmental Science



TO: Michigan Technological University Board of Trustees
FROM: Dean L. Johnson, Dean, College of Business
DATE: March 7, 2024
SUBJECT: Recommendation for Emeritus Status

The faculty of the College of Business voted on March 7, 2024, to request that the Michigan Technological University Board of Trustees name William Breffle as Professor Emeritus upon his retirement on May 3, 2024.

Dr. William Breffle joined the College of Business (then School of Business and Economics) in the fall of 2007 receiving tenure in 2011. Dr. Breffle has an exemplary research record with more than a score of published peer-reviewed journal articles, seven books and book chapters, dozens of conference proceedings and funded technical papers and testimonies. He was an advisor to graduate and PhD students in other departments and has had consistent contributions in service to the College of Business.

Approved

Department Chair

Date

College Dean

3-7-24

Date

Provost and Senior Vice President for Academic Affairs

Date

President

Date



TO: Michigan Technological University Board of Trustees

FROM: Mechanical Engineering-Engineering Mechanics (ME-EM)

DATE: March 29, 2024

SUBJECT: **Recommendation for Emeritus Status for Dr. Ibrahim Miskioglu**

On March 29, 2024, the Department of Mechanical Engineering-Engineering Mechanics faculty voted to recommend Associate Professor Ibrahim Miskioglu for the title of Professor Emeritus upon his on June 30, 2024.

Dr. Miskioglu has dedicated nearly four decades to Michigan Technological University, starting as a Visiting Assistant Professor in 1985 and advancing to a tenured Associate Professor in 1992.

Throughout his tenure, Dr. Miskioglu has taught over 350 sections of 17 unique undergraduate courses and 50 sections of 10 distinct graduate courses for the ME-EM department, with a strong focus on cultivating critical thinking and problem-solving abilities. Additionally, he played an integral role in several student organizations, serving as the Faculty Advisor for the BoardSports Technologies Enterprise and the Society of Experimental Mechanics (SEM) student group.

In addition to his teaching responsibilities, Dr. Miskioglu has made significant contributions to research and service. He has advised numerous graduate committees, published extensively, and held leadership roles within the department, including serving on the ME-EM Executive Committee and coordinating major equipment upgrades.

Dr. Miskioglu's dedication extends beyond the university, with involvement in national and international professional organizations such as the Society for Experimental Mechanics and the Advances in Materials and Processing Technologies Steering Committee.

With 38 years of distinguished service, Dr. Miskioglu's commitment to education and scholarship exemplifies the qualities deserving of emeritus status.

Approved

Department Chair

College Dean

Provost and Senior Vice President for Academic Affairs

President



TO: Michigan Technological University Board of Trustees

FROM: Mary Raber, Chair Engineering Fundamentals

DATE: April 5, 2024

SUBJECT: Recommendation for Emeritus Status for Douglas Oppliger

The faculty of the Engineering Fundamentals Department voted on February 2, 2024 to request that the Michigan Technological University Board of Trustees name Doug Oppliger as Teaching Professor Emeritus upon his retirement on May 3, 2024.

Doug Oppliger was an exceptional instructional track faculty member throughout his time in the Engineering Fundamentals (EF) department, actively involved in the development of the common first-year engineering program and many other innovative teaching and learning initiatives. Many of the practices used today in EF have evolved from Doug's work.

Having started his career in K-12 education, Doug was also passionate about, and engaged in, outreach activities such as Michigan Tech's Engineering Olympics program, and he was instrumental in starting the FIRST Robotics program in the U.P. by initiating the local high school team which was uniquely coached and mentored by Michigan Tech students. This mentorship program evolved into the Robotics Enterprise team which is still active today. Doug's teaching experience at both the K-12 and university level allowed him to communicate with diverse types of students and make learning enjoyable and engaging for all. The training and experience that Doug gained while teaching at the pre-college level served him well during his time at Michigan Tech. His caring demeanor coupled with his ability to explain difficult concepts made him popular with his students.

Doug has made many other significant contributions to the Michigan Tech community. He was instrumental in the formation of the High School Enterprise (HSE) program which facilitated teacher/coaches to engage teams of high school students in long-term engineering projects, based on the successful Michigan Tech Enterprise Program. He worked closely with high school teachers, university and corporate partners in Michigan, Illinois, Georgia and Puerto Rico. Doug also organized summer professional development for teacher/coaches and end-of-year exposition events and directed the 2012 General Motors HSE Expo held at General Motors World Headquarters in Detroit, MI. This very successful program led to the adoption of the Enterprise framework by many high schools in the Midwest region which are still operational today.

Doug was also a key member of the team that designed and developed Mi-STAR, an NGSS-based middle school curriculum and professional learning program that is used by one-third of the middle school science teachers in Michigan. The curriculum focuses on real-world problems that are relevant to children and their families and integrates content and

approaches from all of the science disciplines as well as engineering. It promotes hands-on and minds-on learning and builds transferable skills such as teaming, communication, critical thinking, and problem solving.

Doug had a critical role in the Mi-STAR project, developing a template for each of the curricular units fostering a consistent approach. Inside Mi-STAR this template was colloquially referred to as the “factory model” and was critical for Mi-STAR’s success. Without this design template, the curriculum would probably never have been completed. Because of Doug’s long standing collaboration with K-12 educators, he was also able to identify and recruit teachers to help pilot- and field-test every unit before it was released. He guided other Mi-STAR team members to understand and act upon all of the feedback provided by the teacher-testers, which helped to make Mi-STAR work in real classrooms. Dow Foundation trustees expressed how impressed they were by Doug’s knowledge, commitment, and ability and that Michigan Tech was fortunate to have faculty of such high caliber.

In summary, the Engineering Fundamentals team, COE Dean Audra Morse, Dr. Jackie Huntoon, and many others, wholeheartedly support the designation of Teaching Professor Emeritus being awarded to Doug Oppliger for his many accomplishments and tireless efforts to improve the learning experience for our students over his 20+ year career at Michigan Tech.

We appreciate your consideration of this request.

Approved

Department Chair

Date

College Dean

Date

Provost and Senior Vice President for Academic Affairs

Date

President

Date



TO: Michigan Technological University Board of Trustees

FROM: David Flaspohler, Interim Dean

DATE: April 2, 2024

SUBJECT: Recommendation for Emeritus Status

The faculty of the College of Forest Resources and Environmental Science voted on January 12, 2024, to request that the Michigan Technological University Board of Trustees name Dr. Dave Reed as Professor Emeritus upon his retirement on June 30, 2024.

Dave has served Michigan Tech with a breadth of knowledge, experience and wisdom for the past 41 years, including as provost and executive vice president of academic affairs, dean of Graduate School and interim CFO and has held the position of Vice President for Research since 2001 and is a professor of forest biometrics in the College of Forest Resources and Environmental Science. Under his leadership, the University achieved \$100 million in research expenditures last year, the highest ever recorded.

Reed has directly contributed to nearly three decades of research growth for Michigan Tech. During his tenure, he has overseen the creation of the Great Lakes Research Center (GLRC), the Health Research Institute (HRI), the Institute of Computing and Cybersystems (ICC), the Advanced Power Systems Research Center (APSRC) and other initiatives like Superior Ideas and the new H-STEM Engineering and Health Technologies Complex. He led the successful effort to expand the University's presence in the Lower Peninsula via the Michigan Tech Research Institute (MTRI) in Ann Arbor, our Global Campus programs, and various initiatives in the Grand Traverse region.

Reed has been an active member of local, regional and academic communities, serving in various capacities on a number of boards and professional organizations.

Approved

David Flaspohler

College Dean

30 March 2024

Date

Provost and Senior Vice President for Academic Affairs

Date

President

Date

E. MS in Wildlife Ecology & Conservation

VIII-E. PROPOSAL FOR A MASTER OF SCIENCE DEGREE IN WILDLIFE ECOLOGY AND CONSERVATION

The faculty in the College of Forest Resources and Environmental Science, seek to establish a Master of Science (MS) degree in Wildlife Ecology & Conservation. Due to increased growth and diversity in the college's graduate student population, there is increased research interest within the wildlife ecology and conservation discipline. This proposed degree directly aligns with Michigan Tech's educational and research goals, which focus on creating solutions for societal challenges through action-based education, interdisciplinary research, and innovation, aimed at improving quality of life and promoting equity. This new program will focus on wildlife management, conservation, and policy. It provides opportunities for research in novel areas such as development of autonomous systems to assess wildlife diversity, ecology of zoonotic diseases that have the potential to impact human health, as well as other areas related to wildlife and natural resources.

Regionally, MS degrees in Wildlife Ecology and Conservation are only offered at a few large high-ranking research universities, and there are no similar programs in the Upper Peninsula of Michigan. The degree compliments the MS degree in Applied Ecology currently offered at Michigan, which emphasizes research focused on ecological restoration, wetland ecology, and invasive species management.

The proposal has been approved by the University Senate and University administration. The University is seeking Board of Trustees approval to advance the proposal to the State Academic Affairs Officers.

RECOMMENDATION: It is recommended that the Board of Trustees approves the Master of Science degree in Wildlife Ecology and Conservation.

F. Silver Medal - Chang Park

VIII-F. BOARD OF TRUSTEES SILVER MEDAL AWARD

The Administration recommends that Mr. Chang K. Park be awarded Michigan Technological University's Board of Trustees Silver Medal.

As the recommendation from ECE indicates, "Chang's story is inspiring and one that perfectly illustrates the explosion along the socio-economic continuum that Michigan Tech is well known for." Following his high school graduation from the Brooklyn Academy and receiving the New York State Regent Award in math, Chang chose Michigan Tech where he completed dual degrees in electrical engineering and engineering administration in 1973. Following the completion of his degrees from Michigan Tech, Chang worked in the engineering/transportation industry for a short time before deciding to obtain an MBA from the Wharton School of the University of Pennsylvania.

After a short stint in international finance, Chang took what he learned from his time at Michigan Tech and created a successful global business, Universal Remote Control, Inc. (URC) where he currently serves as the President and CEO. URC develops, produces, and distributes remote controls and home automation products.

Chang is a true humanitarian, donating both time and money to several causes. Some of these include: serving as a member of the national governing board of Common Cause; creating The Chang K. Park Foundation, which supports human rights, the elimination of poverty and hunger, and assists with the implementation of political reform and economic justice; as well as supporting Michigan Tech's LeaderShape program and Graduate School Emergency Fund.

Once again, quoted from the nomination, "Through his life, actions, leadership, philanthropy, and social activism, Chang K. Park is the embodiment of this award."

RECOMMENDATION: It is recommended that the Board of Trustees approves the awarding of the Board of Trustees Silver Medal to Mr. Chang K. Park.

G. Silver Medal - Anthony "Tony" Esposito

VIII-G. BOARD OF TRUSTEES SILVER MEDAL AWARD

The Administration recommends that Mr. Anthony “Tony O” Esposito be awarded Michigan Technological University’s Board of Trustees Silver Medal.

Arguably ranking as one of the most accomplished student athlete graduates from Michigan Tech, Tony earned First Team All-American honors throughout all three of his varsity seasons and lead the Huskies to an NCAA title in 1965, at the same time taking his studies seriously and never missing class. All this success led to a career in the NHL, both on the ice and in administrative roles.

During his tenure in the NHL, Tony played one season with the Montreal Canadiens (winning the Stanley Cup) before being traded to the Chicago Blackhawks, where he played 15 seasons. To this day, Tony is the Blackhawks’ all-time leader for career games played and shutouts; his 15 shutouts are the most of any goalie in modern hockey. Tony’s playing success also landed him invitations to play in All-Star games, as well as with the inaugural Team Canada. As a goalie, Tony perfected the “butterfly” stance, which reinvented this position. He called it “aggressive goaltending.”

Tony’s degree in Business Administration was also vital in his career. He began negotiating his own contracts, and after being voted president of the NHL Players Association, he assisted in negotiating the Collective Bargaining Agreement between the players and owners. After retiring from playing in the NHL, the Pittsburgh Penguins named in him their General Manager, where he served 1988-1991. Following this, he and his brother, Phil, became founding members of the Tampa Bay Lightning. Tony also served as Vice President for the Lightning.

Though Tony passed way to early, in 2021, his accomplishments both as an athlete and in the business sector show that he is more than deserving of this award.

RECOMMENDATION: It is recommended that the Board of Trustees approves the awarding of the Board of Trustees Silver Medal to Mr. Anthony “Tony O” Esposito.

H. Revisions to Board Policy 9.24 Enrollment of Senior Citizens

VIII-H. REVISIONS TO BOARD POLICY 9.24 ENROLLMENT FOR SENIOR CITIZENS

Board policy 9.24 allows limited enrollment for senior citizens at no cost. In recognition of the fact that some courses are now offered only online, and a desire to balance expanding this opportunity to access online courses to our local community with the need to primarily serve our tuition-paying students, it is being recommended that this policy be revised to allow residents of Houghton County, Michigan, or its contiguous counties, which include Baraga County, Iron County, Keweenaw County, and Ontonagon County, who are 60 years of age or older, the ability to audit regularly-scheduled undergraduate or graduate courses as approved by the Office of the Registrar.

RECOMMENDATION: It is recommended that the Board of Trustees approves the revisions to Board Policy 9.24 Enrollment for Senior Citizens.

REVISIONS

PURPLE = ADD

~~RED STRIKETHROUGH~~ = DELETE

9.24 Enrollment for Senior Citizens to Audit Courses

The President may authorize financial aid or waive tuition and required or related fees for **the auditing of** up to two ~~on-campus~~ courses per semester for individuals who are 60 years of age or older **and are residents of Houghton County or counties contiguous with Houghton County (Baraga, Iron, Keweenaw, and Ontonagon). Regularly scheduled undergraduate and graduate courses are available for audit, subject to approval by the Office of the Registrar.** Individuals who are not assessed **tuition and** fees are not entitled to receive any associated benefits.

FINAL VERSION

9.24 Enrollment for Senior Citizens to Audit Courses

The President may authorize financial aid or waive tuition and required or related fees for the auditing of up to two courses per semester for individuals who are 60 years of age or older and are residents of Houghton County or counties contiguous with Houghton County (Baraga, Iron, Keweenaw, and Ontonagon). Regularly scheduled undergraduate and graduate courses are available for audit, subject to approval by the Office of the Registrar. Individuals who are not assessed tuition and fees are not entitled to receive any associated benefits.

I. Approval of FY25 General Fund Operating Budget

VIII-I. FISCAL YEAR 2025 GENERAL FUND OPERATING BUDGET

The general fund budget was developed based on assumptions regarding tuition and state appropriations. However, when the State budget is approved by the Legislature, if there are changes from these assumptions, the Administration is requesting that the Board allow them the flexibility to revise the budget to reflect a change in appropriations and/or tuition cap while continuing to maintain a balanced budget.

RECOMMENDATION: That the Board of Trustees approves the Fiscal Year 2025 General Fund Operating Budget as presented and authorizes the Administration to revise the general fund operating budget to reflect any changes in state appropriations and/or tuition cap while maintaining a balanced budget and informing the Board Audit and Finance Committee of any such changes that may be necessary.



Fiscal Year 2025 Preliminary General Fund Budget

	FY24 Approved Budget	FY25 Proposed Budget	Variance	%
<u>OPERATING REVENUE</u>				
Student Tuition and Fees	\$ 169,982,526	\$ 183,250,075	\$ 13,267,549	7.8%
Federal Grants and Contracts	40,000	40,000	-	0.0%
State/Local Grants and Contracts	-	-	-	
Nongovernmental Grants and Contracts	-	-	-	
Indirect Cost Recoveries	16,850,000	16,850,000	-	0.0%
Educational Activities	485,728	485,728	-	0.0%
Student Resident Fees	-	-	-	
Sales and Services of Dept Activities	-	-	-	
TOTAL OPERATING REVENUE	\$ 187,358,254	\$ 200,625,803	\$ 13,267,549	7.1%
<u>OPERATING EXPENSES</u>				
Contingency/Carryforward Reserve	\$ (5,000,000)	\$ (5,000,000)	\$ -	0.0%
Salaries & Wages - Faculty & Staff	(94,677,994)	(98,464,494)	(3,786,500)	4.0%
Salaries & Wages - Graduate Students	(5,107,346)	(5,330,128)	(222,782)	4.4%
Salaries & Wages - Undergrad Students	(1,262,787)	(1,262,787)	-	0.0%
Fringe Benefits	(37,532,821)	(38,621,032)	(1,088,211)	2.9%
Supplies & Services	(17,156,120)	(17,906,120)	(750,000)	4.4%
Scholarships and Fellowships	(62,779,096)	(70,725,955)	(7,946,859)	12.7%
Utilities	(3,938,170)	(3,938,170)	-	0.0%
TOTAL OPERATING EXPENSES	\$ (227,454,334)	\$ (241,248,686)	\$ (13,794,352)	6.1%
<u>TRANSFERS</u>				
TOTAL TRANSFERS	\$ (18,144,262)	\$ (19,244,262)	\$ (1,100,000)	6.1%
<u>NONOPERATING REVENUES (EXPENSES)</u>				
State Appropriations, Operating	\$ 54,029,040	\$ 55,888,843	\$ 1,859,803	3.4%
Gift Income	3,411,302	3,178,302	(233,000)	-6.8%
Investment Income (loss)	800,000	800,000	-	0.0%
Federal Grants	-	-	-	
Interest Expense	-	-	-	
TOTAL NONOPERATING	\$ 58,240,342	\$ 59,867,145	\$ 1,626,803	2.8%
INCREASE (DECREASE) IN NET POSITION	\$ -	\$ -	\$ -	



**Michigan
Technological
University**

**Resident Undergraduate Tuition and Mandatory Fee Rate Comparison
State Reporting Requirements**

	Freshman	Sophomore	Junior	Senior	Average
<u>FY24 Approved Tuition & Fees</u>					
Tier 3 Tuition (Plateau 12-18 Credits)	\$ 18,074	\$ 18,074	\$ 21,948	\$ 21,948	\$ 20,011
Fees					
Student Activity Fee	120	120	120	120	120
Experience Tech Fee	198	198	198	198	198
Total Tuition and Mandatory Fees:	\$ 18,392	\$ 18,392	\$ 22,266	\$ 22,266	\$ 20,329
% Reported in Downstate Newspapers:	4.42%	4.42%	4.44%	4.44%	4.43%

	Freshman	Sophomore	Junior	Senior	Average
<u>FY25 Proposed Tuition & Fee Change</u>					
Tier 3 Tuition (Plateau 12-18 Credits)	\$ 18,797	\$ 18,797	\$ 22,826	\$ 22,826	\$ 20,812
Fees					
Student Activity	120	120	120	120	120
Experience Tech Fee	206	206	206	206	206
Total Tuition and Mandatory Fees:	\$ 19,123	\$ 19,123	\$ 23,152	\$ 23,152	\$ 21,138
% Reported in Downstate Newspapers:	3.97%	3.97%	3.98%	3.98%	3.98%

	Freshman	Sophomore	Junior	Senior
<u>FY25 Proposed Tuition & Fee Variance</u>				
Tuition \$ Change:	\$ 723	\$ 723	\$ 878	\$ 878
% Change:	4.00%	4.00%	4.00%	4.00%
Student Activity \$ Change:	\$ -	\$ -	\$ -	\$ -
% Change:	0.00%	0.00%	0.00%	0.00%
Experience Tech Fee \$ Change:	\$ 8	\$ 8	\$ 8	\$ 8
% Change:	4.04%	4.04%	4.04%	4.04%
Total Tuition and Mandatory Fees:	\$ 731	\$ 731	\$ 886	\$ 886
% Change:	3.97%	3.97%	3.98%	3.98%



Proposed Fiscal Year 2025 Semester Tuition Rates

Undergraduate
Lower Division
 All Majors
Upper Division
 Tier 1
 Tier 2
 Tier 3

Resident		Non-Resident	
Tuition Rate per Credit Hour <12 and >18	Plateau Tuition Rate 12 - 18 Credits	Tuition Rate per Credit Hour <12 and >18	Plateau Tuition Rate 12 - 18 Credits
\$709	\$9,398	\$1,580	\$21,331
\$790	\$10,395	\$1,683	\$22,703
\$817	\$10,615	\$1,712	\$22,914
\$942	\$11,413	\$1,853	\$23,833

NOTE: Per credit hour rate will apply to undergraduate students enrolled in the summer semester

Tier 1 Majors: Business, Economics, Humanities, Mathematical Sciences, Social Sciences, Visual & Performing Arts

Tier 2 Majors: Forest Resources, Environmental Science, Biological Sciences, Chemistry, Kinesiology & Integrative Physiology, Cognitive & Learning Sciences, Physics, Construction Management, Electrical Engineering Technology, Mechanical Engineering Technology

Tier 3 Majors: Engineering, Computer Science, Computer Network & Systems Admin, Surveying

Graduate

Standard Per Credit Rate
 National Service Rate
 Research Mode Rate

Non-Engineering/ Computer Science	Engineering/ Computer Science
\$1,334	\$1,516
\$895	\$1,016
\$440	\$500

VIII-I. FISCAL YEAR 2025 GENERAL FUND OPERATING BUDGET

The general fund budget was developed based on assumptions regarding tuition and state appropriations. However, when the State budget is approved by the Legislature, if there are changes from these assumptions, the Administration is requesting that the Board allow them the flexibility to revise the budget to reflect a change in appropriations and/or tuition cap while continuing to maintain a balanced budget.

RECOMMENDATION: That the Board of Trustees approves the Fiscal Year 2025 General Fund Operating Budget as presented and authorizes the Administration to revise the general fund operating budget to reflect any changes in state appropriations and/or tuition cap while maintaining a balanced budget and informing the Board Audit and Finance Committee of any such changes that may be necessary.

J. Resolution for Approval of External Auditor

VIII- J. APPROVAL OF EXTERNAL AUDITOR

The University's external auditors (certified public accountants) perform interim audit work prior to the close of our June 30 fiscal year; therefore, it is desirable that they be appointed prior to the end of the fiscal year.

RECOMMENDATION: That the Board of Trustees authorizes the Treasurer to engage the certified public accounting firm Plante & Moran, PLLC to conduct the following audits for the fiscal year ending June 30, 2024:

1. The annual examination of the University's Financial Statements and Supplemental Information (all funds).
2. The annual examination, in accordance with Uniform Guidance, of federal awards and federal student financial assistance programs, including Pell Grants, Education Opportunity Grants, Perkins Loans, College Work Study Programs, and Direct Student Loans.
3. The subsequent event review procedure for the State of Michigan Annual Comprehensive Financial Report.

K. Revisions to Board Policy 8.9 Experience Tech Fee

VIII-K. REVISIONS TO BOARD POLICY 8.9 EXPERIENCE TECH FEE

The Experience Tech Fee was implemented in 2008, with the purpose of providing all Michigan Tech students access to a variety of venues and experiences that improve their overall well-being, while also supporting the operational costs and facility improvements across the Experience Tech venues. The fee supports the Tech Forward Initiatives of Diversity and Inclusion and Health and Quality of Life by providing students a diverse offering of cultural events and opportunities to develop healthy lifestyle habits through recreational activities unique to our area and a culture that is vibrantly learning through living.

For FY2025, the Experience Tech Fee Group is recommending a change to policy 8.9 for the purpose of aligning consideration of increasing the Experience Tech Fee at the same time tuition rates are set. Additionally, verbiage has been added to clarify access to the Experience Tech activities.

RECOMMENDATION: The Board of Trustees approves the revision of Board Policy 8.9 Experience Tech Fee presented herein.

REVISIONS

PURPLE=ADD

RED STRIKETHROUGH=DELETE

8.9 Experience Tech Fee

The ~~President is authorized to make adjustments to the fee structure and assess an~~ Experience Tech Fee ~~of \$99.00 in each of the fall and spring semesters for each enrolled undergraduate student and \$80.00 in each of the fall and spring semesters for each enrolled graduate student. Future year fees will be considered for increase at the same time as tuition is revisited for first time, in-state freshmen students entering the institution. The fee~~ is to improve student access to facilities and events ~~to include~~, and includes but is not limited to, Mont Ripley Ski Hill, Intramural Sports, Portage Lake Golf Course, Gates Tennis Center, Visual and Performing Arts Department events ~~and Hocky Games~~, ~~home~~ Varsity Athletic events, Michigan Tech Trails and Recreational Forest, the Rozsa Center for the Performing Arts presenting series, Outdoor Adventure Programs, and Student Health and Wellness. ~~The President is authorized to assess an Experience Tech Fee in each~~

of the fall and spring semesters for each qualifying undergraduate and graduate student at the amount set by the Board of Trustees at the time that it sets tuition rates as described in Board Policy 8.1.

The Fee is designed to replace revenue ~~that would otherwise have been generated~~ from individual student ~~ticket sales and fees~~ payments for services to support ~~their~~ operational costs of the units. Procedures for the distribution of funds will be established by the Vice President for Student Affairs in consultation with Student Government.

A limited number of exceptions in assessing the fee may be made by the President or the President's designate for ~~university employees and/or graduate students not on the main campus~~ students not on the main campus. Students who are not assessed the fee are not eligible to receive the associated benefits. The fee is not automatically assessed to dual enrollment students, online students, and co-op/internship students, although these students may request the fee be added and, after payment, are eligible to use the associated benefits. Michigan Tech employees utilizing the employee education program and individuals taking classes under Board Policy 9.24 (Enrollment for Senior Citizens) are not eligible for participating in the Experience Tech Fee or its associated benefits.

FINAL VERSION

8.9 Experience Tech Fee

The Experience Tech Fee is to improve student access to facilities and events, and includes but is not limited to, Mont Ripley Ski Hill, Intramural Sports, Portage Lake Golf Course, Gates Tennis Center, Visual and Performing Arts Department events, home Varsity Athletic events, Michigan Tech Trails and Recreational Forest, the Rozsa Center for the Performing Arts presenting series, Outdoor Adventure Programs, and Student Health and Wellness. The President is authorized to assess an Experience Tech Fee in each of the fall and spring semesters for each qualifying undergraduate and graduate student at the amount set by the Board of Trustees at the time that it sets tuition rates as described in Board Policy 8.1.

The Fee is designed to replace revenue that would otherwise have been generated from individual student payments for services to support operational costs of the units. Procedures for the distribution of funds will be established by the Vice President for Student Affairs in consultation with Student Government.

A limited number of exceptions in assessing the fee may be made by the President or the President's designate for students not on the main campus. Students who are not assessed the fee are not eligible to receive the associated benefits. The fee is not automatically assessed to dual enrollment students, online students, and co-op/internship students, although these students may request the fee be added and, after payment, are eligible to use the associated benefits. Michigan Tech employees utilizing the employee education program and individuals taking classes under Board Policy 9.24 (Enrollment for Senior Citizens) are not eligible for participating in the Experience Tech Fee or its associated benefits.

06/19/2008

03/05/2009: Reduced fee to \$32 for the summer semester

10/08/2009: Added a paragraph to articulate those who are not assessed the fee, are not eligible to receive the associated benefits

07/15/2010: Was previously Policy 9.24. Renumbered; responsibility for procedures assigned to the Vice President for Student Affairs, and authority to grant exceptions assigned to the President.

04/29/2011: Increased fee for fall and spring semesters and eliminated summer fee. Renumbered, as was previously policy 8.15.

05/02/2014: Increased undergraduate fee to \$90 and \$74 for graduate students. Added Tech Trails and Forest, and Rozsa Center presenting series.

05/20/2020: Increased undergraduate fee to \$93 and \$76 for graduate students and updated language.

04/30/2021: Increased undergraduate fee to \$96 and \$78 for graduate students.

02/25/2022: Increased undergraduate fee to \$99 and \$80 for graduate students.

04/26/2024: Changed process for fee to be set annually by Board at the time tuition rates are set and updated language.

- IX. Reports
 - E. Provost Report

Placeholder

F. Undergraduate Student Government

USG Board of Trustees Update

Ben Conlin, USG President

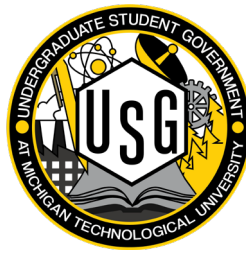
April 26, 2024



**Michigan
Technological**
University



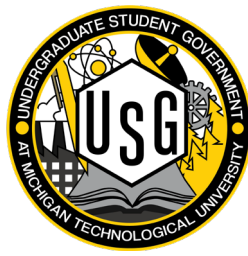
Election Results



- 303 voters in executive board elections
- 327 voters in year representative elections
- 444 voters in college representative elections

- 22/31 positions filled
 - 3 vacancies (CSA, COE, Third Year reps)
 - 6 elections held in the Fall (First Year and Residential reps.)
- 15 out of 22 reps are returning

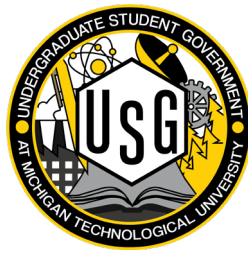




2024 - 2025 Executive Board



- **President: Ben Conlin**
 - Computer Science
- **Treasurer: Lily Ketelsen**
 - Medical Laboratory Science
- **Secretary: Breeanna Schlicker**
 - Computer Science
- **Vice President: Cole Pierucki**
 - Mathematics



Budget Hearings

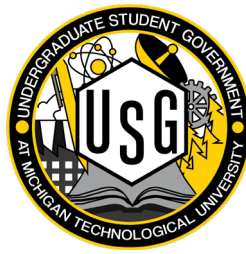
Total Requested
\$879,028.16
Amount Available
\$384,198.12
Difference
494,830.04

- Met with 185 Registered Student Organizations (versus 175 last year)
- Message sent out with the initial allocation:

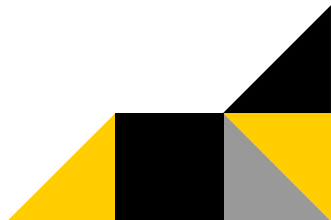
“I have been on this committee for three years. The bottom line is that this was the hardest budget hearing year I have experienced. The Student Activity Fee has not increased in 12 years and the number of RSO's requesting budgets has increased quite significantly in the last 2 years. These two factors combined with rising inflation have forced us to decrease many RSO budgets and keep budgets the same for many RSO's in need of budget increases.”

– Emily Ruf, USG Treasurer and Chair of Ways and Means

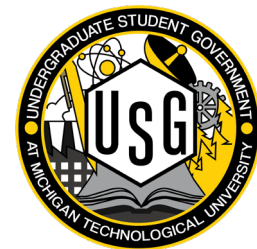
United Student Government Conference



- Met with the student governments from nearly every university in Michigan
- Many struggle with member recruitment and retention
- Takeaways:
 - Increase collaborations with other campus entities (CDI, Student Mental Health and Well-Being, SBGs)
 - Increase approachability and accessibility



USG Committee Updates



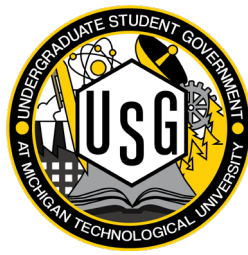
Political Affairs - Brendan Leddy

- Preparing for the upcoming primary elections and presidential elections
- Living Room Conversation discussion series:
 - Encountering Controversial Ideas in Higher Education
 - Freedom of Speech

Events - Konraad VanDyke

- Hosted Study Break, Puzzle Day, Game Day with USG
- Body Barn and Break Bus operations have been streamlined for next year's committee members
- Earth Day event

USG Committee Updates



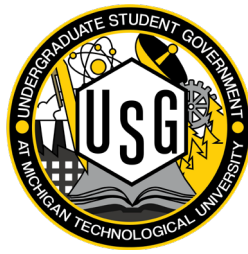
Ways and Means - Lily Ketelsen

- Budget hearings completed, budgets voted on and approved by the USG
- Last day to submit
 - A purchase request - April 14th
 - An Opportunity and Reserve Fund request - April 8th
 - An advancement receipt - April 21st

Public Relations - Isobel Bowker

- Creating RSO spotlights to highlight RSOs doing fun/unique activities around campus
- Working on efforts to increase transparency in the work we do both to students and to administrators

USG Committee Updates



Student Affairs - Daniel Branagan

- Pursuing on-campus lounge opportunities for commuter students, microwaves and mini-fridges are most demanded item
- Looking into Narcan stations for the dorms and other places on-campus
- Negotiating with and alongside University Administration on a possible contract with CollegePads

Ad Hoc Student Activity Fee Review Committee - Emily Ruf

- Proposal approved by USG on 3/27/24



Thank you! Questions or Comments?

Ben Conlin

baconlin@mtu.edu

usg-president@mtu.edu



**Michigan
Technological
University**



G. Graduate Student Government



Presentation to **BOARD OF TRUSTEES**

Karlee Westrem

GRADUATE STUDENT GOVERNMENT

April 26, 2024



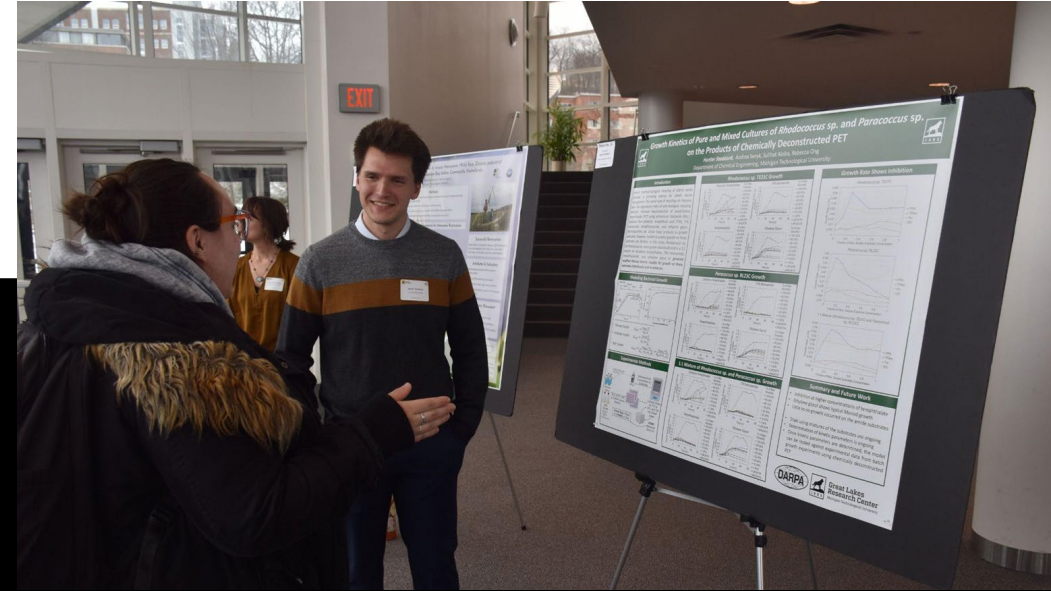
Graduate Research Colloquium

Oral Presentation

First place: Natalie Nold

Second place: Nithin Allwayin

Third place: Brilynn Janckila

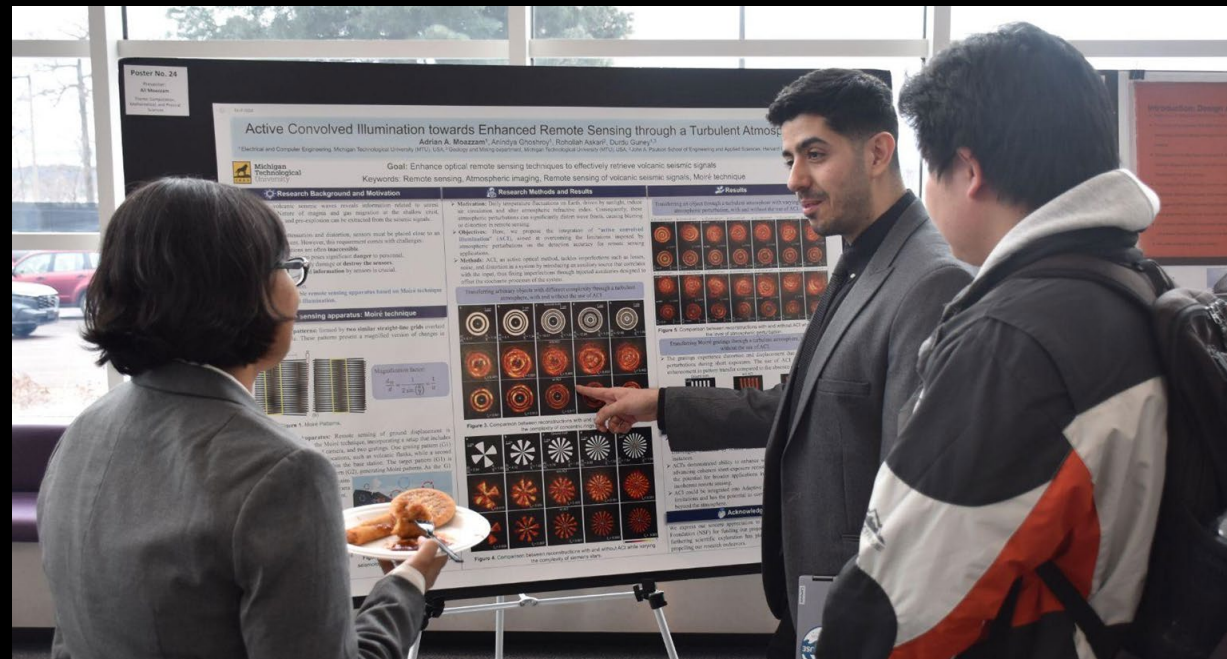


Poster Presentation

First place: Jessica Czarnecki

Second place: Cody Tuftee

Third place: Victoria Santillan



Thank you to
our
volunteers &
judges!!



Annual Banquet



GSG MERIT AWARDS

- Exceptional Staff Member
- Exceptional Graduate Mentor
- Exceptional Student Leader
- Exceptional Student Scholars





Coffee Chats



Thank you to all of our invited guests!



Year In Review

20 Department Meet & Greets (Fall and Spring)

Over 20 Events

Research, Professional Dev. Social Committees

Grad Commons

1,589 swipes*

349 unique students

~26.8% of graduate students



TRAVEL AND CAREER ENRICHMENT GRANTS

150 Travel Grants

11 Career Enrichment



GSG LEADERSHIP 24/25'



Lauren Sprague
President
PhD Cognitive & Learning
Sciences



Matt Sisson
Vice President
PhD Material Sciences



Sarah Larkin
Secretary
PhD Computer Science



Aritra Chakrabarty
Treasurer
PhD Social Sciences



**Oluwatosin
Oyeniran**
*Academic - Research
Chair*
PhD Kinesiology &
Integrative Physiology



Shipra Tiwari
*Academic - Professional
Development Chair*
PHD Electrical & Computer
Engineering



**Vikramaditya
Gurrapu**
Social Chair
MS Computer Science



**Jhuleysy Sanchez
Aguilar**
Public Relations Chair
PHD Geological &
Mining Engineering

THANK YOU!



H. University Senate

University Senate Update

Robert Hutchinson, Senate President

April 26, 2024



Michigan Tech

Spring 2024 Review

- 5-24: Proposal to Extend Employee Benefits Posthumously to Surviving Beneficiaries
- Approved 14 curricular proposals
- 6-24: Proposal to Modify Sections 2.1 and Appendix L of the Faculty Handbook to Update Instructional Track Faculty Reappointment and Promotion Review
- University President Review

Upcoming Items for Fall

- Continue working to increase staff participation on the Senate
- Preparing to transition to daytime meetings for the 24-25 academic year

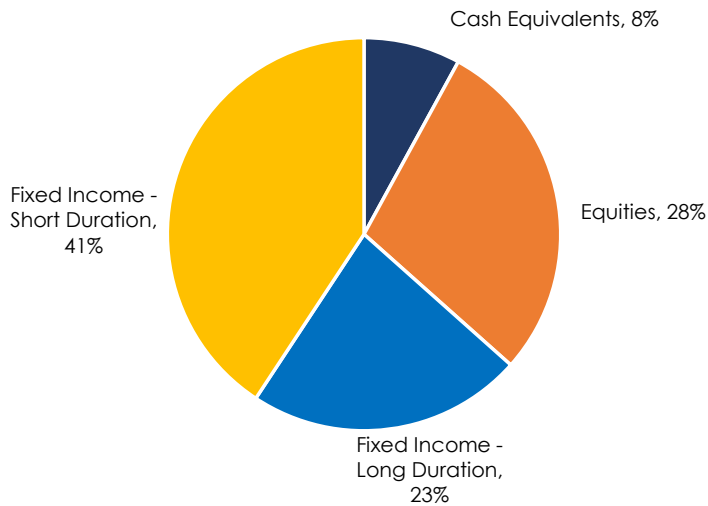


**MICHIGAN TECH UNIVERSITY
INVESTMENT PORTFOLIO
JUNE 30, 2023 THROUGH FEBRUARY 29, 2024**

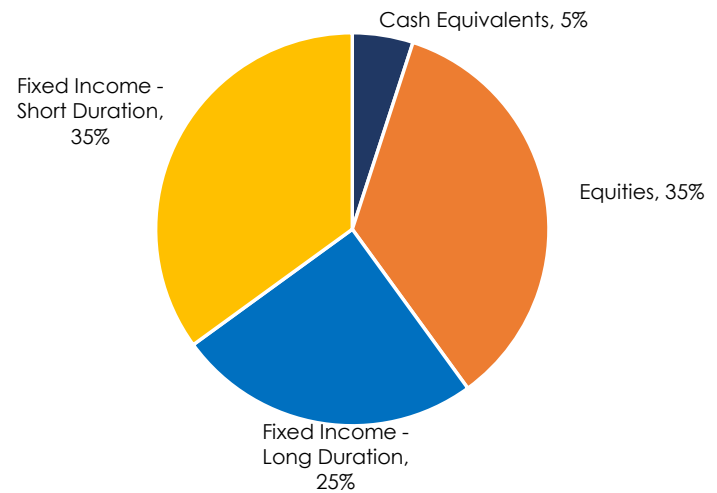
X. Informational Items
A. Analysis of Investments

	Market Value 6/30/2023	Market Value 2/29/2024	Fiscal-Year Investment Return	Benchmark Return	Benchmark
Money Market Fund	\$ 1,706,318	\$ 3,767,291	2.55%	2.69%	3-Month T-Bill
Equity Funds:					
Core Equity Fund	7,818,944	7,815,095	16.16%	15.72%	S&P 500
Commonfund OCIO Equity Fund	5,485,594	5,732,588	13.35%	15.72%	S&P 500
Total Equity Funds	<u>13,304,538</u>	<u>13,547,683</u>			
Fixed Income Funds:					
Intermediate Term Fund	7,252,185	8,624,479	3.57%	3.22%	ICE BofA Merrill Lynch 1-3 Yr Treasury
Commonfund Contingent Asset Portfolio	9,594,832	10,649,465	3.50%	3.22%	ICE BofA Merrill Lynch 1-3 Yr Treasury
High Quality Bond Fund	5,230,205	5,702,692	1.94%	1.63%	Bloomberg Barclays US Aggregate Bond Index
Multi-Strategy Bond Fund	5,899,333	5,035,747	1.91%	1.63%	Bloomberg Barclays US Aggregate Bond Index
Total Fixed Income Funds	<u>27,976,555</u>	<u>30,012,383</u>			
Total	<u><u>\$ 42,987,411</u></u>	<u><u>\$ 47,327,357</u></u>	<u><u>6.42%</u></u>		

Current Asset Allocation



Target Asset Allocation



B. Research & Sponsored Programs

Sponsored Activities Summary

Fiscal Year 2024, Quarter Ended 3/31/2024

- Total awards are up 11.2% for FY24 compared to FY23.
- Gifts are down 11.9% for FY24 compared to FY23.
- Federal agency awards are up 10.6% for FY24 compared to FY23.
- Overall Industry activity decreased by 18.4% over the last fiscal year. However, it should be noted that a singular \$3 million industry related award was received in Q1 of FY23 which was not the case in FY24.
- Research expenditures are up 3.5% over FY23. External expenditures increased by 1.1% compared to FY23. Internal expenditures are up 6.5% over last fiscal year.

Formal Session of the Board of Trustees - Informational Items

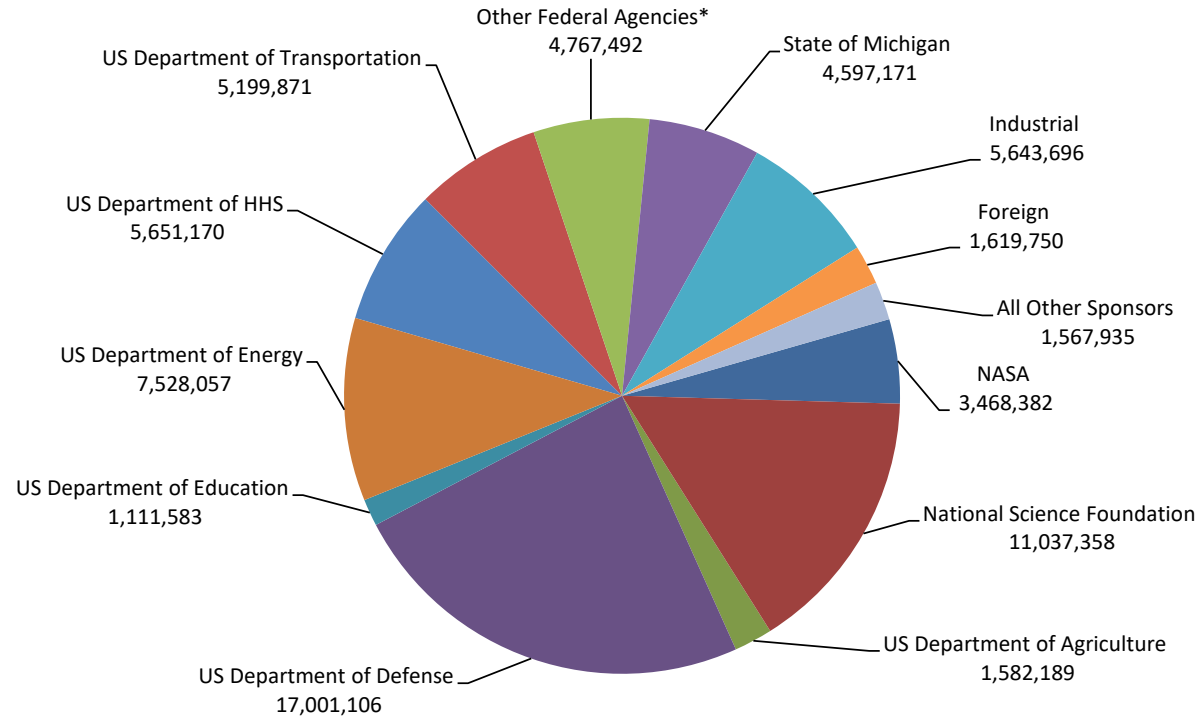
**Sponsored Awards
Fiscal Year 2024
3rd Quarter
Ended Mar 31, 2024**

TOTAL: \$73,239,634

Pre-Proposals Submitted

(excluded from Proposals Submitted figures below)

**FYTD 2023: 49
FYTD 2024: 26**



Sponsor	Proposals Submitted		Awards Received		Awards Received (\$)		Variance \$	Variance %
	FY '24 as of 3/31	FY '23 as of 3/31	FY '24 as of 3/31	FY '23 as of 3/31	FY '24 as of 3/31	FY '23 as of 3/31		
NASA	72	58	27	25	3,468,382	4,841,861	-1,373,479	-28.4%
National Science Foundation	120	103	25	39	11,037,358	10,445,617	591,741	5.7%
US Department of Agriculture	43	45	29	31	1,582,189	2,869,852	-1,287,663	-44.9%
US Department of Defense	76	77	79	81	17,001,106	17,832,453	-831,347	-4.7%
US Department of Education	2	2	3	2	1,111,583	281,024	830,559	295.5%
US Department of Energy	41	45	35	31	7,528,057	6,127,573	1,400,484	22.9%
US Department of HHS	46	54	20	12	5,651,170	3,685,325	1,965,845	53.3%
US Department of Transportation	16	22	18	12	5,199,871	3,232,688	1,967,183	60.9%
Other Federal Agencies*	53	44	38	19	4,767,492	2,537,651	2,229,841	87.9%
Federal Agency Total	469	450	274	252	57,347,208	51,854,044	5,493,164	10.6%
State of Michigan	30	34	22	21	4,597,171	2,734,796	1,862,375	68.1%
Industrial	124	107	102	97	5,643,696	4,618,776	1,024,920	22.2%
Foreign	5	5	5	11	1,619,750	1,604,541	15,209	0.9%
All Other Sponsors	67	73	23	31	1,567,935	2,266,353	-698,418	-30.8%
Subtotal	695	669	426	412	70,775,760	63,078,510	7,697,250	12.2%
Gifts**	N/A	N/A	278	191	2,456,952	2,788,239	-331,287	-11.9%
Crowdfunding	N/A	N/A	4	13	6,922	11,063	-4,141	-37.4%
Grand Total	695	669	708	616	73,239,634	65,877,812	\$7,361,822	11.2%

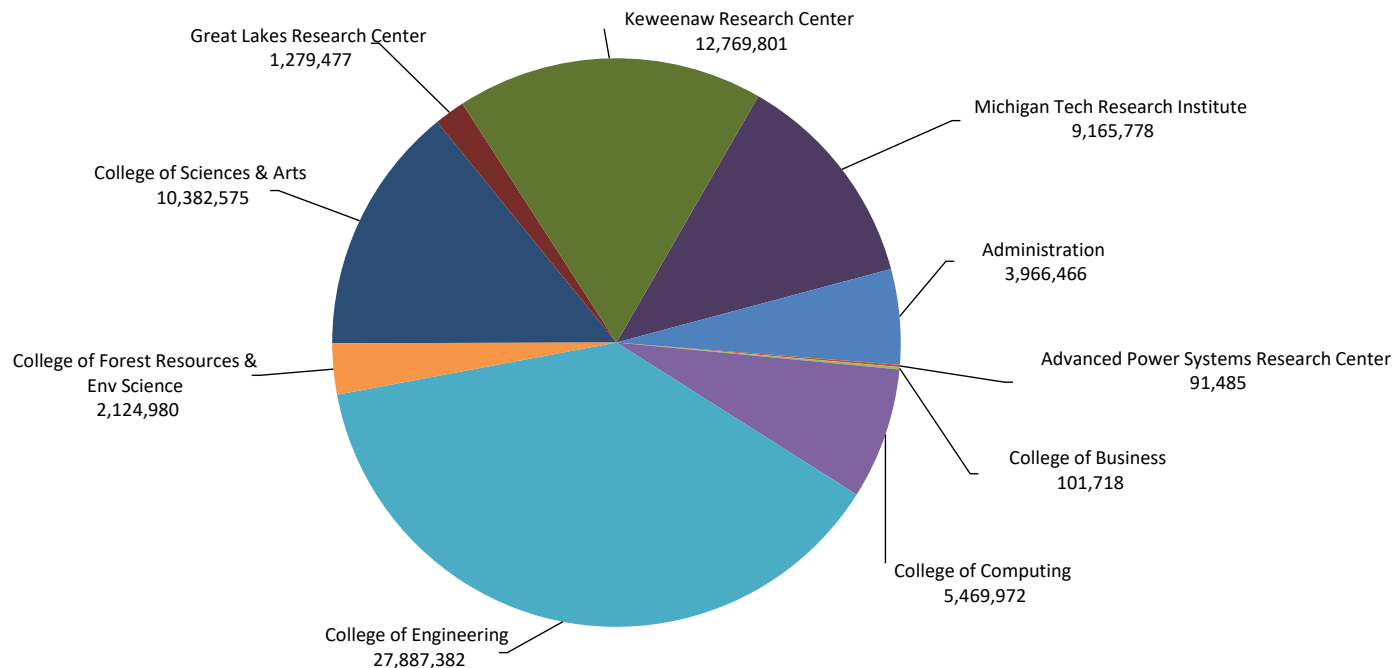
* National Archives and Records Administration, National Endowment for the Arts and Humanities, Office of the Director of National Intelligence, US Dept of Commerce, US Dept of Homeland Security, US Small Business Administration, US Environmental Protection Agency, US Dept of the Interior, US Dept of 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.

Formal Session of the Board of Trustees - Informational Items

Vice President for Research
Fiscal Year 2024
3rd Quarter
Ended Mar 31, 2024

TOTAL: \$73,239,634



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

Submitting Proposals since 07/01/2023
67.6%

On Active Projects as of 3/31/2024
63.9%

SPO & OIC Metrics ¹	Divisional Contributions											Totals	Fiscal Comparison	Percent Change
	Administration	Advanced Power Systems Research Center	College of Business	College of Computing	College of Engineering	College of Forest Resources & Env Science	College of Sciences & Arts	Great Lakes Research Center	Keweenaw Research Center	Michigan Tech Research Institute				
Proposals Submitted	19	5	1	33	326	82	76	33	46	74	695	669	3.9%	
Awards Received	173	3	8	22	251	57	47	23	53	71	708	616	14.9%	
Federal	1,511,583	49,980	-	4,644,790	13,041,017	1,388,839	7,872,761	489,525	8,952,038	4,395,746	42,346,279	36,046,943	17.5%	
Federal Pass-Through	448,107	-	-	136,500	8,068,641	217,107	603,955	724,995	173,691	4,627,933	15,000,929	15,807,101	-5.1%	
Foreign	-	-	-	-	110,130	10,060	1,499,560	-	-	-	1,619,750	1,604,541	0.9%	
Gifts	1,504,862	-	17,500	179,847	561,309	48,500	126,434	-	18,500	-	2,456,952	2,788,239	-11.9%	
Crowdfunding	-	-	-	-	-	-	1,372	5,550	-	-	6,922	11,063	-37.4%	
Industry	25,914	41,505	-	53,875	1,512,842	374,082	-	30,863	3,604,615	-	5,643,696	4,618,776	22.2%	
Other	-	-	84,218	9,960	1,007,919	86,392	278,493	10,000	20,957	69,996	1,567,935	2,266,353	-30.8%	
State of MI	476,000	-	-	445,000	3,585,524	-	-	18,544	-	72,103	4,597,171	2,734,796	68.1%	
Total \$ by Division	3,966,466	91,485	101,718	5,469,972	27,887,382	2,124,980	10,382,575	1,279,477	12,769,801	9,165,778	73,239,634	65,877,812	11.2%	
Fiscal Comparison	2,866,962	753,805	80,000	5,244,573	26,951,890	4,261,639	7,286,512	315,719	6,444,312	11,672,400	65,877,812			
Percent Change	38.4%	-87.9%	27.1%	4.3%	3.5%	-50.1%	42.5%	305.3%	98.2%	-21.5%	11.2%			
Disclosures Received ²	-	-	-	-	50.00%	-	16.67%	-	-	33.33%	6	11	-45.5%	
Nondisclosure Agreements	6	-	1	1	30	1	1	1	11	15	67	71	-5.6%	
Patents Filed or Issued ²	-	-	-	-	88.89%	-	11.11%	-	-	-	9	7	28.6%	
License Agreements	-	-	-	1	4	-	-	-	-	-	5	7	-28.6%	
Gross Royalties ²	-	-	-	-	78.57%	-	21.43%	-	-	-	68,960	47,594	44.9%	

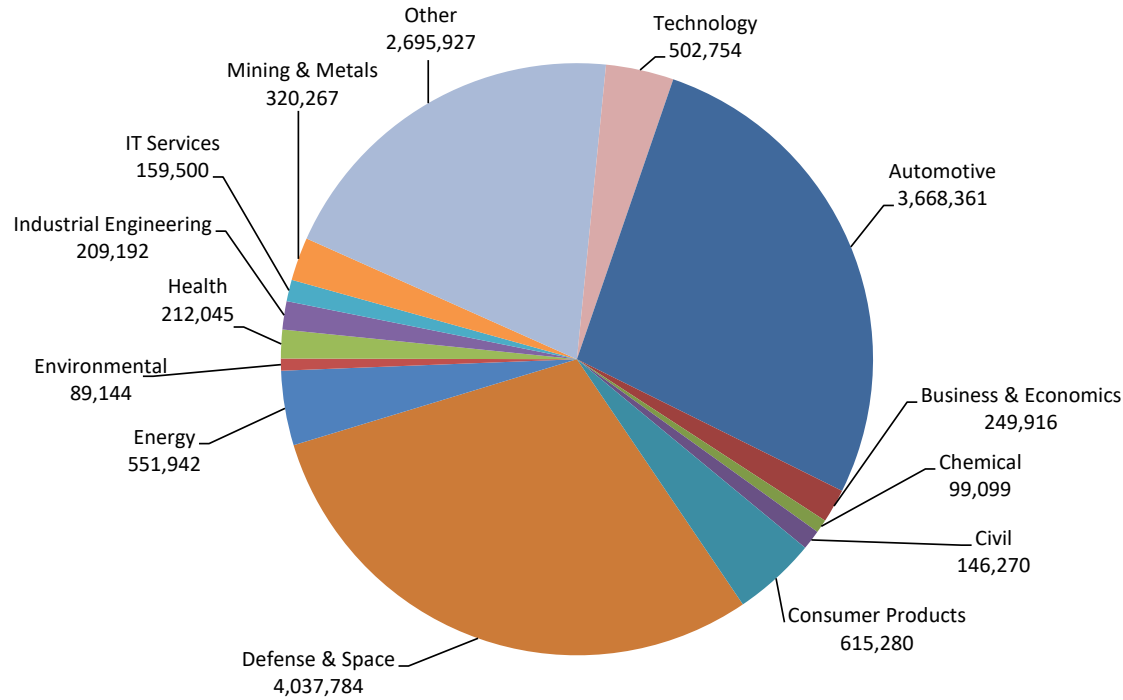
¹ Combined Metrics from both the Sponsored Programs Office (SPO) and Office of Innovation & Commercialization (OIC)

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).

Formal Session of the Board of Trustees - Informational Items

**Sponsored Awards
-Industry-
COMBINED
Fiscal Year 2024
3rd Quarter
Ended March 31, 2024

TOTAL: \$13,557,481**



Industry Segment	Proposals Submitted		Awards Received		Awards Received (\$)		Variance \$	Variance %
	FY '24 as of 3/31	FY '23 as of 3/31	FY '24 as of 3/31	FY '23 as of 3/31	FY '24 as of 3/31	FY '23 as of 3/31		
Automotive	37	39	55	59	3,668,361	3,141,781	526,580	16.8%
Business & Economics	1	5	13	13	249,916	460,844	-210,928	-45.8%
Chemical	4	1	6	4	99,099	79,184	19,915	25.2%
Civil	13	4	34	32	146,270	621,538	-475,268	-76.5%
Consumer Products	22	22	49	45	615,280	912,830	-297,550	-32.6%
Defense & Space	31	22	43	42	4,037,784	7,700,429	-3,662,645	-47.6%
Energy	8	4	30	20	551,942	1,489,622	-937,680	-62.9%
Environmental	1	9	16	14	89,144	96,644	-7,500	-7.8%
Health	10	5	11	12	212,045	409,697	-197,652	-48.2%
Industrial Engineering	14	8	17	6	209,192	136,750	72,442	53.0%
IT Services	11	8	23	10	159,500	89,243	70,257	78.7%
Mining & Metals	12	14	24	21	320,267	309,499	10,768	3.5%
Other	19	13	71	23	2,695,927	394,747	2,301,180	583.0%
Technology	9	9	9	10	502,754	777,413	-274,659	-35.3%
Total	192	163	401	311	13,557,481	16,620,221	-3,062,740	-18.4%

Michigan Technological University
Total Research Expenditures by College/School/Division
Fiscal Year 2024 & 2023
As of March 31, 2024 and March 31, 2023

College/School/Division	FY2024	FY2023	Variance	%
Administration*	5,660,673	5,202,327	458,346	8.8%
Advanced Power Systems Research Center (APSRC)	1,222,095	1,100,592	121,503	11.0%
College of Business	1,380,850	1,529,094	(148,244)	-9.7%
College of Computing	4,186,306	4,317,183	(130,877)	-3.0%
College of Engineering	29,417,772	27,051,258	2,366,514	8.7%
College of Forest Resources & Environmental Science	5,570,969	5,785,479	(214,510)	-3.7%
College of Science & Arts	12,985,320	13,163,325	(178,005)	-1.4%
Great Lakes Research Center (GLRC)**	1,593,299	1,106,360	486,939	44.0%
Keweenaw Research Center (KRC)	6,434,101	6,438,471	(4,370)	-0.1%
Michigan Tech Research Institute (MTRI)	9,267,080	9,407,674	(140,594)	-1.5%
Total	77,718,465	75,101,763	2,616,702	3.5%

*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 April 26, 2024

2023-2024 Goals and Initiatives to be achieved in collaboration with administrative and academic leadership and the Michigan Tech Fund Board of Directors.

- Paramount focus on Donor Integrity
 - Invest in each segment of the donor journey and facilitate a strategic opportunity to match the donor's passion
 - Utilize Flagship Campaign themes and material to jump-start new leadership gift donor relationships and facilitate acceleration of the ask in existing donor work
- Add new constituents and increase movement in the donor pipeline
- Launch and implement CRM
- Enhance donor impact and stewardship
- Get to 45% of the \$350 million campaign goal

FY24 MTF Working Goals

- “The Year of Execution” on a Strong Foundation
 - Donor First: Culture supported by processes, practices and people
 - Campaign Execution: Provide oversight and resources for a successful campaign
 - Cash Flow Management: Execute and enhance cash flow
 - Endowment Growth: Higher emphasis on endowment gifts

Highlights

- \$182.8 million or 52% to the campaign goal of \$350 million
- \$49 million in outstanding asks
- New cash to the endowment since campaign inception: \$19 million
- Planned gifts earmarked for the endowment \$26.4 million
- 81 illustrations, proposals and gift agreements were provided to donors
- Implemented updated data governance and donor privacy plan in conjunction with the implementation of CRM Advance.
- Enhancing customer service and organization of work with the launch of the adv-help@mtu.edu ticket queue.
- Piloting CRM initial access, reporting, and security with campus partners
- Completed a comprehensive review and study of MTU’s Planned Giving Registry and donor giving history to identify donor trends, characteristics, and opportunities which has been used to preliminarily qualify ~300 donors as Planned Giving prospects within the time-scope of the Campaign.

Fundraising totals as of April 1, 2024

- \$17.0 in planned gifts
- \$1.02 in realized planned gifts
- \$2.96 in major outright gifts and pledges
- \$2.00 in annual gifts under \$10,000
- \$1.82 in corporate support
- \$5.77 in foundation gifts
- Upcoming Campaign Events:
 - Campaign Executive Committee next meeting, April 15, 2024
 - Planned Giving Session II with college deans, May 13, 2024

Formal Session of the Board of Trustees - Informational Items

- Organizational
 - Welcomed Charitable Giving Director, James Shortt, to the major gifts team.
 - Vacant positions:
 - Business Systems Analyst/Data Visualization Specialist

Principal Giving

FY 24 Finalized Gifts - Verbal

- Finalized over \$13 million in gifts for the College of Sciences and Arts, H-STEM Building, scholarship, research, and an endowed chair professorship.

FY24/FY25 Pending Gifts

- Collaborating with alumni and their spouses on over \$5 million for the College of Business, an endowed faculty position and scholarship fund in Civil Environmental and Geospatial Engineering, Husky Childcare initiatives and possibly student counseling service, Center for Convergence and Innovation Building, and the football program.

2nd and 3rd quarter Principal Giving Travel

- January – Florida/California
- February – Illinois & Lower Michigan
- March – Texas & Florida
- April – East Coast
- May – California
- June – Southeast

FY24 Completed Campaign Events

- Donor hosted dinners
 - Naples, FL – March 2024
 - Venice, FL – March 2024
 - Armonk, NY – April 2024

FY 25 Campaign Events

- Donor hosted dinners
 - Houghton/Dollar Bay, MI
 - Traverse City, MI
 - Detroit, MI
 - Houston, TX
 - Northern Michigan

Dedications

- April 2024 - Bruce '63 and Roberta Oliver Conference Room in Chemical Engineering
- April 2024 - Alumni Gateway Arch
- April 2024 - Student Study and Lounge space in HSTEM

Principal Gifts Execution Committee

- Working with CCS to fine-tune the wealth, likelihood, and ability of the top 70 friends/alumni who are rated as potential \$1 million+ donors.
- Working collaboratively with the Cornerstone Committee to reach the \$280 million goal so we can launch the public phase.

Advancement and Gift Planning

FY 24 Finalized Gifts as of Feb 29, 2024

Formal Session of the Board of Trustees - Informational Items

- Twenty-two gifts of \$25,000 or more came in the month of December, having closed 61 major gifts totaling \$17.03 million for the fiscal year.
- The executive director for corporate & foundation relations and the director for foundation relations secured a \$5,000,000 foundation gift for the Chemical Sciences and Engineering Building, with possibilities to match an additional \$2,000,000 for a total of \$9,000,000
- Director for charitable giving secured a planned gift increase of \$1.28M designated for Forestry and Greek Life

FY 24/25 Pending Gifts

- 19 pending gifts totaling \$7.21 million in pending proposals expected to close by Jun 30, 2024, with 31 verbal commitments totaling \$10.36 million.
- Director for charitable giving is working on over \$5 million for ECE and ME-EM, and scholarships.
- Corporate and Foundation Relations is working on over \$10 million in gifts for the Chemical Engineering Senior Design Studio, nursing program, undergraduate research, MSE professorships, CDI/MUB building renovation, and SYP course endowment, EERC renovation, and the new residence hall.
- Director for charitable giving is working on a \$2,500,000 estate gift designated for applied physics.
- Executive director for charitable giving collaborated with Principal Giving on campaign events in Texas and Florida and with a department chair for donor visits/meetings at the University of Arizona College of Optics & Photonics- UA.
- Director for charitable giving collaborated with College of Engineering Dean on travel to Houston, TX.
- From February 2-May 3, CFR providing support to Career Services through leadership transition. Initiatives include Spring Career Fair (2/13; over 200 companies), First Destination Survey (placement rate data), Corporate Partner Program overhaul (~25 companies), Corporate Advisory Board summer meeting plans, Fall Career Fair launch & planning.
- CFR, led by the director for foundation relations, collaborated with UMC in developing Michigan Tech Magazine piece featuring Consumers Energy executive leadership.
- Piloting collaborative fundraising strategy and travel planning with the College of Engineering Deans and Chairs.
-

Future Advancement and Gift Planning Travel

Frontline fundraiser travel is scheduled through April and planned through June 30.

- April
 - Houston/ Southern California
 - Chicago-IL
 - Boston
 - Minnesota
 - WI/IL
 - Toronto
- May
 - Florida
 - Colorado
 - WI/Chicago
 - Lower MI
 - N. Cali
 - WI/IL
 - Lower MI
- June
 - Lower MI
 - Pacific NW

Formal Session of the Board of Trustees - Informational Items

- o Lower MI
- o Alaska

Market Development and Strategy

- Completed a comprehensive review and study of MTU's Planned Gift registry and history to identify donor trends, characteristics, and opportunities which has been used to preliminarily qualify ~300 donors as Planned Giving prospects within the time-scope of the Campaign.
- Developed comprehensive giving table and pyramid for athletics programs and priorities totaling \$50 million.

Gift and Estate Administration

- Processed 533 gifts in March
- Developing new processes for the CRM, including multiple customized receipts.
- Provided 81 illustrations, proposals and gift agreements.

Advancement Services/Data Infrastructure

- Enhancing customer service and organization of work with the launch of the adv-help@mtu.edu ticket queue. 388 Tickets received
- The CRM Advance transition is in process. Focus is shifting to automated receipting, fundraising reports, and dashboards. With support from EAS, working to ensure Finance Services and Operations and Student Financial Services receive the data they need from the system.
- Reporting and Transition in the new CRM
- Initial Data governance plan in place recognizing data privacy and security.
- Pilot initial access, report, and security with campus partners

Campaign Executive Committee Initiatives

- Cornerstone Gift Initiative (\$100,000-\$999,999)
 - o The Cornerstone group is now working collaboratively with the Principal Gifts Initiative to bring volunteers together and expand donor networks.
 - o Director for charitable giving and a Campaign Executive Committee Volunteer visited potential donors in Austin and Dallas and recruited a new volunteer to help fundraising in the state of Texas.
- Endowment and Education Growth Initiative
 - o Developing a marketing strategy for our alumni and supporters on the importance of the endowment.
 - o Developed goals for endowment growth by the end of the campaign.
- Corporate and Foundation Relations Initiative
 - o Refine and prioritize corporate and foundation portfolio of prospective and current philanthropic partners
 - o Developed a 30-60-90-day plan to focus on key funding initiatives and opportunities with corporate and foundation partners.
 - o Current strategic initiatives include Chemical Sciences and Engineering Building renovation, nursing, undergraduate research, mobility, and sustainability

Alumni Engagement & Annual Giving Updates

The AE 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.

Communications

Formal Session of the Board of Trustees - Informational Items

- Annual Giving: reporting from 2/29/24 reflects ~\$2.06 million raised, 85% to goal
 - The alumni engagement & annual giving team (AE&AG) continues to enhance how it is using the [Scalefunder](#) platform not only for crowdfunding projects with time-constricted goals, but also for general online giving use. In doing so, we've undertaken a large project that requires coordination with all areas across campus to transition payment processing forms (away from Touchnet to projects/designations on the Scalefunder platform) and updating support pages on MTU's website with fresh language and links.
 - <https://give.mtu.edu/>
 - Limited time crowdfunding projects on the home page ([AISC Pavers](#)), as well as some evergreen projects ([Student Experience](#), [Centers of Excellence](#))
 - [Academic areas](#) & [Athletics](#) have their own groups
 - The AE&AG team continues to work with departments on campus to manage the payment form transition
 - This transition allows consistency for donors, and the opportunity to utilize digital wallet for all online giving to Tech (increasingly more popular way to make a gift).
 - AE&AG proactively manage a communications calendar of both solicitations and non-solicitations to monitor the amount of traffic to our audience, keep focus on priorities, and protect our email open rates and click rates
 - The team has coordinated more than 50 unique in-house email appeals to targeted constituents so far this fiscal year
 - These email appeals average an open rate of 47.56% (a healthy campaign open rate is 20-30% or higher).
 - Hosted another 24-hour giving challenge from noon April 10-noon April 11: [Give Back to the Pack](#).
 - Goal was to increase participation (acquisition of new donors or re-acquisition of lapsed)
 - The team planned for increased marketing around the event - multiple waves of targeted emails managed in-house during the challenge, in addition to partnering with RNL on an omni-channel, month-long marketing campaign in advance
 - XXX gifts, \$XXX,XXX dollars raised in the spirit of Give Back to the Pack 2024
- AE communications
 - MTU Magazine landed in homes in March, featuring a new "For Tech" insert. This insert allowed the Advancement & Alumni Engagement Office more space to be able to feature more alumni and donor stories, in addition to more philanthropic education.
 - Our main alumni social media channels continue to gain following, and the team strategizes quarterly to drive traffic, engagement, and results to each unique social channel.
 - Strategic social posts directly impact engagement (attendance at events, visibility to volunteer opportunities, etc.).
 - Our private LinkedIn MTU Alumni Group is now over 11,300 members

Volunteerism

- [Alumni Board of Directors \(ABOD\)](#) - Winter Carnival 2024 meeting items

Formal Session of the Board of Trustees - Informational Items

- ABOD completed the nomination, interview, selection, and voting process to approve a new slate of Directors who will begin their 6-year term of service on July 1:
 - Heather Storey '92, Nathan Fiebke '03, Nick Laurila '10, Alicia Walby '13, Jason Mack '00, William McCune '11, Jeffrey Burt '83
- ABOD also celebrated a slate of Directors who will close out their term on June 30 and become Life Directors:
 - Jackie Jiran '96, Britta Anderson '15 '23, Scott McBain '86, Andy Van Dyke '11, Adam Mitteer '03 '17, Kristin Kolodge '95
- Hosted a second cohort for [Time & Talent](#) in March

Events

- More than 68 events executed so far this year, an additional 20 in progress or scheduled to occur
 - Events this year have been hosted in 19 different states and 5 different countries, in partnership with 62 unique hosts.
 - Notable events included a pickled egg contest event, continuing the West MI Spring Dinner tradition, and a pregame social before Tech hockey's game vs Boston College in the 2024 NCAA tournament in Rhode Island
- Key events coming up:
 - Michigan Tech Alumni Golf & Pickleball outing in Traverse City on July 11, 2024
 - [Golf outing](#) details
 - [Pickleball tournament](#) details
 - [Reunion Weekend 2024](#): August 1-3
 - A full weekend of activities are on the docket to celebrate not only our honored classes (1954, 1959, 1964, 1969, 1974, 1984, 1994, 1999, 2004, 2014) but also athletic varsity team reunions for Women's Volleyball and Men's & Women's Tennis.
 - A [preliminary outline of the schedule of events](#) is published
 - More details to be shared in April
 - Registration to open in May
 - The slate of [2024 Alumni Award](#) winners will be publicly announced in June
 - Awards Ceremony takes place over Reunion Weekend: Friday, August 2 in the Rozsa

D. Media Coverage

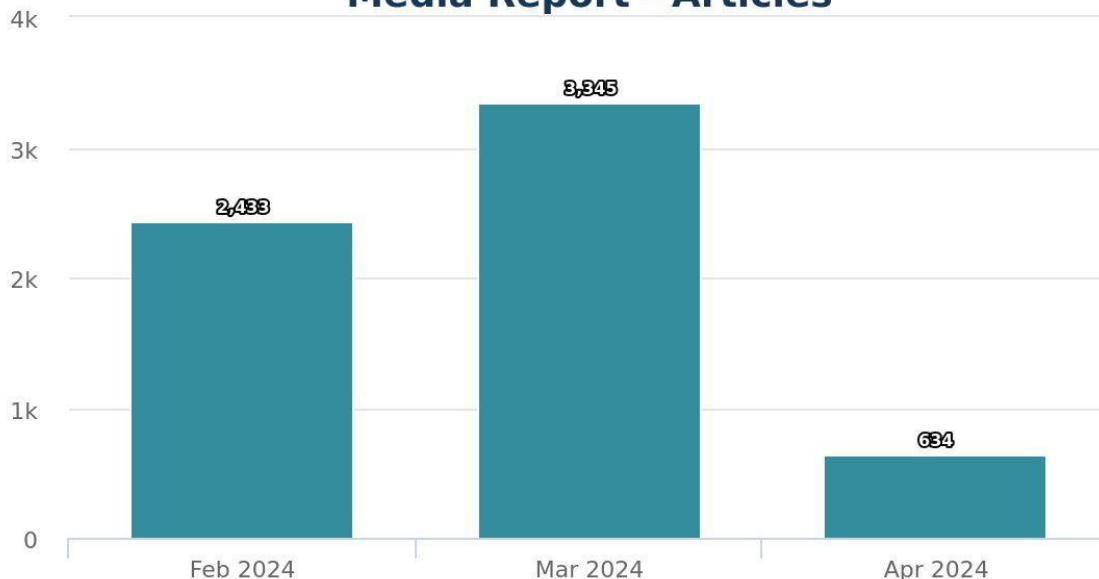
Media Report: Feb. 1 to Apr. 5, 2024
 Michigan Technological University
 Regular Meeting of the Board of Trustees
 Apr. 26, 2024

Overview

Articles	6,412
Total engagement	~ 59K
Average engagement	9
Journalist shares	365
Journalist reach	~ 3.77M
Average unique visitors per month (UVM)	~ 4.36M
Total UVM	~ 27.94B

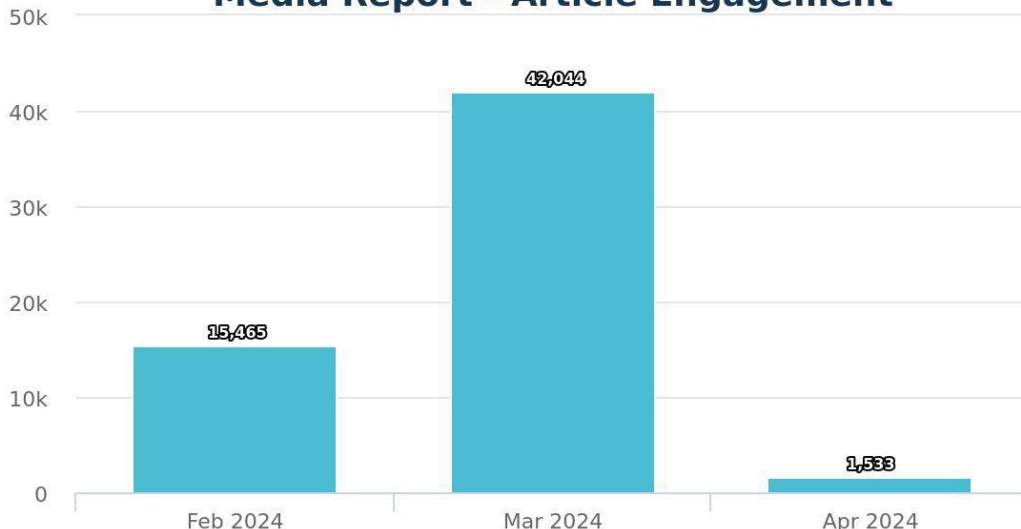
Between Feb. 1, 2024 and Apr. 5, 2024, a total of 6,412 online articles mentioned Michigan Technological University:

04/26/24 Michigan Tech Board of Trustees Regular Meeting, Media Report - Articles



Those 6,412 articles were shared, commented on, or liked on social media roughly 59,000 times, for an average engagement of 9 shares, comments, or likes per article:

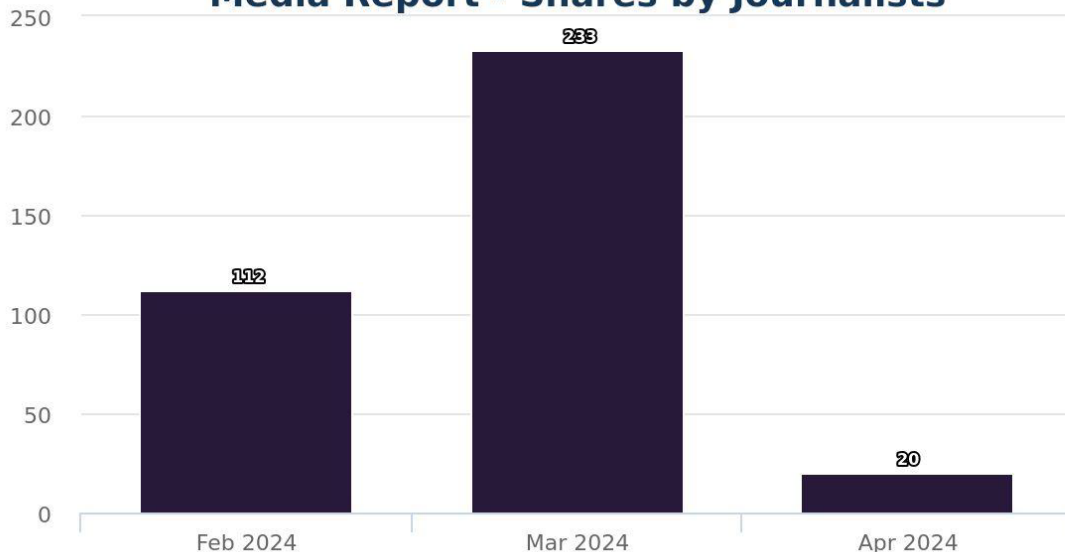
04/26/24 Michigan Tech Board of Trustees Regular Meeting, Media Report - Article Engagement



MUCK RACK

Journalists shared the articles 365 times, resulting in a reach of roughly 3.77 million people:

04/26/24 Michigan Tech Board of Trustees Regular Meeting, Media Report - Shares by Journalists



MUCK RACK

News Highlights:

Research News

Sarah Hoy (CFRES) was quoted and John Vucetich and Rolf Peterson (also CFRES) were mentioned by [AP News](#) in a story about the suspension of the 2023-24 winter study of wolves and moose on Isle Royale last Tuesday (Jan. 30). The National Park Service made the call after sustained warm weather made the ice unsafe for the researchers' survey plane to land. It is the first time in the study's 65-year history that warm weather has caused a suspension. The story was picked up by 200 outlets nationwide, including the [Guardian](#) and [Detroit Free Press](#).

Zhanping You (CEGE/MTTI) was quoted by Michigan State University's [Spartan Newsroom](#) and the [Iron Mountain Daily News](#) in a story about the "big potential" for recycling scrap tires by incorporating them into road pavement. Trial road projects using rubber-modified asphalt are "performing pretty well," according to You. The story was picked up from [Great Lakes Echo](#).

[Bridge Michigan](#) mentioned Michigan Tech in a story examining the use of smart buoys on Lake Erie to communicate data on water conditions, contaminants and nutrients to researchers and anglers. The buoy network was created by Freeboard Technology, a collaborator of Michigan Tech on other network-involved water studies.

[Bridge Michigan](#) mentioned Michigan Tech in a story about climate change's impact on the habitat of the piping plover, an endangered Great Lakes shorebird. The story cited research by Pengfei Xue (CEGE/GLRC) projecting that the Great Lakes' baseline water levels will rise seven to 19 inches by 2050. Xue presented the research at the June 2022 Frontiers in Hydrology Meeting. The story was picked up from [Great Lakes Echo](#).

Nancy Langston (SS/CFRES) was quoted in a [Bridge Michigan](#) story about the impacts of climate change on Michigan winters and on the residents whose identities and livelihoods are tied to the winter season. The story also ran in [Bridge Detroit](#).

Trista Vick-Majors (BioSci/GLRC) was quoted by the [Associated Press](#) in a story exploring how an ongoing lack of winter ice cover could change the Great Lakes. The story mentioned a project launched by Vick-Majors to gather winter-specific lake samples for comparison to summer data, with researchers around the Great Lakes participating in sampling this month. The story was picked up by more than 300 news outlets nationwide, including the [Washington Post](#), [Houston Chronicle](#) and [Seattle Times](#).

Simon Carn (GMES) was quoted by [NASA Earth Observatory](#) in a story about an eruption of the La Cumbre volcano in the Galapagos Islands. The eruption began March 2 on Fernandina Island, and the story included a March 7 aerial image showing continued active lava flow.

Sarah Hoy (CFRES) was quoted by the [Chicago Tribune](#) in a story about the wide-ranging impacts of record-low ice cover on the Great Lakes, including the warm-weather suspension

partway through Michigan Tech's 2023-24 winter study of wolves and moose. The story was picked up by [Yahoo! News](#) and [Yahoo! News U.K.](#)

MTU student Abe Stone (ecology and evolutionary biology) and Sigrid Resh (CFRES/ESC) were quoted by [ABC 10](#) in a story about Stone's research on using native fungus *Chondrostereum purpureum*, or silverleaf disease, to remove invasive buckthorn plants from forests. Stone's research was the subject of a recent story on Michigan Tech's [Unscripted Research Blog](#).

[Fast Company Magazine](#) named Houghton's Orbion Space Technology, co-founded by Brad King (ME-EM) and Jason Sommerville '09 (Ph.D. Mechanical Engineering), to their 2024 Most Innovative Companies list. Orbion, part of the MTEC SmartZone, "specializes in small plasma thrusters that help satellites ease into precision orbits, make evasive maneuvers, and safely reenter and burn out in Earth's atmosphere at the end of their life cycle." Orbion was also featured in Michigan Tech's [2022 Research Magazine](#).

General News

Blue Key National Honor Society President Joe Dlugos was quoted by [Yahoo! News](#), [ABC 10](#) and the [Keweenaw Report](#) in stories previewing Michigan Tech's 2024 Winter Carnival. Dlugos and Tau Kappa Epsilon President Connor Steer were also quoted by [Daily Mining Gazette](#) and [Mining Journal](#). The [Daily Mining Gazette](#) ran a story about the trials and triumphs of the All-Nighter, quoting MTU students Shelby Rohwetter, Colin Fuecht, Kevin Hock, Jacob Ojala, Shannon Mattson, Emily Taylor, Tania Bernal and Dan Raper. The Gazette also picked up [Michigan Tech News](#)' story announcing the [winning snow statues](#).

[DBusiness](#) mentioned Michigan Tech in a story about the new Michigan University Innovation Capital Fund and the Michigan University Innovation Capital Consortium. Driven by a partnership of six Michigan universities, including [Michigan Tech](#), the initiatives were created with a goal of supporting pre-seed startups and early-stage companies across the state. They will be administered by U-M's Innovation Partnerships, which recently received a \$5 million award from the Michigan Innovate Capital Fund to support the program.

Beth Fitzpatrick (ADM) was quoted by [WLUC TV6](#) in a story about enrollment growth seen at Michigan Tech and Northern Michigan University for the winter 2024 semester.

Holly Hassel (HU) was quoted by [Inside Higher Ed](#) in a story reviewing attitudes among college professors regarding tools used to detect AI-generated plagiarism.

[Crain's Grand Rapids Business](#) mentioned Michigan Tech in a story about the ever-so-slight increase in total enrollment (less than 1%) seen by Michigan colleges and universities in fall 2023. MTU was highlighted as one of the seven public universities in the state that accounted for the enrollment increase.

Michigan Tech was mentioned in a [Chronicle of Higher Education](#) opinion piece analyzing the ranking methodology used by the Foundation for Individual Rights and Expression in its 2024 College Free Speech Rankings.

[WLUC TV6](#) and the [Daily Mining Gazette](#) covered the opening of Velodrome Coffee in the Van Pelt and Opie Library on Monday (March 4). Kay Oliver (AC) and students Alayna Mills (chemical engineering) and Rose Siebigteroth (computer science) were quoted by TV6 and student Raquel Carlson (biomedical engineering) was quoted by the DMG.

The [Salt Lake Tribune](#) mentioned Olympic biathlete and Michigan Tech alumna Deedra Irwin in a story discussing U.S. Biathlon's plans to grow awareness of the combined skiing and shooting sport in the U.S. Irwin was featured in last year's [Michigan Tech Magazine](#).

John Lehman (URE) was quoted by [UPword](#) in a story exploring why enrollment increases at Michigan Tech and Northern Michigan University outpaced those of larger colleges downstate in the 2022-23 academic year.

[MLive](#) mentioned Michigan Tech in a story about the U.S. Department of Defense's \$39.9 million award to Calumet Electronics to expand manufacturing of organic substrates, or high-density build-up substrates. The story noted MTU's \$838,000 grant to support semiconductor education and training programs, which was awarded by the Michigan Economic Development Corporation in 2023.


The [Daily Mining Gazette](#) covered the Western U.P. STEM Fair and Festival, held Saturday (March 16) at Michigan Tech. The event featured 40 projects from students in grades 4-8 from across the Western U.P.

[Lake Superior Magazine](#) mentioned the Department of Social Sciences, the Keweenaw Time Traveler Project and retired Professor Theresa Ahlborn (CEGE) in a short feature article highlighting a history video explaining how the Portage Lake Lift Bridge was constructed.

[Yahoo! Sports](#), the [Daily Mining Gazette](#), [FloHockey](#), Minnesota's [Star Tribune](#), the [Hockey News](#), [WLUC TV6](#) and the [Iron Mountain Daily News](#) mentioned Michigan Tech hockey's victory over Bemidji State University in the 2024 CCHA Mason Cup Championship game. The Huskies defeated the Beavers 2-1 on Friday (March 22).

[College Hockey News](#) quoted Joe Shawhan (ATH) and Michigan Tech hockey forward Kyle Kukkonen in a story about the lasting impression left by 2023-24's senior student-athletes on MTU's hockey program following the Huskies' season-ending 6-1 loss to Boston College last Friday (March 29) in the NCAA regional semifinal. MTU hockey was mentioned by almost 80 news outlets across the U.S. following the game, including the [Detroit Free Press](#), [Daily Mining Gazette](#), [WLUC TV6](#), [Boston Herald](#) and [Boston Globe](#).

E. Employee Safety Statistics

 EMPLOYEE SAFETY STATISTICS YEAR-TO-DATE Jan - March 2023/2024											
	Category	Years	Employee Classification								Total
			AFSCME	Faculty	Non-Exempt	POA	Professional	Student	Temporary	UAW	
Number of Recordable Injuries	Injury Only w/Medical - No Lost Time	2023	1	0	0	0	0	0	0	0	1
		2024	0	0	0	0	3	2	1	0	6
	Lost Time Cases	2023	3	0	0	0	0	1	0	0	4
		2024	3	0	0	0	0	0	1	0	4
	Restricted Work Cases	2023	1	0	0	0	0	0	0	0	1
		2024	1	0	0	0	0	0	0	0	1
	Occupational Safety and Health Administration (OSHA) Recordable Injuries (Total of above)	2023	5	0	0	0	0	1	0	0	6
2024		4	0	0	0	3	2	2	0	11	
Number of Days	Injury Lost Time ³	2023	20	0	0	0	0	2	0	0	22
		2024	154	0	0	0	0	6	0	0	160
	Restricted Work Days ³	2023	180	0	0	0	0	0	0	0	180
		2024	86	0	0	0	0	0	0	0	86
Hours Worked	Total Work Hours	2023	62,179	211,206	17,877	3,950	279,446	242,111	14,407	35,540	866,716
		2024	60,487	215,187	18,042	3,917	275,966	208,770	16,273	38,242	836,884
	Percentage of Work Hours	2023	7.2%	24.4%	2.1%	0.5%	32.2%	27.9%	1.7%	4.1%	100.0%
		2024	7.2%	25.7%	2.2%	0.5%	33.0%	24.9%	1.9%	4.6%	100.0%
Rates	Lost Time Case Rate ¹	2023	9.6	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.9
		2024	9.9	0.0	0.0	0.0	0.0	0.0	12.3	0.0	1.0
	Frequency Rate ² (Recordable)	2023	16.1	0.0	0.0	0.0	0.0	0.8	0.0	0.0	1.4
		2024	13.2	0.0	0.0	0.0	2.2	1.9	24.6	0.0	2.6

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 Unive

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
January 1, 2024 - February 29, 2024**

Date	Description	Amount
01/12/24	Industrial Deep Fat Fryer (Qty 2)	\$ 1,000.00
Total		\$ 1,000.00

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.

EERC 2nd floor Classroom Renovation

- Contract dates: May 9, 2024 – July 26, 2024
- Contract type: Construction
- Contract amount: \$977,400
- Funding source: Bonded
- Contractor: LR Contracting Inc. (Hancock, MI)

H. Summary of Scholarships, Awards, and Grants (Board Policy 9.3)

Placeholder

Board of Trustees Summary of Scholarships, Awards, and Grants

2023-24 Fall and Spring

	*TOTAL 23-24 Fall/Spring	
	# Students PAID	\$ Total PAID
INSTITUTIONAL		
GRANT ¹	2159	\$ 14,279,208.63
LOAN ²	40	\$ 111,312.00
SCHOLARSHIP ³	5002	\$ 45,940,711.19
**OTHER	167	\$1,728,628
TOTAL INST	\$62,059,860	
SPONSORED		
SCHOLARSHIP	1386	\$ 5,140,712.68
TOTAL SPONSORED	\$5,140,713	
FEDERAL		
GRANT	1229	\$ 6,122,503.00
LOAN	2772	\$ 25,666,411.00
WORK-STUDY ⁴	167	\$ 351,285.51
TOTAL FEDERAL	\$32,140,200	
STATE		
GRANT	1463	\$ 7,848,156.34
SCHOLARSHIP	2	\$ 6,000.00
TOTAL STATE	\$7,854,156	
EXTERNAL		
LOAN	931	\$ 17,357,648.00
SCHOLARSHIP	966	\$ 3,935,531.62
TOTAL EXTERNAL	\$21,293,180	
TOTAL AID		
	\$128,488,108	

*Numbers include aid paid for fall 2023 and spring 2024. Summer semester awarding is still in progress and ongoing.

**Includes Tuition Reduction Incentive Program, Senior Citizen credits, and Military Family Education Award.

¹ Grants are gift aid offered based on financial need.

² Loans consist of borrowed funds that must be repaid.

³ Scholarships are gift aid offered based on merit, financial need, or a combination of both.

⁴ Work-Study is a program that provides funding that students can earn through part-time employment.

Fund Name	Type	# PAID for 2324 Fall/Spring	\$ Amount PAID Fall/Spring
Diversity Incentive Grant	GRNT	11	\$ 201,725.00
Part-Time Enrollment Support	GRNT	21	\$ 16,684.37
Mich Indian Tuition Grant	GRNT	39	\$ 669,857.59
University Student Aid Grant	GRNT	2013	\$ 13,043,056.00
University Student Grant	GRNT	78	\$ 313,735.67
Marie Ryding Hardship Grant	GRNT	21	\$ 34,150.00
TECHAID Loan	LOAN	40	\$ 111,312.00
906 Scholarship	SCHL	122	\$ 107,952.35
AF Dedicated Award	SCHL	34	\$ 72,789.00
Air Force Room & Board	SCHL	3	\$ 26,104.00
AF Service Award	SCHL	14	\$ 57,211.00
Athletic Grant-A.D. Assistant	SCHL	18	\$ 41,725.00
Athletic Grant-eSports	SCHL	52	\$ 124,225.00
Athletic Grant-Football	SCHL	114	\$ 1,245,966.42
Athletic Grant-Hockey	SCHL	34	\$ 954,004.10
Athletic Grant-M Basketball	SCHL	19	\$ 429,331.01
Athletic Grant-Men CC & TF	SCHL	32	\$ 158,139.00
Athletic Grant-M Nordic Ski	SCHL	11	\$ 116,592.00
Athletic Grant-M Tennis	SCHL	10	\$ 159,200.00
Athletic Grant-Volleyball	SCHL	21	\$ 404,134.37
Athletic Grant-W Basketball	SCHL	15	\$ 388,670.90
Athletic Grant-Women CC & TF	SCHL	25	\$ 157,845.00
Athletic Grant-W Nordic Ski	SCHL	12	\$ 116,570.44
Athletic Grant-W Soccer	SCHL	29	\$ 389,773.00
Athletic Grant-W Tennis	SCHL	8	\$ 207,556.00
Army Room & Board	SCHL	4	\$ 25,041.00
Arctic Warrior Award	SCHL	16	\$ 137,100.00
Blizzard Scholarship	SCHL	4	\$ 7,000.00
COB Dean's Award	SCHL	37	\$ 385,000.00
COB Dean's Award	SCHL	2	\$ 3,000.00
VPA Talent Award	SCHL	46	\$ 43,000.00
Distinguished Leader Award	SCHL	280	\$ 275,000.00
Detroit Promise Scholarship	SCHL	3	\$ 27,357.00
FIRST Scholarship MI Tech	SCHL	29	\$ 104,000.00
GC Corporate GR Fellowship	SCHL	36	\$ 105,732.00
GC Corporate UG Scholarship	SCHL	1	\$ 6,500.00
Grad Sch Acad Excellence Award	SCHL	37	\$ 92,500.00
Husky Innovation Leaders Award	SCHL	91	\$ 126,500.00
Husky Investment Tournament	SCHL	19	\$ 19,000.00
International Ambassador Scholarship	SCHL	31	\$ 361,300.00
Impact Scholarship - COB	SCHL	47	\$ 147,936.00

Fund Name	Type	# PAID for 2324 Fall/Spring	\$ Amount PAID Fall/Spring
Leading Scholar Commended	SCHL	239	\$ 475,000.00
Leading Scholar Distinguished	SCHL	137	\$ 609,750.00
MI MTU Alumni Legacy Award	SCHL	635	\$ 275,800.00
MTU Partner Pathway Award	SCHL	20	\$ 19,500.00
Michigan Tech Transfer Achieve	SCHL	104	\$ 191,500.00
Michigan Tech Transfer Distinction	SCHL	203	\$ 757,666.00
National Business Scholars	SCHL	52	\$ 1,007,500.00
National Business Scholars	SCHL	7	\$ 14,000.00
National Copper Scholars	SCHL	102	\$ 935,000.00
National Gold Scholars	SCHL	204	\$ 2,649,458.00
National Platinum Scholars	SCHL	413	\$ 6,506,688.00
National Silver Scholars	SCHL	124	\$ 1,427,708.00
National Distinction Scholarship	SCHL	1	\$ 5,000.00
National Excellence Scholarship	SCHL	1	\$ 6,250.00
National Leading Scholar	SCHL	46	\$ 750,000.00
National Prominence Scholarship	SCHL	1	\$ 6,750.00
National Achievement Transfer	SCHL	14	\$ 56,000.00
National Distinction Transfer	SCHL	19	\$ 180,000.00
Presidential Copper Scholars	SCHL	234	\$ 224,500.00
Presidential Gold Scholars	SCHL	867	\$ 2,474,501.00
Presidential Platinum Scholars	SCHL	1126	\$ 5,942,750.00
Presidential Silver Scholars	SCHL	610	\$ 1,140,875.00
Presidential Achievement Scholarship	SCHL	4	\$ 4,500.00
Presidential Distinction Scholarship	SCHL	5	\$ 9,375.00
Presidential Leading Scholar	SCHL	121	\$ 1,160,000.00
University Room Scholarship	SCHL	9	\$ 62,775.00
MTU Leading Scholars Award	SCHL	46	\$ 1,519,437.00
Summer Youth Scholars Award	SCHL	37	\$ 81,000.00
Create Your Success Scholarship	SCHL	297	\$ 1,557,000.00
Supplemental University Student Award	SCHL	82	\$ 170,034.00
Michigan Tech Excellence Award	SCHL	2650	\$ 8,354,908.00
College Partner Pathway Award	SCHL	17	\$ 341,731.60
Tuition Reduction Incentive Program		139	\$ 1,516,255.64
Military Family Education Award		8	\$ 134,297.00
Senior Citizen Benefit		20	\$ 78,075.60