

Formal Session of the Board of Trustees April 25, 2025 9:00 a.m. – 11:00 a.m. Location: MUB Ballroom B Public Meeting

Call to Order Jon Jipping, Chair

- II. Roll Call Sarah Schulte, Secretary
- **III.** Confirm Agenda Jon Jipping, Chair

IV. Opening Remarks

- A. Opening Remarks of the Board Chair Jon Jipping, Chair
- B. Opening Remarks of the University President Richard Koubek, President

V. Public Comment Period

VI. Committee Reports

- A. Academic Affairs Committee John Bacon, Committee Chair
- **B.** Audit and Finance Committee Jeff Littmann, Committee Chair

C. Leadership Committee

Monique Wells, Committee Chair

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 Affairs

VIII. Action and Discussion Items

- A. Employee Recognition Richard Koubek, President
- **B.** Tenure-Track Appointments Not Involving Tenure and/or Promotion Andrew Storer, Provost and Vice President for Academic Affairs
- C. Appointments Involving Tenure and/or Promotion Andrew Storer, Provost and Senior Vice President for Academic Affairs
- D. Promotions Andrew Storer, Provost and Senior Vice President for Academic Affairs
- E. Emeritus Rank Andrew Storer, Provost and Senior Vice President for Academic Affairs
- F. Appointment with Tenure Amy Landis, Chemical Engineering Andrew Storer, Provost and Senior Vice President for Academic Affairs
- G. Approval of Revision to Board Policy 8.8 Student Activity Fee Laura Bulleit, Vice President for Student Affairs
- H. FY 25-26 General Fund Budget Nicholas Stevens, Treasurer
- I. Resolution for Approval of External Auditor Nicholas Stevens, Treasurer
- J. Appointment of Treasurer Nicholas Stevens, Treasurer

IX. Reports

- A. Research Presentation Simon Carn, Distinguished Professor, Geological and Mining Engineering and Sciences
- B. Provost Report Andrew Storer, Provost & Sr. Vice President for Academic Affairs
- C. Undergraduate Student Government

Ford Schoonover, USG President

- D. Graduate Student Government Lauren Sprague, President
- E. University Senate Robert Hutchinson, President

X. Informational Items

- A. Analysis of Investments
- **B.** Sponsored Programs
- C. Advancement & Alumni Relations
- D. Media Coverage
- E. Employee Safety Statistics
- F. Disposal of Surplus Property
- G. Summary of Scholarships, Awards, and Grants (Board Policy 9.3)
- H. Contracts over \$500,000
- XI. Date for Next Formal Meeting: July 31, 2025
- XII. Other Business
- XIII. Adjourn

Agenda documents to follow.

VII. Consent Agenda

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

BOARD OF TRUSTEES OFF-PAYROLL REPORT

(February 2, 2025 – March 29, 2025)

	Retirements					
Last Name	First Name	Class	Department	Title	Most Recent Hire Date	Term Date
Yang	Song-Lin	FP	Mechanical & Aerospace Engineering	Professor	08/28/1989	01/01/2025
Lukowski	John	FF	Electrical & Computer Engineering	Associate Professor	08/27/1984	02/28/2025
Berryman	Donna	AF	Facilities Management	Custodian	01/25/2006	03/03/2025
LeMay	John	AF	General Counsel	Stores Clerk	01/11/1999	03/15/2025

	Off Payroll					
Last Name	First Name	Class	Department	Title	Most Recent Hire Date	Term Date
Foguth	Nicole	PF	Residence Housing	Marketing & Communications Manager	01/09/2023	02/21/2025
Johnson	Bonnie	PF	Admissions	Manager of Admissions Operations	03/04/2024	02/21/2025
Valleau	Matthew	PF	Admissions	Assistant Director of Admissions Visitor Engagement	08/08/2022	03/01/2025
Nielsen	Carrie	PF	Office of Advancement	Principal Gifts Associate	02/20/2023	03/02/2025
Bailey	Sharon	NF	Facilities Management	Central Energy Plant Operator	07/06/2015	03/03/2025
Johnson	Karen	PF	University Marketing & Communications	College Marketing & Communications Manager	06/19/2017	03/06/2025
Rankinen	Jason	AF	Residential Dining	Food Service Helper	08/21/2023	03/12/2025
Saari	Olivia	UF	Human Resources	Senior Office Assistant	05/30/2023	03/28/2025

C. Funding Productivity Report

Michigan Technological University Michigan Tech Fund Fundraising Productivity Report - INTERNAL

Fiscal Year 2025 through 3/31/2025 Compared to Prior Fiscal Year

	FY 2025					FY 2	2024			
Source	YTD Total	Adjustment	FY Goal	% of Goal	Source	YTD Total	Adjustment	۶۲ ۴ Goal	% of Goal	FY Total
Major Gifts (Over 10K)	\$3,119,768		4.68	67%	Major Gifts (Over 10K)	\$3,061,120		7.96	38%	5,722,932.75
Planned Gift Commitments	\$12,757,096		15.50	82%	Planned Gift Commitments	\$16,699,554		13.35	125%	4,369,568.05
Annual Giving (10K or less)	\$1,467,183		2.43	60%	Annual Giving (10K or less)	\$2,151,991		2.37	91%	8,420,460.24
Subtotal: Ind Giving	\$17,344,048		22.61	77%	Subtotal: Ind Giving	\$21,912,666		23.68	93%	18,512,961.04
Corporate Giving	\$1,869,151		2.56	73%	Corporate Giving	\$2,007,993		2.50	80%	3,118,139.99
Foundation & Other Org Giving	\$2,486,364		5.00	50%	Foundation & Other Org Giving	\$5,796,393		3.00	193%	3,905,948.85
Corporate Sponsored Research	\$12,118,187		13.75	88%	Corporate Sponsored Research	\$9,054,409		13.67	66%	14,942,356.00
FUNDRAISING TOTAL	\$33,817,749		43.92	77%	FUNDRAISING TOTAL	\$38,771,460		42.85	90%	40,479,405.88

D. Michigan Council for the Arts and Cultural Affairs

VII-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:

- Charlie Berens comedian (September 20, 2025)
- Uncle Jumbo, Grammy-nominated musician (October 16, 2025)
- Nutcracker! Magical Christmas Ballet, dance, and orchestra performance (December 5, 2025)
- National Geographic LIVE: Earth After Dark (January 16, 2026)
- Ben Mulwana, singer-songwriter (February 13, 2026)
- Dinosaur World LIVE!, family performance (February 24, 2026)
- Gaudete Brass Quintet (March 19, 2026)
- Step Afrika! (March 22, 2026)

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.

VIII. Action and Discussion Items

A. Employee Recognition Richard Koubek, President

VIII-A. EMPLOYEE RECOGNITION

For our employees that have worked for Michigan Tech for 35 or more years and in recognition of their distinguished service and outstanding contributions to Michigan Tech, the Board would like to honor them with a resolution of appreciation.

RECOMMENDATION: That the Board of Trustees adopts the Resolution of Appreciation for the following individual:

- 1. Song-Lin "Jason" Yang, 36 years of service, Professor Emeritus, Mechanical & Aerospace Engineering
- 2. John Lukowski, 41 years of service Associate Professor, Electrical & Computer Engineering

B. Tenure-Track Appointments Not Involving Tenure and/or Promotion Andrew Storer, Provost and Vice President for Academic Affairs

VIII-B. 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 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 and Senior Vice President for Academic Affairs
DATE:	March 21, 2025
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 25, 2025.

Appointment without Tenure for Two Years Effective August 11, 2025

Jun Dai	Assistant Professor	College of Business
Nathir Rawashdeh Ronghua Xu	Assistant Professor Assistant Professor	Applied Computing Applied Computing
Xinyu Lei	Assistant Professor	Computer Science
Chunxiu "Traci" Yu	Assistant Professor	Biomedical Engineering
Yixin Liu	Assistant Professor	Chemical Engineering
Abdolmajid Erfani	Assistant Professor	Civil, Environmental & Geospatial Eng.
Ishi Keenum	Assistant Professor	Civil, Environmental & Geospatial Eng.
Quang Tran	Assistant Professor	Civil, Environmental & Geospatial Eng.
Bo Xiao	Assistant Professor	Civil, Environmental & Geospatial Eng.
Hongyu An	Assistant Professor	Electrical & Computer Engineering
Anna Stuhlmacher	Assistant Professor	Electrical & Computer Engineering
Alexandra Glover	Assistant Professor	Materials Science & Engineering
Joshua Mueller	Assistant Professor	Materials Science & Engineering
Sriram Vijayan	Assistant Professor	Materials Science & Engineering
Jung Yun Bae	Assistant Professor	Mechanical & Aerospace Engineering
Shawn Brueshaber	Assistant Professor	Mechanical & Aerospace Engineering
Ana Dyreson	Assistant Professor	Mechanical & Aerospace Engineering
Susanta Ghosh	Assistant Professor	Mechanical & Aerospace Engineering
Vijaya V. N. Sriram Malladi	Assistant Professor	Mechanical & Aerospace Engineering
		Mechanical & Aerospace Engineering
Bhisham Sharma	Associate Professor	Mechanical & Aerospace Engineering
Valoree Gagnon	Assistant Professor	College of Forest Resources & Env. Sci.
Robert Larson	Assistant Professor	Biological Sciences
Jill Olin	Assistant Professor	Biological Sciences
Trista Vick-Majors	Assistant Professor 011	Biological Sciences

Richard Canavez	Assistant Professor	Humanities
James Hammond	Assistant Professor	Humanities
Tiffany Lewis	Assistant Professor	Physics
Jason Harman	Associate Professor	Psychology & Human Factors

Appointment without Tenure for One Year – Extension to Tenure Clock Effective August 11, 2025

Elham Asgari	Assistant Professor	College of Business
Jiehong Guo	Assistant Professor	Civil, Environmental & Geospatial Eng.
Xin Xi	Assistant Professor	Geological & Mining Eng. & Sciences
Parisa Abadi	Assistant Professor	Mechanical and Aerospace Engineering
Paul Goetsch	Assistant Professor	Biological Sciences
Byung-Jun Kim	Assistant Professor	Mathematical Sciences
Qian Zhang	Assistant Professor	Mathematical Sciences

Appointment without Tenure for One Year Effective August 11, 2025

Daniel Dowden

Assistant Professor Civil, Environmental & Geospatial Eng.

Formal notification of these decisions will be sent to each individual Wednesday, May 7, 2025.

APPROVED:

Jell.

Richard Koubek, President

3/24/25

Date

C. Appointments Involving Tenure and/or Promotion Andrew Storer, Provost and Senior Vice President for Academic Affairs

VIII-C. 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 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 21, 2025

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 25, 2025 meeting. If approved, the promotions will be effective August 11, 2025.

Promotion from Assistant Professor without Tenure to Associate Professor with Tenure

Jenny Apriesnig	College of Business
Laura Connolly	College of Business
Weihua Zhou Jianhui Yue	Applied Computing Computer Science
Tara Bal	College of Forest Resources & Environmental Science
Jared Wolfe	College of Forest Resources & Environmental Science
Paulus van Susante	Mechanical & Aerospace Engineering
Gordon Paterson	Biological Sciences
Oren Abeles	Humanities
Erich Petushek	Psychology & Human Factors
Mark Rhodes	Social Sciences
	iate Professor without Tenure to Professor with Tenure
Julia Burton	College of Forest Resources & Environmental Science
Steven Voelker	College of Forest Resources & Environmental Science
Jennifer Nish	Humanities

APPROVED:

Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2025.04.04 17:01:04 -04'00'

Date

INFORMATION SHEET FOR BOARD OF TRUSTEES JENNY L. APRIESNIG Michigan Technological University

Jenny L. Apriesnig, who is currently an assistant professor of economics without tenure in the College of Business, is being considered for promotion to associate professor of economics with tenure in the College of Business.

Academic Degrees:

Ph.D.	2017	Colorado State University, Fort Collins, CO
M.S.	2013	University of Wyoming, Laramie, WY
B.S.	2010	University of Wisconsin – Superior, Superior, WY

Professional Record:

2018-Present	Assistant Professor (without tenure), College of Business
2017-2018	Postdoctoral Research Associate, Arizona State University, Tempe, AZ

Summary of Accomplishments:

<u>Teaching</u>

While at Michigan Tech Dr. Apriesnig has taught four different courses across the graduate and undergraduate curriculum. She contributes to the College of Business goal of offering online graduate programs by also teaching across modes. She also teaches across all classroom modes: face-to-face, asynchronous online, and hybrid (synchronously teaching face-to-face and remoted students). Across the 20 sections she has taught at Michigan Tech, she has received an average score across the seven dimensions of student evaluations of 4.29/5.00. To address the challenges of teaching in a hybrid environment, Apriesnig submitted a proposal and received \$1,800 to purchase electronic tablets for the remote students. This allows all students in the class to interact and work on math-based problems together. This effort was recognized by a student on their early- term survey, *"I think that the way this class is run currently is the best use of online and in-person integration that I have seen at Tech. I have never seen online students engage with in-person students before, especially showing their work (when we work on practice problems). Overall, I think this method is cutting edge for what I have seen at Tech before."*

Outside of the classroom, Dr. Apriesnig is currently serving as the Graduate Program Director of the Applied Natural Resource Economics master's program. She also advised the student organization, Collegiate DECA, for nearly three years, and has helped advise over 10 undergraduate students in research.

• <u>Research/Scholarly Activity</u>

Dr. Apriesnig has 10 research publications, 9 of which were published while at Michigan Tech. In total, her publications have been cited over 293 times. Dr. Apriesnig is active in funded research which includes 6 externally funded projects and 2 internally funded projects. These team-based funded projects have resulted in over \$4 million in research expenditures across the university.

Two of the projects, one funded by Environmental Protection Agency and another funded by the U.S. Department of Energy, are ongoing projects with interdisciplinary teams that will produce outputs

Page 1 of 2

Version: July 1, 2021

suitable for scholarly publication. All the projects allow Dr. Apriesnig to contribute to Michigan Tech's goals of increasing external support, scholarly activities, interdisciplinary work, and promoting economic development and social progress. In addition to the ongoing funded projects, Dr. Apriesnig also has six papers in progress, five of which she plans to submit in the next year.

<u>Service</u>

Dr. Apriesnig provides service at the college, university, and professional levels. In the College of Business she shas served on the Economics, Graduate, and Strategic Planning committee. She has chaired the Economics Committee, and she recently started serving as the Graduate Program Director of the Applied Natural Resource Economics master's program. Her college service also includes updating the economics curriculum, drafting a strategic plan for the economics program, and participating in and planning retention and recruitment events for the economics program. At the university level, she served on an essential education working group, advised a student organization, and has served on panels hosted by the Vice President of Research office. In the profession, she has contributed to service through reviews of papers, conference abstracts, and grant proposals, has chaired conference sessions, and helped organize the inaugural workshop on, "Valuation of the Great Lakes Fisheries and Aquatic Ecosystem Services."

• <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>

Publications

Campbell, V.L., Thompson, J.M., **Apriesnig, J.L.**, Pendell, D.L., and G.L. Tonsor. 2024. Producer perceptions of current U.S. livestock indemnity policy. *Applied Animal Science*. 40(4): 542-548.

- Apriesnig, J.L., Connolly, L., Xavier-Oliveira, E., and K.E. Halvorsen. 2024. Regional Economic Impact of University Research Expenditures. *Studies in Higher Education*. 1-26.
- Chaudhari, U.S., Sedaghatnia, K., Reck, B.K., Maguire, K., Johnson, A.T., Watkins, D.W., Handler, R.M., Hossain, T., Hartley, D.S., Thompson, V.S., Peralta, A., **Apriesnig, J.L.**, and D.R. Shonnard. 2024.
 PET and Polyolefin Plastics Supply Chains in Michigan: Present and Future Systems Analysis of Environmental and Socio-economic Impacts. *Frontiers in Sustainability*. 5.
- Apriesnig, J.L., Warziniack, T., Finnoff, D.C., Zhang, H., Lee, K.D., Mason, D., and E. Rutherford. 2022. The Consequences of Misrepresenting Feedbacks in Coupled Human and Environmental Models. *Ecological Economics*. 195.
- Lee, K., **Apriesnig, J.**, and H. Zhang. 2021. Socio-ecological evaluation of bioeconomic fisheries management: the case of Yellow Perch in Lake Erie. *Frontiers in Ecology and Evolution.* 9.
- Campbell, V.L., Thompson, J.M., **Apriesnig, J.L.**, Pendell, D.L., and G.L. Tonsor. 2021. Poultry Producer's Willingness to Invest in On-Farm Carcass Disposal: A Study on U.S. Poultry. *Journal of Applied Poultry Research*. 30(4).
- Palm, K.E., Campbell, G.A. and J.L. Apriesnig. 2021. Management of Local Fisheries: A Case Study of Laoang, Northern Samar, Philippines. *Marine Policy*. 132.
- Apriesnig, J.L., Manning, D.T., Suter, J.F., Magzamen, S., and J.E. Cross. 2020. Academic Stars and Energy Stars, an Assessment of Student Academic Achievement and School Building Energy Efficiency. *Energy Policy.* 147.
- Vongsikeo, V., Breffle, W.S., **Apriesnig, J.L.**, and B.D. Barkdoll. 2020. The Economic Value of Carbon Sequestration Through Tree Planting in Laos. *Asian Development Policy Review*. 8(2): 102-111.

INFORMATION SHEET FOR BOARD OF TRUSTEES LAURA CONNOLLY Michigan Technological University

Laura Connolly, who is currently an assistant professor of economics without tenure in the College of Business, is being considered for promotion to associate professor of economics with tenure in the College of Business.

Academic Degrees:

Ph.D.	2018	Economics, University of Alabama, Tuscaloosa, AL
B.A.	2013	Mathematics and Economics, The University of North Carolina at Chapel Hill, Chapel
		Hill, NC

Professional Record:

2018 – present	Assistant Professor (without tenure), College of Business, Michigan Technological University
2016	American Economic Association Summer Fellow, United States International Trade Commission, Washington, DC

Summary of Accomplishments:

<u>Teaching</u>

Dr. Connolly has significantly supported MTU's mission to educate students, teaching more than 2,100 students across 23 undergraduate sections. She relies heavily on student engagement and connection to real world examples in the classroom. The majority of her teaching assignment has been Economic Decision Analysis (EC 3400; 17 sections, average of 118 students through Spring 2024). She integrates personal finance topics throughout the class, equipping students with the knowledge to make sound economic decisions and to succeed financially with their degree far beyond their time at MTU. Although EC 3400 is the largest class in the College of Business, Dr. Connolly's average student evaluation in the course is a 4.53/5 and her evaluations were in the top 10% across campus three times.

Dr. Connolly's teaching effectiveness is even more evident in smaller classroom settings such as Microeconomic Theory (EC 3002; 3 sections, average of 30 students) and Labor Economics (EC 4710; 3 sections, average of 14 students). In both courses, she continues to emphasize the connection between classroom content and real-world economic conditions and public policies, updating content and assignments each year to reflect current events. Her average student evaluations are 4.65/5 in Microeconomic Theory and 4.85/5 in Labor Economics. Dr. Connolly's student evaluations in Labor Economics were in the top 10% across campus twice, including an evaluation of 4.98/5 in Spring 2021 during the pandemic. In further recognition of her teaching effectiveness, she was nominated by the College of Business Dean for the Dean's Teaching Showcase in 2020 and recognized by the Provost for shifting effectively to remote learning in Spring 2020.

• <u>Research/Scholarly Activity</u>

Dr. Connolly is an applied microeconomist with research expertise in labor and demographic economics. She has increasingly produced research outputs at MTU, including both peer-reviewed publications and external funding. Since 2022, she has published five peer-reviewed articles in high-quality journals (all ranked by the Australian Business Dean's Council), including a solo-authored paper in *Labour Economics*.

Her research has been cited 69 times, with 97% of those citations occurring since 2019. Her published work explores labor market differences across populations and the impacts of public policy on labor market dynamics, with an emphasis on gender. For example, Dr. Connolly has analyzed the gender wage gap, women's underrepresentation in management positions, and how policy changes impact labor market dynamics for men and women. In ongoing work, she continues to investigate women's underrepresentation in management positions and explores how women adjust their labor supply in response to spousal job loss. In recognition of her scholarly work on the gendered impacts of trade, Dr. Connolly was invited to present at the U.S. International Trade Commission's seminar series in Fall 2023.

Dr. Connolly has also collaborated with others in the College of Business to establish an expertise in economic impact studies and a track record of externally funded research (over \$200,000). She has submitted twelve grant proposals (9 external; 3 internal) and received funding for seven projects (4 external; 3 internal). Most of the funded projects are economic impact studies focused on local economic development in Michigan's Upper Peninsula, such as the opening or closure of a business, and are often sponsored by or in partnership with local organizations. These projects contribute to both the College of Business' emphasis on stakeholder engagement and societal impact, as well as the university's goal to foster social development and economic growth for our state and local community. Dr. Connolly continues to seek funding for her work, with one proposal under review and two active grants.

• <u>Service</u>

Dr. Connolly is significantly involved in service for the economics program, College of Business, and university. She co-led the efforts to update the undergraduate economics curriculum, leading to the creation of four pathways within the program, and is actively involved with Essential Education. She serves on one College of Business committee per year, was appointed chair of the External Engagement Committee for AY 2023-24, and meaningfully contributes to the life of the college. Dr. Connolly has also served on three faculty search committees (two economics, one environmental policy), four university committees/working groups, and one dissertation committee at MTU. She further contributes to student-oriented activities across campus through consistent volunteering, including Career Closet, mentoring undergraduate student research projects (SURF and McNair Scholars), and advising undergraduate student organizations (Phi Kappa Tau). Beyond the university, Dr. Connolly is a volunteer member on Breakwater Credit Union's audit supervisory committee. She also contributes to the economics profession by regularly reviewing journal articles and serving as a discussant and session chair at conferences.

- Recent and Significant Publications/Exhibitions/Performances/Etc.
 - 1) Apriesnig, J., Connolly, L., Xavier-Oliveira, E., and Halvorsen, K. (2024) "Regional Economic Impact of University Research Expenditures." *Studies in Higher Education*.
 - 2) Connolly, L., Hampton, M., and Lenhart, O. (2024) "Labor Mobility and the ACA: Heterogeneous Impacts of the Preexisting Conditions Provision." *Journal of Policy Analysis and Management*.
 - 3) Connolly, L. and Connolly, J. (2023) "Understanding the Gender Wage Gap Among City Managers." *Journal of Economic Insight*.
 - 4) PI, Regional Economic Impacts of Dredging the Menominee River Harbor (with J. Apriesnig and T. White), Funded by the City of Menominee (2023); \$69,218.
 - 5) Yang, L. K., Connolly, L., and Connolly, J. (2022) "Is There a Glass Cliff in Local Government Management? Examining the Hiring and Departure of Women." *Public Administration Review*.
 - 6) Connolly, L. (2022) "The Effect of a Trade Shock on Gender-Specific Labor Market Outcomes in Brazil." *Labour Economics*.

INFORMATION SHEET FOR BOARD OF TRUSTEES Weihua Zhou Michigan Technological University

Weihua Zhou, a tenure-track assistant professor in the Department of Applied Computing in the College of Computing at Michigan Tech, is being considered for promotion to associate professor with tenure.

Academic Degrees:

Ph.D.	2012	Southern Illinois University Carbondale, Carbondale, IL
Ph.D.	2008	Wuhan University, Wuhan, China
B.S.	2003	Wuhan University, Wuhan, China

Professional Record:

2019 – present	Tenure-Track Assistant Professor, Department of Applied Computing, Michigan Technological University
	Tenure-Track Assistant Professor, University of Southern Mississippi, Long Beach, MI
2012 – 2015	Post-Doctoral Fellow, School of Medicine, Emory University, Atlanta, GA

Summary of Accomplishments:

<u>Teaching</u>

Dr. Zhou has taught 13 lecture courses at MTU. <u>His teaching evaluation is 4.43 on average</u>. In May 2023, he received <u>a "top-10%" letter</u> from the MTU provost for the course SAT 4650 he taught.

Students that Dr. Zhou mentored/ supported at MTU

- Dr. Zhou graduated **3 PhD students** (Haipeng Tang, Zhuo He, and Chen Zhao) and co-mentored 5 PhD students. He has two new PhD students (Rochak Dhakal and Abhilash Das) starting from fall 2024.
- Dr. Zhou supported 6 master's students (Pukar Baral, Anjum Shaik, Kristoffer Larsen, Goutham Thota, Chibuike Nwokeafor, Ifunanya Ezeumeh) and 8 undergraduate students (Kristoffer Larsen, Drew Pienta, Gabriel Baquerizo, Noah Painter, Sean Phelan, Aili Toyli, Hannah Kilpatrick, Kiana Prany).

Highlights. (1) Chen (2019-2023) received **Michigan Tech Dean's Award for Outstanding Scholarship** and is working as a **Tenure-Track Assistant Professor at Kennesaw State University** Department of Computer Science. (2) Chen, Kristoffer, and Pukar received the **MTU HRI Graduate Fellowship** awards. (3) Gabriel and Sean received the **MTU Summer Undergraduate Research Fellowship (SURF)** awards. Drew, Kris, Gabriel, Sean, and Aili received the **MTU Undergraduate Research Internship Program (URIP)** awards.

• <u>Research/Scholarly Activity</u>

Dr. Zhou's research is dedicated to medical imaging and informatics, particularly, designing and developing machine learning-based approaches to integrate multi-source information to optimize clinical decision making and improve patient management of complicated chronic diseases.

- Three projects in Dr. Zhou's lab are being supported by NIH. <u>His total externally funded budget is</u> \$1,026,492 (from NIH: \$1,008,100) after he joined Michigan Tech.
- Research publications: Dr. Zhou has published 90 journal papers and 12 conference papers. <u>57 peer-reviewed journal papers were published after he joined Michigan Tech</u>. His papers were published on top-tier journals, including *Information Fusion* (1 count, IF 14.7), *Pattern Recognition* (2 counts, IF 7.5), *European Journal of Nuclear Medicine and Molecular Imaging* (2 counts, IF: 8.6), *Computers in Biology and Medicine* (5 counts, IF: 7.0), and *Journal of Nuclear Cardiology* (27 counts, IF: 3.0).

• Dr. Zhou's total citations: <u>1,851 (as of 08/03/2024)</u>. See his <u>Google Scholar Link</u>.

One of the university's strategic research goals is to conduct impactful, multi-disciplinary research. Dr. Zhou's research aligns perfectly with this objective. Moving forward, he will continue to contribute to this goal by conducting impactful and multi-disciplinary research that aims to improve the quality of life.

• <u>Service</u>

Professional service:

- Reviewed 39 papers for academic journals including IEEE Transactions on Medical Imaging, Pattern Recognition, Medical Image Analysis, and Journal of Nuclear Cardiology, from 2017 to 2024.
- > Reviewed grant proposals for AHA and Institute of Clinical and Translational Science (ICTS) at UCI.
- > Invited to give research talks for ASNC 2019 and SNMMI 2023.
- > Translated the abstracts of 34 selected papers for the Journal of Nuclear Cardiology from 2016-2023.

University and department service:

- Managing the Department of Applied Computing GPU Cluster, since March 2024.
- Served in 1) the faculty search committees (Cybersecurity and Health Informatics) (2023 and 2024);
 2) department charter committee (spring 2024);
 3) the Graduate Dean's Award Awards Advisory Committee 2020-2022.

Dr. Zhou's dedication to service in the past is evident in his contributions to the department, university, and academic community. He is committed to continuing to provide valuable service and contribute to the intellectual growth and development of our institution and the wider academic community.

• <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>

Scientific research grants that Dr. Zhou would like to highlight:

NIH 1R15HL172198 (PI: Weihua Zhou, total budget: \$427,307; <u>link</u>) 12/20/2023-11/30/2026 Title: Multi-modality image fusion to improve coronary revascularization in patients with stable coronary artery disease

NIH 1R15HL173852 (PI: Qiuying Sha, total budget: \$429,153; <u>link</u>) 08/01/2024- 07/31/2026
 Title: Integrative analysis of electrical and mechanical dyssynchrony to improve cardiac resynchronization therapy (<u>Note: **Dr. Zhou was the original PI on this proposal** when it was submitted to NIH. However, his other R15 [1R15HL172198] is funded and NIH's policy only allows each PI to have one active R15, so the PI has been transferred to Dr. Sha)
</u>

Publications that Dr. Zhou would like to highlight:

- Zhao C, Keyak JH, Cao X, Sha Q, Tian Q, Qiu C, Su R, Wu L, Luo Z, Zhao L, Shen H, Deng HW*, Zhou W*. Multi-view information fusion using multi-view variational autoencoder to predict proximal femoral fracture load. *Frontiers in Endocrinology Sec. Bone Research* (IF: 5.2). 2023. (<u>link</u>) (the first study on information fusion between medical images and genomics for hip fracture risk prediction)
- Zhao C, Xu Z, Jiang J, Esposito M, Pienta D, Hung GU, Zhou W*. AGMN: Association Graph-based Graph Matching Network for Coronary Artery Semantic Labeling on Invasive Coronary Angiograms. *Pattern Recognition* (IF: 8.0). 2023. (<u>link</u>) (the first study on graph machine learning for ICA semantic segmentation to improve patient management of coronary artery disease)
- 3. Fernandes F¹, Larsen K¹ (Dr. Zhou's undergraduate student RA), He Z, Nascimento E, Peix A, Sha Q, Paez D, Garcia EV, Zhou W*, Mesquita CT*. A new method using machine learning to integrate ECG and gated SPECT MPI for Cardiac Resynchronization Therapy Decision Support. *European Journal of Nuclear Medicine and Molecular Imaging* (IF: 9.1). 2023. (link) (the first study using machine learning for ECG-SPECT information fusion to guide CRT for patients with heart failure)
- Zhao C, Xu Y, He Z, Tang J, Zhang Y, Han J, Shi Y*, **Zhou W***. Lung Segmentation and Automatic Detection of COVID-19 Using Radiomic Features from Chest CT Images. *Pattern Recognition* (IF: 8.0). 2021. (<u>link</u>) (citation: 88) (one of our major contributions using AI to detect COVID-19 infection)

INFORMATION SHEET FOR BOARD OF TRUSTEES Jianhui Yue Michigan Technological University

Jianhui Yue, who is currently an assistant professor of computer science without tenure in the Department of Computer Science in the College of Computing, is being considered for promotion to associate professor of computer science with tenure in the Department of Computer Science in the College of Computing.

Academic Degrees:

Ph.D.	2012	University of Maine, Orono, ME
M.S.	2003	Huazhong University of Science and Technology, Wuhan, China
B.S.	1996	National University of Defense and Technology, Changsha, China

Professional Record:

2017 – present	Assistant Professor (without tenure), Department of Computer Sciences, Michigan
2017 present	Technological University
2015 – 2017	Visiting Assistant Professor, Department of Computer Science and Software
2013 - 2017	Engineering, Miami University, Oxford, OH
2014 – 2015	Post-Doctoral Fellow, Auburn University, Auburn, AL
2012 -2014	Post-Doctoral Fellow, University of Maine, Orono, ME
2006-2012	Research Assistant, University of Maine, Orono, ME
2003 - 2006	Lecturer, School of Software Engineering, Sichuan University, Chengdu, China
2000 - 2003	Research Assistant, Huazhong University of Science and Technology, Wuhan, China

Summary of Accomplishments:

- <u>Teaching</u>
 - Jianhui has shown an outstanding commitment to service within both the university and the broader academic community. As a web chair for the International Conference on Networking, Architecture, and Storage (NAS) for multiple years, Jianhui has played a key role in maintaining and improving the conference infrastructure, including migrating the website to a cloud platform and overseeing the paper submission systems. This work, conducted despite the challenges of the COVID-19 pandemic, demonstrates Jianhui's dedication to supporting international conferences in the field. Additionally, Jianhui's extensive editorial and review work for prestigious journals, such as *ACM Transactions on Architecture and Code Optimization* and *IEEE Transactions on Computers*, further highlights their commitment to advancing scholarly research across a wide range of topics, from high-performance computing to machine learning and bioinformatics.
 - At the university level, Jianhui has made significant contributions through departmental service, notably as a member of the Computer Science Undergraduate and ABET Committees. Jianhui's efforts in shaping curriculum and managing accreditation materials have been vital to maintaining the department's academic quality and rigor. Given this demonstrated leadership and consistent engagement, Jianhui is well-positioned to continue excelling in service at both departmental and international levels. Jianhui's ability to manage multiple responsibilities across professional societies, academic editorial work,

and university service makes them an invaluable asset to the university and the wider intellectual community.

- <u>Research/Scholarly Activity</u>
 - Jianhui's research demonstrates a clear trajectory of excellence in the fields of computer systems design and optimization, particularly in advancing the performance of emerging persistent memory and designing systems that support data- and compute-intensive workloads through innovative technologies like near-data processing. Since joining MTU, Jianhui has made significant contributions to these areas, as evidenced by the publication of twelve papers in highly regarded conferences and journals. One notable achievement is the nomination of a paper for the Best Paper Award at the prestigious HPCA international conference, highlighting Jianhui's contributions to high-performance computing. This broad research impact is further demonstrated by publications in leading venues such as IEEE Transactions on Emerging Topics in Computing, IEEE Transactions on Computers, and ACM Transactions on Architecture and Code Optimization.
 - Jianhui's research closely aligns with the university's strategic plan to promote and reward scholarly excellence, contributing to the goal of fostering high-impact research. The publications in premier venues and the Best Paper Award nomination reflect both the quality and recognition of Jianhui's work, elevating the university's aspirations for excellence. Moving forward, Jianhui's future research remains aligned with the university and department's priorities, focusing on optimizing systems for data- and compute-intensive workloads, including machine learning. These research areas address critical challenges in data-driven industries, further enhancing the university's reputation for producing impactful and far-reaching innovations.

• <u>Service</u>

Jianhui has shown strong commitment to service at both university and international levels. As web chair for the International Conference on Networking, Architecture, and Storage (NAS), Jianhui improved conference infrastructure by migrating the website to a cloud platform and managing paper submissions, even during the COVID-19 pandemic. Jianhui's editorial and review work for leading journals, such as *ACM Transactions* and *IEEE Transactions*, reflects dedication to advancing research in high-performance computing and related fields. At the university, Jianhui has contributed significantly through roles on the Computer Science Undergraduate and ABET Committees, helping shape curriculum and maintain academic standards. With proven leadership, Jianhui is well-positioned to continue excelling in service roles across academic and professional communities.

• <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>

1) "FlashGNN: An In-SSD Accelerator for GNN Training", Proceedings of 2024 IEEE International Symposium on High-Performance Computer Architecture (HPCA'24))

2) "Funcstore: Resource efficient ephemeral storage for serverless data sharing", Proceedings of the 38th Symposium on Mass Storage Systems and Technologies (MSST'24)

3) "RACE: An Efficient Redundancy-aware Accelerator for Dynamic Graph Neural Network", ACM Transactions on Architecture and Code Optimization 2023

4) "Object Fingerprint Cache for Heterogeneous Memory System", IEEE Transactions on Computers 2023

5) "FlashWalker: An in-storage accelerator for graph random walks", Proceedings of 2022 IEEE

International Parallel and Distributed Processing Symposium (IPDPS'22)

INFORMATION SHEET FOR BOARD OF TRUSTEES TARA L. BAL Michigan Technological University

Tara L. Bal, who is currently an assistant professor of forest health without tenure in the College of Forest Resources and Environmental Science, is being considered for promotion to associate professor of forest health with tenure in the College of Forest Resources and Environmental Science.

Academic Degrees:

Ph.D.	2013	Michigan Technological University, Houghton, MI
M.S.	2007	Michigan Technological University, Houghton, MI
B.S.	2004	Purdue University, West Lafayette, IN

Professional Record:

2020 – present	Assistant Professor (without tenure), Master of Forestry Degree Program Director, CFRES, Michigan Technological University
2014 2020	Research Assistant Professor (without tenure), Master of Forestry Degree Program
2014 – 2020	Director, SFRES/CFRES, Michigan Technological University
2009 – 2013	Graduate Research Assistant, SFRES, Michigan Technological University
2007 – 2009	Research Technician, SFRES, Michigan Technological University
2005-2007	Graduate Research Assistant, SFRES, Michigan Technological University
2004-2005	Forester II, Texas Forest Service, Palestine TX

Summary of Accomplishments:

<u>Teaching</u>

Dr. Bal's instruction at MTU has been exemplary, as evident from student teaching evaluations from 2020-present where she regularly receives an average of 7-dimensions of 4.5/5.0 or greater from her courses: Forest Health (3cr), Insect Ecology (2cr), Forest Management (2cr), Professionalism in Forestry (1cr). Since 2020, she also has taught The Natural Resource Professional (2cr), Maple Syrup Mgmt & Culture (1-3cr), and Wild Foods (2cr). Her commitment to high quality teaching and curriculum development is evident in that she has been a part of efforts to expand the new Nara Maple Center. Dr. Bal previously received the prestigious MTU campus-wide teaching award, The Dean's Teaching Showcase Award for her development of the maple syrup course, recruiting students from all colleges on campus. She also recently won an MTU award for development in the new Essential Education Experiential programs, preparing a new course Reading the Forest (3cr) to take place in Sweden as a Study Abroad in 2025. During the global Covid-19 pandemic, Dr. Bal remained flexible and 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. She recently led the development and administration of a "Professionalism in Natural resources" Digital Badge certificate for students in the College's Integrated Field Practicum or "camp" semester, which employers have stated that they are eagerly seeking out our exceptional students who complete this training. Dr. Bal continues to grow professionally and develop her courses, attending pedagogy workshops and regularly integrating her partnerships with professionals into her classes, where students engage with DNR specialists on field trips, generate data for research with the National Park Service, or doing hands-on management of invasive species with local non-profit organizations. In total, she raised over \$10,000 to enhance forestry-related education at MTU in the last 2 years for funds supporting instruction, equipment for teaching, or funds to lower costs for students.

• <u>Research/Scholarly Activity</u>

Dr. Bal has a steep upward career trajectory both in regard to research funding and publications.

Since 2020, she has raised over \$1,300,000 as PI or Co-PI, averaging 9+ proposals submitted annually to various types of sponsors with an over 80% awarded rate. To date, she has 30 articles in peer-reviewed literature and has an h-index of 10 with over 300 citations. These metrics have exponentially increased since Dr. Bal started as an assistant professor at MTU initially hired as only .75 FTE. Dr. Bal's research is also gaining both national and international attention. For instance, Dr. Bal's Northern Oak Wilt project across Michigan and Canada has had at least 20,000 views on social media. She is further impacting forest health and forest education through partnerships across agencies and orgs including Michigan DNR, US Forest Service, National Park Service, Sustainable Forestry Initiative, Ontario Ministry of Natural Resources, USDA National Institute of Food & Agriculture and International Union of Forest Research organizations. As mycologist with the Wood Protection Research Group at MTU, she has worked with around 30 industry sponsors on developing sustainable tools and technology related to wood use and durability. Her research activities and sponsors span national and international border, including awards from the US Embassy in Suriname and industrial companies from Finland. Since 2020 alone, Dr. Bal has advised 4 PhD students, 1 Post-doc, 6 MS students, 39 MF students and 2 undergraduate SURF awardees, as well as advising serving on additional PhD and MS student committees.

• <u>Service</u>

Dr. Bal contributes to her professional community through service to the MTU Ecosystem Science Center, presenting at MTU recruiting events locally and at natural resources conferences, serving on her College's various committees such as the DEI Committee and Graduate Curriculum Committee and by mentoring undergraduate students. She also serves as Director of the Master of Forestry degree program, for which she maintains credentials, stays engaged with accreditation updates, and regularly connects professional graduate students with professionals. She has also served in her professional societies, where she was an elected board member of The Society of American Foresters (SAF) from 2020-2023, nominated to run for Vice-President/President of the organization for a 3 yr term, and was nominated as a board member of Michigan Forest Association, Oak Wilt Coalition, and North Central Forest Pest Workshop various years since 2020. Dr. Bal strategically aligns her service with opportunities, such as students that she brings to present and network at meetings for the Michigan Oak Wilt. Her service to the International Union of Forest Research Organizations (IUFRO) Forest Education Committee has resulted in 2 publications, multiple international presentations, and a MOCC course segment online. Broadly speaking she is selective in her service in ways that are doubly beneficial for her career and community as a whole.

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

Over the last 4 years, Dr. Bal has been awarded 4 proposals through federal and state agencies in a significant international collaboration with Canada for her work on oak wilt. This large project has already resulted in a fully funded graduate student, 14 presentations (2 won national awards), 1 publication already, 4 pubs in preparation, and another 4 anticipated, demonstrating growing impact. This work is expected to result in improved policy in the state of Michigan and Canada for preventing the spread of a significant forest disease and reduce a burden on forest industry by providing key data. Dr. Bal has also shared her forest education work with federal agencies and the National Association of University Forest Resources Programs, becoming a known name in the scholarship of student trends and enrollments in natural resources that deans, administrators, and employers are keenly attuned to.

Version: January 25, 2017

INFORMATION SHEET FOR BOARD OF TRUSTEES Jared D. Wolfe Michigan Technological University

Jared D. Wolfe, who is currently an assistant professor of wildlife ecology without tenure in the College of Forest Resources and Environmental Science, is being considered for promotion to associate professor of wildlife ecology with tenure in the College of Forest Resources and Environmental Science.

Academic Degrees:

Ph.D.	2014	Louisiana State University, Baton Rouge, LA
M.S.	2010	California State Polytechnic University, Humboldt (formerly Humboldt State University), Arcata, CA
B.S.	2006	California State Polytechnic University, Humboldt (formerly Humboldt State University), Arcata, CA

Professional Record:

2020 – present	Assistant Professor (without tenure), College of Forest Resources and Environmental
2020 – present	Science Michigan Technological University
2018 – 2020	Assistant Research Professor, College of Forest Resources and Environmental Science
2018 - 2020	Michigan Technological University
2015 2019	Wildlife Ecologist, Pacific Southwest Research Center, USDA Forest Service, Arcata,
2015 – 2018	CA
2014 - 2015	Post-Doctoral Fellow, Klamath Bird Observatory, Ashland, OR

Summary of Accomplishments:

Teaching — Since his arrival at Michigan Tech, Dr. Jared D. Wolfe has played a pivotal role in revitalizing the Wildlife Ecology and Conservation major within the College of Forest Resources and Environmental Science. By leading a collaborative effort to update the curriculum, Dr. Wolfe worked with fellow faculty to make the program more appealing to students, contributing to the major doubling in size and becoming one of the most highly enrolled programs within the College. As part of this initiative, he developed and taught several core courses, including Wildlife Research Techniques and Human Dimensions of Wildlife Conservation, which emphasize a hands-on and data-driven approach to wildlife studies. Dr. Wolfe has integrated modern statistical platforms such as RStudio and emergent AI tools, including Autonomous Recording Units and associated classifiers for biodiversity monitoring, into his teaching. This approach equips students with advanced skills necessary for analyzing large datasets and prepares them for a rapidly evolving work environment. His dedication to teaching excellence has been recognized by the Provost for three separate semesters, and he has secured several competitive grants to acquire cutting-edge equipment to enhance classroom learning. His commitment to student success is reflected in consistently positive feedback from students, with an average teaching evaluation score of 4.54 out of 5 across all courses since 2021. Moving forward, Dr. Wolfe aims to continue incorporating innovative technologies and AI platforms into his curriculum, with a vision of establishing Michigan Tech's Wildlife Ecology and Conservation BSc as a premier international choice for students pursuing careers in biodiversity conservation.

Version: July 1, 2021

Research/Scholarly Activity — Dr. Jared D. Wolfe has built a distinguished research program in wildlife ecology, focusing on avian conservation and the impacts of climate change on biodiversity. His work has significantly advanced our understanding of wildlife populations in temperate and tropical systems, forest management strategies, and demographic modeling. Over the past decade, he has secured over \$4 million in competitive funding from organizations such as the NSF, USDA Forest Service, US Fish and Wildlife Service, and private donors to support research examining the impacts of climate change and forest degradation on wildlife communities across the Americas and Africa. In addition to research, Dr. Wolfe is co-leading the creation of a new national park in the Central African country of Equatorial Guinea. His research aligns closely with the strategic goals of the College of Forest Resources and Environmental Science and Michigan Tech, promoting sustainable practices and advancing biodiversity conservation through innovative research and technology. Dr. Wolfe's future plans include integrating long-term bird datasets with contemporary climate models to precisely elucidate how climate change impacts of climate refugia across the Neotropics.

Service — Dr. Jared D. Wolfe has demonstrated a strong commitment to service at multiple levels, significantly contributing to his college, the university, and the international scientific community. At the College of Forest Resources and Environmental Science, he has chaired both the Curriculum and Graduate Studies Committees, leading efforts to revitalize the Wildlife Ecology and Conservation major, establish the Wildlife and Ecology Master's program, and develop the rapidly growing Bachelor's in Environmental Science and Sustainability. He serves on the leadership team for the Midwest Migration Network and the board of the North American Banding Council. Dr. Wolfe co-founded the Biodiversity Initiative, a non-profit focused on conservation in Central Africa, and the Louisiana Bird Observatory, the first year-round songbird demographic monitoring effort in Louisiana. His service is further reflected in his roles as an elected member of the American Ornithological Society and a Research Associate with the Klamath Bird Observatory. He has received several prestigious awards, including the Wings Across the Americas Award from the USDA Forest Service for his conservation work in Central America and the President's Award from the Louisiana Ornithological Society for the creation of the Louisiana Bird Observatory. Moving forward, Dr. Wolfe aims to continue leveraging his expertise to support interdisciplinary collaborations and international partnerships, further enhancing Michigan Tech's impact in biodiversity conservation.

Recent and Significant Publications/Exhibitions/Performances/Etc. — Dr. Jared D. Wolfe has made substantial contributions to wildlife ecology and conservation science, authoring more than 70 peer-reviewed articles, with a current h-index of 24. His recent work includes a 2024 study in *Science Advances* that examines the impact of climate change on avian survival in pristine tropical forests, and a 2023 paper in the *Proceedings of the Royal Society B* exploring habitat use by Amazonian birds along disturbance gradients. His research on the role of culturally significant birds of the Karuk and Yurok tribes in guiding prescribed burns in the Klamath-Siskiyou bioregion, published in *Ecosphere* in 2023, was featured by the USDA Forest Service as an example of successfully integrating Traditional Ecological Knowledge into western science to guide forest management. Dr. Wolfe's work has been widely recognized and covered by media outlets such as *NPR*, *ABC News, The Guardian*, as well as featured on the cover of *Audubon Magazine*. He is also the co-author of the award-winning book *Molt in Neotropical Birds: Life History and Aging Criteria*, published by CRC Press, which has been instrumental in advancing our understanding of avian molt and plumage cycles.

INFORMATION SHEET FOR BOARD OF TRUSTEES Paul J. van Susante Michigan Technological University

Paul J. van Susante, who is currently an assistant professor of Mechanical Engineering without tenure in the Department of Mechanical and Aerospace Engineering in the College of Engineering, is being considered for promotion to associate professor of Mechanical and Aerospace Engineering with tenure in the Department of Mechanical and Aerospace Engineering in the College of Engineering.

Academic Degrees:

Ph.D.	2011	Colorado School of Mines, Golden, CO
M.S.	2004	Colorado School of Mines, Golden, CO
M.S.	2001	Delft University of Technology, Delft, The Netherlands

Professional Record:

2023 – present	The Lou & Herbert Wacker Endowed Professorship in Mechanical Engineering,
2025 – present	Michigan Technological University
2019 – present	Assistant Professor (without tenure), Department of Mechanical and Aerospace
2019 – present	Engineering, Michigan Technological University
2015 – 2019	Associate Teaching Professor, Department of Mechanical and Aerospace
2013 - 2019	Engineering, Michigan Technological University
2012 – 2015	Assistant Teaching Professor, Department of Mechanical and Aerospace Engineering,
2012 - 2015	Michigan Technological University
2006 - 2012	Adjunct Instructor, Division of Engineering, Colorado School of Mines, CO

Summary of Accomplishments:

<u>Teaching</u>

Dr. van Susante started as a Teaching Track faculty, taught 12 different courses and two enterprises. He developed and was coordinator for MEEM2901 (up to 360 students/year, 4 lab spaces, 24 lab sections, 7 TAs and 4 faculty members), founded the Multiplanetary INnovation Enterprise (MINE), MINE students work in his research lab space and he recruits from MINE for work in his lab (38 students in AY 23-24). Since becoming Tenure Track Faculty, his enterprise has grown from 25 to 81 students since there is better synergy between the research in his Planetary Surface Technology Development Lab (PSTDL) and the Enterprise work and many students are interested. He has taught the Intro to Aerospace course for quite a few years (9 times since 2014) and constantly updates the course with the latest ongoing (fast changing) aerospace developments as well as arrange for guest lecturers (virtual and in-person) to discuss a variety of state-of-the-art topics. The students learn a lot from those and regularly express their enjoyment of the course as evidenced by the always oversubscribed course (67 students in a course of normally 40 seats) and always >4 out of 5 score on the average of 7 dimensions course evaluations. In his Enterprise his team constantly strive to improve outcomes, involvement and learning. He typically runs 4 projects, one of which is very popular (40+ students), which is the NASA Lunabotics Competition that is held annually at NASA Kennedy Space Center visitor center in Florida. He takes 10 students to that competition every year, 5 of them are seniors and 5 are next year's leadership. He strongly believes in sound course foundation work combined with hands-on application of the learned material to create good engineers. This is evidenced by companies calling and telling him at conferences to make sure his students apply to their jobs. He is heavily involved with the newly (almost finalized) approved Aerospace Engineering Major and is developing two new fundamental courses: AE2550 (Space Environment & Operation) and AE3501 (Aerospace System Engineering Practice) to be ready for teaching in Fall 2025. He loves working with passionate students on topics of interest and looks forward to teaching them this new exciting curriculum.

• Research/Scholarly Activity

When he became Assistant Professor in 2019, he founded the Planetary Surface Technology Development Lab (PSTDL, or Huskyworks) with the goal to study technologies applicable to the lunar and Mars surface activities being planned as part of NASA's ARTEMIS program. He invested all his startup in a large Dusty Thermal Vacuum Chamber and created a unique testing facility (in the US and the world). This has led to 20 funded proposals and over \$4.7M in funding, mostly from NASA and some from the commercial space industry directly. The most notable grant is a \$1.99M Lunar Surface Technology Research grant awarded in 2020 to develop and test a cone penetrometer and ground penetrating radar for lunar determination of geotechnical properties and mapping of volatiles which is currently in final testing. He has partnered with many small businesses on SBIR/STTR grants for technology development, several of which are now in phase 2, some with the PSTDL as a full partner. Consequently, he has 10 ongoing funded projects and 15 Non-Disclosure Agreements with companies developing technology for lunar applications. For example, his lab is about to test wheels in his DTVAC under lunar conditions for one of the commercial consortia for the next NASA Lunar Terrain Vehicle. Five of the pending proposals have been selected for funding but are waiting for paperwork to be put in place. Over the past 4 years he supervised two teams in two NASA centennial challenge competitions, both of which reached the final rounds held in Summer 2024. His team was 1 of 4 finalist teams in the NASA Watts on the Moon Challenge and 1 of 6 finalist teams in the NASA Break the Ice Challenge. During the various phases of the competitions the PSTDL has been awarded approximately \$1M in prizes which funded participation in the next rounds. Since 2019 He published 5 Peer reviewed journal articles, 32 Peer reviewed conference papers, 41 abstracts and posters, 6 invitation only workshops (one at the White House in DC), 32 invited presentations (one at the National Academy of Science), Supervised 4 PhD students (one graduated, two graduating this year), two new PhD students just started, he was part of two PhD committees, supervised and graduated 7 MS students and was on 10 MS committees (9 graduated, 1 ongoing), he hired two research engineers. As recognition for his research contributions, he was awarded the 2023 Outstanding Technical Contribution Award from the ASCE Aerospace Division as voted by his peers and was promoted to Senior member in AIAA. Several proposals and partnerships are in development with the goal to help NASA, the US and commercial partners get back to the Lunar Surface and develop sustainable permanent activities there and have MTU hardware on some of the future missions. All this fits well with the new Aerospace Engineering Major.

<u>Service</u>

During the last 5 years Dr. van Susante has been a member of 4 hiring committees, he is a member of the department social committee and helps organize events for the department, he is a member of the Aerospace Major Implementation Committee and is in charge of developing two new courses. He was an associate editor for the ASCE Journal of Aerospace Engineering for two years, conference chair for the ASCE Earth & Space 2021 conference, reviewed several journal papers and research proposals for NASA, Luxembourg and Dutch national science organizations, and continues to be secretary of the AIAA Space Resources Technical Committee where he helps organize and chair sessions and review conference papers.

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

2024 – \$124k LTV testing contract with NASA and 3 industrial partners

2024 – Finalist participation for two NASA Challenges – won \$250k NASA DTVAC testing opportunity

2023 - \$351k award with commercial partner for Lunar construction design and analysis tools

2023 - Outstanding Technical Contribution Award from ASCE Aerospace Division

INFORMATION SHEET FOR BOARD OF TRUSTEES GORDON PATERSON Michigan Technological University

Gordon Paterson, who is currently an assistant professor of biology without tenure in the Biological Sciences Department in the College of Science and Arts, is being considered for promotion to associate professor of biology with tenure in the Biological Sciences Department in the College of Arts and Sciences.

Academic Degrees:

Ph.D.	2006	University of Windsor, Windsor, ON, CANADA
M.S.	1996	Trent University, Peterborough, ON, CANADA
B.S.	1993	University of Waterloo, Waterloo, ON, CANADA

Professional Record:

2017 – present	Assistant Professor (without tenure), Biological Sciences Department, Michigan Technological University
2013 – 2016	Assistant Professor (without tenure), Dept. of Environmental and Forest Biology, State University of New York, College of Environmental Science and Forestry.
2011 – 2013	Research Associate, Great Lakes Institute for Environmental Research, University of Windsor
2011	Research Fellow, Norwegian Institute for Water Research
2009 – 2011	Post-doctoral Fellow, Great Lakes Institute for Environmental Research
2007 – 2009	NSERC Post-doctoral Fellow, Trent University
2006 – 2007	Post-doctoral Fellow, Great Lakes Institute for Environmental Research

Summary of Accomplishments:

<u>Teaching</u>

Dr. Paterson has contributed substantially to the teaching mission of the Biological Sciences Department including instruction of the general service course Principles of Biochemistry along with Environmental Toxicology and Fish Biology courses. He also leads the university-wide Scientific Profession graduate course which provides advanced responsible conduct of research training. His teaching style is highly engaging and he strives to include a diversity of student learning opportunities and experiences to maintain student interaction and comprehension of course materials. These efforts are reflected in his induction into the Academy of Teaching Excellence in April 2024 and concomitant nomination for the 2024 Distinguished Teaching Award in the Assistant Professor category. Dr. Paterson is continuously updating course syllabi to include current and emerging methods and discoveries. He engages his students to contribute to course materials using early term surveys to receive student input for course content that result in lecture and discussion materials of specific interest to students enrolled in his courses each semester. Dr. Paterson continues to improve his pedagogical skills through courses, workshops and student and peer-feedback that help foster interactive and engaging classroom and lab experiences for as many students as possible.

• <u>Research/Scholarly Activity</u>

Over the course of his career Dr. Paterson has been awarded over \$2.1 million in research grants and contracts as both principal (PI) and co-principal (co-PI) investigator. This includes over \$650,000 as PI and \$1.2 million as co-PI since arriving at MTU in January 2017. Dr. Paterson has 49 peer-reviewed publications

over his career with multiple publications in high impact journals including Environmental Science and Technology (impact factor: 11.4), Chemosphere (impact factor: 8.1) and Environmental Pollution (impact factor: 7.6). These publications are recognized as important contributions to his field by his peers as demonstrated by his citation metrics (*h*-index: 23; *i*-10 index: 36 and >1860 citations). Dr. Paterson has advised 26 undergraduates, three of whom have first author publications in the peer-reviewed literature (Reeves et al. 2024; Roose et al. 2021; Pitt et al. 2017). Two of these students received either an honorable mention (H. Roose) or were awarded (J. Pitt) an NSF GRFP fellowship for their PhD research. Dr. Paterson is currently advising 2 PhD and 2 MS candidates and has successfully graduated 7 MS students along with being a member of over 30 graduate student supervisory committees. Current research proposals and publications in development or under review align well with departmental, college and institutional priorities.

• <u>Service</u>

Dr. Paterson contributes to service at the professional, departmental, college and institutional levels. He is currently an Associate Editor with the Bulletin of Environmental Contamination and Toxicology and has been chair of program committees for two international conferences successfully hosted by and since his arrival at Michigan Tech. Dr. Paterson also provides peer-review for multiple journals and proposal review for national and international funding agencies. As an example of his recent academic service, Dr. Paterson chaired the Biological Sciences Chair Evaluation Committee for the reappointment of this three-year position (2022-2025) and has been an active member on the Biological Sciences Graduate Committee since 2019. Dr. Paterson is also the biology department's representative at the Graduate Faculty Council. Since 2018, he has been the faculty advisor for the Biochemistry Club at Michigan Tech and has volunteered as an *ad-hoc* reviewer or judge for Michigan Tech programs including the Summer Undergraduate Research Fellowship (SURF), World Water Day Student Poster session, and the Ecosystem Science Center's Student Research Grant proposals.

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

Dr. Paterson has published 15 peer reviewed papers since starting at MTU in 2017 which includes three undergraduate and four graduate student lead author publications in the primary peer-reviewed literature. As evidence of his mentoring skills and research excellence, his recent (July 2024) MS graduate Mitch Kehne won the Outstanding Poster Award at this year's International Association for Great Lakes Research annual conference held in May 2024 in Windsor, ON, Canada. This chapter of Mr. Kehne's MS thesis along with three other graduate student led publications are all in the final stages of preparation for submission in 2024. Dr. Paterson was also a contributing team leader and member for the risk assessment analysis and report led by the Great Lakes Research Center detailing the potential risks to the Great Lakes ecosystem and resources associated with the complexity of Line 5 oil spill scenarios.

INFORMATION SHEET FOR BOARD OF TRUSTEES Oren M. Abeles Michigan Technological University

Oren M. Abeles, who is currently an assistant professor of rhetoric and composition without tenure in the Department of Humanities in the College of Sciences and Arts, is being considered for promotion to associate professor of rhetoric and composition with tenure in the Department of Humanities in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2017	The University of North Carolina, Chapel Hill, NC
M.A.	2010	The University of North Carolina, Chapel Hill, NC
M.S.	2006	Northwestern University, Evanston, IL
B.A.	2001	Bowdoin College, Brunswick, ME

Professional Record:

2017 –	Assistant Professor (without tenure), Department of Humanities, Michigan
present	Technological University
	Graduate Teaching Fellow, Department of English and Comparative Literature, The University of North Carolina

Summary of Accomplishments:

<u>Teaching</u>

Dr. Abeles teaches introductory courses on rhetoric and more advanced courses on rhetorical theory and communication in scientific and technological contexts. His undergraduate courses make frequent use of artificial intelligence tools both to help students improve their own writing and to think critically about the usefulness and limitations of A.I.

Dr. Abeles also teaches and mentors graduate students in the Humanities Department's doctoral program. His graduate courses focus on the application of rhetorical theory to the analysis of scientific arguments.

All of his courses have received high-scoring student evaluations and excellent peer teaching evaluations. During the COVID pandemic, Dr. Abeles received special acknowledgement from the Provost's Office for the efficiency and effectiveness of his transition from classroom instruction to online learning. His focus on persuasive arguments in STEM contexts, as well as his use of A.I. in writing pedagogy, provide innovative education that directly supports MTU's mission.

<u>Research/Scholarly Activity</u>

Dr. Abeles's research focuses on the role that rhetorical tropes play in scientific and technical communication. His work demonstrates that scientists and technical writers use tropes to describe complex natural phenomena and to understand emerging technologies. Much of his research traces the way that metaphor and metonymy have been central to the logical arguments for natural selection and evolutionary genetics. His scholarship makes a significant contribution to MTU's role as a leading STEM university, demonstrating how humanistic methods, informed by a clear understanding of science, can produce results that benefit both

disciplines. Given the increasingly important roles that genetics and genetic engineering play in Michigan Tech's STEM initiatives, his scholarship is an example of how faculty across the campus can contribute to the university's current research priorities. Additionally, the cross-disciplinary nature of Dr. Abeles's work directly aligns with Tech's Strategic Plan to "advance interdisciplinary research to address problems of social significance."

At the same time, Dr. Abeles has also published significant scholarship on the role that rhetorical style plays in cultural criticism. This includes work on the rhetorics of environmentalism, vegetarianism, gender inequality, and consumerism. The wide applicability of his research methodology directly supports the mission of MTU's multidisciplinary Humanities Department.

• <u>Service</u>

Dr. Abeles has provided critical service to the University. Most significantly, he twice directed the University's Writing Program, which provides introductory writing instruction to the majority of MTU students. In this capacity, Dr. Abeles supervised writing instructors, conducted program assessments, and provided direct support to undergraduate students.

Dr. Abeles has also served as director of the Humanities Department's undergraduate major in scientific and technical communication (STC). Under his directorship, the program added new instructors in useability and user experience, graphic design, and digital rhetoric. These changes coincided with an increase in the number of undergraduate students enrolled in the major.

Additionally, Dr. Abeles served on three different search committees. This includes the recent search for a new Dean of the College of Sciences and Arts. His other service includes working on the Humanities graduate program steering committee, serving as a doctoral advisor to two graduate students, and participating on five doctoral and master's committees. Dr. Abeles also serves as a peer reviewer for two academic journals and the three major professional conferences in his field. He currently works as an officer for the Association for the Rhetoric of Science, Technology, and Medicine.

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

- "The Self-ish Gene: Retroactive Tropes in Richard Dawkins's Evolutionary Logic." Rhetoric Society Quarterly, vol. 54, no. 4, 2024. This peer-reviewed article, published in the premier journal in Dr. Abeles's field, demonstrates the role of metaphor in the theory evolutionary genetics.
- "Where is Frances Burney? Irony, Free Indirect Discourse, and the Cultural Critic in Cecilia." Women's Writing, vol. 30, no. 2, 2023.
 This peer-reviewed article studies the role of rhetorical irony in a pivotal modern novel.
- "Constituting Vegetarian Audiences: Orchestrations of Egocentric, Anthropocentric, and Ecocentric Exigencies in Jonathan Safran Foer's *Eating Animals*." *Vegetarian Arguments in Culture, History, and Practice: The V Word*. Palgrave/McMillan, 2021.
- Co-Principle Investigator, NEH Connections "Planning Grant" on Human-Centered Engineering Curriculum, National Endowment for the Humanities, \$34,999.

INFORMATION SHEET FOR BOARD OF TRUSTEES ERICH J. PETUSHEK Michigan Technological University

Erich J. Petushek, who is currently an assistant professor without tenure in the Department of Psychology and Human Factors in the College of Sciences and Arts, is being considered for promotion to associate professor with tenure in the Department of Psychology and Human Factors in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2014	Michigan Technological University, Houghton, MI
M.S.	2011	Northern Michigan University, Marquette, MI
B.S.	2008	Marquette University, Milwaukee, WI

Professional Record:

2019 – present	Assistant Professor (without tenure), Department of Psychology and Human Factors, Michigan Technological University, Houghton, MI
2019 – present	Adjunct Professor, Department of Family Medicine, Michigan State University, East Lansing, MI
2015 – 2019	Assistant Professor (non-tenure track), College of Human Medicine – Upper Peninsula Campus, Michigan State University, Marquette, MI
2014 – 2015	Postdoctoral Fellow in Coaching Cognition and Cognitive Engineering, University of Huddersfield, Huddersfield, UK
2011 – 2014	National Science Foundation Graduate Research Fellow, Department of Cognitive and Learning Sciences, Michigan Technological University, Houghton, MI
2009 – 2011	Graduate Teaching Assistant, Department of Health Physical Education and Recreation, Northern Michigan University, Marquette, MI

Summary of Accomplishments:

<u>Teaching</u>

At MTU, Dr. Petushek has taught and redesigned seven courses, including undergraduate and graduate classes in psychology, statistics, human factors, and usability assessment, emphasizing project-based and service-learning methodologies. His students collaborate with internal university clients and external partners to create solutions to complex problems. Dr. Petushek transformed the Introductory Psychology course into a capstone project-based class and revamped the Statistics course to focus on effect size estimation using free, open-source software. Additionally, through a contract with Michigan State University and the Upper Peninsula Health Education Corporation, he facilitates research projects for MD students and a quality improvement curriculum for medical residents, linking them with his Human Factors in Healthcare students to enhance patient safety, quality, and evidence-based practices. This innovative collaboration exemplifies the synergy between human factors practitioners and medical providers, and he is committed to expanding this model to meet the growing job market for human factors graduates in healthcare.

<u>Research/Scholarly Activity</u>

To date, his research has produced 43 publications, 4 books/book chapters, and over 100 abstracts/conference proceedings, with an h-index of 20 and 1852 citations. Securing over \$1 million in funding through various grants, his work has significantly impacted the field of Anterior Cruciate Ligament (ACL) injury prevention and recovery, with two papers among the top 100 most impactful articles in ACL

research in 2022. His research emphasizes developing efficient, user-friendly measurement tools, such as the ACL-IQ and the Intervention Usability Scale for Exercise, while also evaluating and developing interventions to reduce injury risk and optimize recovery. His recent efforts, supported by a Research Excellence Fund Seed Grant and a pending NIH-R01 grant, focus on integrating bio-psycho-social data to enable tailored interventions, aligning with precision health initiatives.

Since joining MTU, Dr. Petushek has graduated three PhD and one MS student and advised numerous doctoral and master's students across various departments. As an Early Career Research Mentor for MSU MD students, he guides research that contributes significantly to the field. One of his PhD graduates earned a BJSM PhD Academy Award, and other students have received prestigious fellowships, including the King-Chávez-Parks Initiative's Future Faculty Fellowship. His research aligns with MTU's strategic goals by advancing evidence-based practices and fostering interdisciplinary collaborations. Looking ahead, he plans to expand research to include emerging technologies in injury prevention/rehabilitation, continue clinician collaborations, and pursue strategic health funding to enhance MTU's research capabilities and societal impact.

• <u>Service</u>

Dr. Petushek has actively contributed to various service roles, including the MTU Senate, the Institutional Review Board (IRB) at MTU and UP-Health System Marquette, and the Husky Innovate Advisory Board. As a member of the Senate Committee for Facilitating Equity and Understanding, he helps foster an inclusive and supportive environment. Within his department, he has served on the Graduate Committee for five years, influencing the direction and quality of our programs.

Additionally, Dr. Petushek has chaired the Annual Upper Peninsula Medical Conference at MTU for three years, which is pivotal in expanding MTU's health research portfolio and provides CME credits to local and rural physicians. These roles have enabled him to connect with clinicians and stakeholders, directly supporting his research mission of enhancing evidence-based practice through interdisciplinary collaboration and comprehensive healthcare improvement.

• <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>

- 1. Tabbaa, A., Atkins, M., Montalvo, A., Petit, C.*, White, M., **Petushek, E.J.,** Diekfuss, J., Myer, G.D. Lamplot, J., (In Press) Lower ACLR Failure Rates in Bone-Soft Tissue vs Soft-Tissue Only Allografts in Adults: A Systematic Review and Meta-Analysis. *American Journal of Sports Medicine*
- 2. Lamplot, J., **Petushek, E.J.**, Petit, C.*, Warren, S.M., Barber-Foss, K., Slutsky-Ganesh, A.B., Valencia, M.*, Kenyon, C.D., McPherson, A., Xerogeanes, J.W., Myer, G.D., Deikfuss, J.A. (In Press) Reason profiles for not returning to pre-injury activity level following ACL reconstruction– A latent class analysis with subgroup comparison of patient reported outcome measures. *Orthopedic Journal of Sports Medicine*
- 3. Petushek, E.J., Diekfuss, J., Lamplot, J., Mørtvedt, Al.*, Hoey, L*., Heo, K. *, Petit, C.*, Barber Foss, K., Warren, S., Slutsky-Ganesh, A., Kenyon, C., McPherson, A., Biller, M., Newsome, M., Jennings, B., Xerogeanes, J., & Myer, G.D. (2024) Usefulness of current patient-reported outcome scales for ACL injury useful? A mixed-methods evaluation of stakeholder-perceived utility of specific constructs and items across the rehabilitation timeline. *Orthopedic Journal of Sports Medicine*, 12(3).
- 4. Petushek, E.J., Mørtyedt, A.*, Nelson, B.*, and Hamati, M.C* (2021). The effect of a brief, web-based animated video for improving comprehension and implementation feasibility for reducing anterior cruciate ligament injury: A three-arm randomized controlled trial. International Journal of Environmental and Public Health. 18(17):9092
- 5. **Petushek, E.J.,** Nilstad, A., Bahr, R. and Krosshaug, T (2021). Drop Jump? Single leg Squat? Not if you Aim to Predict ACL Injury from Real-time Clinical Assessment a Prospective Cohort Study Involving 880 Elite Female Athletes. *Journal of Orthopedic and Sports Physical Therapy*, 51(7):372-378.
- 6. Mørtvedt, A.*, Krosshaug, T., Bahr, R. and **Petushek, E.J.** (2020). Can I spy with my little eye...a knee about to go 'pop'? Can coaches and sports medicine professionals accurately screen female athletes' landings for ACL injury risk? *British Journal of Sports Medicine*. 54(3), 154-158
- 7. Petushek, E.J., Sugimoto, D., Stoolmiller, M., Smith, G.*, and Myer, G. (2019). Evidence based best-practice guidelines for preventing ACL injuries: A systematic review and Meta-analysis. *American Journal of Sports Medicine*, 47(7), 1744-1753
- 8. Petushek, E.J., Cokely, E.T., Ward, P., Wallace, S., Durocher, J.J., and Myer, G.D. (2015) Injury risk estimation expertise: Assessing the ACL injury risk estimation quiz. *American Journal of Sports Medicine*, 43(7), 1640-1647.

^{*}Denotes students I have mentored

INFORMATION SHEET FOR BOARD OF TRUSTEES Dr. Mark Alan Rhodes II, PhD Michigan Technological University

Mark Rhodes, who is currently an assistant professor of geography without tenure in the Department of Social Sciences in the College of Sciences and Arts, is being considered for promotion to associate professor of geography with tenure in the Department of Social Sciences in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2019	Kent State University, Kent, OH
M.A.	2015	Kent State University, Kent, OH
B.A.	2009	Saint Cloud State University, St. Cloud, MN
B.E.S.	2009	Saint Cloud State University, St. Cloud, MN

Professional Record:

11110 = nracant	Assistant Professor (without tenure), Department of Social Sciences, Michigan
	Technological University
2014 – 2019	Graduate Administrative Assistant, Graduate College, Kent State University, Kent, OH
2013 – 2019	Instructor, Department of Geography, Kent State University, Kent, OH

Summary of Accomplishments:

• <u>Research/Scholarly Activity</u>

Dr. Rhodes is a cultural and historical geographer working through processes of commemoration, memorialization, and the creation, management, and contestation of heritage or historical sites. While much of Dr. Rhodes's work takes place in Wales studying their National Museum System or World Heritage Sites, recently Dr. Rhodes has expanded more broadly to the European Union and their management of industrial heritage with an invitation to join Martin Luther University and their Post-Extractive Futures team as a Visiting Researcher during their sabbatical leave. Dr. Rhodes also began the Living Memory Lab which researches the naming of plant-based foods in honor of individuals and regularly works with students across campus on independent research projects to study the impacts or trends at this intersection of cultural and ecological heritage. Dr. Rhodes has published 25 peer-reviewed scholarly journals, one edited volume, and has received as P.I. or co-P.I. \$351,114 across 8 grants and awards for research and education. This is in addition to several book chapters, invited encyclopedia entries, and news or general audience publications. Many of these works represent the highest impact journals in geography including articles in the Transactions of the Institute of British Geographers (ranked #11 by Google Scholar), Political Geography (ranked #7), and two articles in Tourism Geographies (ranked #2). Dr. Rhodes's ongoing and future efforts seek to increase student opportunities domestically and globally, particularly for graduate students. To this end, they have included graduate opportunities within their study abroad experiences as both students and teaching assistantships, and they continue to seek out funding from federal agencies (US. Dept. of Interior, US Dept. of State, and the National Endowment for the Humanities) to provide research experience and financial support to graduate students.

• <u>Teaching</u>

Dr. Rhodes to date has directed or co-directed five study away programs at MTU, advised a host of undergraduate and graduate students for their degrees or independent research, and regularly produces

impactful experiences and products in his courses. In 2022, Dr. Rhodes designed and led Amtrak Tourism: Trains, Cities, and Sustainability for the first time and repeated the program in 2023 taking students on a three-week train ride to six cities and sites around the West to study sustainable tourism and planning. In 2024, Dr. Rhodes designed and led the Wales: Community Transformations program where students go behind the scenes of the heritage sites (i.e. national parks, museums, and World Heritage Sites) that Dr. Rhodes researches to understand how formerly industrial communities can use natural and cultural heritage to heal the economic and environmental scars of deindustrialization. Dr. Rhodes advises one PhD Candidate and one master's student, does or has served on 5 other PhD committees and 2 other MS committees. Dr. Rhodes mentors undergraduate students who have completed theses (4), earned SURF or URIP Fellowships (6), McNair Scholars (2), Michigan Space Grant Fellows (1), or taken Undergraduate Program for Exploration and Research in Social Sciences (UPERSS) credits (8). In the classroom students regularly walk away with tangible products or transformative experiences. Examples include museum exhibit or interpretive signage credits, academic conference presentation experience, or organizing and offering lecture series, such as the Fall 2024 Visit Keweenaw Sustainable Tourism Series.

• <u>Service</u>

Dr. Rhodes consistently offers his services towards professional and university needs. In the department, he has served on eight committees, including two years on the Department Graduate Committee and started a local chapter, now serving as its Faculty Sponsor, of the International Geography Honor Society: Gamma Theta Upsilon. At the university level, Dr. Rhodes has worked in three different capacities advancing Essential Education, regularly volunteers as a Judge for the 3-Minute Thesis or Undergraduate Research Symposium, and is now the only faculty advisor for the US Dept. of Education Gilman Program, which awards scholarships to Pell-Eligible students who wish to study abroad. At the international level, Dr. Rhodes currently serves as Chair of the Cultural Geography Specialty Group and the Historical Geography Specialty Group (HGSG) of the American Association of Geographers. Through both groups, Dr. Rhodes coordinates keynotes, panel series, student and faculty awards, and promotes cultural and historical geography within the discipline and beyond. As Chair of HGSG, Dr. Rhodes also oversees the journal *Historical Geography*, negotiates with its publisher University of Nebraska Press, and recently chaired the search for two new editors-in-chief. Dr. Rhodes also serves on the Board of the North American Association for the Study of Welsh Culture and History and, since 2021, has reviewed post-doctoral applications for the European Union's EUTOPIA Science and Innovation Fellowship Program.

• <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>

Rhodes, M. 2024. National Museum Wales and the scalar bureaucracies of institutional memory work. *Political Geography* 111. DOI: <u>10.1016/j.polgeo.2024.103094</u>.

- *Rhodes, M.* and Hannum, K. 2024. UNESCO, Mining Heritage, and the Scalar Sustainability of Tourism Geographies at industrial World Heritage Sites. *Journal of Tourism Futures.* DOI: <u>10.1108/JTF-10-</u> <u>2023-0235</u>
- *Rhodes, M.* and W. Price. 2024. 'A Nation Built on Coal': Transcalar landscapes of memory work at the Big Pit National Coal Museum. *Tourism Geographies* 26 (5): 755-77. <u>10.1080/14616688.2023.2253793</u>.
- *Rhodes, M.* 2024. Students ride the rails in this course to learn about sustainability and tourism. <u>*The Conversation.*</u> Uncommon Courses Series (article picked up by the *New Haven Register*, the *Albany Times-Union*, the *San Francisco Chronicle/SFGate*, and over 30 other outlets).
- *Rhodes, M.* and Bartoszek, J. 2023. Memorial Entrepreneurship and the Political Economies of Food-Based Living Memory. *Geographical Review*. DOI: <u>10.1080/00167428.2023.2283728</u>.
- *Rhodes, M.* and C. Keeve. 2023. More-Than-Human Memory: The Political Ecologies of the Paul Robeson Tomato. *Journal of Political Ecology* <u>30(1):424-47</u>.

INFORMATION SHEET FOR BOARD OF TRUSTEES JULIA I. BURTON Michigan Technological University

Julia I. Burton, who is currently an Associate Professor of Silviculture without tenure in the College of Environmental Science and Forestry, is being considered for tenure. Julia was hired at the Associate rank in 2021 after fulfilling similar functions at State University of New York College of Environmental Science & Forestry and Utah State University.

Academic Degrees:

Ph.D.	2011	University of Wisconsin-Madison, Madison, WI
M.S.	2004	University of Minnesota, St. Paul, MN
B.S.	2002	University of Wisconsin-Stevens Point, Stevens Point, WI

Professional Record:

1011 - nrocont	Associate Professor (without tenure), College of Forest Resources & Environmental
2021 present	Science, Michigan Technological University
2019-2021	Assistant Professor, SUNY College of Environmental Science & Forestry, Syracuse, NY
2016 – 2019	Research Assistant Professor, Utah State University, Logan, UT
2011 – 2016	Research Associate (post-doctoral), Oregon State University, Corvallis, OR

Summary of Accomplishments:

• <u>Teaching</u>

Silviculture, defined as the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis, is an important cornerstone of forestry. Dr. Burton teaches two undergraduate silviculture classes (at the Ford Center & Forest residential field station as part of the CFRES Integrated Field Practicum, or "Fall Camp". Classes generally run all day from 8:00-5:00 pm. In the classroom, Dr. Burton engages students through class discussions of real-world scenarios and challenges them with role play. She uses guizzes and polls to assess and solidify their understanding of key terms and concepts. Field tours of the Ford Forest and surrounding area provide concrete examples of principles and practices. Field exercises allow students to practice and hone their observational, critical thinking, and quantitative skills. Authentic assignments include quantitative problems, reflective essays, and a silvicultural prescription for a real forest property. Tours with professionals provide students opportunities to learn from and network with potential employers. Integrated within her focus on silvicultural principles and practices is a discussion of the historical and contemporary philosophies underlying silviculture, and professional and environmental ethics. As she has adapted to the format at "Fall Camp" she has received increasingly positive feedback from students (teaching evaluations and informally) as well as from peer evaluations. Her efforts were recognized in MTU's 2024 Deans' Teaching Showcase.

Dr. Burton has also taught several courses at the graduate level. In spring 2024 She offered an Ecological Silviculture course in which students read and discussed the recent Ecological Silviculture textbook. Students selected relevant topics and performed small-scale literature reviews, which they summarized and presented to the class. Eight students enrolled and their feedback was positive. She will regularly offer a new 3-credit graduate course that integrates ecological silviculture with a broader range of advanced

topics in alternate years beginning in spring 2025.

• Research/Scholarly Activity

Silvicultural forest management faces challenges related to changes in climate, disturbance regimes, ungulate herbivory, introduced species, and interactions thereof. Dr. Burton's research explores and evaluates how silvicultural management can be leveraged to modulate the linkages among functional traits of individual plants, species and communities, and ecosystem dynamics over space and time. These studies, conducted in close collaboration with graduate student trainees, undergraduate students, and colleagues, contribute to Dr. Burton's long-term goal of developing silvicultural practices that sustain a broad range of values forests provide in the context of diverse challenges. A major effort since 2019 has been establishing a network of large-scale manipulative climate change adaptation experiments in northern hardwood forests of NY and MI. Dr. Burton is testing alternative strategies for achieving these goals by building adaptive capacity (Adaptive Capacity Through Silviculture, ACTS). The experiments compare Resilience and Transition strategies that both focus on increasing adaptive capacity to Businessas-Usual and No Action approaches. Dr. Burton has leveraged start-up funding and substantial institutional support from MTU and SUNY ESF, including a Research Excellence Fund Seed Grant, in-kind support from the Michigan Department of Natural Resources, and on-going collaborations with colleagues at SUNY ESF to establish the experiment at three locations. To fund research within this network, she recently led an \$900k multi-institution proposal (submitted on 9/12/2024). A previous submission received positive reviews, and she is are optimistic about our prospects now that treatments are nearly completed. The ACTS network has also been leveraged in a larger \$10MM proposal that focuses on developing UAV technology to guide climate change adaptation. Synergistic research for which Dr. Burton has have been awarded funding focuses on assisted migration of pine tree species a climate change adaptation strategy (\$122k, US Forest Service), fire ecology and management (\$112k, US Forest Service), long-term dynamics of old-growth northern hardwood forests (\$24k, Friends of Sylvania), and inter- and intraspecific variability in the traits and functional diversity of trees (\$15k, Huron Mountain Wildlife Foundation; \$24k, McIntire-Stennis).

• <u>Service</u>

Dr. Burton's service extends from CFRES and Ecosystem Science Center (ESC) to my profession spanning local to international scales. On the Ford Center & Forest Advisory Committee, Julia has provided guidance and feedback pertaining to the sustainable management of, and research on, CFRES Forests, and maintenance of Ford Center facilities. She has served on search committees for the new Dean and an instructional-track faculty member. As a member of the ESC, she regularly reviews proposals and judges presentations at our annual Student Poster Forum. She is engaged in efforts to recruit and retain students and faculty and improve the climate in CFRES.

Dr. Burton's external service ranges from active participation in professional societies, working groups and organizations, to reviewing proposals and manuscripts. She has been active in Society of American Foresters (SAF) nationally (e.g., on the Silviculture Instructors Tour) and regionally. She has been invited to give presentations at the SAF National Convention, Ecological Society of America meetings, Northern Hardwoods Conference, and North American Forest Ecology Workshop (NAFEW). She provides leadership at national and international scales. For example, she is the Treasurer of the organizational committee for the NAFEW. Dr. Burton anticipates taking on more leadership roles as her career progresses.

• Dr. Burton has authored six publications since 2022, primarily with her graduate students, including two papers led by Dr. Claudia Bartlick (PhD, 2023, MTU).

INFORMATION SHEET FOR BOARD OF TRUSTEES Steven L. Voelker Michigan Technological University

Steven L. Voelker, who is currently an associate professor of forestry without tenure in the College of Forest Resources and Environmental Sciences, is being considered for tenure in the College of Forest Resources and Environmental Sciences.

Academic Degrees:

Ph.D.	2009	Oregon State University, Corvallis, OR
M.S.	2004	University of Missouri, Forest Ecology, Columbia, MO
B.S.	2001	University of Wisconsin-Stevens Point, Stevens Point, WI

Professional Record:

2021 – present	Associate Professor (without tenure), College of Forest Resources and Environmental
2021 present	Sciences, Michigan Technological University
2019 – 2021	Adjunct Assistant Professor, Department of Environmental Biology, State University
2019 - 2021	of New York, College of Environmental Science and Forestry
2016 – 2019	Assistant Professor, Department of Plants, Soils & Climate, Utah State University
2014 – 2016	Post-doctoral Researcher, Department of Forest Ecosystems & Society, Oregon State
2014 - 2016	University
2011 – 2014	Post-doctoral Researcher, Department of Integrative Biology, University of California
2011 - 2014	and Department of Biology, Southern Oregon University
2009-2011	Post-doctoral Researcher, Department of Forest Ecosystems & Society, Oregon State
2009-2011	University

Summary of Accomplishments:

• <u>Teaching</u>

Since arriving at MTU in 2021 Dr. Voelker has taught four courses. Two of these undergraduate courses, Forest and Natural Resource Management and Wood Anatomy, were taught on an interim basis for two years because of shifts in faculty availability. The third course, Forests and Climate Change was taught for the first time in 2024 and expect to continue to teach each year for the foreseeable future, as it is a required course for undergraduates in the new undergraduate degree program in Environmental Science and Sustainability. He is also scheduled to take over teaching Tree Physiology, during the 2025/2026 school year and teach that course each year for the foreseeable future as it is required for the Forestry degree program. In addition, Dr. Voelker is developing a graduate course in Stable Isotopes in Science, that will help train graduate students in CFRES and across campus on the theory and use of stable isotopes in natural sciences and for forensic purposes. Dr. Voelker's teaching evaluation scores at MTU have averaged 4.2 out of 5, when averaged across the seven dimensions of teaching, indicating that the students have appreciated the content, teaching style and attentiveness to their needs he brings to the classroom. Dr. Voelker also mentor graduate students; as the primary or co-advisor he has graduated four MS students and one PhD student, and currently has two MS students and two PhD students. Dr. Voelker's graduate students have all graduated in a timely manner and most have

produced multiple peer-reviewed papers, reflecting his success at mentorship.

• <u>Research/Scholarly Activity</u>

Dr. Voelker's research program is internationally recognized for work in using dendrochronology and tree-ring isotopes to understand past tree growth, physiology and climatic variability. The work of he and his graduate students collectively represents more tree-ring stable isotope data being in peer-reviewed papers than any other researcher in North America. Dr. Voelker recently concluded a four-year grant from the National Science Foundation that used these techniques to reconstruct temperatures near Lake Superior over the last 500 years and to evaluate whether climate change has made the jet stream across North America more eccentric or "wavy" compared to previous centuries. His PhD student will be publishing papers on these topics in the next year as he gets ready to defend his dissertation. Last year Dr. Voelker had a proposal funded from NOAA to support a MS student who is studying lake trout growth responses to climate in Lake Superior. This summer Dr. Voelker was part of a collaboration that will provide funding from the USDA Forest Service and the Wisconsin DNR to support a PhD student to use dendrochronological techniques to better understand the history of fire in the Upper Peninsula of Michigan and thereby provide an impetus to use prescribed fire as a management tool to make forests more resilient and our communities safer from the threats of wildfire.

• <u>Service</u>

Over the first three years at MTU Dr. Voelker has served as the head of the CFRES Curriculum Committee, served on a hiring committee for a Lecturer position and is currently the Chair of a hiring committee for a tenure track professor of Environmental Data Science. He also serves on the Graduate Studies Committee and the Earn and Learn Committee. The latter is a program that determines which undergraduate students receive college-level funds to carry out undergraduate research during their first and second years, which is a great recruitment tool. Dr. Voelker has been asked to serve on editorial boards of peer-reviewed journals, but so far has turned down those offers to prioritize research productivity and teaching effectiveness during the pre-tenure period. Dr. Voelker serves his fields of research as a peer reviewer, exemplified by his having conducted reviews for more than 35 different journals and for grant proposals submitted to the National Science Foundation and the US Department of Agriculture.

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

There are four achievements that best demonstrate Dr. Voelker's international recognition. The first is a paper in *Nature Communications* reviewing, globally, how fast-growing trees tend to die sooner within and across species. The second is a 2021 paper reviewing evidence for how atmospheric CO₂ influences forests, a work that has been cited over 100 times each year. The third is co-authorship on four chapters within the 2022 book "Tree-Ring Stable Isotopes" that is open-access and has been visited over 242,000 times. The last is a 2022 paper in *Science* showing that globally, tree growth is strongly limited by source activity (i.e., photosynthesis in leaves) and by sink activity (i.e., wood formation in the tree trunk) whereas theory and models predicting forest growth and carbon storage have only conventionally represented limitation by source activity.

INFORMATION SHEET FOR BOARD OF TRUSTEES Jennifer M. Nish Michigan Technological University

Jennifer M. Nish, who is currently an associate professor of rhetoric and composition without tenure in the Department of Humanities in the College of Sciences and Arts, is being considered for promotion to associate professor of rhetoric and composition with tenure in the Department of Humanities in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2014	University of Kansas, Lawrence, KS (English: Rhetoric and Composition)
B.A.	2008	University of Nebraska, Lincoln, NE (English & Psychology)

Professional Record:

2023 – present	Associate Professor (without tenure), Department of Humanities, Michigan
2025 – present	Technological University, Houghton, MI
Feb 2023 –	Assistant Professor (with tenure), Department of English, Texas Tech University,
August 2023	Lubbock, TX
2018 – 2023	Assistant Professor (without tenure), Department of English, Texas Tech University,
2018 - 2023	Lubbock, TX
2014 – 2018	Assistant Professor (without tenure), Department of English, American University of
2014 - 2018	Beirut, Beirut, Lebanon
2009-2014	Graduate Teaching Assistant, Department of English, University of Kansas, First- and
2009-2014	Second-Year English Program, Lawrence, KS

Summary of Accomplishments:

<u>Teaching</u>

Dr. Nish brought 15 years of university teaching experience to Michigan Tech, during which she developed 15 undergraduate courses and 10 graduate courses, chaired nine PhD dissertations and four master's theses, and served as a reader on 14 PhD committees and three master's committees. At Michigan Tech, she has taught graduate and undergraduate courses that serve the entire university, such as Composition (UN 1015), a first-year writing course taken by most undergraduate students, several sections of Advanced Composition (HU 3015), which fulfills communication-intensive course requirements for students of many majors, and Composition Pedagogy (HU 5931), which focuses on the education and mentorship of new graduate instructors who will teach composition during their time at Michigan Tech. She has collaborated with the Director of Composition and graduate students in the Humanities department to coauthor a textbook for Michigan Tech first-year writing students and instructors, revise the first-year composition curriculum, and mentor composition instructors at Michigan Tech. She developed a new graduate course, Disability Studies and Disability Justice (HU 5116) in Spring 2024. She serves as an advisor for one doctoral student and one master's student and a committee member for two doctoral students. She previously served as a committee member for one master's student who graduated. Her average of seven dimensions score on teaching evaluations has ranged from 4.59-4.75. In 2024, she was a finalist for the Distinguished Teaching Award and was inducted into the Academy of Teaching Excellence.

• <u>Research/Scholarly Activity</u>

Dr. Nish's research focuses on the complex ways that rhetorical activity shapes and is shaped by power relationships. The practical purpose of this work is to help scholars, students, and members of the public

understand and engage with the texts and ideas they encounter in their everyday lives, particularly in communities that are focused on social transformation. Her book, Activist Literacies: Transnational Feminisms and Social Media Rhetorics (University of South Carolina Press, 2022) provides readers with a concepts and frameworks for understanding activist rhetoric that circulates digitally and transnationally. Her 12 additional publications include three peer-reviewed journal articles, five peer-reviewed book chapters, a coauthored textbook, a coedited textbook, and two pieces written for public audiences. Her ongoing work continues to explore the relationship between rhetoric and power, building on her previous work in transnational rhetoric and developing new projects focused on disease and disability. A second book project, Postviral, traces how complex chronic disease activists create connections between different communities, such as between people with Long Covid and with myalgic encephalomyelitis (ME) or between contemporary complex chronic disease activism and legacies such as HIV/AIDS activism, showcasing the knowledges shared by people living with these debilitating, incurable, and underresearched diseases. She is also co-editing a collection focused on transnational feminist rhetorical scholarship as a framework that equips rhetors to understand and respond to contemporary global crises. Finally, she is working on articles and chapters about equitable and inclusive approaches to writing program administration.

• <u>Service</u>

During her time at Michigan Tech, Nish has served the Humanities department on several committees including the 2024-25 search committee for a Humanities department chair and the Rhetoric, Theory, and Culture Graduate Program Committee, which oversees curriculum and admissions for the master's and doctoral degrees in Humanities. She co-chaired the 2023-2024 Composition Working Group (with Holly Hassel, the Director of Composition) that wrote a new textbook, revised the curriculum for UN 1015: Composition, and provided professional development activities for Humanities graduate students such as a conference proposal workshop, conference proposal submission, and a coauthored publication about the group's work. Nish was chair of the 2024 Humanities Department retreat committee; in this role, she led full-time faculty in analyzing and discussing existing departmental programs and structures and developing a set of collective goals and action items based on the retreat work. She serves the university as a member of the ADVANCE Advocates and Allies Advisory Board and the Essential Education E-Portfolio Working Group. Her recent service to her discipline includes serving as an Associate Editor for Peitho (a journal), an advisory board member for the Coalition of Feminist Scholars in the History of Rhetoric and Composition (CFSHRC), a CFSHRC Bylaws Committee member, a mentor to junior scholars, and a journal and manuscript reviewer for Peitho, College Composition and Communication, Rhetoric Society Quarterly, Parlor Press, and the Feminisms and Rhetorics conference. She has served as a formal and informal mentor for individual undergraduate and graduate students applying for graduate programs and academic positions, as well as several junior faculty at other institutions. She served as a manuscript mentor for five junior scholars at the Rhetoric Society of America research network forum in 2023. She also engages in community service work at the state and national level with #MEAction, an organization focused on advocacy for complex chronic diseases such as myalgic encephalomyelitis (ME) and Long Covid.

• <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>

"Toward Disruptive Agency" (with Heather Bastian). *College Composition and Communication*, vol 75, no. 2, Dec. 2023

"Crip Letters: Storying Cognitive Disability and Re/Writing Academic Work" (with V. Jo Hsu). *College Composition and Communication* (Eds. Kimberly Weiser, Christina Cedillo, and Rachel Jackson), vol 75, no. 1, September 2023.

Activist Literacies: Transnational Feminisms and Social Media Rhetorics (University of South Carolina Press, 2022)

Page 2 of 2

Version: July 1, 2021

D. Promotions

Andrew Storer, Provost and Senior Vice President for Academic Affairs

VIII-D. 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.



Office Memo

Office of the Provost and Senior Vice President for Academic Affairs

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

то:	Richard Koubek, President
FROM:	Andrew Storer, Provost & Senior Vice President for Academic Affairs
DATE:	March 21, 2025
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 25, 2025 meeting. If approved, the promotions will be effective August 11, 2025.

Promotion from Associate Professor with Tenure to Professor with Tenure

Laura Brown	Computer Science
Daisuke Minakata	Civil, Environmental, & Geospatial Engineering
Lanrong Bi	Chemistry
Tatyana Karbencheva-Christova	Chemistry
Rudy Luck	Chemistry
Stefka Hristova	Humanities
Kelly Steelman	Psychology & Human Factors

APPROVED:

Jell

Richard Koubek, President

3/24/25

Date

INFORMATION SHEET FOR BOARD OF TRUSTEES LAURA E. BROWN Michigan Technological University

Laura E. Brown, who is currently an associate professor of computer science with tenure in the Department of Computer Science in the College of Computing, is being considered for promotion to professor of computer science with tenure in the Department of Computer Science in the College of Computing.

Academic Degrees:

Ph.D.	2009	Vanderbilt University, Nashville, TN
M.S.	2005	Vanderbilt University, Nashville, TN
M.S.	2022	University of Michigan – Ann Arbor, Ann Arbor, MI
B.S.	2000	Swarthmore College, Swarthmore, PA

Professional Record:

2023 – present	Associate Dean of Data Science Initiatives, College of Computing, Michigan Technological University
2022 – 2023	Director of Data Science Initiatives, College of Computing, Michigan Technological University
2019 – present	Graduate Program Director – Data Science, Michigan Technological University
2016 – present	Associate Professor, Department of Computer Science, Michigan Technological University
2010 – 2016	Assistant Professor (without tenure), Department of Computer Science, Michigan Technological University
2009 - 2010	Lecturer, Department of Computer Science, Michigan Technological University

Summary of Accomplishments:

<u>Teaching</u>

Dr. Brown is passionate about teaching and supporting students in the classroom. She has published articles on teaching innovations at several conferences on computer science and engineering education. Teaching topics include artificial intelligence, data mining, and data science. Recently, she has led efforts in the creation and design of the curriculum for the new B.S. of Data Science degree. These efforts have included the design of three new classes in the last two years: Explorations in Data Science, Data Science with Python, and Foundations of Data Science. In the future, she will continue the design of new data science courses as well as add data science options to the Essential Education program.

Dr. Brown has served as the graduate program director for the MS in Data Science. There she serves as the main advisor to students on their educational and career goals. The MS in Data Science program has grown from 31 students in Fall 2019 to 89 students in Fall 2024. Additionally, as PI on an NSF Research Traineeship (NRT) project she will lead the team to expand integrative training experiences for graduate students in interdisciplinary research across computing, sensing, and different application domains.

• <u>Research/Scholarly Activity</u>

Dr. Brown's scholarly activities has focused on the creation and application of methods in artificial intelligence, machine learning, and data science to several different disciplinary and interdisciplinary domains and research problems. A few recent funded projects include:

- Use of machine learning techniques in computer systems research to train controllers for hardware prefetchers. *Collaboration with faculty from computer science.*
- Use of data analysis and modeling methods to understand the relationships between dissolved organic matter (DOM) composition and microbe assemblages that degrade DOM in aquatic environments. *Collaboration with faculty from biology and forestry.*
- Examine the novice student code to understand the common patterns (both good and bad) that students produce and use software to help provide better, constructive, immediate feedback. *Collaboration with faculty from computer science and engineering fundamentals.*
- An infrastructure grant to support creating a GPU-accelerated cluster for the campus. *Collaboration with faculty from computer science, physics, biomedical engineering.*
- A training grant to support graduate students in interdisciplinary topics related to Data Science and sensing of the environment. *Collaboration with faculty from computer science, applied computing, forestry, geological and mining engineering.*

Some projects in the pipeline extend and expand these past efforts, e.g., to explore the relationships of DOM composition and microbe assemblages out of lab conditions. New opportunities include training high school teachers to introduce data science, as well as a project to develop and retrospectively evaluate a longitudinal machine learning-based algorithm to predict patient diagnosis of endometriosis based on past medical history and current visit data.

• <u>Service</u>

Dr. Brown has an extensive record of service at all levels at Michigan Tech. She has been a member of multiple campus-wide working groups, member of several Tech Forward initiatives, member and chair of graduate faculty council, member of the Senate, and most recently in the position of Associate Dean. Dr. Brown is also committed to expanding knowledge and opportunities in computing. In the past two years, she has organized six workshops for graduate students, faculty, and staff on topics related to programming and software skills. Each workshop had ~20-40 participants from units across campus. Additionally, she has presented and led a hands-on lab session on data mining and data science topics to the SYP Women in Computer Science program for the last 9 years.

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

- Benjamin, M.E.; Brown, L.E.; Sticklen, J.; Ureel, L.C.; Jarvie-Eggart, M., "Engaging Novice Programmers: A Literature Review of the Effect of Code Critiquers on Programming Selfefficacy" in Proceedings of 2023 IEEE Frontiers in Education Conference (FIE), Oct. 2023. DOI: https://doi.org/10.1109/FIE58773.2023.10342975
- Hayibo, K.S.; Petsiuk, A.; Mayville, P.; Brown, L.E.; Pearce, J.M., "Monofacial vs. Bifacial Solar Photovoltaic Systems in Snowy Environments", *Renewable Energy* 193: 657-668, 2022. DOI: https://doi.org/10.1016/j.renene.2022.05.050
- Liu, J.; Brown, L.E., "A Few-shot Learning Model based on a Triplet Network for the Prediction of Energy Coincident Peak Days" in Proceedings of 35th International Florida Artificial Intelligence Research Society Conference (FLAIRS), May 2022. DOI: https://doi.org/10.32473/flairs.v35i.130733
- Schum, S.K.; Brown, L.E.; Mazzoleni, L.R., "MFAssignR: Molecular formula assignment software for ultrahigh resolution mass spectrometry analysis of environmental complex mixtures", *Environmental Research* 191:110114, 2020. DOI: https://doi.org/10.1016/j.envres.2020.110114
- Jafari, M.; Brown, L.E.; Gauchia, L., "Hierarchical Bayesian Model for Probabilistic Analysis of Electric Vehicle Battery Degradation", *IEEE Transactions on Transportation Electrification*, 5(4): 1254-1267, 2019. DOI: https://doi.org/10.1109/TTE.2019.2956350

INFORMATION SHEET FOR BOARD OF TRUSTEES Daisuke Minakata Michigan Technological University

Daisuke Minakata, who is currently an associate professor of environmental engineering with tenure in the Department of Civil, Environmental, and Geospatial Engineering in the College of Engineering, is being considered for promotion to professor with tenure in the Department of Civil, Environmental, and Geospatial Engineering in the College of Engineering.

Academic Degrees:

Ph.D.	2010	Georgia Institute of Technology, Atlanta, GA
M.S.	2005	Kyoto University, Kyoto, Japan
B.S.	2002	Kyoto University, Kyoto, Japan

Professional Record:

2019 – present	Associate Professor, Department of Civil and Environmental Engineering. Michigan
	Technological University
2021 – 2022	Visiting Scholar, Swiss Federal Institute of Aquatic Science and Technology (Eawag)
2013 – 2019	Assistant Professor, Department of Civil and Environmental
2013 - 2019	Engineering. Michigan Technological University
2010 – 2013	Research Engineer I, Brook Byers Institute for Sustainable Systems, Georgia Institute
2010 - 2015	of Technology
2009 – 2010	Graduate Research Assistant, Department of Civil and Environmental Engineering,
2009 - 2010	Georgia Institute of Technology

Summary of Accomplishments:

• <u>Teaching</u>

Dr. Minakata has taught ten (10) undergraduate classes, thirteen (13) different graduate classes, and two (2) graduate seminar since 2013. His teaching load generally averages 3 formal courses per academic year, in addition to special project supervision and M.S. and Ph.D. research supervision.

• <u>Research/Scholarly Activity</u>

Dr. Minakata's scholarly products include: Fifty seven (58) refereed papers in leading journals that focus on research in his specialty. Dr. Minakata received twenty-five (25) grants as a PI, co-PI, or senior personnel with a total award amount of \$1,351,012 for Dr. Minakata' fraction; and twenty-five (25) advisees scholarships, fellowships and awards.

• <u>Service</u>

Dr. Minakata has served as a member on professional conference organizing committee and various campus committees at the Department and University level. In addition, he has reviewed proposals and many peer-reviewed manuscripts.

Recent and Significant Publications/Exhibitions/Performances/Etc.

Minakata, D. Development of elementary reaction-based kinetic model to predict the aqueous-phase fate of organic compounds induced by reactive free radicals. *Accounts of Chemical Research*. 2024, 57, 12, 1658-1669

Information Sheet for Board of Trustees Lanrong Bi

Michigan Technological University

Lanrong Bi, who is currently an associated professor with tenure in the Department of Chemistry in the College of Sciences and Arts, is being considered for promotion to full professor of chemistry in the Department of Chemistry in the College of Sciences and Arts.

Academic Training:

Ph.D. in Pharmaceutic Sciences	2000	School of Pharmacy, Peking University (Beijing, China)
Postdoctoral Research Fellow	2001-2002	National Center for Scientific Research (CNRS), France
Postdoctoral Research Scientist	2002-2003	NIH-supported Postdoc position at CUNY, NY
Postdoctoral Research Scientist	2003-2005	Columbia Genome Center, Columbia University, NY

Professional Record:

2013- present	Associate Professor (with tenure), Department of Chemistry, Michigan Technological University	
2007 – 2013	Assistant Professor, Department of Chemistry, Michigan Technological University	
2005-2007	Associate Research Scientist, Columbia Genome Center, Columbia University, NY	
2000-2001	Lecturer, School of Pharmacy, Peking University (China)	

Summary of Accomplishments

Research and Scholarly Activity: Dr. Lanrong Bi, an Associate Professor in the Department of Chemistry at Michigan Technological University, is at the forefront of research in organelle-targeted therapeutic delivery. With a Ph.D. in Pharmaceutical Sciences from Peking University—a globally esteemed institution (#14 among world universities)—Dr. Bi brought her expertise from her previous role as an Associate Research Scientist at Columbia University's Genome Center to Michigan Tech. Here, she has established an innovative and collaborative research program focused on pioneering advancements in therapeutic delivery. Through this program, she has secured substantial funding from leading organizations, including NIH, NSF, AHA, NASA, MMIE, and Roche. This support has provided students with invaluable interdisciplinary training and hands-on experience in state-of-the-art research projects. Dr. Bi's collaborative approach has been instrumental in attracting both internal and external funding, with awarded grants totaling \$1,782,783 and pending proposals of \$9,497,096, where she has served as Principal Investigator, further strengthening Michigan Tech's research capabilities.

During Dr. Bi's recent **American Heart Association (AHA) funding** period, Dr. Bi encountered health challenges requiring two surgeries. Despite these obstacles, Dr. Bi maintained our productivity with two no-cost extensions, culminating in 12 publications relevant to this AHA project and five manuscripts in revision. This progress helped Dr. Bi secured her second **NIHR15 grant of \$469,500** in the year 2024, supporting further research and contributing to Michigan Tech's standing as a center for medical research advancement.

Dr. Bi's research group has made considerable scholarly contributions, reflected in two U.S. patents from her research lab. She personally holds **10 U.S. patents** and has authored over **50 articles** in esteemed journals, including *Proceedings of the National Academy of Sciences USA (Impact factor: 11.1), Journal of the American Chemical Society (Impact factor: 14.8), and Autophagy (Impact factor: 16).* With over **16764 citaons**, an H-index of 29, and an i10-index of 52, Dr. Bi's work is highly regarded, underscoring the depth and impact of her research.

Teaching and Mentoring: Dr. Bi is committed to advancing education for both graduate and undergraduate students at Michigan Tech, consistently receiving high evaluations for her teaching. She is also deeply dedicated to mentoring, actively guiding students in their research pursuits. In recognition of her contributions, **Dr. Bi received the Bhakta Rath Research Award** in 2012, a prestigious honor for work that meets future national needs and fosters technological progress. This award, shared with her Ph.D. student Nazmiye Yapici, illustrates the strength and impact of her mentorship.

Her mentorship has helped students achieve outstanding success. For instance, **Catherine Bammert secured an Assistant Professor position at UT MD Anderson Cancer Center**, the nation's top-ranked cancer research institute, **directly after earning her Ph.D. in Dr. Bi's lab**, bypassing the need for a postdoctoral fellowship. Similarly, **Nazmiye Yapici has received substantial NSF funding as a principal investigator**, showcasing the quality of training provided in Dr. Bi's lab and her dedication to nurturing future leaders in science and technology. Supported by Michigan Tech and in collaboration with other faculty, Dr. Bi's commitment to research, mentorship, and teaching creates a dynamic environment where students excel and make meaningful contributions to scientific advancement.

Professional Service: Since 2015, Dr. Lanrong Bi has had the privilege of serving on the Editorial Board of *Nature Scientific Reports* (Nature Publishing Group, Impact Factor: 5.133). Additionally, she has contributed as a **Guest Editor** for *Antioxidants* (Impact Factor: 7.675), *Biomedicines* (Impact Factor: 4.757) and Molecules (Impact Factor: 4.2). These editorial roles reflect Dr. Bi's commitment to maintaining high standards in scientific research and the dissemination of knowledge. Her selection for these positions highlights her expertise and dedication to advancing the field, while also underscoring Michigan Tech's support of faculty in impactful service roles that align with the university's values of excellence, collaboration, and significant contributions to the broader scientific community.

Since 2012, Dr. Bi has also **served as a regular member of numerous NIH study sections**, bringing her expertise to various panels, including the Biological Chemistry, Biophysics, and Drug Discovery (IMST) study section, the Interdisciplinary Molecular Sciences and Training (NCI IMAT), and the NIH NCI R33 Emerging Technologies to Accelerate Cancer Research. Through these roles, Dr. Bi has demonstrated a strong commitment to the NIH's peer review process, offering valuable insights to evaluate research that advances health and medicine. Her participation in these specialized panels reflects her dedication to rigorous, high-quality scientific review.

As a mentor and co-chair for the ACS Postdoc to Faculty training workshop, Dr. Bi has also been able to support postdoctoral scholars transitioning to faculty roles. Through developing training modules, leading career development sessions, and offering guidance on teaching, research management, and work-life balance, Dr. Bi has helped future faculty navigate the complexities of academia. This work reflects Michigan Tech's dedication to fostering academic talent and furthering the reputation of Michigan Tech as a leader in mentorship and research excellence.

Dr. Bi has further contributed by serving as a Session Chair at ACS national meetings, where she has led symposia such as the "Symposium on Biomass and Biotechnologies for Energy" at the 246th ACS meeting in Indianapolis and "Dye-Sensitized Solar Cells and Organic Solar Cells" at the 245th meeting in New Orleans. Additionally, she co-chaired the Annual World Congress of Molecular & Cell Biology, underscoring her commitment to fostering scientific collaboration and advancing her field through these leadership roles.

Dr. Bi is grateful for Michigan Tech's support, which has provided a solid foundation for her professional development, research, and service contributions. Her achievements reflect both her dedication and the university's commitment to creating an environment where faculty can make significant impacts in their fields. This combination of her efforts and Michigan Tech's resources enhances both her career and the university's reputation within the global scientific community.

K12 Education Outreach: Dr. Bi's research group is making a significant impact in K-12 educational outreach and science education through their engaging **holiday-themed chemistry demonstrations** at local schools. By introducing young students to scientific concepts in a fun, hands-on way, they are sparking curiosity and making science accessible and enjoyable. These demonstrations provide foundational insights into scientific principles while also instilling a positive attitude toward learning, potentially inspiring the next generation of scientists. Beyond enriching K-12 students, these outreach efforts offer invaluable teaching experience for members of Dr. Bi's group, who are dedicated to **visiting classrooms 2-3 times a year**. This consistent involvement underscores their commitment to local education.

Summary: Dr. Bi is honored to contribute to Michigan Tech University's commitment to excellence. Her research group has made steady advancements in life sciences, producing impactful work that has earned citations and recognition, underscoring both its quality and relevance. She takes pride in mentoring students like Dr. Catherine Bammert and Dr. Nazmiye Yapici, who have flourished within Michigan Tech's rigorous graduate training environment. Dr. Bi is also privileged to support public health and medicine through her ongoing role on NIH study section panels, where she upholds high standards of scientific review, and as a Guest Editor for leading journals, where she brings her expertise to advancing biomedical research.

Dr. Bi deeply values the resources, research opportunities, and academic support Michigan Tech provides, recognizing them as essential to her work. She is equally committed to K-12 outreach and science education, aligning her efforts with the university's broader mission to engage with and support the community. Integrating her teaching, research, and service, Dr. Bi strives to create meaningful, lasting contributions. She feels privileged to be part of a university that champions scientific excellence, education, and community engagement and looks forward to continuing her journey at Michigan Tech with appreciation for the support and collaboration of her colleagues over the past 17 years and beyond.

Information sheet for board of trustee (Lanrong Bi)

INFORMATION SHEET FOR BOARD OF TRUSTEES Tatyana G. Karabencheva-Christova Michigan Technological University

Tatyana G. Karabencheva-Christova, who is currently an associate professor of chemistry with tenure in the Department of Chemistry in the College of Sciences and Arts, is being considered for promotion to professor of chemistry with tenure in the Department of Chemistry in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2011	Bristol University, Bristol, UK
B.S.	2004	Sofia University, Sofia, Bulgaria

Professional Record:

2022-present	Associate Professor with tenure, Department of Chemistry, Michigan Technological
	University, Houghton, MI
2019 – 2022	Associate Professor (without tenure), Department of Chemistry, Michigan
2015 - 2022	Technological University, Houghton, MI
2017 – 2019	Research Associate Professor, Department of Chemistry, Michigan Technological
	University, Houghton, MI
2012-2017	Associate Professor, Northumbria University, Newcastle-upon-Tyne, UK
2011-2012	Assistant Professor, Northumbria University, Newcastle-upon-Tyne, UK
2010-2013	Visiting Scholar and Marie Curie Fellow, Stanford University, CA, USA
2008-2010	Research Fellow, Autonomous University of Barcelona, Spain

Summary of Accomplishments:

<u>Teaching</u>

Dr. Karabencheva-Christova has actively contributed to the undergraduate teaching mission of the Department of Chemistry by developing and delivering a new undergraduate course, "CH2510 - *Introduction to Computational Chemistry and Chemical Informatics*" at MTU. She also updated and delivered a graduate course "*Molecular Modeling*" at MTU. Dr. Karabencheva-Christova led the effort to upgrade and improve (including name change) the B.S. program in "*Computational Chemistry and Chemical Informatics*" at MTU.

• <u>Research/Scholarly Activity</u>

Through various multilevel computational chemistry methods, Dr. Karabencheva-Christova's research reveals the mechanisms of reactions catalyzed by metal-containing enzymes. This research is essential for drug design, biomedicine, chemical biology, and enzyme engineering. In particular, Dr. Karabencheva-Christova's research focuses on computational chemistry studies of i) zinc-containing matrix metalloproteinases (MMPs); and ii) iron-dependent DNA and histone demethylases. Dysfunction of MMP enzymes leads to diseases such as various cancers, arthritis, and many others, and therefore they are targets for drug design. Dr. Karabencheva-Christova's studies provide insights into structure-function relationships and the mechanism of collagen hydrolysis by MMPs. This research is funded by NIH. Another direction of Tatyana's research explores the catalytic mechanisms of iron-dependent oxygenases which provide new horizons for enzyme redesign and design of better inhibitors. During her career, Tatyana has secured research grants funding from funding agencies such as the National Institutes of Health, European Commission, the European Molecular Biology Organization, High-Performance Computing - Europe, the

UK Overseas Scholarship, and the Brazilian State Funding Agencies)/The UK Academies Research Fellowship. The work of her group has been featured on the covers of several peer-reviewed journals.

• <u>Service</u>

Tatyana is a member of the Graduate Program Committee at the Department of Chemistry at MTU where she contributes to ongoing efforts to update and improve graduate education in chemistry. Karabencheva-Christova is a member of the Editorial Advisory Board of ChemPhysChem and an Editor of the Journal of Computational Biophysics and Chemistry. She has been a Volume Editor/Co-Editor of the Elsevier Inc. Book Series: Advances in Protein Chemistry and Structural Biology. Karabencheva-Christova serves on review panels for NIH and NSF and reviews for DoE, ACS, and RCS journals. In addition, Karabencheva-Christova serves on the GPC committee, TPR committee, Diversity Inclusion and Belonging Committee, and ACS Bridge Partnership program and has been co-chair of the chemistry department chair search.

- Recent and Significant Publications/Exhibitions/Performances/Etc.
- Anandhu Krishnan, Sodiq Waheed, Sreerag Melayikandy[,] Ciara LaRouche, Meredith Paik, Christopher J. Schofield and Tatyana G. Karabencheva-Christova^{*}, Effects of Clinical Mutations in the Second Coordination Sphere and Remote Regions on the Catalytic Mechanism of Non-Heme Fe(II)/2-Oxoglutarate-Dependent Aspartyl Hydroxylase AspH, ChemPhysChem, 2024, e202400303, Featured on the <u>Front Cover</u>
- Koteswara Rao Gorantla, Sodiq O. Waheed, Anandhu Krishnan, Ann Varghese, Isabella DiCastri, Ciara LaRouche, Meredith Parks, Gregg B. Fields, and Tatyana G. Karabencheva-Christova*, Novel Insights into the Catalytic Mechanism of Collagenolysis by Zn(II)-Dependent Matrix Metalloproteinase-1, Biochemistry 2024, 63, 15, 1925–1940, Featured as <u>Supplementary Cover</u>
- Anandhu Krishnan, Sodiq Waheed, Ann Varghese, Fathima Hameed, Christopher Schofield and Tatyana G. Karabencheva-Christova*, Unusual Catalytic Strategy by Non-Heme Fe(II)/2-Oxoglutarate-Dependent Aspartyl Hydroxylase AspH, Chemical Science, 2024, 15, 3466-3484, Featured on the <u>Back Cover</u>
- Ann Varghese, Sodiq O. Waheed, Koteswara Rao Goranta, Isabella DiCastri, Ciara LaRouche, Brendan Kaski, Gregg Fields and Tatyana G. Karabencheva-Christova*, Catalytic Mechanism of Collagen Hydrolysis by Zinc(II)-Dependent Matrix Metalloproteinase-1, Journal of Physical Chemistry B, 2023, 127, 9697–9709. Selected as Supplementary Cover
- 5. Ann Varghese, Sodiq O. Waheed, Shobhit S. Chaturvedi, Isabella DiCastri, Ciara LaRouche, Brendan Kaski, Nicolai Lehnert, Deyu Li, Christo Z Christov and Tatyana G. Karabencheva-Christova*, Revealing the Catalytic Strategy of FTO, Chem Catalysis, 3, 100732, 2023, Preview: Detailed computational analysis reveals the molecular basis of FTO catalysis, Lide Cha, Angela Yao, Wei-chen Chang, Chem Catalysis, Volume 3, Issue 9, 2023,100763
- Sodiq O. Waheed, Ann Varghese, Isabella DiCastri, Brenden Kaski, Ciara LaRouche, Gregg B. Fields and Tatyana G. Karabencheva-Christova*, Mechanism of the Early Catalytic Events in the Collagenolysis by Matrix Metalloproteinase-1, ChemPhysChem, e202200649, 2022, Featured on the <u>Front Cover</u>, with the author's <u>Cover Profile</u>
- Shobhit S. Chaturvedi, Bathir Jaber Sathik Rifyaee Simahudeen, Sodiq Waheed, Jon Wildey, Cait Warner, Christopher Schofield, Tatyana Karabencheva-Christova, Christo Christov, Can Second Coordination Sphere and Long-Range Interactions Modulate Hydrogen Atom Transfer in a Non-Heme Fe(II) Dependent Histone Demethylase?, JACS Au, 9, 2169–2186, 2022
- 8. Sodiq O. Waheed, Ann Varghese, Shobhit S. Chaturvedi, **Tatyana G. Karabencheva-Christova*** and Christo Z. Christov*, How Human TET2 Enzyme Catalyzes the Oxidation of Unnatural Cytosine Modifications in Double-Stranded DNA, *ACS Catalysis*, *12* (9), 5327-5344,2022

INFORMATION SHEET FOR BOARD OF TRUSTEES RUDY L. LUCK Michigan Technological University

Rudy L. Luck, who is currently an associate professor of chemistry with tenure in the Department of Chemistry in the College of Science and Arts, is being considered for promotion to professor of chemistry.

Academic Degrees:

Ph.D.	1987	Inorganic Chemistry, University of Toronto, Ont., Canada
M.S.	1984	Inorganic Chemistry, University of Toronto, Ont., Canada
B.S.	1982	Chemistry & Biochemistry, University of Toronto, Ont., Canada

Professional Record:

2003 – present	Associate Professor, Chemistry, Michigan Technological University
1997 – 2003	Assistant Professor, Chemistry, Michigan Technological University
1990 – 2003	Assistant Professor, Chemistry, American University
1987 – 1990	Postdoctoral Fellow, Texas A&M University, Laboratory for Molecular Structure and Bonding,
	Professor F. A. Cotton
1984 – 1987	Doctoral Fellowships for Graduate Research, University of Toronto, Ont., Canada
1982 – 1985	Teaching Assistant, Chemistry Department, University of Toronto, Ont., Canada

Summary of Accomplishments:

- <u>Teaching</u> Rudy Luck's teaching portfolio spans foundational and advanced topics in chemistry, with primary instruction in first-year University Chemistry and fourth-year Inorganic Chemistry lectures and labs. He has also developed two specialized courses essential to the department's curriculum: CH4130, a professional development course tailored for undergraduate majors, and CH5130, a graduate-level course in chemical safety, which he created and established as a required course for chemistry graduate students, with attendance from students across various departments. Luck has further enriched his instructional range by offering courses in crystallography, organometallic chemistry, and catalysis. As a VIPEr Fellow over the past two years (an initiative by the American Chemical Society's Division of Inorganic Chemistry), he engaged in professional development focused on innovative teaching methods for inorganic chemistry. In May 2014, Luck was invited to teach a specialized two-week graduate course on Organometallic Catalysis at Al-Farabi Kazakh National University in Kazakhstan.
- <u>Research/Scholarly Activity</u> Luck has an extensive research portfolio, with over 160 peer-reviewed publications and 25 conference presentations. His work has earned an h-index of 30 and an i10-index of 103 according to Google Scholar. His research covers a broad range of topics, including the activation of small molecules (such as dinitrogen and dihydrogen), the synthesis of metal-metal quadruple bond complexes, catalysis, epoxidation, metal oxide clusters, and theoretical modeling of pH probes for use in organelles and environmental applications. Luck has successfully mentored eight PhD students, including Professor Ge Wang, who was honored in Michigan Tech's College of Science and Arts Academy, and two MS students. He is also skilled in crystallography, operating a single crystal X-ray diffractometer to obtain structural data for research across his department and at NMU. His research has attracted substantial funding, including a grant from the National Science Foundation and two current awards from the National Institutes of Health (NIH). September 2023awarded in September 2023, provides \$469,500 for his ongoing work, and a supplemental NIH grant of \$77,000, awarded in June 2024, funded the acquisition of a Shimadzu HPLC instrument.
- <u>Service</u> Rudy Luck has made significant service contributions. He has served on key departmental committees, including the Promotion and Tenure Committee, the Executive Committee, and Graduate Admissions, and has held the role of Department Safety Officer since 2013. At the university level, Luck was appointed Faculty Fellow in the Office of Compliance, Integrity, and Safety from September 2015 to June 2016, where his efforts led to the development of the university's Chemical Hygiene Plan. Luck represented the department in the University Page 1 of 2

Senate from January 2007 to September 2012, serving as Senate President from September 2009 to May 2012, elected unopposed each year. In addition, he has advised various student organizations on campus, including the Chess, Table Tennis, and Cricket clubs, supporting student engagement beyond academics.

- Recent and Significant Publications/Exhibitions/Performances/Etc.
- 2023 D.L. Arachchige, S.K. Dwivedi, S. Jaeger, A.M. Olowolagba, M. Mahmoud, D.R. Tucker, D.R. Fritz, T. Werner, M. Tanasova, R.L. Luck, H. Liu, Highly Sensitive Cyanine Dyes for Rapid Sensing of NAD(P)H in Mitochondria and First-Instar Larvae of Drosophila melanogaster, ACS Appl. Bio Mater., 6, 3199-3212.
- 2023 S.K. Dwivedi, D.L. Arachchige, A. Olowolagba, M. Mahmoud, J. Cunnien, D.R. Tucker, D. Fritz, T. Werner, R.L. Luck, H. Liu, Thiophene-based organic dye with large Stokes shift and deep red emission for live cell NAD(P)H detection under varying chemical stimuli, J. Mater. Chem. B, 11, 6296-6307.
- 2023 S.K. Dwivedi, D.L. Arachchige, T. Vohs, J. Tang, K. Usimaki, A.M. Olowolagba, D.R. Fritz, R.L. Luck, T. Werner, H. Liu, Near-infrared rhodol dyes bearing salicylaldehyde moieties for ratiometric pH sensing in live cells during mitophagy and under hypoxia conditions, *J. Mater. Chem. B*, 11, 2852-2861.
- **2023** Y. Zhang, X. Qiu, B. Wang, X. Liu, Y. Cheng, X. Rong, Y. Kuang, L. Sun, J. Liu, R.L. Luck, H. Liu, **Effective fluorescent probe for detection of phosgene based on naphthalimide dyes in liquid and gaseous phases**, *Spectrochim. Acta, Part A*, 289, 122189.
- 2022. Zhang, Y., Qiu, X., Sun, L., Yan, Q., Luck, R. L., Liu, H. A two-photon fluorogenic probe based on a coumarin Schiff base for formaldehyde detection in living cells. *Spectrochim. Acta, Part A* 274, 121074. 10.1016/j.saa.2022.121074.
- **2022**. Luck, R. L., Newberry, N. K. Free-radical catalyzed oxidation reactions with cyclohexene and cyclooctene with peroxides as initiators. J. Phys. Org. Chem., 10.1002/poc.4326.
- 2022. Zhang, Y., Sun, L., Yan, Q., Qiu, X., Cheng, Y., Wang, B., Tan, X., Fang, M., Luck, R. L., Liu, H. Near-infrared fluorescent probe based on cyanine scaffold for sensitive detection of uranyl ions in living cells and water samples. *Microchem. J.* 180, 107619. 10.1016/j.microc.2022.107619
- 2022. Zhang, Y., Arachchige, D. L., Olowolagba, A., Luck, R. L., Liu, H. Near-infrared fluorescent probe based on rhodamine derivative for detection of NADH in live cells. *Methods* (Amsterdam, Neth.) 204, 22-28. 10.1016/j.ymeth.2022.03.019.
- 2022. Wan, S., Vohs, T., Steenwinkel, T. E., White, W. R., Lara-Ramirez, A., Luck, R. L., Werner, T., Tanasova, M., Liu, H. Near-Infrared Fluorescent Probes with Amine-Incorporated Xanthene Platforms for the Detection of Hypoxia. ACS Appl Bio Mater. 10.1021/acsabm.2c00493.
- **2021**. Mazi, W., Yan, Y., Zhang, Y., Xia, S., Wan, S., Tajiri, M., Luck, R. L., Liu, H. **A near-infrared fluorescent probe based on a hemicyanine dye with an oxazolidine switch for mitochondrial pH detection**. *J. Mater. Chem. B 9*(3), 857-863. 10.1039/d0tb02181d.
- 2021. Wan, S., Xia, S., Medford, J., Durocher, E., Steenwinkel, T. E., Rule, L., Zhang, Y., Luck, R. L., Werner, T., Liu, H. A ratiometric near-infrared fluorescent probe based on a novel reactive cyanine platform for mitochondrial pH detection. J. Mater. Chem. B 9(25), 5150-5161. 10.1039/d1tb00643f.
- 2021. Huntley, G. M., Luck, R. L., Mullins, M. E., Newberry, N. K. Hydrochloric Acid Modification and Lead Removal Studies on Naturally Occurring Zeolites from Nevada, New Mexico, and Arizona. *Processes 9*(7), 1238. 10.3390/pr9071238.
- 2021. Zhang, Y., Xia, S., Wan, S., Steenwinkel, T. E., Vohs, T., Luck, R. L., Werner, T., Liu, H. Ratiometric Detection of Glutathione Based on Disulfide Linkage Rupture between a FRET Coumarin Donor and a Rhodamine Acceptor. *ChemBioChem* 22(13), 2282-2291. 10.1002/cbic.202100108.
- 2021. Yan, Y., Zhang, Y., Xia, S., Wan, S., Vohs, T., Tanasova, M., Luck, R. L., Liu, H. Ratiometric near-infrared fluorescent probes based on hemicyanine dyes bearing dithioacetal and formal residues for pH detection in mitochondria. *Molecules* 26(7), 2088. 10.3390/molecules26072088.
- 2021. Bainbridge, P. C., Luck, R. L., Newberry, N. K. Syntheses, theoretical studies, and crystal structures of [Ni(II)SSRRL](PF6)2 and [Ni(II)SRSRL](CI)(PF6) that contains anagostic interactions. Can. J. Chem. 99(2), 137-146. 10.1139/cjc-2020-0136.

INFORMATION SHEET FOR BOARD OF TRUSTEES Stefka Hristova Michigan Technological University

Stefka Hristova, who is currently an associate professor of digital media with tenure in the Department of Humanities in the College of Sciences and Arts, is being considered for promotion to full professor of Digital Media with tenure in the Department of Humanities in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2010	University of California, Irvine, Irvine, CA
M.A.	2004	California State University Los Angeles, Los Angeles, CA
B.S.S.	1999	Emerson College, Boston, MA

Professional Record:

2017 – present	Associate Professor (with tenure) Department of Humanities, College of Sciences and	
2017 – present	Arts, Michigan Technological University	
2011-2017	Assistant Professor (without tenure) Department of Humanities, College of Sciences	
	and Arts, Michigan Technological University	
2010-2011	Part-Time Lecturer, Department of Art, California State University Long Beach	

Summary of Accomplishments:

<u>Teaching</u>

Dr. Hristova contributes to the undergraduate major Communication, Culture, Media; the graduate program in Rhetoric, Theory, and Culture; and to the Essential Education at Michigan Tech. She was a Finalist for the 2021 Distinguished Teaching Award at Michigan Tech. Additionally, she has placed among the top 10% teachers at the College of Arts and Sciences, Michigan Technological University for 2015, 2017, 2019, 2020, 2021, 2022.

<u>Research/Scholarly Activity</u>

In her scholarship, Dr. Hristova explores the cultural impact of Artificial Intelligence. She has published numerous articles and book chapters, authored a book (*Proto-Algorithmic War*, 2022), edited a book (*Algorithmic Culture*, 2021), and secured a grant on the topic (*Bad Information* (2021-2).

• <u>Service</u>

Dr. Hristova has engaged in departmental, university, and professional service. Most notably, she has directed the undergraduate program in Communication, Culture, Media; serves on Diversity Council; leads the Policy Ethics and Culture Tech Forward Initiative and directs the Institute for Policy, Ethics, and Culture.

- <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>
 - Hristova, Stefka. Proto-Algorithmic War: How the Iraq War Became a Laboratory for Algorithmic Logics. Palgrave Press, Social and Cultural Studies of Robots and Al series, 2022. <u>https://link.springer.com/book/10.1007/978-3-031-04219-5</u>
 - Hristova, Stefka with Soonkwan Hong, Jennifer D. Slack (Eds.) *Algorithmic Culture: How Big Data and Al are Transforming Everyday Life*. Lanham: Lexington Books, 2021.
 - Hristova, Stefka. "Seeing Double: Machine Vision, Difference, and Repetition," *communication* +1, special issue on "Media of Verification." Vol. 10: Iss.1, Article

5. https://scholarworks.umass.edu/cpo/vol10/iss1/5

- Hristova, Stefka. "Habitus and Habits in Algorithmic Culture." In *Handbook of Critical Studies of Artificial Intelligence*, edited by Simon Lindgren. Edward Elgar Publishers. November, 2023.
- Hristova, Stefka. "Traces: Photographic Negatives and the Quest for Truth," Visual Resources Journal. Special Issue "What is an Image, Now?" (December, 2022). https://doi.org/10.1080/01973762.2022.2149299
- Hristova, Stefka. "Sociality, Appearance, and Surveillance in Digital Political Activism." In *Visual Activism in the 21st Century: Art, Protest and Resistance in an Uncertain Worlds*, edited by Stephanie Hartle and Darcie White, 252-263. London: Bloomsbury Visual Arts, 2022.
- Hristova, Stefka. "Emptied Faces: In search for an algorithmic punctum." In *Faces on Screen: New Approaches*, edited by Alice Maurice, 75-90. Edinburgh: Edinburgh University Press, 2022.
- Hristova, Stefka. "Portraiture, Surveillance, and the Continuity Aesthetic of Blur." *Frames Cinema Journal*, (2021), <u>10.15664/fcj.v18i1.2249</u>.
- Hristova, Stefka. "Training for the Algorithmic Machine." *Media and Communication, Special Issue: Critical Theory in the Digital Media Age: Ways Forward* 9, no. 2 (2021), https://www.cogitatiopress.com/mediaandcommunication/article/view/3773.
- Hristova, Stefka, Soonkwan Hong, and Jennifer D. Slack. "Introduction: In the Presence of Algorithms." In Algorithmic Culture: How Big Data and Artificial Intelligence are Transforming *Everyday Life*, edited by Stefka Hristova, Soonkwan Hong, Jennifer D. Slack. Lanham: Lexington Books, 2021.
- Slack, Jennifer D., Stefka Hristova. "Why Do We Need the Concept of Algorithmic Culture?" In *Algorithmic Culture: How Big Data and Artificial Intelligence are Transforming Everyday Life*, edited by Stefka Hristova, Soonkwan Hong, Jennifer D. Slack. Lanham: Lexington Books, 2021.
- Hristova, Stefka. "Do You See What I See?" Photographic Image. North of the 45th Exhibition at the DeVos Art Museum, Northern Michigan University. June-July 2024. Juried.
- Hristova, Stefka and Atkinson, Sarah. *Unreal Reflections*. Photographic Exhibition, Concourse Gallery, Michigan Technological University September 2023. Invited.
- Hristova, Stefka. Moderator for "AI and Photography" *Mozilla Foundation Festival*. March 2023.
- Hristova, Stefka. "Negating Visions." Exploratory Grant. *Hagley Library*, May 2023 \$400.
- Hristova, Stefka. "Seeing Double: machine learning, difference, and repetition." Presenter at *Data and Society*'s Digital Doppelgangers Workshop, May 2023, \$150.
- Harter, Kathleen and Stefka Hristova. "Adapt Copper TRACES In-Park Education Event to Digital Format." *National Park Service*. Fall2023-Summer 2025. \$45,912.95
- Hristova, Stefka and Sue Collins. "Bad Information: Fake News, Manipulated Photographs, and Social Influencers." *Michigan Humanities*. Fall 2021-Spring 2022 \$8,350.
- CUE.NEXT Computing in Undergraduate Education Workshop Participant January 2020 \$1200.
- NEH Summer Scholar for "Material Maps In the Digital Age" Summer 2019 \$3300.

INFORMATION SHEET FOR BOARD OF TRUSTEES KELLY S. STEELMAN Michigan Technological University

Kelly S. Steelman, who is currently an associate professor of psychology and human factors with tenure in the Department of Psychology and Human Factors in the College of Sciences and Arts, is being considered for promotion to professor of psychology and human factors with tenure in the Department of Psychology and Human Factors in the College of Sciences and Arts.

Academic Degrees:

Ph.D.	2011	University of Illinois at Urbana-Champaign, Psychology, Urbana, IL
M.S.	2006	University of Illinois at Urbana-Champaign, Human Factors, Urbana, IL
M. ENG	2004	Illinois Institute of Technology, Mechanical and Aerospace Engineering, Chicago, IL
B.S.	2002	Illinois Institute of Technology, Aerospace Engineering, Chicago, IL

Professional Record:

2019-present	Associate Professor (with tenure), Department of Psychology and Human Factors (formerly Cognitive and Learning Sciences), Michigan Technological University
2013 – 2019	Assistant Professor (without tenure), Department of Cognitive and Learning
	Sciences, Michigan Technological University
2011 – 2013 Postdoctoral Researcher, Department of Psychology, Flinders University	

Summary of Accomplishments:

<u>Teaching</u>

In early 2020, Dr. Steelman attended the Teaching and Learning Studio at Stanford's d.School, a 5-day intensive program to learn design tools and mindsets for navigating complex challenges in higher ed. This experience was transformative, changing not only her teaching but shifting the direction of her service, leadership, and research. Although her classes have always involved active learning, this training helped her more meaningfully engage students through reflection, out-of-the classroom experiences, and offering students choice in the way they demonstrate their learning. She has developed a range of courses in psychology and human factors, but she is most proud of *Intro to Engineering Psychology*. The course uses approaches learned through IDEAhub and the d.School and introduces engineering and computer science students to human factors and human-centered design early in their curriculum through gen ed. It is also the first foundational course in the Human Factors major. Over the past several years, Dr. Steelman has not only developed her own teaching practices but has shared what she's learned. In the last year alone, she engaged over 75 different Michigan Tech faculty and staff in teaching and curriculum innovation workshops and presented 9 workshops at regional or national conferences.

<u>Research/Scholarly Activity</u>

Dr. Steelman's research focuses on the design and development of technology and training, using psychological theories of attention to help people manage large information demands and reduce cognitive overload in contexts including transportation and education. Her work is applied and interdisciplinary; she regularly collaborates with faculty in computer science and engineering education. Within the Breaking Digital Barriers Research Group (co-led with Dr. Wallace), she led the development of a tech anxiety rating scale and a tutoring model to reduce technological anxiety and improve digital literacy for older adults. Over the past decade their research group has trained scores of college students, librarians, and community volunteers in the tutoring model and facilitated hundreds of tutoring sessions

for older adults in the local community through the Building Adult Skills in Computing (BASIC) program. BASIC serves as a service-learning program for students and a testbed for research with older adults understanding the barriers they face in gaining digital competency. This research is funded by the NSF, and Dr. Steelman is the PI on a grant to develop a socio-technical system for remote digital tutoring, which includes a functional software suite that is currently undergoing community testing. Building on this, her research team is integrating Large Language Models to assess and address learner digital competency through natural language queries, adapting strategies from our tutoring model.

Her most well-cited work comes from the development of a computational model of attention, n-SEEV, that predicts eye movements and attentional behavior in dynamic workspaces like in aviation and driving. This model has been validated through simulations and behavioral studies and has been developed into a tool with a graphical user interface. Building off this work, her recent studies have examined the impact of in-vehicle technologies on driver attention and performance in semi-autonomous driving. She has recently applied for grants through the Federal Rails Administration to support future driving research. Her education research, a collaboration with faculty from engineering and computer science, examines programming skill development and technology adoption. Recent work with her graduate students examines multimedia learning, particularly through TikTok-style videos, that defy traditional design principles but engage learners effectively. At Michigan Tech, she has advised five PhD students and two master's students and served on 18 additional thesis and dissertation committees.

• <u>Service</u>

Dr. Steelman is the Chair of the Department of Psychology and Human Factors. In this capacity, she increased enrollment by 65% in three years, led the design and implementation of a new major in human factors, and facilitated the department's first self-study and external evaluation. An early member of the 21st Century Education Tech Forward Initiative and IDEAhub, she served as the interdisciplinary team lead from 2019-2022, developing the initial concept for Essential Education minors. In 2022, she became co-director of IDEAhub and co-led the final writing, presentation, and negotiation of the Essential Ed senate proposal. Since 2023, she has served as a member of the Essential Ed Implementation Team, working with faculty, staff, and administration to prepare for the launch of Essential Education in Fall 2025. Her service to the profession has been through the organization of two academic conferences and advocacy for the field of human factors as a Science Policy Fellow for the Human Factors and Ergonomics Society.

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

Lucas, E., **Steelman**, K.S., Ureel, L. & Wallace, C. (2024). For those who don't know (how) to ask: Building a dataset of technology questions for digital newcomers. *AI for Education - Bridging Innovation and Responsibility at the 38th AAAI Annual Conference on AI*, <u>arXiv:2403.18125</u>

Steelman, K., Handley, H. (2022). <u>A Primer on the Human Readiness Level Scale</u>. In: Katie Plant and Gesa Praetorius (eds) Human Factors in Transportation. AHFE Open Access, vol 60. AHFE International, USA. Tislar, C. L. & Steelman, K.S. (2021). <u>Inconsistent seduction: Addressing potential confounds and methodological issues in the study of the seductive detail effect</u>. *Brain and Behavior, 11 (9), e2322*.
Steelman, K. S., & Tislar, K. L. (2019). <u>Measurement of Tech Anxiety in Older and Younger Adults</u>. In *International Conference on Human-Computer Interaction* (pp. 520-527). Springer, Cham.
Steelman, K.S., McCarley, J.S., & Wickens, C.D. (2017). <u>Theory-based Models of Attention in Visual</u> Workspaces. *International Journal of Human-Computer Interaction, 33*(1), 1-8.
Steelman, K.S., Tislar K.L., Ureel L.C., & Wallace C. (2017) <u>Eliciting Best Practices in Digital Literacy</u> <u>Tutoring: A Cognitive Task Analysis Approach</u>. In J. Zhou and G. Salvendy (Eds), Lecture Notes in Computer Science: Vol. 10297. Aging, Design and User Experience (pp. 447-460). Springer, Cham.

Steelman, K.S., McCarley, J.S. & Wickens, C.D. (2011). <u>Modeling the Control of Attention in Visual</u> <u>Workspaces</u>. *Human Factors*, *53*(2), 142-153.

E. Emeritus Rank

Andrew Storer, Provost and Senior Vice President for Academic Affairs

VIII-E. EMERITUS RANK

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

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

Dr. Leonard J. Bohmann, Professor Emeritus Department of Electrical & Computer Engineering	
Dr. John S. Gierke, Professor Emeritus Department of Geological & Mining Engineering & Sci	ences
Mr. John T. Lukowski, Professor Emeritus Department of Electrical & Computer Engineering	
Dr. Judith Perlinger, Professor Emerita Department of Civil, Environmental, & Geospatial Eng	ineering
Dr. Timothy J. Schulz, Professor Emeritus Department of Electrical & Computer Engineering	
Dr. Noel Urban, Professor Emeritus Department of Civil, Environmental, & Geospatial Eng	ineering



OFFICE MEMO

TO: Michigan Technological University Board of Trustees

- FROM: Jin W. Choi, Department Chair, Electrical and Computer Engineering
- **DATE:** March 26, 2025
- SUBJECT: Recommendation for Emeritus Status

In accordance with the Department of Electrical and Computer Engineering Charter, the Department's Promotion and Tenure Committee voted on March 25, 2025 to recommend that the Michigan Technological University Board of Trustees names Dr. Leonard J. Bohmann as Professor Emeritus upon his retirement on June 30, 2025.

Dr. Bohmann joined Michigan Tech in 1989 as Assistant Professor in Electrical and Computer Engineering, achieving the rank of Associate Professor in 1995, and Professor in 2011. He served as Interim Department Chair in 2007-2008 and has been Associate Dean of Engineering since 2007. He has made great contributions as both undergraduate and graduate educator, having developed and taught 18 courses under the quarter system and 23 under semesters. He was instrumental in developing the online MSEE, online course delivery, and certificates in EE Power. His contributions have been mainly in power systems and renewable energy. He has advised 20 graduate students to completion, been PI or co-PI on numerous funded projects, and published 62 papers. He has been active as reviewer, session chair, and committee contributor to ASEE and IEEE. He earlier led departmental efforts in ABET accreditation and now serves as an ABET accreditor. Additionally, Dr. Bohmann has contributed as Program Evaluator since 2005, and he became Team Chair and a Commissioner on the Engineering Accreditation Commission in 2016.

Approved

Jin Choi

Digitally signed by Jin Choi Date: 2025.03.26 09:20:18 -04'00'

Department Chair

Michelle Scherer Digitally signed by Michelle Scherer Date: 2025.03.27 09:40:36 -04'00'

College Dean

Date

Date

Revised 9/25/23

03/26/2025

Andrew J. Store	Digitally signed by Andrew J. Storer Date: 2025.03.31 11:14:43 -04'00'
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Provost and Senior Vice President for Academic Affairs

Date

Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2025.03.31 12:27:47 -04'00'

President

Date



то:	Michigan Technological University Board of Trustees
FROM:	Department of Geological and Mining Engineering and Sciences Chair
DATE:	March 20, 2025
SUBJECT:	Recommendation for Emeritus Status

The faculty of the Department of Geological and Mining Engineering and Sciences (GMES) voted on March 17, 2025, to request that the Michigan Technological University Board of Trustees name Dr. John S. Gierke as Professor Emeritus upon his retirement on June 30, 2025.

Dr. Gierke's professional career has been closely tied to Michigan Tech, beginning with his BS (1984) and MS (1986) in civil engineering and his PhD (1990) in environmental engineering. He joined the GMES faculty as an assistant professor in 1990, was promoted to associate professor in 1996, and became a professor in 2009. He served as Chair of the Department of GMES from 2014 to 2020.

Dr. Gierke has received international recognition for his interdisciplinary research in groundwater hydrology, contaminant removal, water-resource evaluation, landslide and volcanic hazards, and low-impact development. He has published 65 peer-reviewed journal articles and 12 book chapters, many of which are co-authored with his students. He has attracted nearly \$7 million in research funding.

Dr. Gierke has served as the advisor for 10 PhD students and 53 M.S. students. Additionally, he created and advised Michigan Tech's first environmentally focused enterprise, Aqua Terra Tech (2003-2012). In recognition of his outstanding achievements, Dr. Gierke was named Michigan Distinguished Professor of the Year by the President's Council of State Universities in Michigan in 2007.

We respectfully request the Board of Trustees to confer the title of Professor Emeritus to Dr. John S. Gierke in honor of his distinguished career and service to Michigan Technological University.

Approved

Aleksey Smirnov Digitally signed by Aleksey Smirnov Date: 2025.03.20 14:47:16 -04'00'	
Department Chair Michelle Scherer Digitally signed by Michelle Scherer Date: 2025.03.21 12:41:24 -04'00'	Date
College Dean Andrew J. Storer Digitally signed by Andrew J. Storer Date: 2025.03.24 11:20:23 -04'00'	Date
Provost and Senior Vice President for Academic Affairs Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2025.03.24 11:36:36 -04'00'	Date
President	 Date

630 Dow Environmental Sciences and Engineering Building | 1400 Townsend Drive, Houghton, MI 49931-1295 906-487-2531 | f. 906-487-3371 | geo@mtu.edu | **mtu.edu/geo**



OFFICE MEMO

TO: Michigan Technological University Board of Trustees

- FROM: Jin W. Choi, Department Chair, Electrical and Computer Engineering
- **DATE:** March 26, 2025
- SUBJECT: Recommendation for Emeritus Status

In accordance with the Department of Electrical and Computer Engineering Charter, the Department's Promotion and Tenure Committee voted on March 25, 2025 to recommend that the Michigan Technological University Board of Trustees names Mr. John T. Lukowski as Professor Emeritus upon his retirement on March 17, 2025.

Mr. John T. Lukowski has been a valued member of the faculty of the Department of Electrical and Computer Engineering at Michigan Technological University serving two years as an Instructor, 11 years as an Assistant Professor, and 28 years as an Associate Professor, totaling 41 years of service to the institution. He served as the ABET administrator and assessment chair for the department over three successful accreditation cycles, most recently in the 2024 cycle, contributing in a critical and challenging role necessary for the ongoing success of the unit. He taught 54 unique classes under the quarter and semester systems and was a key contributor in the department's capstone design program, evidenced in his role mentoring 15 senior design sections since January 2022. The department's students recognized Mr. Lukowski's significant contribution to their academic preparation in naming him the HKN Professor of the Year in 2022. Mr. Lukowski was engaged with MS-level graduate education and served as advisor or active committee member for 9 Thesis or Report MS students associated with sponsored research.

Approved

Jin Choi

Digitally signed by Jin Choi Date: 2025.03.26 10:18:09 -04'00'

03/26/2025 Date

Department Chair

Michelle Scherer Digitally signed by Michelle Scherer Date: 2025.03.27 09:40:17 -04'00'

College Dean

Date

Andrew J. Storer	Digitally signed by Andrew J. Storer Date: 2025.03.31 11:14:00 -04'00'
Provost and Senior Vice Pre	sident for Academic Affairs

Date

Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2025.03.31 12:27:27 -04'00'

President

Date



Michigan Tech

TO: Michigan Technological University Board of Trustees

- **FROM**: Audra Morse, Department Chair of Civil, Environmental, and Geospatial Engineering
- DATE: February 19, 2025
- **SUBJECT:** Recommendation for Emeritus Status

The faculty of the Department of Civil, Environmental, and Geospatial Engineering voted on February 10, 2025 to request that the Michigan Technological University Board of Trustees name Judith Perlinger as Professor Emerita upon her retirement on June 30, 2025.

Judith Perlinger joined the faculty at Michigan Technological University in 1995. Her research has studied environmental transport and transformation of organic pollutants and effects of these on human and ecosystem health and climate. In her 30 years on the faculty, she has published over 30 research papers and has collaborated on 8 book chapters. In 2006 she was inducted to the Michigan Tech Academy of Teaching Excellence for the Fredrick D. Williams Instructional Innovation Award.

Approved

Audra Morse Date: 2025.02.20 17:32:12 -05'00'	
epartment Chair Date	
Michelle Scherer Date: 2025.03.06 06:40:53 -05'00'	
College Dean Date	
Andrew J. Storer Digitally signed by Andrew J. Storer Date: 2025.03.21 13:06:12 -04'00'	
rovost and Senior Vice President for Academic Affairs Date	
Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2025.03.24 11:36:58 -04'00'	
resident Date	
college Dean Date Andrew J. Storer Digitally signed by Andrew J. Storer Date Date: 2025.03.21 13:06:12 -04'00' rovost and Senior Vice President for Academic Affairs Date Richard J. Koubek Digitally signed by Richard J. Nate: 2025.03.24 11:36:58 -04'00' Date	



OFFICE MEMO

TO: Michigan Technological University Board of Trustees

FROM: Jin W. Choi, Department Chair, Electrical and Computer Engineering

DATE: March 26, 2025

SUBJECT: Recommendation for Emeritus Status

The In accordance with the Department of Electrical and Computer Engineering Charter, the Department's Promotion and Tenure Committee voted on March 25, 2025 to recommend that the Michigan Technological University Board of Trustees names Dr. Timothy J. Schulz as University Professor Emeritus upon his retirement on June 30, 2025.

Dr. Schulz joined Michigan Tech in 1992 as Assistant Professor in Electrical & Computer Engineering, subsequently achieving the rank of Associate Professor and Professor. He became as Department Chair in 1999, was appointed to Dean of Engineering in 2007, and returned to the Department in 2012. In 2019 he was awarded the prestigious title of University Professor. He has made great contributions as both undergraduate and graduate educator, having developed and taught 11 courses under the quarter system and a similar number under semesters. Dr. Schulz also contributed significantly to efforts to develop the online MSEE in the areas of signal and systems. He is best known for his work in scene recovery, having pioneered both Multi-frame Blind Deconvolution (518 citations) while a PhD student and later Phase Diversity (719 citations). He has served as principal investigator or co-principal investigator on numerous funded projects and published over 70 scholarly contributions with over 4,000 citations. Dr. Schulz is also a fellow of SPIE and Optica (formerly OSA) and is a member of Tau Beta Pi.

Approved

Jin Choi

Digitally signed by Jin Choi Date: 2025.03.26 10:14:29 -04'00' 03/26/2026 Date

Department Chair

Michelle Scherer Digitally signed by Michelle Scherer Date: 2025.03.27 09:40:26 -04'00'

College Dean

Date

Andrew J. Store	Digitally signed by Andrew J. Storer Date: 2025.03.31 11:13:34 -04'00'
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Provost and Senior Vice President for Academic Affairs

Date

Richard J. Koubek Digitally signed by Richard J. Koubek Date: 2025.03.31 12:28:00 -04'00'

President

Date



TO: Michigan Technological University Board of Trustees

- **FROM**: Audra Morse, Department Chair of Civil, Environmental, and Geospatial Engineering
- DATE: February 19, 2025
- **SUBJECT:** Recommendation for Emeritus Status

The faculty of the Department of Civil, Environmental, and Geospatial Engineering voted on February 10, 2025 to request that the Michigan Technological University Board of Trustees name Noel Urban as Professor Emeritus upon his retirement on June 30, 2025.

Dr. Urban joined the faculty at Michigan Technological University in 1995. His research has studied aquatic biogeochemical modeling in Lake Superior. In his 30 years on the faculty, he has published over 25 research papers, collaborated on 12 book chapters, and has served as the primary advisor for over 50 Master of Science and Doctoral students.

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F. Appointment with Tenure - Amy Landis, Chemical Engineering Andrew Storer, Provost and Senior Vice President for Academic Affairs

V-F. APPOINTMENT WITH TENURE – AMY LANDIS

Dr. Amy Landis is being recommended for appointment as professor with tenure in the Department of Chemical Engineering effective August 4, 2025. The department and college of engineering promotion and tenure committees, the dean, the provost, and the president have endorsed the recommendation for this appointment and tenure. Dr. Landis was most recently a professor in the Department of Civil and Environmental Engineering at Colorado School of Mines. She will assume the duties of Associate Dean for Graduate and Online Education in the College of Engineering at Michigan Technological University August 4, 2025. Dr. Landis earned her PhD and MS from the University of Illinois at Chicago in 2007 and 2003 following the completion of her BS from Denison University.

RECOMMENDATION: It is recommended that the Board of Trustees approve the appointment of Dr. Amy Landis as professor with tenure in the Department of Chemical Engineering effective August 4, 2025.

INFORMATION SHEET FOR BOARD OF TRUSTEES Dr. AMY ELAINE LANDIS Michigan Technological University

Amy E. Landis is currently a professor with tenure at Colorado School of Mines; she has been tenured since 2012 and has earned tenure at three previous institutions: Arizona State University, Clemson University, and Mines. Amy E. Landis has accepted an offer to be Associate Dean for Graduate and Online Education (ADG) in the College of Engineering as well as a professor in the Department of Chemical Engineering at Michigan Technological University. Amy E. Landis is being considered for tenure as professor in the Department of Chemical Engineering at MTU.

Academic Degrees:

Ph.D.	2007	University of Illinois at Chicago, IL
M.S.	2003	University of Illinois at Chicago, IL
B.S.	2001	Denison University, OH

Professional Record:

2017 – present	Professor with tenure, Department of Civil and Environmental Engineering, Colorado School of Mines (2017-2023, Presidential Fellow for Diversity, Inclusion & Access reporting to President's office)
2015 – 2017	Professor with tenure, Department of Civil Engineering, Clemson University; Hash endowed chair in Sustainable Development and Director of the Institute for Sustainability
2012 – 2015	Associate Professor with tenure, School of Sustainable Engineering and the Built Environment Arizona State University; Director of Research, Center for Earth Systems Engineering and Management
2007-2011	Assistant Professor, Department of Civil & Environmental Engineering, University of Pittsburgh
2005 – 2006	Research Fellow, National Risk Management Research Laboratory, US Environmental Protection Agency, OH
2004 – 2005	Fulbright Fellow, Swiss Federal Institute of Technology, Switzerland

Summary of Accomplishments:

> <u>Teaching</u>

Landis has received 6 educational excellence awards throughout her career. She has developed 8 new classes that cover a range of topics related to sustainability at both the undergraduate and graduate levels. She consistently scores above average on student evaluations of teaching. She developed one of Mines first fully online courses in support of their new online certificate and degree programs in 2018. She has secured approximately \$2.86M in external funding to support development of innovative engineering education research and programs and an additional \$2.7M in funding for student scholarships. In her role leading Diversity, Inclusion & Access (DI&A) at Mines, her office developed inclusive classroom teaching practices and workshops that were disseminated to all departments and nearly all instructors at Mines. Landis' teaching interests and experience align with university and departmental strategic investments in energy and sustainability as well as growth of online initiatives from Global Campus.

> <u>Research/Scholarly Activity</u>

Dr. Landis' research program focuses on sustainable energy and plastics; her work spans sustainability engineering, community engagement, industrial ecology, byproduct synergies, biofuels, biopolymers, and Life Cycle Assessment. Landis has led many multimillion-dollar proposals; as Director of the Institute for Sustainability at Clemson, she developed a strategic plan and programming to connect researchers from across Clemson to collaborate on \$multimillion proposals. At Mines, Landis led their \$160M NSF Engine effort (in review) and helped to bring in Mines largest primary award to date, a \$32M DOE award. In summary Dr. Landis has:

- > Secured a credited share of over \$14.5M in research since 2008 (over \$76.7M collaboratively), including 13 NSF, 4 USDA, 10 DOE awards
- Currently 11 active research awards totaling \$46.5M (\$7.9M credited), with an estimated \$3.4M to be transferred to MTU
- > Annual expenditures currently average ~\$500K
- > Fundraised over \$3.2M for DI&A programming and scholarships at Mines since 2017
- > Published 91 peer reviewed journal articles & 65 refereed conference proceedings
- > Graduated 14 PhD students; 2 PhD students in progress. Graduated 7 MS thesis students, 4 MS students, advised over 30 undergraduate researchers, 8 high school researchers, and 6 postdocs

Dr. Landis has already begun collaborating with MTU faculty; she submitted several NSF proposals 2024-2025 with MTU colleagues and is pursuing a new \$1M proposal from the Caribbean Biodiversity Foundation to support plastic research and development of new online sustainability certificates. Her research aligns with university and departmental strategic investments in Energy and Sustainability as well as Ecology, Ecosystem, and Environmental Policy. Given her track record in leading multi-million dollar, multi-institution proposals, we expect Dr. Landis to continue leading similar efforts at MTU.

> <u>Service</u>

Landis led Mines campus-wide diversity, inclusion & access (DI&A) strategic planning and implemented university-wide programming for President's office at Mines from 2017-2023; this position is the equivalent to a VP or Chief of DI&A at other universities. Her duties included supporting student, faculty, and staff recruitment and retention, assessing effectiveness of programs, fundraising, and much more. As Director of Institute for Sustainability at Clemson, she created new institutional programs that expanded revenue generation, improved faculty research productivity and increased student engagement in sustainability-related certificates and coursework. Dr. Landis has served on many departmental and university committees over the course of her career; a few highlights include awards committees, graduate recruitment committees, curriculum committees, chair of the Clemson grand challenges committee, and chair of Mines Sustainable Futures Initiative. Landis is well-known in her professional community of plastics and sustainability; she has served as chair and on organizing committees for numerous conferences (e.g. American Institute of Chemical Engineers-AIChE, Institute of Electrical and Electronics Engineers-IEEE, International Symposium on Sustainable Systems and Technology-ISSST, and Circular Economy for Plastic Sustainability-CEPlast). She also on the board for Research Corporation for Science Advancement (RCSA), one of the oldest foundations in the nation. At MTU in her role as ADG, Dr. Landis will lead important efforts for the College of Engineering to increase graduate student enrollment and completion in order to maintain MTU R-1 status.

> <u>Recent and Significant Publications/Exhibitions/Performances/Etc.</u>

Landis is well-known internationally for her research expertise; she has given 57 invited talks and/or keynotes all around the world; examples include 3 different prestigious Gordon Research Conferences. She is the Director of the NSF BASE Camp Center for Engineering at Mines as well as the Director of the CEPlast International Network.

G. Approval of Revision to Board Policy 8.8 Student Activity Fee Laura Bulleit, Vice President for Student Affairs

VIII-G. REVISIONS TO BOARD POLICY 8.8 STUDENT ACTIVITY FEE

The Student Activity Fee is assessed each semester to all enrolled undergraduate and graduate students at Michigan Tech. This fee supports a vibrant community of registered student organizations as well as other student-focused initiatives and Michigan Tech traditions that benefit the campus community. The Undergraduate Student Government holds the responsibility for administering and distributing this fee.

Following an extensive survey of the undergraduate and graduate student populations during the 2023-2024 academic year, the Undergraduate Student Government recommends—for the first time since 2012—an increase in the Student Activity Fee from \$60 per semester to \$80 per semester for undergraduate students starting in the 2025-2026 academic year. The additional funds will help offset increased costs of travel and supplies, as well as accommodate the growth in the number of registered student organizations. In consultation with the Graduate Student Government, no change is recommended in the Student Activity Fee assessed to graduate students.

RECOMMENDATION: It is recommended that the Board of Trustees approve the revision to Board Policy 8.8 Student Activity Fee

REVISIONS

PURPLE = ADD <u>RED STRIKETHROUGH</u> = DELETE

8.8 Student Activity Fee

The President is authorized to assess a \$860.00 fee in each of the Fall and Spring semesters as an Activity Fee for enrolled undergraduate students. The majority of this fee is to be used for support of student organizations as administered by the Undergraduate Student Government, and the remainder is to be used for initiatives that benefit the campus community as determined by the Vice President for Student Affairs. Procedures for the distribution of funds to meet these goals will be established by mutual agreement of the Undergraduate Student Government and the Vice President for Student Affairs and reviewed annually.

The President is authorized to assess a \$50.00 fee in each of the Fall and Spring semesters as an Activity Fee for enrolled Graduate students. Of the \$50.00 levied Fall and Spring, 50% of this fee is to be earmarked for support of student organizations as administered by the Undergraduate Student Government, 50% is to be earmarked for support of the Graduate Student Government. The President is authorized to levy a \$10 per summer Activity Fee for

Summer enrolled Graduate Students. The \$10 is to be earmarked for support of the Graduate 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 students not on the main campus.

Students not enrolled in courses on the main campus, University employees and/or Senior Citizens who are not assessed the fee are not eligible to receive the associated benefits.

FINAL VERSION

8.8 Student Activity Fee

The President is authorized to assess a \$80.00 fee in each of the Fall and Spring semesters as an Activity Fee for enrolled undergraduate students. The majority of this fee is to be used for support of student organizations as administered by the Undergraduate Student Government, and the remainder is to be used for initiatives that benefit the campus community as determined by the Vice President for Student Affairs. Procedures for the distribution of funds to meet these goals will be established by mutual agreement of the Undergraduate Student Government and the Vice President for Student Affairs and reviewed annually.

The President is authorized to assess a \$50.00 fee in each of the Fall and Spring semesters as an Activity Fee for enrolled Graduate students. Of the \$50.00 levied Fall and Spring, 50% of this fee is to be earmarked for support of student organizations as administered by the Undergraduate Student Government, 50% is to be earmarked for support of the Graduate Student Government. The President is authorized to levy a \$10 per summer Activity Fee for Summer enrolled Graduate Students. The \$10 is to be earmarked for support of the Graduate 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 students not on the main campus.

Students not enrolled in courses on the main campus, University employees and/or Senior Citizens who are not assessed the fee are not eligible to receive the associated benefits.

VIII-H. Fiscal Year 2026 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 2026 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 2026 Preliminary General Fund Budget
Revised: 04/03/2025

	FY25 Approved Budget			126 Proposed Budget	Variance	%
OPERATING REVENUE						
Student Tuition and Fees	\$	183,250,075	\$	194,085,972	\$ 10,835,897	5.9%
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		16,899,424	49,424	0.3%
Educational Activities		485,728		485,728	-	0.0%
Student Resident Fees		-		-	-	
Sales and Services of Dept Activities		-		-	 -	
TOTAL OPERATING REVENUE	\$	200,625,803	\$	211,511,124	\$ 10,885,321	5.4%
OPERATING EXPENSES						
Contingency/Carryforward Reserve	\$	(5,000,000)	\$	(5,000,000)	\$ -	0.0%
Salaries & Wages - Faculty & Staff		(98,464,494)		(102,506,494)	(4,042,000)	4.1%
Salaries & Wages - Graduate Students		(5,330,128)		(5,517,278)	(187,150)	3.5%
Salaries & Wages - Undergrad Students		(1,262,787)		(1,262,787)	-	0.0%
Fringe Benefits		(38,621,032)		(40,366,811)	(1,745,779)	4.5%
Supplies & Services		(17,906,120)		(18,744,164)	(838,044)	4.7%
Scholarships and Fellowships		(70,725,955)		(74,702,613)	(3,976,658)	5.6%
Utilities		(3,938,170)		(3,938,170)	-	0.0%
TOTAL OPERATING EXPENSES	\$	(241,248,686)	\$	(252,038,317)	\$ (10,789,631)	4.5%
<u>TRANSFERS</u>						
TOTAL TRANSFERS	\$	(19,244,262)	\$	(20,178,285)	\$ (934,023)	4.9%
NONOPERATING REVENUES (EXPENSES)						
State Appropriations, Operating	\$	55,888,843	\$	56,727,176	\$ 838,333	1.5%
Gift Income		3,178,302		3,178,302	-	0.0%
Investment Income (loss)		800,000		800,000	-	0.0%
Federal Grants						
Interest Expense		-		-	-	
TOTAL NONOPERATING	\$	59,867,145	\$	60,705,478	\$ 838,333	1.4%
INCREASE (DECREASE) IN NET POSITION	\$	-	\$	-	\$ -	



Resident Undergraduate Tuition and Mandatory Fee Rate Comparison State Reporting Requirements

Proposed Fiscal Year 2026

	Freshman		Freshman Sophomore		Junior		Senior		Average
Tuition & Fees									
Tier 3 Tuition (Plateau 12-18 Credits)	\$	19,608	\$	19,608	\$	23,812	\$	23,812	\$ 21,710
Experience Tech Fee		214		214		214		214	214
Student Activity Fee		160		160		160		160	160
Total Tuition and Mandatory Fees:	\$	19,982	\$	19,982	\$	24,186	\$	24,186	\$ 22,084
% Reported in Downstate Media:		4.50%		4.50%		4.47%		4.47%	4.48%

	Freshman	S	ophomore	Junior	Senior
Tuition & Fees Variance					
Tuition \$ Change:	\$ 812	\$	812	\$ 986	\$ 986
% Change:	4.32%		4.32%	4.32%	4.32%
Experience Tech Fee \$ Change:	\$ 8	\$	8	\$ 8	\$ 8
% Change:	3.88%		3.88%	3.88%	3.88%
Student Activity Fee \$ Change:	\$ 40	\$	40	\$ 40	\$ 40
% Change:	33.33%		33.33%	33.33%	33.33%
Total \$ Change:	\$ 860	\$	860	\$ 1,034	\$ 1,034
% Change:	4.50%		4.50%	4.47%	4.47%

Approved Fiscal Year 2025

	Freshman		Sophomore		Junior		Senior		Average
Tuition & Fees									
Tier 3 Tuition (Plateau 12-18 Credits)	\$	18,796	\$	18,796	\$	22,826	\$	22,826	\$ 20,811
Experience Tech Fee		206		206		206		206	206
Student Activity Fee		120		120		120		120	120
Total Tuition and Mandatory Fees:	\$	19,122	\$	19,122	\$	23,152	\$	23,152	\$ 21,137
% Reported in Downstate Media:		3.97%		3.97%		3.98%		3.98%	3.97%



Proposed Fiscal Year 2026 Semester Tuition and Fee Rates

Tuition Rates

	Resi	dent	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			
Undergraduate Lower Division							
All Majors Upper Division	\$740	\$9,804	\$1,648	\$22,252			
Tier 1	\$824	\$10,844	\$1,756	\$23,684			
Tier 2	852	11,074	1,786	23,904			
Tier 3	983	11,906	1,933	24,863			

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

	Non- Engineering/ Computer Science	Engineering/ Computer Science
Graduate		
Standard Per Credit Rate	\$1,392	\$1,581
National Service Rate	934	1,060
Research Mode Rate	459	522

Fee Rates

Undergraduate	
Experience Tech Fee	\$10
Student Activity Fee	8
Graduate	
Experience Tech Fee	

Experience Tech Fee Student Activity Fee

Per Semester	
A	
\$107	
80	
# 0 /	
\$86	
50	

I. Resolution for Approval of External Auditor Nicholas Stevens, Treasurer

VIII-I. 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, 2025:

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.

J. Appointment of Treasurer Nicholas Stevens, Treasurer

VIII-J. APPOINTMENT OF TREASURER

Public Act 70 of 1885 as amended in 1963 states that no member of the Board of Trustees can serve as secretary or treasurer and that the Board elect a secretary and treasurer to serve at their pleasure. Included here is the nomination for the position of Treasurer.

RECOMMENDATION: That the Board of Trustees appoint Carlos Rodriguez as the Treasurer of the Board of Trustees effective June 1, 2025.

Supporting information

Carlos R. Rodriguez was named the chief financial officer and vice president for administration effective May 1, 2025. Rodriguez most recently served as associate vice president for finance and business services, commonwealth campuses, at Pennsylvania State University. There, he oversaw the budget planning and management for Penn State's 19 undergraduate commonwealth campuses, Penn State Great Valley and the Office of the Vice President for Commonwealth Campuses. Prior to his role at Penn State, he served as budget director at the U.S. Department of Housing and Urban Development. He is a retired U.S. Army engineering officer and holds a B.S. in Business Administration from Penn State Fayette, The Eberly Campus, and an MBA in Project Management from Grantham University.

IX. Reports

A. Research Presentation

Simon Carn, Distinguished Professor, Geological and Mining Engineering and Sciences

Michigan Tech Research Award 2024

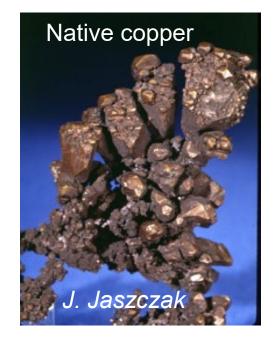
Simon Carn

Dept. of Geological and Mining Engineering and Sciences Michigan Technological University, Houghton, MI scarn@mtu.edu

Acknowledgments: NASA; NASA Goddard Space Flight Center; Environment and Climate Change Canada



Volcanism in the Keweenaw







Explosive volcanic eruptions

Mount Pinatubo (Philippines) – June 12, 1991 (Getty Images)



- **Eruption magnitude (or size) = Mass (or volume)** of solid material (ash, lava) emitted
- Volcanic gas emissions also determine impacts



Tonga Geological Services staff making observations of the Hunga Tonga-Hunga Ha'apai volcano.

Prepare now for big eruptions

Michael Cassidy & Lara Mani

More must be done to forecast and try to manage globally disruptive volcanic eruptions. The risks are greater than people think.

Cassidy and Mani, Nature (2022)

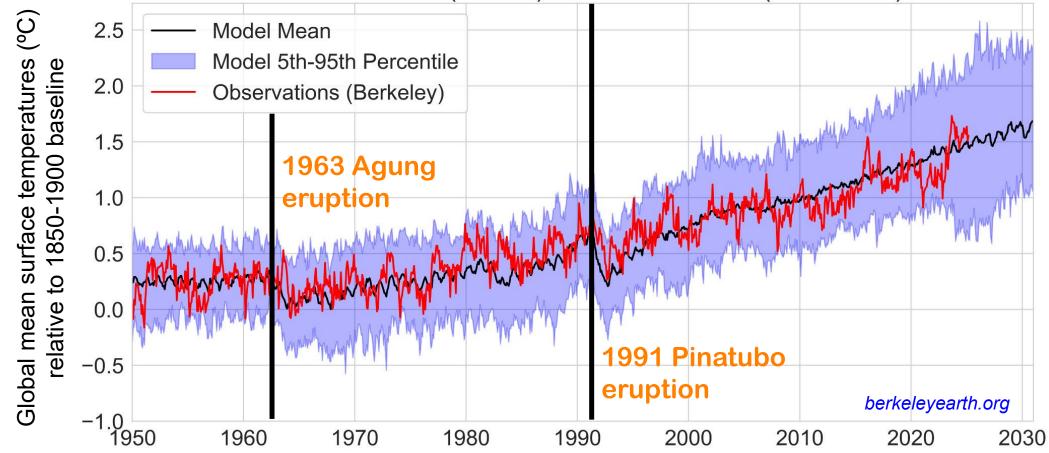
e massive eruption of the Hunga Tonga–Hunga Ha'apai volcano this January in Tonga, in the south Pacific Ocean, was the volcanic equivalent of a 'near miss' asteroid whizzing by the Earth. The eruption was the largest since

lasted only about 11 hours. Had it gone on for longer, released more ash and gas or occurred in more densely populated areas of southeast Asia, or near a high concentration of vital shipping lanes, electricity grids or other crucial global infrastructure, it would have had reper-Mount Pinatubo in the Philippines blew in cussions for supply chains, climate and food

Timely eruption response required to prepare observational assets, mitigate hazards, and forecast climate impacts

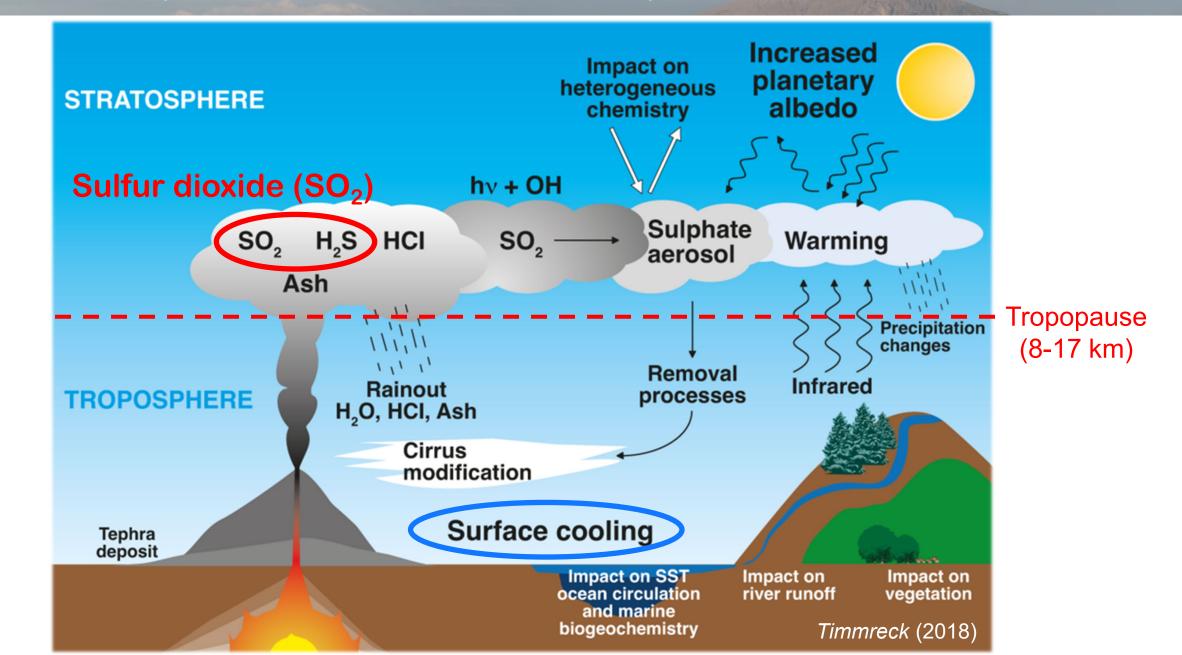
Climate impacts of volcanic eruptions

Climate Models (CMIP6) and Observations (1950-2030)



- Large volcanic eruptions can cool the climate counteracting anthropogenic climate change
- Eruptions also provide a test of climate models & our knowledge of atmospheric processes
- Geoengineering interventions have been proposed to mimic volcanic eruptions

Climate impacts of volcanic eruptions

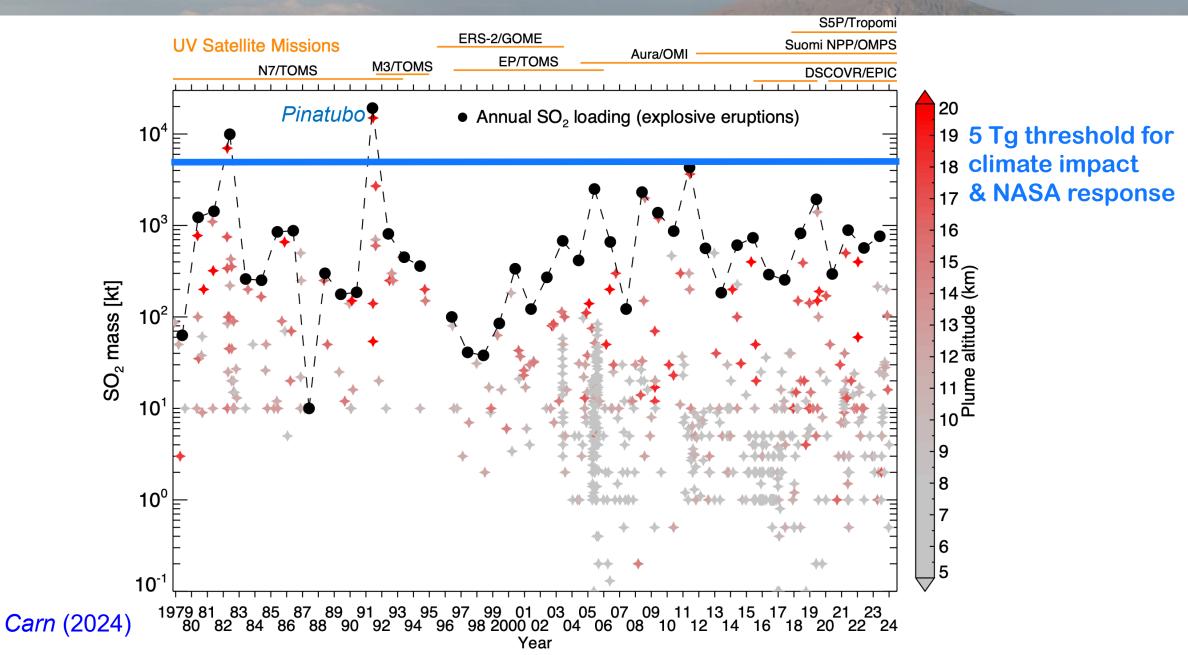


Satellite measurements of volcanic SO₂ emissions

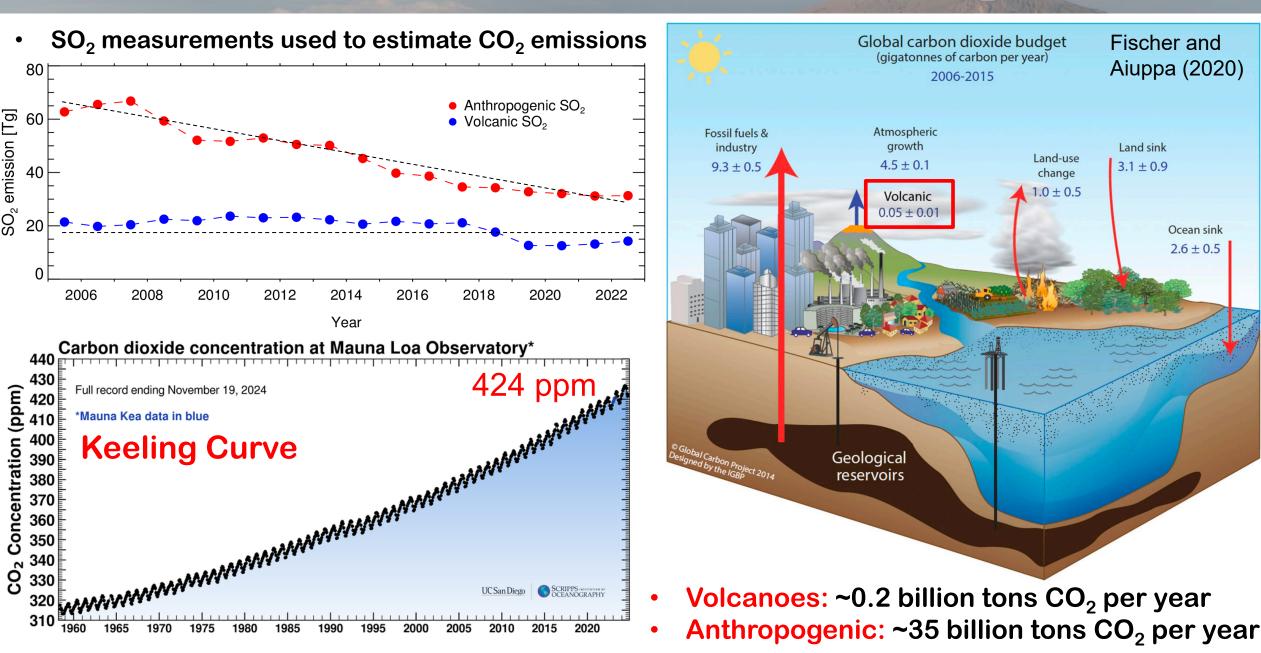
Suomi NPP/OMPS - 06/20/2019 ~1.4 million tons SO_2 SO2 mass: 1.587 kt; Area: 119994 km2; SO2 max: 1.91 DU 1400 Houghton **Raikoke eruption (Russia)** 1200 **June 2019** 1000 SO₂ mass [kilotons] 800 $SO_2 \rightarrow H_2SO_4$ 600 400 200 Volcano 0 SO₂ column STL [DU] 28 19 26 03 21 24 31 07 14 10 Jul-2019 Aug-2019 Sep-2019 1.5 2.0 0.0 0.5 1.0

U.S. (NASA/NOAA) and European satellite instruments are used to track volcanic emissions

SO₂ emissions by volcanic eruptions (1978-2024)



Volcanic emissions of carbon dioxide (CO₂)



Ocean sink 2.6 ± 0.5

Impact of Michigan Tech research

 Measurements of global volcanic emissions are applicable to many fields, including volcanology, atmospheric, climate, health, environmental sciences

Carn, S.A., V.E. Fioletov, C.A. McLinden, C. Li, and N.A. Krotkov (2017), A decade of global volcanic SO₂ emissions measured from space, *Sci. Rep.*, 7, 44095. 405 citations

Carn, S.A., L. Clarisse and A.J. Prata (2016), Multi-decadal satellite measurements of global volcanic degassing, *J. Volcanol. Geotherm. Res.*, 311, 99-134. 327 citations

Schwandner, F.M., M.R. Gunson, C.E. Miller, S.A. Carn, et al. (2017). Space-borne detection of localized carbon dioxide sources. *Science*, 358. 201 citations

Fischer, T.P., S. Arellano, S.A. Carn, A. Aiuppa, B. Galle, P. Allard, T. Lopez, H. Shinohara, P. Kelly, C. Werner, C. Cardellini, and G. Chiodini (2019), The emissions of CO₂ and other volatiles from the world's subaerial volcanoes, *Sci. Rep.*, 9, 18716.

171 citations

B.

Provost Report Andrew Storer, Provost & Sr. Vice President for Academic Affairs

Provost's Report

Board of Trustees April 25, 2025

Andrew J. Storer, Provost



Tenure and Promotion Recommendations

11 Recommendations for promotions from

• Assistant Professor without Tenure to Associate Professor with Tenure

3 Recommendations for promotions from

• Associate Professor without Tenure to Associate Professor with Tenure

7 Recommendations for promotions from

• Associate Professor with Tenure to Full Professor with Tenure



Kudos to Faculty Considered for Tenure and/or Promotion

From Missouri University of S&T:

"This is important cutting-edge research at a time when [area] are exploding."

From George Mason University:

"[This person] has a solid and sustained trajectory of exemplary teaching and mentoring, coupled with a significant record of meaningful service to [their] university and profession. [Their] research is of high quality and impact, supported by a successful history of external funding that is expected to continue.."

From Indiana University:

"[This person] has consistently placed this work in top journals & received external funding to support students"

From University of Notre Dame:

"[This person] is a world-class researcher with an excellent track record of procuring external funding."



Instructional Track Faculty Promotions

2 Promotions from Assistant Teaching Professor to Associate Teaching Professor

- Terri Frew, Department of Visual & Performing Arts
- Cameron Hadden, Dept. of Mechanical & Aerospace Engineering

5 Promotions from Associate Teaching Professor to Teaching Professor

- Matthew Barron, Department of Engineering Fundamentals
- Andrew Galerneau, Department of Chemistry
- Laura Rouleau, Department of Social Sciences
- David Wanless, Dept. of Manufacturing & Mechanical Eng. Technology
- Ruihong Zhang, Department of Computer Science



Reviews for Reappointment

82 Tenure-track faculty reviews

29 Major reviews of tenure-track faculty for reappointment.

• Recommendations forwarded for approval to the Board of Trustees.

53 Interim reviews^{*} of tenure-track faculty for continuing appointment.

108 Instructional-track faculty reviews*

- Instructional-track faculty reviewed for reappointment or continuing appointment.
- Professors of Practice reviewed for continuing appointment.

* Board approval not required for reappointment or continuing appointment of instructional-track faculty



Emerita/Emeritus Faculty Recommendations This Meeting

Dr. Leonard J. Bohmann, Professor Emeritus, Dept. of Electrical & Computer Eng.
Dr. John S. Gierke, Professor Emeritus, Dept. of Geological & Mining Eng. & Sci.
Mr. John T. Lukowski, Professor Emeritus, Dept. of Electrical & Computer Eng.
Dr. Judith Perlinger, Professor Emerita, Dept. of Civil, Env., & Geospatial Eng.
Dr. Timothy J. Schulz, University Professor Emeritus, Dept. of Electrical & Comp. Eng.
Dr. Noel Urban, Professor Emeritus, Dept. of Civil, Environmental, & Geospatial Eng.



Emerita/Emeritus Faculty Previously Approved in AY 2024-25

Dr. Stephen L. Kampe, Professor Emeritus, MSE

Dr. Nancy Langston, Professor Emerita, SS

Dr. Guy Meadows, Professor & Director Emeritus, GMES & GLRC

Mr. Chris Miller, Teaching Professor Emeritus, CFRES

Dr. Iosif Pinelis, Professor Emeritus, MA

Dr. David Shonnard, Professor Emeritus, ChE

Dr. Robert Shuchman, Professor & Director Emeritus, GMES & MTRI

Dr. Nikola Subotic, Professor & Director Emeritus, ECE & MTRI

Dr. Song-Lin "Jason" Yang, Professor Emeritus, MAE



Essential Education

- Full rollout in Fall 2025
- Pilot classes included a Fall 2024 soft launch of the Michigan Tech Seminar classes involving
 - 57 course sections
 - 22 faculty
 - 1,125 students
- Six course list teams overseeing classes in various categories
- Twenty-one-member Essential Education Steering Committee
- Eight essential education minors in place (following senate review)



Outcomes: Academic Advising Working Group

Goal: Enhance the academic advising program to best support students in their success at Michigan Tech.

- Adopted a new advising software platform (CRM Advise).
- Appointed a person to oversee advising campus wide (Travis Wakeham), with an emphasis on training and preparation for Essential Education implementation.
- Working to increase the number of academic advisor positions on campus.
- Report available on the provost website.



Outcomes: Artificial Intelligence Working Group

Preparing students for a workforce in which AI is omnipresent

- Developed and posted wording relating to the use of AI for use in syllabi.
- Made online training modules from Auburn available to all faculty.
- MTU specific training developed and delivered by Holly Hassel (HU) and Shane Oberloier (ECE).
- Report available on the provost website.



Curriculum Roadmap Working Group

Goal: Develop a roadmap to the future undergraduate curriculum offerings at Michigan Tech.

Vision: An undergraduate curriculum that:

- 1. reflects the character of the university,
- 2. serves the contemporary needs of the industries of the State of Michigan,
- 3. excites and attracts students from around the country.
- Year 1: Review data on current degree programs and collect information on future plans. Product: State of the Curriculum document.
- Year 2 (current year): Finalize Curriculum Roadmap document. This will be used to guide curriculum reform and development from 2025 2030.



Pathway to 100 PhDs Working Group

Led by Dr. Will Cantrell, Associate Provost for Graduate Education and Dean of the Graduate School

- Year 1: Culminate an overview of strategies for success
- Year 2: Implementation

PhD Recruitment Taskforce initiated; chaired by Dr. Wayne Gersie, VP for Community Engagement



Tech Forward 2.0: A campuswide effort

- Fall 2024
 - Tomorrow Needs pieces
- Spring 2025
 - Board retreat
 - Campus conversations three held engaging over 200 attendees
- Fall 2025
 - Campus conversations become more focused around themes
 - Develop more detailed proposal, budgets and strategic plans
- Spring 2026
 - Prepare for rollout
 - Finalize marketing materials and budget needs to launch initiatives



Tech Forward 2.0 in development

Ideation work accomplished:

- 3 days
- 200+ Faculty, Staff, Trustees
- ~350 person-hours
 - >8 weeks of cumulative effort!
- 979 Stick Notes
- 30+ Boards
- 777 Votes (Stickers)



Tech Forward 2.0: A campuswide effort

- Fall 2024
 - Tomorrow Needs pieces
- Spring 2025
 - Board retreat
 - Campus conversations three held engaging over 200 attendees
- Fall 2025
 - Campus conversations become more focused around themes
 - Develop more detailed proposal, budgets and strategic plans
- Spring 2026
 - Prepare for rollout
 - Finalize marketing materials and budget needs to launch initiatives



2025-26 Curriculum Changes

8 New Undergraduate Minors

2 New Undergraduate Concentrations

1 Undergraduate Minor Name Change

2 New Graduate Certificates

4 Programs Shelved – 3 Undergraduate & 1 Graduate



University Professor Spring 2025



Zhanping You, Professor, CEGE



Distinguished Professors Spring 2025

Barbara Dai, Professor, CEGE



Claudio Mazzoleni, Professor, Physics





Academy of Teaching Excellence – 2025 Inductees

- Jason Archer (Humanities), Assistant Professor
- Estela Mira Barreda (Humanities), Assistant Teaching Professor
- Terri Frew (Visual and Performing Arts), Assistant Teaching Professor
- Gord Paterson (Biological Sciences), Assistant Professor*
- Tim Wagner (Mathematical Sciences), Assistant Teaching Professor
- Matt Barron (Engineering Fundamentals), Associate Teaching Professor
- Zack Fredin (Civil, Environmental and Geospatial Engineering), Associate Teaching Professor
- Paniz Khanmohammadi Hazaveh (Applied Computing), Associate Teaching Professor
- Jeffery Hollingsworth (Civil, Environmental and Geospatial Engineering), Professor of Practice
- Teresa Woods (Mathematical Sciences), Associate Teaching Professor



* Previously inducted

MASU Distinguished Professor of the Year Awarded Spring 2025

Jaclyn Johnson

Teaching Professor

Department of Mechanical and Aerospace Engineering





Thank You



C. Undergraduate Student Government Ford Schoonover, USG President

USG UPDATE April 25, 2025



Presented By: Ford Schoonover

SPRING RECAP

Budget Hearings

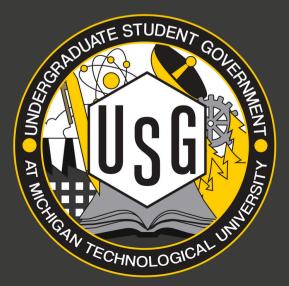
- Total Allocation: \$483,334.97
- Over **70** Orgs Got Requested Budgets

Constitution Revisions

- WaM Restructuring
- **3** Months of Diligent Revisions
- Unanimous Body Approval

Elections

- New E-Board
- **17** Elected Representatives
- **3** Expected Appointments



ONGOING

Budget Appeals

- Only 6 Appeals
- 3 Missed Hearing Time Slot Constitution Voting

 \bullet

• No SBG Appeals

4/7/25 ed to Ratify ach

Recruiting

- **10** Open Representative Positions
- **3** Open Engineering Positions



UPCOMING

Collaboration

- Creation of Joint Committees
- Large **Campus Wide** Events
- Increased Communication

Rulaw Revisions

- dditions

 \bullet

nding

Fall Outreach

- O-Week Preparations
- Campus Resources Campaign
- First Year & Residential **Elections**



Thank You From USG



Questions? Email: USG-President@mtu.edu

D. Graduate Student Government

Lauren Sprague, President



Presentation to BOARD OF TRUSTEES Lauren Spragu<u>e</u>

GRADUATE STUDENT GOVERNMENT April 25, 2025



Graduate Research Colloquium

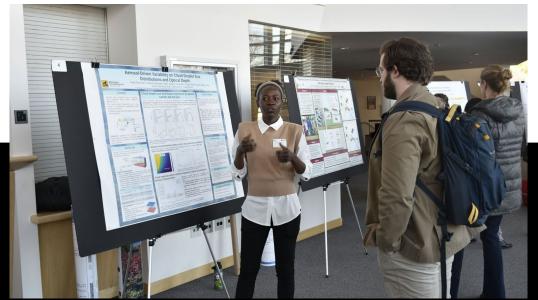
Oral Presentation

First place: Amir Tajik *Second place*: Ian Mattson *Third place*: Grace Dykstra

Poster Presentation

First place: Geeta Nain *Second place*: Israel Adeoye *Third place*: Ali Awad





Thank you to our volunteers & judges!!

Over 100 presentations!

April 25 2025



Annual Banquet



GSG MERIT AWARDS

Exceptional Staff Member Lynn Manchester Exceptional Graduate Mentor Carolyn Duncan **Exceptional Student Leader** Israel Adeoye **Exceptional Student Scholar** Kwadwo Boateng





1885



Michigan Technological University College of Engineering



Michigan Technological University Graduate School



Michigan Technological University Van Pelt and Opie Library



April 25 2025



Speed Networking





Thank you Dr. Veinott and the Psych & Human Factors Department



Year In Review

30 Department Meet & Greets (Fall and Spring)

Over 25 Events Research, Professional Dev. Social Committees

Grad Commons

+1,600 swipes*
425 unique students
~31% of graduate students
20 non GSG related events



TRAVEL AND CAREER ENRICHMENT GRANTS

125 Travel Grants 10 Career Enrichment



GSG LEADERSHIP 25/26'



Lauren Sprague President PhD Psychology & Human Factors Oluwatosin Oyeniran Vice President PhD Kinesiology &

Integrative Physiology

Shammas Shafi Secretary PhD Manufacturing Engineering

JESS CZARNECKI Treasurer PhD Forest Science Israel Adeoye Research Chair PhD Environmental Engineering Geeta Nain Professional Development Chair PhD Atmospheric Sciences

Victoria Santilla Social Chair PhD Biomedical Engineering Sindhura Repkah Public Relations Chair PhD Mechanical Engineering



E. University Senate

Robert Hutchinson, President

University Senate Update

Robert Hutchinson, Senate President





2024-2025 Academic Year Highlights

- Approved Revisions to Graduate Faculty Status Policy
- Approved Revisions to the Faculty Handbook, Appendix I, Section 5.8
- Considered 8 Essential Education Minors
- Considered modifications to Academic Integrity policy as recommended by the

University's AI Working Group

• Considered amendments to the Senate Bylaws, allowing non-tenured faculty to

serve as Senate Secretary



MICHIGAN TECH UNIVERSITY INVESTMENT PORTFOLIO JUNE 30, 2024 THROUGH FEBRUARY 28, 2025

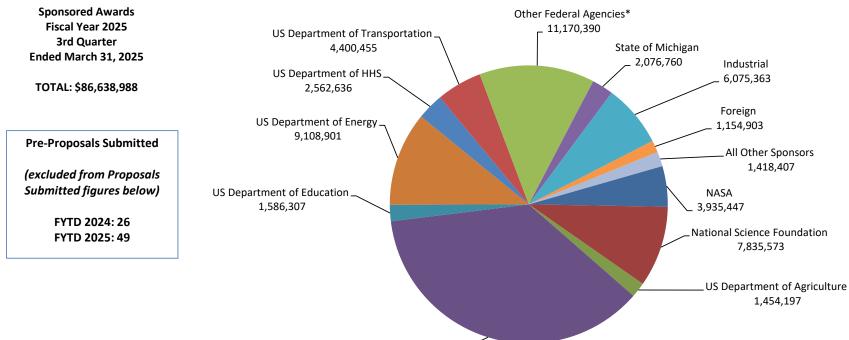
	Market Value 6/30/2024	Market Value 2/28/2025	Fiscal-Year Investment Return	Benchmark Return	Benchmark
Money Market Fund	\$ 3,786,266	\$ 3,038,394	3.07%	3.26%	3-Month T-Bill
Equity Funds:					
Core Equity Fund	8,374,550	4,904,440	9.11%	10.00%	S&P 500
Commonfund OCIO Equity Fund	5,889,451	-			
Total Equity Funds	14,264,001	4,904,440			
Fixed Income Funds:					
Intermediate Term Fund	8,748,423	10,152,486	4.42%	3.96%	ICE BofA Merrill Lynch 1-3 Yr Treasury
Commonfund Contingent Asset Portfolio	10,872,035	10,202,043	4.45%	3.96%	ICE BofA Merrill Lynch 1-3 Yr Treasury
High Quality Bond Fund	5,775,075	4,724,769	4.91%	4.77%	Bloomberg Barclays US Aggregate Bond Index
Multi-Strategy Bond Fund	5,103,332	4,741,456	4.53%	4.77%	Bloomberg Barclays US Aggregate Bond Index
Total Fixed Income Funds	30,498,865	29,820,754			
Total	\$ 48,549,132	\$ 37,763,588	5.49%		

B. Sponsored Programs

Sponsored Activities Summary

Fiscal Year 2025, Quarter Ended 3/31/2025

- ➤ Total awards are up 18.3% for FY25 compared to FY24.
- ➤ Gifts are up 36.4% for FY25 compared to FY24.
- ▶ Federal agency awards are up 26.5% for FY25 compared to FY24.
- > Overall Industry activity increased by 15.1% over the last fiscal year.
- Preliminary research expenditures are up 16.1% over FY24. Internal research expenditures are up 9.0% while the external expenditures are up 21.9%.

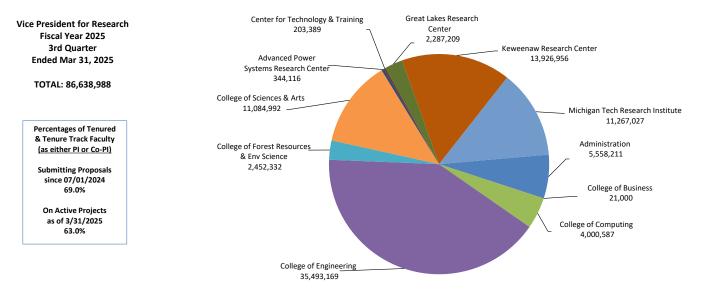


US Department of Defense _ 30,482,375

	Proposals Submitted		Awards R	eceived	Awards Rec	eived (\$)		
	FY '25	FY '24	FY '25	FY '24	FY '25	FY '24	Variance	Variance
Sponsor	as of 3/31	as of 3/31	as of 3/31	as of 3/31	as of 3/31	as of 3/31	\$	%
NASA	63	72	42	27	3,935,447	3,468,382	467,065	13.5%
National Science Foundation	128	120	35	25	7,835,573	11,037,358	-3,201,785	-29.0%
US Department of Agriculture	47	43	21	29	1,454,197	1,582,189	-127,992	-8.1%
US Department of Defense	99	76	97	79	30,482,375	17,001,106	13,481,269	79.3%
US Department of Education	1	2	5	3	1,586,307	1,111,583	474,724	42.7%
US Department of Energy	40	41	38	35	9,108,901	7,528,057	1,580,844	21.0%
US Department of HHS	50	46	13	20	2,562,636	5,651,170	-3,088,534	-54.7%
US Department of Transportation	11	16	11	18	4,400,455	5,199,871	-799,416	-15.4%
Other Federal Agencies*	43	53	44	38	11,170,390	4,767,492	6,402,898	134.3%
Federal Agency Total	482	469	306	274	72,536,281	57,347,208	15,189,073	26.5%
State of Michigan	52	30	21	22	2,076,760	4,597,171	-2,520,411	-54.8%
Industrial	111	124	97	102	6,075,363	5,643,696	431,667	7.6%
Foreign	8	5	6	5	1,154,903	1,619,750	-464,847	-28.7%
All Other Sponsors	88	67	26	23	1,418,407	1,567,935	-149,528	-9.5%
Subtotal	741	695	456	426	83,261,714	70,775,760	12,485,954	17.6%
Gifts**	N/A	N/A	255	278	3,351,681	2,456,952	894,729	36.4%
Crowdfunding	N/A	N/A	4	4	25,593	6,922	18,671	269.7%
Grand Total	741	695	715	708	86,638,988	73,239,634	\$13,399,354	18.3%

* Institute of Museum and Library Services, National Endowment for the Arts and Humanities, US Dept of Commerce, US Environmental Protection Agency, US Dept of the Interior, US Dept of Homeland Security, US Dept of Labor, US Dept of State, US Small Business, US Dept of Treasury, 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.



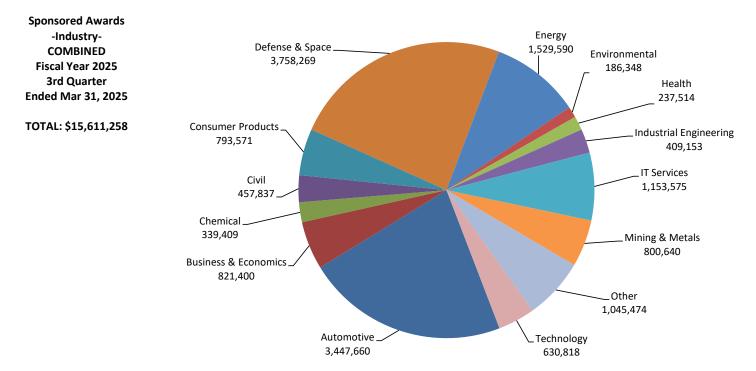
SPO & OIC Metrics ¹	Administration	College of Business	College of Computing	College of Engineering	College of Forest Resources & Env Science	College of Sciences & Arts	Advanced Power Systems Research Center ³	Center for Technology & Training ³	Great Lakes Research Center ³	Health Research Institute ³	Institute of Computing & Cybersystems ³	Keweenaw Research Center ³	Michigan Tech Research Institute ³	Totals	Fiscal Comparison	Percent Change
Proposals Submitted	22	4	42	331	76	82	14	1	31	-	1	54	83	741	695	6.6%
Awards Received	164	3	27	280	43	47	6	2	25	-	-	53	65	715	708	1.0%
Federal	1,041,453	-	3,150,204	20,097,645	1,421,825	10,028,666	-	-	319,961	-	-	10,476,372	5,088,829	51,624,955	42,346,279	21.9%
Federal Pass-Through	2,075,482	-	553,491	10,290,927	566,184	824,197	32,000	128,410	986,713	-	-	474,042	4,979,880	20,911,326	15,000,929	39.4%
Foreign	-	-	-	516,681	12,970	-	94,612	-	-	-	-	20,000	510,640	1,154,903	1,619,750	-28.7%
Gifts	1,979,852	11,000	92,657	1,005,872	122,300	140,000	-	-	-	-	-	-	-	3,351,681	2,456,952	36.4%
Crowdfunding	-	-	463	601	-	24,529	-	-	-	-	-	-	-	25,593	6,922	269.7%
Industry	12,000	-	71,373	1,695,248	245,088	30,000	155,018	-	815,094	-	-	2,956,542	95,000	6,075,363	5,643,696	7.6%
Other	-	10,000	63,919	1,021,743	83,965	37,600	-	-	126,180	-	-	-	75,000	1,418,407	1,567,935	-9.5%
State of MI	449,424	-	68,480	864,452	-	-	62,486	74,979	39,261	-	-	-	517,678	2,076,760	4,597,171	-54.8%
Total \$ by Division	5,558,211	21,000	4,000,587	35,493,169	2,452,332	11,084,992	344,116	203,389	2,287,209	-	-	13,926,956	11,267,027	86,638,988	73,239,634	18.3%
Fiscal Comparison	3,966,466	101,718	5,469,972	27,887,382	2,124,980	10,382,575	91,485	N/A	1,279,477	N/A	N/A	12,769,801	9,165,778	73,239,634		
Percent Change	40.1%	-79.4%	-26.9%	27.3%	15.4%	6.8%	276.1%	N/A	78.8%	N/A	N/A	9.1%	22.9%	18.3%		
Disclosures Received ²	2.94%	-	2.94%	56.83%	-	35.29%	2.00%	-	-	-	-	-	-	17	6	183.3%
Nondisclosure Agreements	1	-	9	41	1	1	13	-	-	-	-	15	26	107	67	59.7%
Patents Filed or Issued ²	-	-	-	50.00%	-	50.00%	-		-	-	-	-	-	8	9	-11.1%
License Agreements	1	-	1	5	1	-	-	-	-	-	-	-	-	8	5	60.0%
Gross Royalties ²	20.00%	-	-	80.00%	-	-	-	-	-	-	-	-	-	60,475	68,960	-12.3%

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).

³ Denotes a Tier 1 Center or Institute which now includes the Center for Technology & Training, Health Research Institute and the Institute of Computing & Cybersystems. This transition occurred during Quarter 3 of FY25. It is the

expectation that their research activity will increase.



	Proposals	Submitted	Awards R	eceived	Awards Rece	eived (\$)		
	FY '25	FY '24	FY '25	FY '24	FY '25	FY '24	Variance	Variance
Industry Segment	as of 3/31	as of 3/31	\$	%				
Automotive	39	37	52	55	3,447,660	3,668,361	-220,701	-6.0%
Business & Economics	9	1	25	13	821,400	249,916	571,484	228.7%
Chemical	5	4	12	6	339,409	99,099	240,310	242.5%
Civil	4	13	41	34	457,837	146,270	311,567	213.0%
Consumer Products	19	22	43	49	793,571	615,280	178,291	29.0%
Defense & Space	34	31	35	43	3,758,269	4,037,784	-279,515	-6.9%
Energy	8	8	13	30	1,529,590	551,942	977,648	177.1%
Environmental	4	1	11	16	186,348	89,144	97,204	109.0%
Health	12	10	15	11	237,514	212,045	25,469	12.0%
Industrial Engineering	9	14	12	17	409,153	209,192	199,961	95.6%
IT Services	11	11	71	23	1,153,575	159,500	994,075	623.2%
Mining & Metals	9	12	27	24	800,640	320,267	480,373	150.0%
Other	15	19	30	71	1,045,474	2,695,927	-1,650,453	-61.2%
Technology	17	9	11	9	630,818	502,754	128,064	25.5%
Total	195	192	398	401	15,611,258	13,557,481	2,053,777	15.1%

Michigan Technological University Total Research Expenditures by College/School/Division Fiscal Year 2025 & 2024 As of March 31, 2025 and March 31, 2024

College/School/Division	FY2025	FY2024	Variance	%
Administration*	6,546,121	5,660,673	885,448	15.6%
Advanced Power Systems Research Center (APSRC)	875,805	1,222,095	(346,290)	-28.3%
Center for Technology & Training	60,473	N/A	60,473	N/A
College of Business	1,685,297	1,380,850	304,447	22.0%
College of Computing	4,695,099	4,186,306	508,793	12.2%
College of Engineering	32,593,661	29,417,772	3,175,889	10.8%
College of Forest Resources & Environmental Science	5,134,743	5,570,969	(436,226)	-7.8%
College of Science & Arts	15,819,821	12,985,320	2,834,501	21.8%
Great Lakes Research Center (GLRC)**	1,462,301	1,593,299	(130,998)	-8.2%
Institute of Computing and Cybersystems	25,463	N/A	25,463	N/A
Keweenaw Research Center (KRC)	10,861,513	6,434,101	4,427,412	68.8%
Michigan Tech Research Institute (MTRI)	10,440,812	9,267,080	1,173,732	12.7%
Total	90,201,109	77,718,465	12,482,644	16.1%

*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 25, 2025

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

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

FY25 MTF Working Goals

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

Flagship Campaign

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

As of March 31, 2025, the leadership phase of our seven-year campaign has successfully secured over \$239.3 million or 68.4% in gifts, bringing us closer to our \$350 million campaign goal. The public phase is slated to begin when we reach \$300 million; the campaign is scheduled to conclude in June 2028.

Accomplishments as of March 31, 2025

Hosted another 24-hour giving challenge from noon April 8-noon April 9: <u>Give Back to the Pack</u>, resulting in 1,116 gifts totaling \$782,221 dollars.

104

- \$239.3 million or 68.4% to the campaign stretch goal of \$350 million
- \$14.1 million in outstanding and anticipated asks
- New cash to the endowment since campaign inception: \$25.641 million
- Planned gifts earmarked for the endowment \$34.5 million
- 50 new, 47 executed and 59 agreements in process
- 13 illustrations were provided to donors
- \$12.7 million in planned gifts
- \$9.62 million in realized planned gifts
- \$3.1 million in major outright gifts and pledges
- \$1.4 million in annual gifts under \$10,000
- \$1.8 million in corporate support
- \$2.4 million in foundation gifts
- Campaign Executive Committee met on April 21, 2025

Advancement and Gift Planning

- In conjunction with CCS, a fundraising workshop for Deans and Chairs was held on April 17, 2025. Chairs Audra Morse and Jason Blough led the session from their perspective.
- Moves Management Strategy for donor relationships has prioritized our top donor prospects and strategic engagement to close gifts sooner and within the Flagship campaign timeline.
- Foundation Relations has re-established and created new relationships with 12 foundations who support Michigan Tech.
- Foundation Relations participated in a session hosted by Research Development for faculty on how to strategically approach foundations and other sponsors. Key differences between these funding sources and federal funders were discussed and practical guidance on finding a variety of funding streams for a sustainable research program was provided.
- Conducting interviews for a Senior Administrative Aide.
- Frontline fundraising travel schedule includes the following for March June, 2025. Chairs and Deans are engaged in donor visits when appropriate.
 - Arizona
 - California
 - Florida
 - Illinois
 - Lower & Upper Michigan
 - Minnesota
 - Texas
 - Wisconsin
 - Canada

Giving Update

In the Leadership phase of the campaign, we remain focused on our current seven-figure and above donors, while also working to grow this donor base through ongoing outreach.

Working on finalizing over \$40 million in gifts to benefit scholarships, faculty, research, and athletics.

FY25 Campaign Donor Hosted Events

- Houghton, MI complete
- Detroit, MI rescheduled FY '26
- Ft. Meyers, FL -complete
- Sarasota, FL complete
- The Villages, FL complete

FY25 Second, Third, and Fourth Quarter Travel

- Lower Michigan (three trips)
- North Carolina
- Colorado
- California, Silicon Valley
- N/E Coast
- Minnesota
- Texas
- Arizona
- Florida
- Southern California

April 2025 - 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.

Communications

- Annual Giving:
 - Hosted another 24-hour giving challenge from noon April 8-noon April 9: <u>Give Back to the Pack</u>.
 - 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
 - 1,116 gifts, \$782,221 dollars raised in the spirit of Give Back to the Pack 2025
 - Progress to goal: as of February 28, 2025 we are 56% to our fiscal year end goal.
- AE communications
 - MTU Magazine to go out in April, featuring the second-ever "For Tech" insert. This insert allows the Advancement & Alumni Engagement Office more space to be able to feature more alumni and donor stories, in addition to more philanthropic education.

Volunteerism

- <u>Alumni Awards 2025</u>: The Alumni Board voted to approve the 2025 Alumni Award winner slate over the Winter Carnival meetings.
- PCA 2025 Induction: The next induction ceremony & PCA meeting will occur Nov 6-7, 2025.
 - Only academic departments and current PCA members can submit nominees. Nomination period for academic units and current PCA members closed in March.
 - A selection committee will review nomination materials and choose the induction slate late spring.
- <u>Time & Talent</u>: We are anticipating hosting the next cohort of Time & Talent alumni the week of October 6-10, 2025. More to come soon.

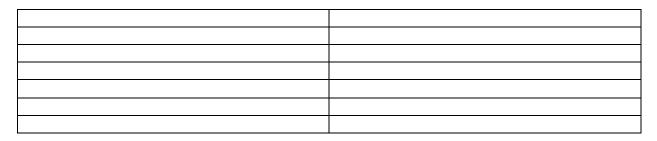
Events

- So far this fiscal year (*FY25: July 1, 2024-June 30, 2025*): nearly **70 alumni events** across **12 different states** have been hosted or are being planned for the future. More than **58** unique alumni volunteers have engaged with us in co-hosting these events year to date (YTD).
- Key events coming up:
 - May 2-3: Military Appreciation Weekend // Houghton, MI
 - August 14: Michigan Tech Alumni Golf outing // Clarkston, MI
 - July 31-August 1: Reunion Weekend 2025 // Houghton, MI
 - A full weekend of activities are on the docket to celebrate not only our honored classes (1955, 1960, 1965, 1970, 1975, 1985, 1995, 2000, 2005, 2015)
 - A preliminary outline of the schedule of events is published
 - More details to be shared in mid to late April
 - Registration to open in May
 - The slate of <u>2025 Alumni Award</u> winners will be publicly announced in June
 - Awards Ceremony takes place over Reunion Weekend: Friday, August 1 in the Rozsa
 - Oct 2, 2025: <u>Traveling Tech Talks</u> // Houston, TX

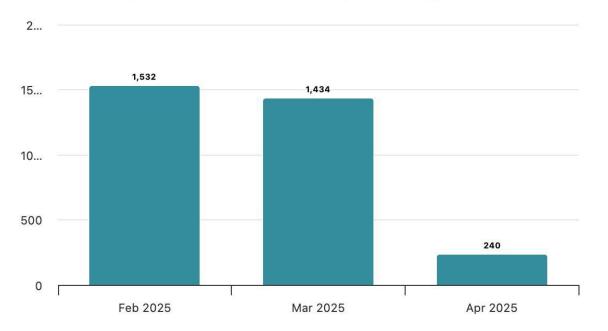
D. Media Coverage

Media Report: Feb. 1 to April 7, 2025 Michigan Technological University Regular Meeting of the Board of Trustees April 25, 2025

Overview

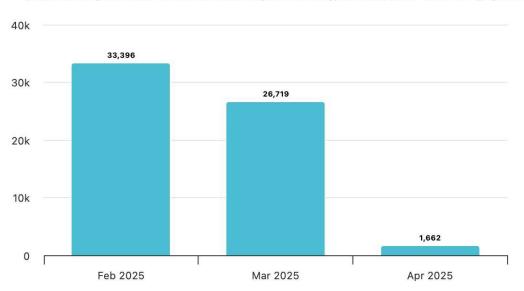


Between Feb. 1 and April 7, 2025, a total of 3,206 online articles mentioned Michigan Technological University:



4/25/25 Michigan Tech Board of Trustees Regular Meeting, Media Report - Articles



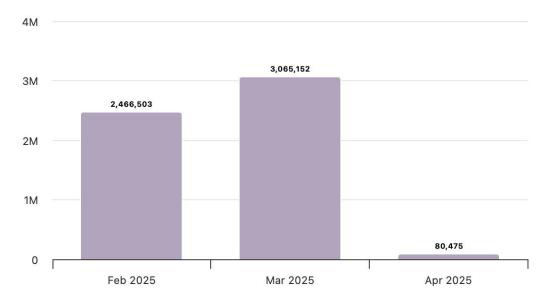


Those 3,206 articles were shared, commented on, or liked on social media roughly 61,700 times, for an average engagement of 19 shares, comments, or likes per article:



MUCK RACK

Journalists shared the articles 269 times, resulting in a reach of roughly 5.6 million people:



4/25/25 Michigan Tech Board of Trustees Regular Meeting, Media Report - Journalist Reach

MUCK RACK

News Highlights:

Research News

<u>TIME Magazine</u> mentioned Kristin Brzeski (CFRES) in a story about Colossal Biosciences' work to revive extinct species, including their successful efforts to bring back the dire wolf using genetic engineering. The company's methods could also contribute to efforts aimed at saving endangered species like the red wolf. The story was picked up by <u>Yahoo! Canada</u>.

<u>NASA</u> mentioned Michigan Tech in a story about its University Student Research Challenge, highlighting several projects selected for the challenge. AeroFeathers, a project led by Michigan Tech students and focused on developing new propeller blades and fixed wing design concepts inspired by owl feathers, was featured as a 2023 awardee.

<u>Spartan Newsroom</u> and the <u>Mining Journal</u> quoted Jared Wolfe (CFRES) in stories about how Indigenous communities rely on forests for food, medicine and cultural values. Wolfe discussed Michigan's forest management practices and the need to incorporate traditional Indigenous knowledge for more sustainable resource use.

<u>Spartan Newsroom</u> and the <u>Mining Journal</u> quoted Roman Sidortsov (SS) in stories about the Upper Peninsula's leadership in renewable energy development. Sidortsov discussed the role of local energy production in reducing electricity costs and the impact of the Inflation Reduction Act on the region's renewable energy growth.

Lucas Nave (CFRES) was quoted by the <u>University of Michigan Biological Station</u>, <u>Technology</u> <u>Networks</u>, <u>Phys.org</u>, <u>EurekAlert!</u> and eight additional outlets in stories about a <u>study</u> on forest carbon storage. The research found that factors like forest structure, tree and microbial composition, and soil nitrogen availability play a more significant role in carbon sequestration than time alone. Nave led the study while at the University of Michigan.

Michigan Tech Vice President for Research Andrew Barnard was a guest on the March 16 episode of the "<u>Copper Country Today</u>" radio program. The episode was titled "MTU's R1 Status and Its Impact on the Community."

University President Rick Koubek was a guest on the Mar. 5 episode of Michigan Public's "<u>Stateside</u>" radio show. The episode discussed Michigan Tech's new R1 research university designation and membership in the University Research Corridor, the research it will contribute, and the positive impact for the state of Michigan.

University President Rick Koubek was quoted by <u>Crain's Detroit Business</u>, <u>MSU Today</u>, the <u>Mining Journal</u>, <u>Michigan Business Network</u>, and <u>WLUC TV6</u>, and Andrew Barnard (VPR) was quoted by the <u>Daily Mining Gazette</u> in stories about Michigan Tech joining Michigan's University Research Corridor. Both articles discussed how the membership will enhance innovation and economic growth in the state.

The <u>Detroit News</u> covered Michigan Tech's new status as an R1 institution under the 2025 revisions to the Carnegie Classification of Institutions of Higher Education. The recognition highlights Michigan Tech's significant research spending and doctoral production. University President Rick Koubek, Andrew Barnard (VPR) and Paul van Susante (MAE) were quoted.

<u>Inside Higher Ed</u>, <u>Crain's Detroit Business</u> and <u>Forbes</u> covered Michigan Tech's new status as an R1 institution under the 2025 revisions to the Carnegie Classification of Institutions of Higher Education. The recognition highlights Michigan Tech's significant research spending and doctoral production. University President Rick Koubek and Andrew Barnard (VPR) were quoted.

<u>Bridge Michigan</u> mentioned Michigan Tech in a story about the Rx Kids cash-assistance program in Michigan, referencing <u>research</u> by Richelle Winkler (SS) and Ph.D. student Julia Petersen (environmental and energy policy) on population loss in the Upper Peninsula over the past two decades.

Inside Higher Ed, Crain's Detroit Business, Forbes, MichAuto and WLUC TV6 covered Michigan Tech's new status as an R1 institution, and Hope College mentioned Tech as one of Michigan's R1 institutions in a story about its own newly acquired research distinction. Andrew Barnard (VPR) was quoted by TV6, and that story was picked up by Saginaw's WNEM TV5. covered Michigan Tech's new status as an R1 institution under the 2025 revisions to the Carnegie Classification of Institutions of Higher Education.

General News

Tim Havens (CS/ICC/GLRC) was quoted by <u>My UP Now</u> in a story about Art in Silico hosted by Michigan Tech's Institute of Computing and Cybersystems. Havens highlighted the event's role in showcasing the evolving relationship between computational methods and art and the opportunity it provides for students to engage with emerging technologies like AI.

<u>Sports Illustrated</u> and 24 national news outlets mentioned Michigan Tech in a story about the most Frozen Four championships. Michigan Tech has won three national titles in college hockey.

The <u>New York Times</u> mentioned Stephanie Carpenter (HU) in a March 28 review of "Moral Treatment," Carpenter's historical fiction novel published in February. The review was part of an article titled "Thrilling, Lush New Historical Fiction." The novel won the inaugural Summit Series Prize awarded by Central Michigan University Press.

<u>MIT Technology Review</u> mentioned Sarah A. Bell (HU) in a review about her book "Vox ex Machina: A Cultural History of Talking Machines," which explores the history of voice synthesis and human expressions in technology. <u>Forbes</u> highlighted the Department of Social Sciences' industrial heritage and archaeology graduate program as one of 34 national success stories exemplifying a new higher education strategy: offering "niche programs catering to high-demand, specialized fields." Launched in 1990, the program allows students to study industrial remains at sites across the Upper Peninsula and "combines archaeology, history, anthropology, and engineering elements to preserve and interpret America's industrial heritage."

<u>MLive</u> mentioned Michigan Tech's Ford Center and Forest in a story about the coldest recorded temperature in Michigan this winter, which was measured at negative 32 degrees Fahrenheit at the Ford Center in Alberta on Jan. 21. The temperature was confirmed by both manual and remote sensors and verified by the National Oceanic and Atmospheric Administration.

<u>UPword</u> mentioned Michigan Tech's mechatronics program as a consultant in the development of "Storytelling and Semiconductors," an educational program debuting in fourth-grade classrooms across the western Upper Peninsula in fall 2025.

<u>CBS Sports</u>, <u>Yahoo! News</u>, and 20 national news outlets mentioned Michigan Tech hockey defenseman Chase Pietila in stories about his signing a three-year entry-level contract with the Pittsburgh Penguins. Pietila was drafted by the Penguins in the fourth round of the 2024 NHL Draft.

<u>UPword</u> mentioned Mont Ripley and the ski area's general manager Chris Maxon in a story about growth and expansion happening at ski areas in the Upper Peninsula and elsewhere in the U.S.

<u>Bridge Michigan</u> mentioned Michigan Tech's Winter Carnival in a story about a push to encourage year-round tourism in the Upper Peninsula and northern Lower Peninsula by adding new cold-weather events and activities and revitalizing lapsed ones.

The <u>Athletic</u> mentioned Michigan Tech in a story reviewing Doug Gottlieb's first year as head coach of the University of Wisconsin-Green Bay men's basketball team. The article described Gottlieb's viral "Nobody U" comment, made prior to his team's Dec. 18 loss to Michigan Tech, as a "meteor hitting a gas truck parked at a fireworks warehouse."

<u>MLive</u>, <u>WLUC TV6</u>, <u>102.3 WGRT-FM</u>, <u>UPword</u>, <u>Lake Superior Magazine</u> and the <u>Keweenaw</u> <u>Report</u> covered Michigan Tech's 2025 Winter Carnival, highlighting activities like snow statue building, broomball and a laser light show. Blue Key President Skyler Spitzley was quoted about the excitement on campus, while junior Ethan Smith of Phi Kappa Tau and senior Emily Taylor of Alpha Sigma Tau discussed the statue competition. <u>TV6</u> also covered the final hours of the snow statue competition before the 9 a.m. judging yesterday, Feb. 6.

<u>WLUC TV6</u> aired a feature segment on Michigan Tech's broomball tradition on the station's "Upper Michigan Today" morning show on Wednesday, Feb. 5. The segment included a Broomball 101 lesson and scientific demonstrations by the Michigan Tech Mind Trekkers.

E. Employee Safety Statistics



EMPLOYEE SAFETY STATISTICS YEAR-TO-DATE

Jan - March 2024/2025

	Category	Years			En	nployee Cla	ssification				
	Category	Tears	AFSCME	Faculty	Non-Exempt	POA	Professional	Student	Temporary	UAW	Total
	Injury Only w/Medical - No Lost	2024	0	0	0	0	3	0	1	1	5
	Time	2025	0	1	0	0	1	1	0	1	4
	Lost Time Cases	2024	1	0	0	0	0	0	1	0	2
Number of	LOST TIME Cases	2025	0	0	0	0	1	0	1	0	2
Recordable	Restricted Work Cases	2024	3	0	0	0	0	2	1	0	6
Injuries	Resilicied work Cases	2025	0	0	0	0	0	3	0	0	3
	Occupational Safety and Health Administration (OSHA)	2024	4	0	0	0	3	2	3	1	13
	Recordable Injuries (Total of above)	2025	0	1	0	0	2	4	1	1	9
	Injury Lost Time ³	2024	250	0	0	0	0	49	6	0	305
Number of		2025	0	0	0	0	4	0	10	0	14
Days	Destricted Wests Davis ³	2024	93	0	0	0	0	0	16	0	109
	Restricted Work Days ³	2025	0	0	0	0	0	17	0	0	17
	Total Work Hours	2024	60,487	215,627	20,343	3,917	273,123	208,870	16,416	38,242	837,02
Hours	TOTAL WORK HOURS	2025	63,397	221,027	18,633	3,987	286,983	222,746	16,421	33,315	866,50
Worked	Percentage of Work Hours	2024	7.2%	25.8%	2.4%	0.5%	32.6%	25.0%	2.0%	4.6%	100.0%
	Percentage of work Hours	2025	7.3%	25.5%	2.2%	0.5%	33.1%	25.7%	1.9%	3.8%	100.0%
		2024	3.3	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.5
Rates	Lost Time Case Rate ¹	2025	0.0	0.0	0.0	0.0	0.7	0.0	12.2	0.0	0.5
Rales	Energy Data ² (Data 111)	2024	13.2	0.0	0.0	0.0	2.2	1.9	36.5	5.2	3.1
Frequency Rate ² (Recordable)	2025	0.0	0.9	0.0	0.0	1.4	3.6	12.2	6.0	2.1	

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 University.

3 The number of days are total days for the life of the cases first reported during this period.

The Bureau of Labor Statics 2023 Injury, Illness, and Fatalities, Table 1 reports for Colleges and Universities; the average LOST TIME CASE RATE of days away from work was 0.4 and the average FREQUENCY RATE was 1.3.

F. Disposal of Surplus Property

Michi an Technolo ical University Surplus Property Sales January 1, 2025 - March 31, 2025

Date	Description	A	mount
03/20/25	Miscellaneous scrap metal	\$	673.65
Total		\$	673.65

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

Board of Trustees Summary of Scholarships, Awards, and Grants

	*TOTAL 24-25 Fall/Spring						
	# Students PAID	\$ Total PAID					
INSTITUTIONAL							
GRANT ¹	1914	\$ 12,550,448.51					
LOAN ²	26	\$ 57,342.00					
SCHOLARSHIP ³	5223	\$ 52,862,397.54					
**OTHER	193	\$ 2,022,472.18					
TOTAL INST	\$67,49	92,660					
SPONSORED							
SCHOLARSHIP	1671	\$ 6,522,869.70					
TOTAL SPONSORED	\$6,52	2,870					
FEDERAL							
GRANT	1530	\$ 8,337,062.00					
LOAN	2597	\$ 24,994,850.00					
WORK-STUDY ⁴	158	\$ 303,138.46					
TOTAL FEDERAL	\$33,63	35,050					
STATE							
GRANT	1743	\$ 10,676,164.07					
SCHOLARSHIP	7	\$ 21,207.00					
TOTAL STATE	\$10,6	97,371					
EXTERNAL							
LOAN	993	\$ 17,835,423.30					
SCHOLARSHIP	892						
TOTAL EXTERNAL	\$21,01	15,887					
TOTAL AID	\$139,3	63,838					

*Numbers include aid paid for fall 2024 and spring 2025. 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.

		# PAID for 2425	\$ Amount PAID
Fund Name	Туре	Fall/Spring	Fall/Spring
Enrollment Incentive Grant	GRNT	5	\$ 92,419.00
Part-Time Enrollment Support	GRNT	7	\$ 9,296.41
Michigan Indian Tuition Grant	GRNT	37	\$ 707,485.60
University Student Aid Grant	GRNT	1746	\$ 11,214,703.00
University Student Grant	GRNT	116	\$ 493,165.50
Marie Ryding Hardship Grant	GRNT	23	\$ 33,379.00
TECHAID Loan	LOAN	26	\$ 57,342.00
906 Scholarship	SCHL	141	\$ 121,857.00
AF Dedicated Award	SCHL	12	\$ 68,138.00
Air Force Room & Board	SCHL	2	\$ 14,048.00
AF Service Award	SCHL	23	\$ 88,716.00
Athletic Grant-A.D. Assistant	SCHL	21	\$ 81,204.00
Athletic Grant-eSports	SCHL	29	\$ 125,000.00
Athletic Grant-Football	SCHL	125	\$ 1,426,062.66
Athletic Grant-Hockey	SCHL	33	\$ 1,045,886.16
Athletic Grant-M Basketball	SCHL	20	\$ 494,518.71
Athletic Grant-Men CC & TF	SCHL	29	\$ 179,128.63
Athletic Grant-M Nordic Ski	SCHL	10	\$ 120,022.00
Athletic Grant-M Tennis	SCHL	8	\$ 151,750.00
Athletic Grant-Volleyball	SCHL	20	\$ 430,093.32
Athletic Grant-W Basketball	SCHL	14	\$ 357,968.06
Athletic Grant-Women CC & TF	SCHL	25	\$ 161,276.48
Athletic Grant-W Nordic Ski	SCHL	13	\$ 117,912.00
Athletic Grant-W Soccer	SCHL	29	\$ 380,915.55
Athletic Grant-W Tennis	SCHL	9	\$ 242,106.00
Army Room & Board	SCHL	1	\$ 2,498.00
Arctic Warrior Award	SCHL	17	\$ 171,804.00
Blizzard Scholarship	SCHL	6	\$ 6,999.97
COB Dean's Award	SCHL	68	\$ 745,000.00
COB Dean's Award	SCHL	9	\$ 18,000.00
VPA Talent Award	SCHL	47	\$ 43,500.00
Distinguished Leader Award	SCHL	411	\$ 402,000.00
Detroit Promise Scholarship	SCHL	1	\$ 1,771.00
FIRST Scholarship MI Tech	SCHL	29	\$ 109,250.00
GC Corporate GR Fellowship	SCHL	65	\$ 237,416.00
GC Corporate UG Scholarship	SCHL	1	\$ 6,500.00
Grad Sch Academic Excellence Award	SCHL	31	\$ 73,000.00
Husky Innovation Leaders Award	SCHL	63	\$ 87,229.00
Husky Investment Tournament	SCHL	21	\$ 19,500.00
International Ambassador Scholarship	SCHL	45	\$ 526,600.00
Impact Scholarship - COB	SCHL	31	\$ 121,310.00

		# PAID for 2425	\$ Amount PAID
Fund Name	Туре	Fall/Spring	Fall/Spring
LEAP Technologies	SCHL	8	\$ 34,000.00
Leading Scholar Commended	SCHL	439	\$ 864,000.00
Leading Scholar Distinguished	SCHL	364	\$ 1,624,500.00
MI MTU Alumni Legacy Award	SCHL	659	\$ 396,667.00
MTU Partner Pathway Award	SCHL	30	\$ 29,459.00
Michigan Tech Transfer Achievement	SCHL	103	\$ 179,333.00
Michigan Tech Transfer Distinction	SCHL	202	\$ 737,000.00
National Business Scholars	SCHL	32	\$ 587,500.00
National Business Scholars	SCHL	5	\$ 10,000.00
National Copper Scholars	SCHL	106	\$ 1,014,000.00
National Gold Scholars	SCHL	213	\$ 2,828,668.00
National Platinum Scholars	SCHL	468	\$ 7,445,813.00
National Silver Scholars	SCHL	116	\$ 1,391,563.00
National Distinction Scholarship	SCHL	1	\$ 8,334.00
National Leading Scholar	SCHL	37	\$ 622,917.00
National Achievement Transfer	SCHL	15	\$ 64,000.00
National Distinction Transfer	SCHL	15	\$ 130,000.00
Presidential Copper Scholars	SCHL	248	\$ 236,834.00
Presidential Gold Scholars	SCHL	831	\$ 2,365,688.00
Presidential Platinum Scholars	SCHL	1289	\$ 6,854,490.00
Presidential Silver Scholarship	SCHL	592	\$ 1,120,543.00
Presidential Achievement Scholarship	SCHL	1	\$ 1,500.00
Presidential Distinction Scholarship	SCHL	2	\$ 3,750.00
Presidential Leading Scholar	SCHL	110	\$ 1,038,334.00
University Room Scholarship	SCHL	8	\$ 54,522.00
MTU Leading Scholars Award	SCHL	58	\$ 2,080,492.00
Summer Youth Scholars Award	SCHL	42	\$ 98,000.00
Create Your Success Scholarship	SCHL	293	\$ 1,441,500.00
Supplemental University Student Award	SCHL	11	\$ 28,475.00
Michigan Tech Excellence Award	SCHL	3144	\$ 11,069,099.00
College Partner Pathway Award	SCHL	13	\$ 322,436.00
Tuition Reduction Incentive Program		161	\$ 1,784,772.68
Military Family Enducation Award		8	\$ 144,902.00
Senior Citizen Benefit		24	\$ 92,797.50

X-H. CONTRACTS OVER \$500,000

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

- East Gateway Sign
 - Contract dates: April October 2025
 - Contract type: Construction
 - Contract amount: \$890,736.00
 - Funding Source: Auxilliary reserves