



**Formal Session of the Board of Trustees
February 24, 2023
9:00 a.m. – 11:00 a.m.
Location: MUB Ballroom B
Public Meeting**

- I. Call to Order**
Jeffrey Littmann, Chair
- II. Roll Call**
Sarah Schulte, Secretary
- III. Confirm Agenda**
Jeffrey Littmann, Chair
- IV. Opening Remarks**
 - A. Opening Remarks of the Board Chair** Jeffrey Littmann, 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**
Andrea Dickson, Committee Chair
 - C. Leadership Committee**
Jon Jipping, Committee Chair
- VII. Consent Agenda**
 - A. Approval of Minutes**
 - B. Degrees in Course**
 - C. Resignations, Retirements, and Off Payroll**

D. Fundraising Productivity Report

E. Exclusion Resolution

VIII. Action and Discussion Items

A. Resolution to Approve 2024 Room & Board Rates

Julie Seppala, Treasurer

B. Approval for New Line of Credit

Julie Seppala, Treasurer

IX. Reports

A. Faculty Report

Robert Nemiroff, Professor, Physics

B. Undergraduate Student Government

Cheyenne Scott, President

C. Graduate Student Government

Ranit Karmakar , President

D. University Senate

Mike Mullins, President

X. Informational Items

A. Analysis of Investments

B. Research & Sponsored Programs

C. Advancement & Alumni Relations

D. Media Coverage

E. Employee Safety Statistics

F. Disposal of Surplus property

XI. Other Business

XII. Date for Next Formal Meeting: April 28, 2023

XIII. Adjourn

VII. Consent Agenda

- A. Approval of Minutes**
- B. Degrees in Course**



MEMORANDUM

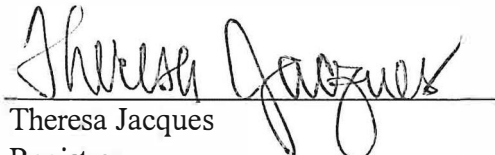
To: Dr. Richard J. Koubek
Office of the President

From: Theresa Jacques
Registrar's Office

Date: February 1, 2023

Subject: Candidates for Degrees – Conferral Term 202208

The attached list of candidates for degrees, beginning with Rebecca Rose Malinowski and ending with Yi Xu is submitted for the granting of the appropriate degrees by the Board of Trustees. I certify that these candidates meet all requirements for their respective degrees and that the names have been submitted to and have received the approval of the faculty from their major department.


Theresa Jacques
Registrar

TJ/sw

Michigan Technological University Degrees Awarded for Conferral Term 202208

Michigan Technological University Registrar's Office February 1, 2023

Associate of Arts in Humanities

- Rebecca Rose Malinowski

Bachelor of Arts in English

- Christian I Johnson - Magna Cum Laude
- Kiera L Raymond

Bachelor of Arts in History

- William Albert Fiedler

Bachelor of Arts in Sound Design

- Illeana E Barragan - Cum Laude
- Riley Josef Mehki
- Sage E Moser - Magna Cum Laude

Bachelor of Science in Accounting

- Brette Ashton Eychner - Cum Laude
- Evan Sorensen
- Irene Lee Trierweiler - Cum Laude
- Jacob Emery Stadwick - Magna Cum Laude
- Kasey P Kangas - Summa Cum Laude

Bachelor of Science in Applied Ecology and Environmental Sciences

- Adam Keith Weber
- Alyssa D Reuter - Magna Cum Laude
- Kyle Gerard Chalut - Magna Cum Laude

Bachelor of Science in Applied Geophysics

- Austin M Riggs - Summa Cum Laude
- Isabelle Rae McGuire

Bachelor of Science in Audio Production and Technology

- Grayson Andrew Dunham
- Reece Whittier Parsons - Cum Laude

Bachelor of Science in Biochemistry and Molecular Biology

- Amanda Pearl Bekkala - Magna Cum Laude
- Madelyn Marie Jones - Magna Cum Laude

Bachelor of Science in Bioinformatics

- Emily Wood - Magna Cum Laude
- Noah B Mason

Bachelor of Science in Biological Sciences

- Amanda JeeMin Stevens - Cum Laude
- Garret Mark Hurt - Magna Cum Laude
- Janie Lauren Grindland - Magna Cum Laude
- Leah Colleen Gingerich
- Megan Gail Peterson - Cum Laude

Bachelor of Science in Biomedical Engineering

- Haley Marie Papineau - Magna Cum Laude
- Kiira Noelle Hadden - Cum Laude
- Madison Leigh Rosiek - Magna Cum Laude

Bachelor of Science in Chemical Engineering

- Michael E Schumacher

Bachelor of Science in Chemistry

- Donni Rae Fuller
- Jailynn Johnson
- Madison Ashley Vickers
- Tara Ashley Vohs - Summa Cum Laude

Bachelor of Science in Civil Engineering

- Abigail Lee Bethune - Cum Laude
- Adam Calvin Grady
- Adam Michael Bau - Magna Cum Laude
- Allyson D Goff
- Andrew Paul Heinonen
- Christian Alexander Benson
- Curtis K Byrns
- Donavon Dean Free - Cum Laude
- Ethan James Kangas
- Gabriel Scott Bollinger - Magna Cum Laude
- Hailey Michelle Bedard
- Johnathan Wayne Hardy
- Jonathan Carl Lobsinger - Cum Laude
- Kaitlyn Alexis Pascoe
- Kevin Tran
- Mariah Jean Sheeler - Cum Laude
- Mark Gregory Luebke
- Robert Alan Froelich - Cum Laude
- Scott Marvel - Magna Cum Laude

- Sean David Bonner - Summa Cum Laude

Bachelor of Science in Computer Engineering

- Andrew W Rosales
- Cayman William Schefsky - Magna Cum Laude
- Christopher John Hettinger - Summa Cum Laude
- Evan Christopher McKenzie - Magna Cum Laude
- Jarod Michael Wladysiak
- Joshua Duncan Robinson - Magna Cum Laude
- Preston P Engler - Summa Cum Laude
- Randal Montgomery McDowell
- Tyler John Zetty - Summa Cum Laude
- Tyler Jon Newton - Summa Cum Laude
- Ymailda Hernandez

Bachelor of Science in Computer Network and System Administration

- Bradley Thomas Jacoby - Cum Laude
- Byron James Langerman - Cum Laude
- Cody Dominique Holoday - Cum Laude
- Destiny Victoria Michaels - Magna Cum Laude
- Lucas Earl Runkel
- Matthew Alexander Hoying
- Michael Bearden - Magna Cum Laude
- Seth Ryan Hessbrook - Magna Cum Laude

Bachelor of Science in Computer Science

- Alec William Brinker - Magna Cum Laude
- Austin Michael Mabee
- Benjamin Fitz Collicott - Summa Cum Laude
- Christian Charles Clemmons
- Emily Ann Fournier
- Jason Curtis Hoffman
- Jenna Rose Byron
- John Alexander Callahan
- Joshua Dorion Tennant
- Julien G Thrum - Cum Laude
- Justin Leonard Daniel Marshall - Cum Laude
- Laura Elizabeth Albrant - Cum Laude
- Matthew J Schwennesen - Summa Cum Laude
- Neil Richard Dennis

- Niklas Paul Romero
- Noah D Deverney
- Samuel J VanderArk - Summa Cum Laude
- Tom Allen Berg - Cum Laude
- Tyler James Becker - Summa Cum Laude
- Yaqirah Donna Rice - Magna Cum Laude

Bachelor of Science in Construction Management

- Carter Larry Ghiringhelli
- Marcus Scott Hillstrom
- Scout William Wunder
- Troy Christopher Manthei

Bachelor of Science in Cybersecurity

- Adam Michael Berg
- Elisha John Brockert
- Lindsay Elizabeth Kulpa

Bachelor of Science in Ecology and Evolutionary Biology

- Abbey R Ambrosius
- Elizabeth Rae Connett - Cum Laude

Bachelor of Science in Electrical Engineering

- Andrew Richard Kiefer - Magna Cum Laude
- Benjamin Edward Holladay - Cum Laude
- Christian James Day
- Darien Joel Carson - Cum Laude
- Erin Ann Shearer
- Gaird Davison Brock
- Hope Margaret Winters - Cum Laude
- Jerrad David Smithhart
- Joshua Frank Gindt - Cum Laude
- Karl W Pliscott
- Keola K Kaaikala
- Kole Mitchell Augustine - Magna Cum Laude
- Leif Frederick Kett
- Mario Louis Rebottaro
- Matthew Victor Sietsema - Magna Cum Laude
- Mikalah Ann Brock - Magna Cum Laude
- Nathan Richard Hoffmann
- Neil Richard Dennis

- Patrick James Kaiser
- Rachel Elizabeth Mellin - Magna Cum Laude
- Steven Daniel Beauprey - Cum Laude
- Tyler James Myers
- Weichao Weng
- William Henry Kalajian
- Zachary Tyler Van Hooser

Bachelor of Science in Electrical Engineering Technology

- Andrew Jay Simon
- Caleb Devonta Keoki Rogers
- Ian Vance Hassinger - Magna Cum Laude

Bachelor of Science in Engineering

- Brendan Michael Sokol

Bachelor of Science in Engineering Management

- Anastasia Quinn Motta - Magna Cum Laude
- Jacob Samuel Romang - Magna Cum Laude
- Nathan Sodini

Bachelor of Science in Environmental Engineering

- Carlin Ga-Chung Wong
- Jonah Stone Meyer
- Katherine Jean Gallarno
- Kelly Elise Livingston - Cum Laude
- Malina Faith Gallmeyer - Summa Cum Laude
- Margaret T Purvis
- Tyler Edziu Kosiara - Cum Laude

Bachelor of Science in Exercise Science

- Elizabeth Mundell *
- Jacob Thomas Rivard
- Lily Klaira Hart - Magna Cum Laude
- Matthew Frederick Winter - Magna Cum Laude
- Meg E Keranen - Cum Laude
- Michael Dion Bates - Cum Laude

Bachelor of Science in Finance

- Carissa Lee Beyer - Cum Laude
- Connor John Dopke
- Jada Elizabeth Markham

Bachelor of Science in Forestry

- Michael Oren Walther

Bachelor of Science in Human Biology

- Adam James Scott Tharp - Magna Cum Laude
- Christian I Johnson - Magna Cum Laude
- Haley Suzanne Ruitter - Summa Cum Laude
- Luke A Terrian - Summa Cum Laude
- Rebecca G Stone - Summa Cum Laude

Bachelor of Science in Management

- Anna Marie Nault
- Daisy Jo Ansel - Cum Laude
- Mark Anthony Sinclair
- Maya Nicole Thurston - Summa Cum Laude
- Ryan Lee Calkins - Cum Laude
- William James Marano

Bachelor of Science in Management Information Systems

- Fiona Wing-Si Chow

Bachelor of Science in Marketing

- Jaxon T Verhoff - Summa Cum Laude

Bachelor of Science in Materials Science and Engineering

- Alexandra Jordan Marcyan
- Anna Marie Palmcook
- Haley Marie Papineau - Magna Cum Laude
- Sophie Alexis Mehl - Summa Cum Laude

Bachelor of Science in Mathematics

- Austin David Higgins - Cum Laude
- Brandi A Bousley
- Finian T Laverty - Magna Cum Laude
- Raquel Victoria Leisner - Magna Cum Laude

Bachelor of Science in Mathematics and Computer Science

- Austin David Doorlag

Bachelor of Science in Mechanical Engineering

- Adam A Dums
- Anders Arthur Carlson
- Andrew Richard Kiefer - Magna Cum Laude
- Andrew Stephen Nold - Magna Cum Laude
- Anthony Alan Bashur
- Audrey Colleen Levanen - Magna Cum Laude

- Benjamin J DeLaurelle - Cum Laude
- Bennett Harrison Speaks
- Brandon Robert Mroczek
- Brenden Robert Blazier - Cum Laude
- Brody Allen Little
- Callanen Ry Swaty - Summa Cum Laude
- Carter Anthony Heller - Magna Cum Laude
- Casimir Adam Mankowski
- Chandler Galen Vincent
- Charlotte Rose Wilkes - Magna Cum Laude
- Cheryl Mae Johnson
- Christian Joseph Hornick
- Clayton Joseph Spevak
- Collin Curtis Miller
- David Petersen - Summa Cum Laude
- Drew James Pienta - Cum Laude
- Dustin Mark Dimitry - Cum Laude
- Eamon Leo McClintock
- Elizabeth Anne Louise Bates
- Evan Wang DeLosh - Magna Cum Laude
- Ezequiel Cuellar - Cum Laude
- Gabriel Jay Glennon - Magna Cum Laude
- Gabriela Annunziata Sgambati - Summa Cum Laude
- Gavin L Coan
- Grant Edward Cooper
- Hailey Michelle Bedard
- Hunter Scott Freitag
- Isaac Llewellyn Coulter
- Jack Thomas Jones
- Jacob Ryan Stover - Magna Cum Laude
- Jacob Taylor Sobiech
- Jake Robert Jones
- Jared L Roebuck
- Jared Matthew Hainey - Summa Cum Laude
- Jason Michael Janquart - Cum Laude
- Jayson James Fitzpatrick - Magna Cum Laude
- Jillian Alise Hansen

- Johannes Daniel Strueber
- John Robert Nagel - Cum Laude
- John Thomas Benz - Summa Cum Laude
- John Thomas Walunas - Magna Cum Laude
- Jonathan Paul Hildebrandt
- Joseph Edward McCarthy
- Junren Liu
- Karl W Pliscott
- Kyle Jackson Smith
- Kyle M DeRoche
- Logan Jacob Drake
- Logan Kent Batka
- Luke A Reich - Summa Cum Laude
- Madison Leigh Rosiek - Magna Cum Laude
- Marc Alexander Weykamp - Cum Laude
- Matthew Fenner Bettwy
- Matthew James Wells
- Matthew Loren Kangas
- Michael Richard Munderloh - Magna Cum Laude
- Mikhail Podorozhanskiy **
- Nathan Robert Weeden
- Nicholas Edmund Hallstrom
- Nicholas J Linder
- Noah John Jaeger
- Parker J Daly-Seiler - Summa Cum Laude
- Peter James Deneen - Magna Cum Laude
- Rachel Elizabeth Reiz - Magna Cum Laude
- Rudi Russell Miller
- Russell Paul English
- Ryan Vandiepen - Magna Cum Laude
- Rylie Elizabeth Platt - Magna Cum Laude
- Samantha Lynn Downs - Cum Laude
- Samuel B Hallgren
- Samuel Lieberman Stechschulte
- Samuel Manning Cieslewicz - Cum Laude
- Shamus Gordon Megill - Cum Laude
- Shaun R Hoffmann

- Sophie Lois Stewart
- Stephanie Sue Yeager - Cum Laude
- Taylor Rose Hammond
- Tyler Joseph Fabian - Magna Cum Laude
- Tylore Lee Baker
- Zachariah Alexander Charnesky

Bachelor of Science in Mechanical Engineering Technology

- Alec David Bloom
- Brendan John Rzeppa
- Dillon Robert Hude
- Dillon Ronald Harry Bennetts
- Evan Lee Franzel - Cum Laude
- Harvey William Hilgendorf
- Keaton Alexander McIntyre
- Ryley Alan Johnson
- Trevor N Henry

Bachelor of Science in Medical Laboratory Science

- Eleanora Katherine Cotter **
- Mackenzie Nan Nicholas - Cum Laude **
- Molly Ellen Anderson - Summa Cum Laude **
- Victoria Leda Chenier - Magna Cum Laude **

Bachelor of Science in Mining Engineering

- Emily Isabelle Voght - Summa Cum Laude

Bachelor of Science in Physics

- Erin Casey Ruth Aldrich - Cum Laude

Bachelor of Science in Psychology

- Emilie Therese Jacques - Magna Cum Laude
- Hannah Grace DeRuyter
- Samuel Jacob Raber
- Trenton Lee Laramore - Cum Laude

Bachelor of Science in Scientific and Technical Communication

- Marley Grace Long - Cum Laude
- Noel Donald Kamdem-Tegue

Bachelor of Science in Social Sciences

- Ethan Alexander Gerds

Bachelor of Science in Software Engineering

- Audrey Anna Schmitt - Magna Cum Laude

- Hunter James Kreuer
- Jade Brennan Wang

Bachelor of Science in Sports and Fitness Management

- Brandon Dean Thompson
- Kiley Nicole Farrey

Bachelor of Science in Statistics

- Blake Anthony Hawes - Magna Cum Laude

Bachelor of Science in Sustainability Science and Society

- Sidney Marie Mechling - Summa Cum Laude

Bachelor of Science in Theatre and Entertainment Technology

- Laura Bufanda

Bachelor of Science in Wildlife Ecology and Conservation

- Faith Lauren Wallenmaier
- Madison Shelby Baerlocher
- Rachel Anne Douglas - Magna Cum Laude
- Zachary Joseph Depotie - Cum Laude

Bachelor of Science in Wildlife Ecology and Management

- Blake Alexander Chosa

Doctor of Philosophy in Applied Physics

- Geeta Sachdeva
- Neerav Kaushal
- Tong Gao

Doctor of Philosophy in Atmospheric Sciences

- Jesse Charles Anderson

Doctor of Philosophy in Biological Sciences

- Aditi Pradeep Vyas
- Manas Deepak Warke

Doctor of Philosophy in Biomedical Engineering

- Md. Saleh Akram Bhuiyan

Doctor of Philosophy in Chemical Engineering

- Oluwatoyin Areo
- Victor Joseph Claremboux

Doctor of Philosophy in Chemistry

- Jared Lee Edwards
- Parya Siahcheshm
- Shobhit Sanjeev Chaturvedi

Doctor of Philosophy in Civil Engineering

- Aynaz Biniyaz
- Doctor of Philosophy in Electrical Engineering
- Li Wei
- Doctor of Philosophy in Engineering - Environmental Engineering
- Emily Shaw
- Doctor of Philosophy in Environmental and Energy Policy
- Shardul Tiwari
- Doctor of Philosophy in Forest Molecular Genetics and Biotechnology
- James Karl Rauschendorfer
- Doctor of Philosophy in Forest Science
- Parth Parimalbhai Bhatt
 - Peng Quan
- Doctor of Philosophy in Materials Science and Engineering
- Fereshteh Mallakpour
 - Masoud Kasraie
- Doctor of Philosophy in Mechanical Engineering - Engineering Mechanics
- Benedict Osobomen Egboiyi
 - Gurijala Venkat Prithvi Reddy
 - Ikechukwu Emmanuel Okoh
 - Jeffrey Jay Wiersma
 - Masoud Ahmadi
 - Mitchel Lee Timm
 - Philip Silvester Zoldak
 - Rasoul Bayaniahangar
 - Rohit Sunil Pandhare
 - Satyum Joshi
- Doctor of Philosophy in Physics
- Sambhawana Sharma
- Doctor of Philosophy in Rhetoric, Theory and Culture
- Alfred Lawrence Owusu-Ansah
 - Marina Choy
 - Modupe Omolara Yusuf
- Master of Business Administr. in Business Administration
- Ezra Riley Cotter
 - Jay Louis Czerniak
 - Jessica M Comfort
 - Will Oscar Randl Ark

Master of Engineering Mgmt in Engineering Management

- Austin Jeffery Goudge
- Garrett Keith
- Joshua Michael Golimbieski
- Louis Lawrence Thom

Master of Engineering in Engineering

- Jonathan Miller

Master of Forestry in Forestry

- Bradley D Biggs
- Katelyn R Hacker
- Kyle Dahms
- Mattison Brady
- Michael A Verduyn
- Thomas Eric Panella

Master of Geographic Info Sci in Geographic Information Science

- Joel Thomas Van Diepenbos

Master of Science in Accounting

- Fredrick James Kemp
- Julian W Blann
- Seth Alan Mosentine

Master of Science in Applied Cognitive Science and Human Factors

- Matthew Chard

Master of Science in Applied Ecology

- Katelyn Palo
- Maria Mercedes Ferrer

Master of Science in Applied Statistics

- Brandy Vanessa Mendoza
- Caleb Joel Holdener
- Claire Elise Semenchuk
- Fnu Anil Raju
- Heidi White
- Hunter Mcknight Willis
- Jason Paul Bausano
- Lan Hu
- Lee Jacob Shepich
- Michaela Bergquist
- Simon Haynes

Master of Science in Biological Sciences

- Dalton Charles Norris

Master of Science in Biomedical Engineering

- Alireza Asadbeygi
- Anthony August Geraci
- Tate Glenna Robison

Master of Science in Chemical Engineering

- Benjamin Frank Caithamer
- Tarot Denger
- Titilayo Christianah Akinseye

Master of Science in Chemistry

- Abhijeet Anandrao Patil
- Michael Christopher Hromada
- Shobhit Sanjeev Chaturvedi

Master of Science in Civil Engineering

- Julia Katherine Jenaway
- Maria Schadow
- Michael M Turner
- Nathan Anthony Machiorlatti
- Owen Elias Mattila
- Sean David Gulbranson

Master of Science in Computer Science

- Nicholas R Hamilton
- Rohith Challapalli
- Saano E Murembya
- Tino Christopher Moore

Master of Science in Cybersecurity

- Stuart Gordon Hoxie

Master of Science in Data Science

- Anudeep Reddy Puthalapattu
- Renu Wadhvani
- Sanjay Katta
- Sarah Jun Shilts
- Shivangi Goswami

Master of Science in Electrical Engineering

- Ansuman Ashim Goswami
- Timothy Thomas Nguyen

Master of Science in Electrical and Computer Engineering

- Alok Mahesh Ghodke
- Drew James Johnson
- Eduardo Marmol Diaz
- Evan J Sivec
- Ian Delbridge Helman
- Jacob Kneibel
- Jacob Leroy Roberts
- Justin Alex Mentink
- Parthipan Kanagaraj
- Patrick Alan Rice
- Zachary Jonathon Kerman

Master of Science in Environmental Engineering

- Benjamin Charles Holland
- Benjamin Jon Mohrhardt
- Rose Cecilia Daily
- Srujana Neyikapula
- Theresa Maria Passe

Master of Science in Environmental and Energy Policy

- Cynthia Lee Pindral
- Kabanda Herve Christian Sheja

Master of Science in Forestry

- Mattison Brady

Master of Science in Industrial Heritage and Archaeology

- Timothy Josiah Stone

Master of Science in Kinesiology

- Gregory James Miodonski
- Gwyneth Taressa Hamlin

Master of Science in Materials Science and Engineering

- Swapnil Sambhaji Bamane

Master of Science in Mathematical Sciences

- Nicole Ballach
- Yue Kang

Master of Science in Mechanical Engineering

- Abhilash Bharat Galapure
- Adesh Rathore
- Akhil Madugula

- Akhilesh Bale Gopichand
- Austin Thomas Yakes
- Bryant Goodenough
- Edward Lin
- Ganapathi Sai Karthik Sathvik Rachakonda
- Ganesh Ishwar Gadag
- George Burton Johnson
- Himanshu Kumar Swain
- Karan Prabhakar Jadhav
- Karthik Suriya Narayanan
- Kelsey Ann Martin
- Kevin James Nelson
- Khaterreh Kashmiri
- Madeleine Rose McFall
- Madhava Kirantu
- Meet Pankaj Patel
- Piyush Hitendra Chaudhari
- Rajeev Hanmant Mali
- Rohith Madhavan
- Ronak Jagdishchandra Panchal
- Sagnik Maity
- Shandilya Pendyala
- Shubham Pravinkumar Shaha
- Siddharth Uthirakumar
- Umesh Prashant Tendulkar
- Venkata Rayudu Marni
- Yuvraj Babasaheb Rupnar

Master of Science in Mechatronics

- Anthony James Wise
- Edwin Joseph Yazbec

Master of Science in Mining Engineering

- Poorva Kadrolli

Master of Science in Physics

- Joshua David Brandewie

Master of Science in Statistics

- Siyu Wang
- Yi Xu

*Addendum to Conferral

- Degree awarded in term 201508

**Addendum to Conferral

- Degree awarded in term 202205

VII-C. Resignations, Retirements, and Off Payroll

BOARD OF TRUSTEES OFF-PAYROLL REPORT

(November 27, 2022 – February 4, 2023)

RETIRED

Name	Class	Department	Title	Most Recent Hire Date	Term Date
Jean-Celeste Kampe	FD	Associate Provost for Undergraduate Education	Associate Provost and Dean	07/01/2008	01/06/2023
Susan Abramson	AF	Wadsworth Hall Food Service	Cook	02/13/2001	12/02/2022
Carol (Kangas) Asiala	NP	Geological & Mining Engineering & Sciences	Assistant Research Scientist/Engineer	09/01/1995	01/31/2023
Mary Struthers	UF	Senior Administrative Aide	Center for Educational Outreach	04/23/2001	12/09/2022

OFF-PAYROLL

Name	Class	Department	Title	Most Recent Hire Date	Term Date
Sajjad Bigham	FF	Mechanical Engineering-Engineering Mechanics	Associate Professor	08/16/2016	12/23/2022
Zhaohui Wang	FF	Electrical & Computer Engineering	Associate Professor	08/19/2013	12/30/2022
Maryam Pourhasanzadehsharifi	FR	Mechanical Engineering-Engineering Mechanics	Assistant Teaching Professor	08/17/2020	12/23/2022
Krystal Price	AF	Wadsworth Hall Food Service	Cooks Helper	10/14/2010	01/07/2023
Brandon Wrucke	AF	Facilities Management	Custodian	07/11/2022	01/08/2023
Joshua Wood	CF	General Athletics	Assistant Football Coach, Co-Defensive Coordinator	07/09/2011	12/10/2022
Brandon VanBuren	NF	Facilities Management	Central Energy Plant Operator	11/30/2020	01/03/2023
Mary Beth Hodges	NP	Information Technology Business Operations	Information Technology Inventory Control Clerk	05/19/2014	01/17/2023
Patricia Bennett	PF	Residence Education & Housing Services	Associate Director of Housing	11/15/2010	12/18/2022
Evan Lang	PF	Michigan Tech Research Institute (MTRI)	Assistant Research Engineer – Software Development	08/24/2020	12/23/2022
Allison Berryman	PF	Center for Technology & Training	Project Manager, Training & Operations	07/31/2017	01/07/2023
Christina Lehmann	PF	Associate Vice President for Research Development	Director of Human Research Protection Program	11/11/2013	01/17/2023
Derrick Morris	PF	Financial Aid Administration	Financial Aid Manager	11/15/2021	01/20/2023
Melanie Watkins	RP	Civil, Environmental & Geospatial Engineering	Research Assistant Professor	05/14/2018	12/31/2022
Jenna Laird	UF	Geological & Mining Engineering & Sciences	Administrative Aide	11/15/2021	11/26/2022
Lois Hwang	UF	Career Services	Administrative Aide	01/21/2019	12/23/2022
Pauline Housby	UF	Merchandising Operations	Office Assistant	07/26/2021	01/19/2023

VII-D. Fundraising Productivity Report

**Michigan Technological University
Michigan Tech Fund**

Fundraising Productivity Report

July 1, 2022 through December 31, 2022

Compared to Prior Fiscal Year

FY23

Source	YTD Total	Adjustment	FY Goal <small>(in millions)</small>	% of Goal
Individual Giving	15,911,690		21.27	75%
Corporate Giving	1,194,126		2.05	58%
Foundation & Other Org Giving	506,796		5.13	10%
Corporate Sponsored Research	7,016,673		13.33	53%
FUNDRAISING TOTAL	24,629,285	-	41.77	59%

<i>Amt of TOTAL from Gifts-in-Kind</i>	<i>647,607 (included in the source totals above)</i>
<i>Amt of Gifts/Pledges earmarked for the endowment</i>	<i>8,855,157 (included in the source totals above)</i>
<i>Amt of Gifts/Pledges earmarked for demand funds</i>	<i>6,365,770 (included in the source totals above)</i>
<i>Amt of Gifts/Pledges earmarked for unrestricted funds</i>	<i>291,667 (included in the source totals above)</i>

TOTAL PROGRESS TOWARDS FY GOAL	\$ 24,629,284.87	41.77	59%
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<i>Realized Planned Gifts - All</i>	<i>655,293 (NOT included in the source totals above)</i>
<i>Amt of Realized Planned Gifts earmarked for the endowment</i>	<i>36,246</i>

<i>Realized Pledges</i>	<i>839,314 (NOT included in the source totals above)</i>
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FY22

Source	YTD Total	Adjustment	FY Goal <small>(in millions)</small>	% of Goal	FY22 Total
Individual Giving	10,761,064		20.75	52%	18,901,223
Corporate Giving	1,000,762		2	50%	2,345,521
Foundation & Other Org Giving	360,381		5	7%	10,657,856
Corporate Sponsored Research	9,059,939		13	70%	15,092,172
FUNDRAISING TOTAL	21,182,146	0	40.75	52%	46,996,772

Notes:

- The Adjustment totals include changes to gift records (eg. gift received date, amount, or other donor driven gift modifications)
- The FUNDRAISING TOTAL includes outright gifts, as well as new pledge and planned gift commitments, made in the specified date range.
- Realized planned gifts and realized pledges are not included in the FUNDRAISING TOTAL.
- An individual's gifts made through a donor-advised fund are counted under the individual.
- An individual's gifts made through another source (i.e. family foundation or closely held business) are counted under the source entity.
- The FUNDRAISING TOTAL for fiscal years 2020 and later include gifts-in-kind under other sources (Major Gifts, Annual Giving, etc).

VII-E. Exclusion Resolution for Department of Defense

VII-E. EXCLUSION RESOLUTION FOR DEPARTMENT OF DEFENSE

In 2008 the Board of Control amended policy 12.8. Security Clearance Department of Defense by establishing an Executive Committee. On March 5, 2009, the Board approved an Exclusion Resolution for the Department of Defense that excludes Board of Trustees member's access to classified information unless they are a member of the Executive Committee. The Board appointees to the Executive Committee are Jon Jipping, Jeffrey Littmann, and Steven Tomaszewski. The Administration is requesting that the Exclusion Resolution be revised to reflect the current Board appointments.

RECOMMENDATION: That the Board of Trustees adopts the Exclusion Resolution as presented herein.

I, *Richard J. Koubek*, do hereby certify that I am President of Michigan Technological University, a Michigan educational institution organized and existing under the laws of the State of Michigan, and that the following is a true and correct copy of a resolution adopted by the Board of Trustees of Michigan Technological University at a meeting held at Michigan Technological University on Friday, February 24, 2023, at which time a quorum was present.

EXCLUSION RESOLUTION

WHEREAS, current Department of Defense Regulations contain a provision making it mandatory that the Senior Management Officials and Facility Security Officer meet the personnel clearance requirements established for a contractor facility security clearance; and

WHEREAS, said Department of Defense Regulations permit the exclusion from the personnel clearance requirements of certain members of the Board of Trustees and other officers, provided that this action is recorded in the corporate minutes.

NOW THEREFORE BE IT DECLARED that the President of the University, Chairman of the Board, Vice President for Research and Facility Security Officer at the present time do possess, or will be processed for, the required eligibility for access to classified information; and

BE IT RESOLVED that in the future, when any individual enters upon any duties as President of the University, Vice President for Research, Chairman of the Board, and Facility Security Officer, such individual shall immediately make application for the required eligibility for access to classified information; and

BE IT RESOLVED AND DIRECTED that the following members of the Board of Trustees shall not require, shall not have, and can be effectively and formally excluded from access to all **CLASSIFIED** information in possession of the corporation and shall not affect adversely corporate policies or practices in the performance of classified contracts for the Department of Defense or the government contracting activities (User Agencies) of the National Industrial Security Program.

NAME	TITLE
John Bacon	Board of Trustee Member
Andrea Dickson	Board of Trustee Member
Matthew Johnson	Board of Trustee Member
Derhun Sanders	Board of Trustee Member
Monique Wells	Board of Trustee Member

IN WITNESS WHEREOF I have hereunto set my hand and affixed the seal of Michigan Technological University on this date: _____.

 Richard J. Koubek
 President, Michigan Technological University

VIII. Action and Discussion Items

A. Resolution to Approve 2024 Room & Board Rates

VIII-A. FY2024 ROOM AND BOARD AND APARTMENT RENTAL RATES

Michigan Tech is committed to providing exceptional facilities and services and a vibrant residential education experience that values academic success and a best in class student experience. Our on-campus residential community includes high quality and diversified dining services and housing alternatives that offer opportunities for learning and personal growth in a clean, safe, and comfortable environment.

The recommended schedule of residence hall room and dining rates for Douglass Houghton Hall, McNair Hall, Wadsworth Hall, Hillside Place, and rental rates for Daniell Heights apartments and University houses for FY2024 are included herein.

These rates are recommended for approval, with the confidence that our staff will continue to provide the type of innovative management and student development that has permitted Michigan Tech to attract, retain, and support a world-class student population.

RECOMMENDATION: That the Board approves the recommended residence hall housing and meal plan rates and apartment and houses rental rates for FY2024.

Student Housing and Dining Rates 2023- 2024

Douglass Houghton Hall, McNair Hall, Wadsworth Hall

Occupancy Dates: August 26 2023 - December 22, 2023 (16 weeks) and January 14, 2024- May 3, 2024 (15 weeks)

Housing (Regular Occupancy) and Dining	2022-2023 Housing & Unlimited Dining	Proposed Increase	2023-2024 Housing & Unlimited Dining	Percent Change
Wadsworth Hall, McNair Hall, Douglas Houghton Hall				
*Standard Occupancy (Double/Quad)	\$ 12,028	\$ 496	\$ 12,524	4.12%
Single Occupancy	\$ 13,826	\$ 589	\$ 14,415	4.26%
Triple Occupancy	\$ 11,563	\$ 465	\$ 12,028	4.02%
Wadsworth Hall w/ private bath				
Double Occupancy	\$ 13,020	\$ 527	\$ 13,547	4.05%
Single Occupancy	\$ 15,004	\$ 527	\$ 15,531	3.51%
Housing (Reduced/Temporary Occupancy) and Dining	2022-2023 Housing & Unlimited Dining	Proposed Increase	2023-2024 Housing & Unlimited Dining	Percent Change
Temporary Housing	\$ 10,106	\$ 1,023	\$ 11,129	10.12%

Combined Room and Board rates include the unlimited Gold plan meal plan which has \$200 in dining dollars and 8 guest meal swipes per semester. Students can downselect to the unlimited Silver meal plan which has \$100 in dining dollars and 4 guest meal swipes per semester, for \$279 less. Guest meal swipes expire at the end of the semester. Dining Dollars carry over from fall to spring semester and expire at the end of the spring semester.

* Rate reported to US Department of Education Integrated Postsecondary Education Data System based on their requirement to report the typical room charge for the full academic year for a full-time student sharing a room with one other student and to report the board charge based on the maximum meal plan available for the full academic year to a full-time student.

Hillside Place Residence Hall

Occupancy Dates: August 26 2023 - December 22, 2023 and January 14, 2024- May 3, 2024

Single Bedroom and Meal Rate	2022-2023 Housing & 150 Block Dining	Proposed Increase	2023-2024 Housing & 150 Block Dining	Percent Change
Single Bedroom in Shared Apartment	\$ 12,847	\$ 798	\$ 13,645	6.21%
Single Bedroom Apartment	\$ 13,808	\$ 860	\$ 14,668	6.23%

150 and 100 meals per semester block meal plans are required for Hillside Place and are also available to Daniell Heights or off-campus students. Meals expire at the end of each semester. Hillside Place residents can downselect to the 100 or the new for FY24 75 meal block plans for \$750 and \$1,180 less respectively. The unlimited Gold and Silver meal plans are available as an upgrade in lieu of the Block meal plan.

Daniell Heights Apartments & University Houses

Lease Agreement Dates: July 1, 2023 to June 30, 2024 or August 15, 2023 to June 30, 2024

Monthly Rental Rate	2022-2023	Proposed Increase	2023-2024	Percent Change
Daniell Heights Student Rates				
One Bedroom	\$ 775	\$ 50	\$ 825	6.45%
Two Bedroom	\$ 1,100	\$ 50	\$ 1,150	4.55%
Three Bedroom	\$ 1,400	\$ 60	\$ 1,460	4.29%
Daniell Heights University Employee Rates				
One Bedroom	\$ 970	\$ 70	\$ 1,040	7.22%
Two Bedroom	\$ 1,200	\$ 100	\$ 1,300	8.33%
Three Bedroom	\$ 1,540	\$ 70	\$ 1,610	4.55%
University Houses				
Efficiency (small) Single	\$ 420	\$ 40	\$ 460	9.52%
Standard Single	\$ 550	\$ 40	\$ 590	7.27%
Deluxe (large) Single	\$ 600	\$ 50	\$ 650	8.33%

Daniell Heights Flex Housing

Lease Agreement Dates: August 15, 2023 to June 30, 2024 with flexible release policy (month-to-month)

Monthly Rental Rate	2022-2023	Proposed Increase	2023-2024	Percent Change
Daniell Heights Student Rates				
One Bedroom apartment-per bed rate (2 occupancy)	\$ 388	\$ 67	\$ 454	17.16%
Two Bedroom apartment-per bed rate (4 occupancy)	\$ 275	\$ 41	\$ 316	14.91%

Flex housing was first piloted in the 2022-2023 academic year as a tactic to increase on-campus housing capacity in response to demand. Initial pricing was set at approved apartment rates divided by the number of beds. We are continuing to pilot this approach, but see the need to add a small premium for the month-to-month flexibility, increased furniture, and wear and tear on the facilities.

Summer Term Residence Hall Rates (Summer 2023)

Housing and Dining	2022-2023 Weekly	Proposed Increase	2023-2024 Weekly	Percent Change
Single Occupancy, shared bath	\$ 172	\$ 8	\$ 180	4.65%
Single Occupancy, private bath	\$ 198	\$ 9	\$ 207	4.55%
Double Occupancy, shared bath	\$ 129	\$ 6	\$ 135	4.65%
Double Occupancy, private bath	\$ 155	\$ 7	\$ 162	4.52%
Dining Plan Rate-no dining dollars	\$ 143	\$ 7	\$ 150	4.90%

VIII-B. Approval of Line of Credit

VIII-B. APPROVAL OF LINE OF CREDIT

To authorize borrowing from time to time, to provide funds for general operating purposes and other general corporate purposes of the University, the University seeks approval to negotiate, execute and deliver, revolving lines of credit up to an amount not to exceed \$20,000,000. Availability of revolving lines of credit for general operating purposes reinforces the overall liquidity position of the University. Should the University ever draw on the lines of credit, the unpaid principal and interest on amounts used for general operating purposes would be due and payable no later than December 31, 2027.

RECOMMENDATION: That the Board of Trustees adopt the attached resolution authorizing the President of the University and the Treasurer of the Board to negotiate, execute and deliver the borrowing of funds under revolving lines of credit, not to exceed \$20,000,000, as presented.

RESOLUTION OF THE BOARD OF TRUSTEES OF
MICHIGAN TECHNOLOGICAL UNIVERSITY
AUTHORIZING THE BORROWING OF FUNDS UNDER REVOLVING LINES OF CREDIT
AND PROVIDING FOR OTHER MATTERS RELATING THERETO

WHEREAS, the Board of Trustees of Michigan Technological (the “*Board*”) is a constitutional body corporate established pursuant to Article VIII, Section 6 of the Constitution of the State of Michigan of 1963, with general supervision of Michigan Technological University (the “*University*”) and the control and direction of all expenditures from the University’s funds; and

WHEREAS, the Board, in the exercise of its constitutional duties, has determined that it is appropriate and in the best interests of the University to establish one or more revolving lines of credit (each, a “*Line of Credit*”), whereby the Board may borrow the aggregate principal sum of up to Twenty Million Dollars (\$20,000,000) at any one time outstanding, on a revolving loan basis, to provide funds for general operating purposes and other general corporate purposes of the University; and

WHEREAS, in order to provide the Board with access to one or more Lines of Credit for the foregoing purposes, it will be necessary for the Board to enter into one or more revolving loan agreements, revolving credit agreements, or similar agreements, with one or more banks or financial institutions (each, a “*Credit Agreement*”); and

WHEREAS, it is necessary for the Board to authorize the President of the University and the Treasurer of the Board (each, an “*Authorized Officer*”), or either of them individually, to negotiate, execute and deliver, for and on behalf of the Board, one or more Credit Agreements with one or more banks or financial institutions, and other related documents, all within the limitations set forth herein.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF MICHIGAN TECHNOLOGICAL UNIVERSITY, AS FOLLOWS:

1. Authorization of Lines of Credit; Purposes and Terms; Advances. The Board hereby authorizes the borrowing from time to time of funds under one or more Lines of Credit, on a revolving loan basis, to provide funds for general operating purposes and other general corporate purposes of the University. The aggregate maximum principal amount of borrowings permitted to be outstanding at any time under the Lines of Credit shall not exceed Twenty Million Dollars (\$20,000,000).

Interest shall accrue on sums outstanding under each Line of Credit at the variable rate or rates of interest specified in the related Credit Agreement, subject, however, to adjustments in the applicable interest rate for increased costs of the bank or financial institution providing such Line of Credit, changes in applicable laws or regulations, rating changes, defaults and other specified factors, all as may be specified in the Credit Agreement, but in no event shall the applicable interest rate exceed the lesser of 25% per annum, the maximum rate permitted by law, or the maximum rate, if any, specified in the Credit Agreement. Interest accrued on unpaid advances under each Line of Credit shall be payable on the dates and in the amounts as shall be provided in the related

Credit Agreement. Advances under each Line of Credit shall be repaid with interest as provided in the related Credit Agreement; *provided, however*, that all unpaid principal of and accrued interest on all outstanding advances shall be finally due and payable not later than December 31, 2027.

Advances under any Line of Credit shall be made at the request of an Authorized Officer, or any other officer or employee of the Board or the University so designated in writing by an Authorized Officer.

2. Selection of Credit Providers; Approval of Credit Agreements and Notes. The Board further authorizes the Authorized Officers, or either of them individually, to select one or more banks or financial institutions to provide one or more Lines of Credit, and to negotiate, execute and deliver, for and on behalf of the Board and as its corporate act and deed, one or more Credit Agreements with one or more banks or financial institutions providing the Lines of Credit, and if appropriate, any participant banks or financial institutions, subject to the terms, conditions and limitations contained in this Resolution. Any Credit Agreement may provide for the delivery of a promissory note (each, a “*Note*”) to evidence all or part of the Board’s obligations under such Credit Agreement, and each Authorized Officer is individually authorized to prescribe the form of such Note and to execute and deliver such Note for and on behalf of the Board and as its corporate act and deed.

3. Limited Obligations; Security. The obligations of the Board under each Credit Agreement and related Note shall be limited and not general obligations of the Board, payable solely from General Revenues (as shall be defined in each Credit Agreement in a manner generally consistent with the definition thereof contained in that certain Trust Indenture, dated as of January, 1, 2023, between the Board and The Bank of New York Mellon Trust Company, N.A., as trustee), and may be unsecured or, if an Authorized Officer so determines, secured as set forth below; provided, that the Board reserves the right, but shall not be obligated, to pay the Board’s obligations under any Credit Agreement and related Note from any legally available funds. Each Authorized Officer is individually authorized, in the name of the Board and as its corporate act and deed, to secure the Board’s obligations under any Credit Agreement and related Note by a parity first lien or subordinated lien on General Revenues. A first lien on the General Revenues permitted to be established by this Resolution securing the obligations of the Board under a Credit Agreement and related Note shall be on a parity basis with the liens on General Revenues established as security for the outstanding bonds, notes and other obligations of the Board secured by a first lien on General Revenues. Any pledge of General Revenues securing the Board’s obligations under a Credit Agreement and related Note shall be valid and binding from the date of execution and delivery of the Credit Agreement and related Note, and all moneys or properties subject thereto which are thereafter received shall immediately be subject to the lien of the pledge without physical delivery or further act. The lien of said pledge shall be valid and binding against all parties (other than the holders of any other bonds, notes or other obligations secured by a parity first lien on General Revenues) having a claim in tort, contract or otherwise against the Board, irrespective of whether such parties have notice of the lien.

No recourse shall be had for the payment of the principal amount of or interest or other amounts due under any Credit Agreement or related Note, or any claim based thereon, against the State of Michigan or the Board or the University, or any officer or agent thereof, as individuals, either directly or indirectly, nor shall the principal amount of or interest or other amounts due under any Credit Agreement or related Note be payable from or become a lien on or be secured by any property, real, personal or mixed, of the State of Michigan or the Board, other than the General Revenues and the moneys from time to time on deposit in funds or accounts, if any, established by the Credit Agreement.

4. Authorization of Other Actions. The Authorized Officers, or either of them individually, are further authorized to perform all acts and deeds and to negotiate, execute and deliver, for and on behalf of the Board, any and all related agreements, amendments, instruments and certificates, and to make any determinations, elections and filings, necessary to obtain, maintain, renew or replace, and provide for the ongoing administration of, the Lines of Credit authorized by this Resolution.

5. Conflicting Resolutions. Any resolutions or parts of resolutions or other proceedings of the Board in conflict herewith are hereby repealed insofar as such conflict exists.

IX. Reports

- A. Faster than Light: What Can Do It and What Can't**
Robert Nemiroff, Professor, Physics



MTU

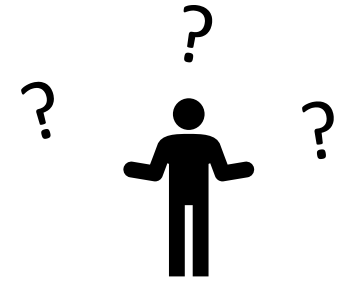
Board of Trustees Meeting

February 24, 2023

Robert J. Nemiroff
MTU University Professor, Physics

Faster than Light: What Can Do It and What Can't

Who is this Robert Nemiroff?



Shruggy

- Predicted some gravitational microlensing phenomena
- Constrained some universe attributes with GRBs
- Developed some all-sky monitors and techniques
- Studying attributes of relativistic illumination fronts
- Co-founded (1999): Astrophysics Source Code Library
- Co-founded (1995): PI: NASA's Astron. Pic. of the Day
 - <https://apod.nasa.gov/>
 - More: My Husky Bites lecture in 2021 November

RJN's Research Group Photo – COVID edition



Ögetay Kayali; Robert Nemiroff
Katyayani Trivedi, Casey Aldrich
Oindabi Mukherjee

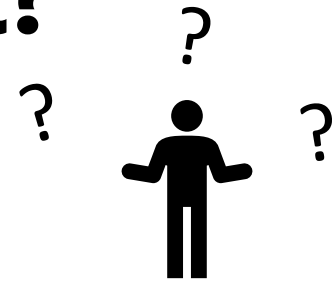
Surprise Quiz! (Not graded)

- Please take a moment to ponder these questions.
- You will be asked to consider if any of these things can move faster than light.

- Need “beta readers” for a book I am writing!



Can you move faster than light?



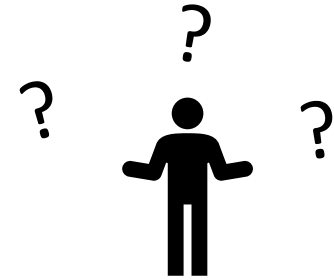
- A: Yes.
- B: No.
- C: Maybe so.

- Best answer: No, according to Einstein's Special Relativity, the fastest you can go is (near) c , the speed of light.

Can shadows move faster than light?

- A: Yes.
- B: No.

- Best answer: Yes. Example: shine a flashlight at the Moon. Move your hand in front at a normal speed. The shadow of your hand on the Moon will move superluminally. (But it's too dim to see.)



Can shadows transfer information faster than light?

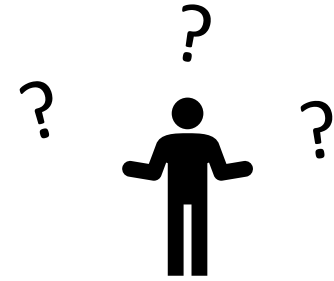
- A: Yes.
- B: No.

- Best answer: No. You cannot transfer locally created information faster than light using shadows. (More on why later.)



Can laser spots move faster than light?

- A: Yes.
- B: No.

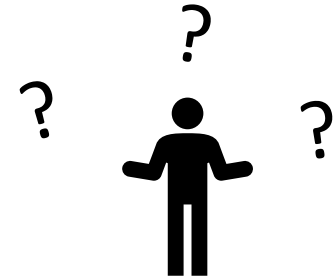


- Best answer: Yes. Example: Shine your laser at a big dome one light-year away. Then sweep your laser from horizon to horizon in one-second. After a year, the laser spot will move between horizons, on the dome, in one second. The only way this can happen is if the spot moved faster than light.
- This speed could be considered the orchestrated superposition of unrelated photons – but it is still superluminal.

Can laser spots transfer information faster than light?

- A: Yes.
- B: No.

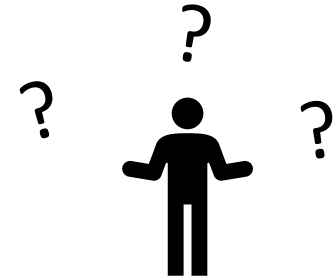
- Best answer: No. Photons move out from the laser at the speed of light only. Information moving on the dome originated at the laser, not on the dome.



Can protons move through water faster than light?

- A: Yes.
- B: No.

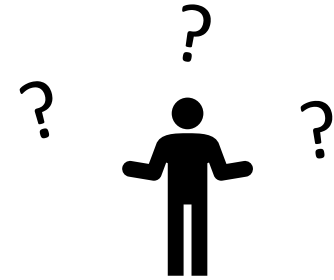
- Best answer: Yes. This considers that the speed of light through water is given by either its group or phase velocity. If you had a race across a swimming pool between a highly energetic proton and an optical photon, the proton would win.



Can distant galaxies move faster than light?

- A: Yes.
- B: No.

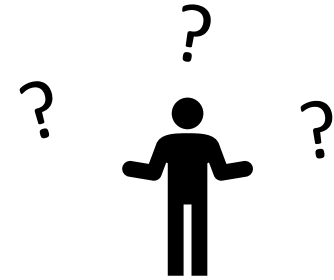
- Best answer: Yes. There are galaxies in the universe that you can see that are actually now speeding away FTL. Example: if you shine a laser at any galaxy with $z > 3$, that light will never reach that galaxy. (Assuming the universe continues to expand as it does now.)



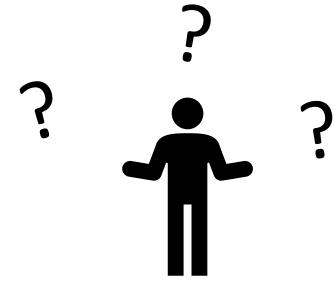
Can scissors close faster than light?

- A: Yes.
- B: No.

- Best answer: Most scissors "no", but some scissors "yes"!



When you turn on a room light, does the dividing line between dark and light, on the walls, move faster than light?



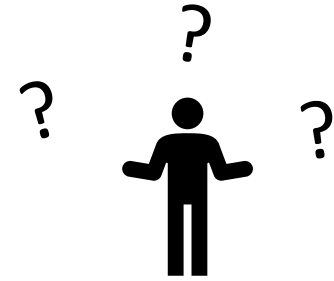
- A: Yes.
- B: No.

- Best answer: Yes.
- Cascade of superlatives: "All illumination fronts across all objects are always superluminal."

Is anything involving superluminal motion practically useful?

- A: Yes.
- B: No.

- Best answer: Yes. One example: It can give 3D information. If you sweep an approaching jet at the right speed, the superluminal illumination front will cause an entire flat wing to light up all at once – which can allow you to identify the type of jet.



Sweep laser down infinite wall. Where does the laser spot first appear?

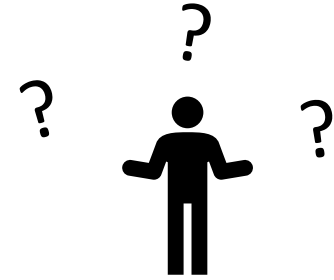
- A: Nearest the laser.
- B: Infinitely far down the wall.
- C: Somewhere in between.

- Best answer: Somewhere in between.



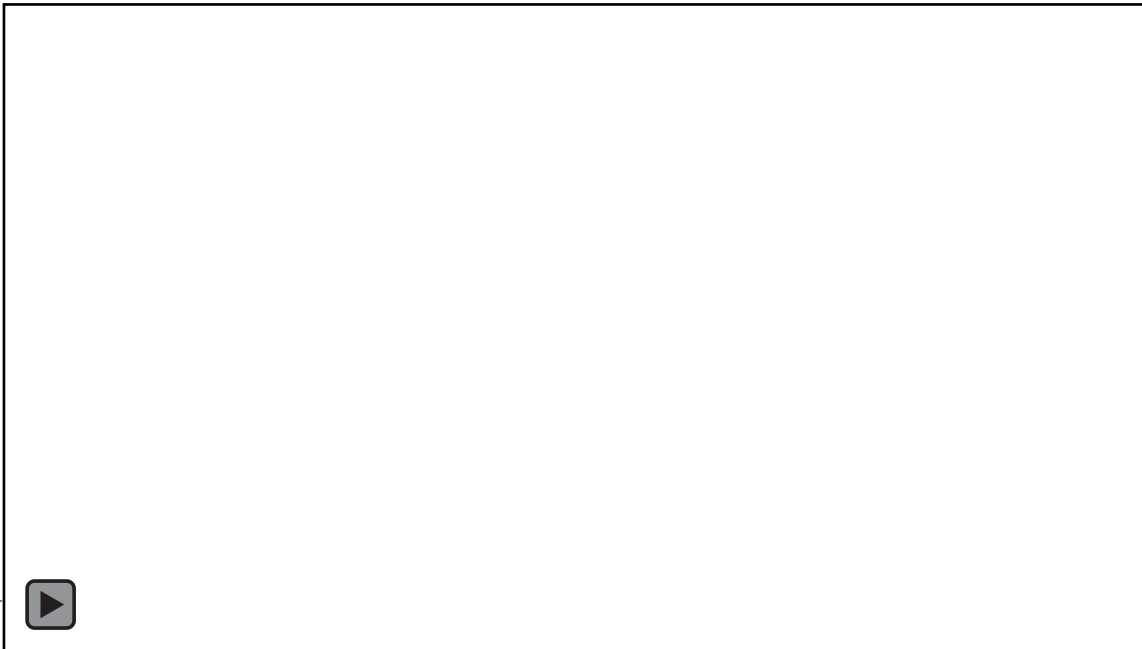
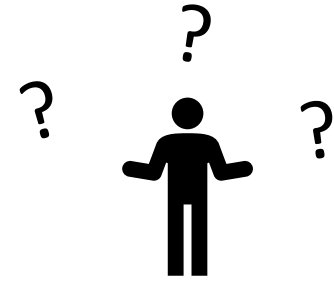
Sweep laser down infinite wall. Which direction does the laser spot move?

- A: Toward the laser.
 - B: Away from the laser
 - C: Something completely different.
-
- Best answer: Something completely different. Two spots are created. This is an example of "Relative Image Doubling (RID)" which my group is currently studying!



Sweep laser down infinite wall. Which direction does the laser spot move?

- A: Toward the laser.
- B: Away from the laser
- C: Something completely different.



Simulation by MTU graduate student Ögetay Kayali

Thank you!

My “Superluminal” Publications (refereed, abridged)

Nemiroff, R., Publications of the Astronomical Society of Australia 32, id.e001, Superluminal Spot Pair Events in Astronomical Settings: Sweeping Beams (2015)

Nemiroff, R.; Zhong, Qi ; Lilleskov, Elias, Physics Education 51, Lights illuminate surfaces superluminally (2016)

Nemiroff, R.; Annalen der Physik 530, Pair Events in Superluminal Optics (2018)

Hakkila, J. & Nemiroff, R. Astrophysical Journal 883, Time-reversed Gamma-Ray Burst Light-curve Characteristics as Transitions between Subluminal and Superluminal Motion (2019)

Kaushal, N. & Nemiroff, R., Physics Education 54, Analyses of scissors cutting paper at superluminal speeds (2019)

Kaushal, N. & Nemiroff, R., Astrophysical Journal 898, Toward the Detection of Relativistic Image Doubling in Water Cerenkov Detectors (2020)

Kayali, Ö & Nemirof, R. Astrophysical Journal (in preparation), Toward the Detection of Relativistic Image Doubling in IceCube Detectors (submitted, 2023)



IX-B. Undergraduate Student Government

Cheyenne Scott, President

Undergraduate Student Government Update

Cheyenne Scott, USG President
February 24, 2023





COMMITTEE UPDATES



Events

Spring Break bus tickets for downstate were offered

Interest form for potential buses to Wisconsin



Student Affairs

Working to plan more interactive events for student body



Political Affairs

Living Room Conversations Series

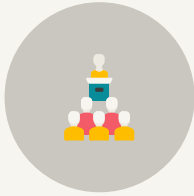


Public Relations

New sticker designs for promotion

Continued update of social medias

WAYS & MEANS



RSO Spending

36% of RSO allocated budgets have been utilized



Opportunity Fund

Funded 13 requests this semester, totaling \$24,939, with more upcoming requests



Reserve Fund

Funded 2 requests this semester, totaling \$3,200

*Totals as of 2/6/2023

BUDGET HEARINGS



Hearings

187 student organizations are registered for a 10 minute budget hearing



Committee Makeup

6 undergraduate voting members
Offered GSG an advisory role but they declined



Process

40 hours of discussion over February 16th through 19th



Allocation Totals

Total allocated to student organizations
Average per student org

01

USG in Action: Liaisons

- Tech Forward Initiative on Sustainability and Resilience
- Houghton City Council
- Pizza with the President
- University Senate
- Athletic Council



02

USG in Action: Committees

- Senate Committee for Accessibility and Affordability on Course Materials
- Student Commission
- Alumni Board of Directors
- Title IX Awareness Committee
- Friends of the Library



03

October Recess Has Passed

- Discussions since 2015
- Passed on January 18th, 2023
- Thursday and Friday recess in Week 8 of Fall Semester
- Will go into effect Fall of 2023



THANK YOU

Questions?

clscott@mtu.edu
usg-president@mtu.edu

usg@mtu.edu
Instagram: usgatmtu
Website: usgatmtu.mtu.edu

IX-C. Graduate Student Government
Ranit Karmakar, President



Presentation to

BOARD OF TRUSTEES

Ranit Karmakar

President

GRADUATE STUDENT GOVERNMENT

February 24, 2023



GSG SOCIAL EVENTS

CROSS COUNTRY SKIING (Jan 28th)



62

COCOA & COOKIES (Feb 8th)



~100



GSG PROFESSIONAL DEVELOPMENT EVENTS

GRANT WRITING WORKSHOP (Jan 17th)

5 TIPS FOR GRANT WRITING SPRING 2023



BROUGHT TO YOU BY THE GSG PROFESSIONAL DEVELOPMENT COMMITTEE



Host

DR. ANDREW FISS

Graduate Program Director
RTC: Rhetoric, Theory, and Culture

JANUARY 17

NOON

LIBRARY EAST READING ROOM

CAREER PLANNING WORKSHOP (Jan 31st)

CAREER PLANNING WORKSHOP SPRING 2023



BROUGHT TO YOU BY THE GSG PROFESSIONAL DEVELOPMENT COMMITTEE



Host

DR. MELISSA BAIRD

Graduate Director
Department of Social Sciences

JANUARY 31

NOON

LIBRARY EAST READING ROOM

CV WORKSHOP (Feb 14th)

CURRICULUM VITAE WORKSHOP SPRING 2023



BROUGHT TO YOU BY THE GSG PROFESSIONAL DEVELOPMENT COMMITTEE



Host

DR. MELISSA BAIRD

Graduate Director
Department of Social Sciences

FEBRUARY 14

NOON

LIBRARY EAST READING ROOM



GSG RESEARCH EVENTS

GRADUATE RESEARCH COLLOQUIUM (Mar 29th – 30th)



IMPORTANT DATES

February 1 – *Registration Opens*

March 3 – *Registration Closes*

March 17 5pm – *Poster and Abstracts Due*

March 29 (12 – 5 pm) – *Oral Presentations (MUB)*

March 29 (5 – 8 pm) – *Poster Presentations (Rosza Lobby)*

March 30 (9 – 5 pm) – *Oral Presentations (MUB)*

March 30 (5 – 7 pm) – *Banquet (Rosza Lobby)*



GRAD COMMONS

“New house for Grad students, new home for GSG”

880 swipes*

~1100 attendance + GSG events

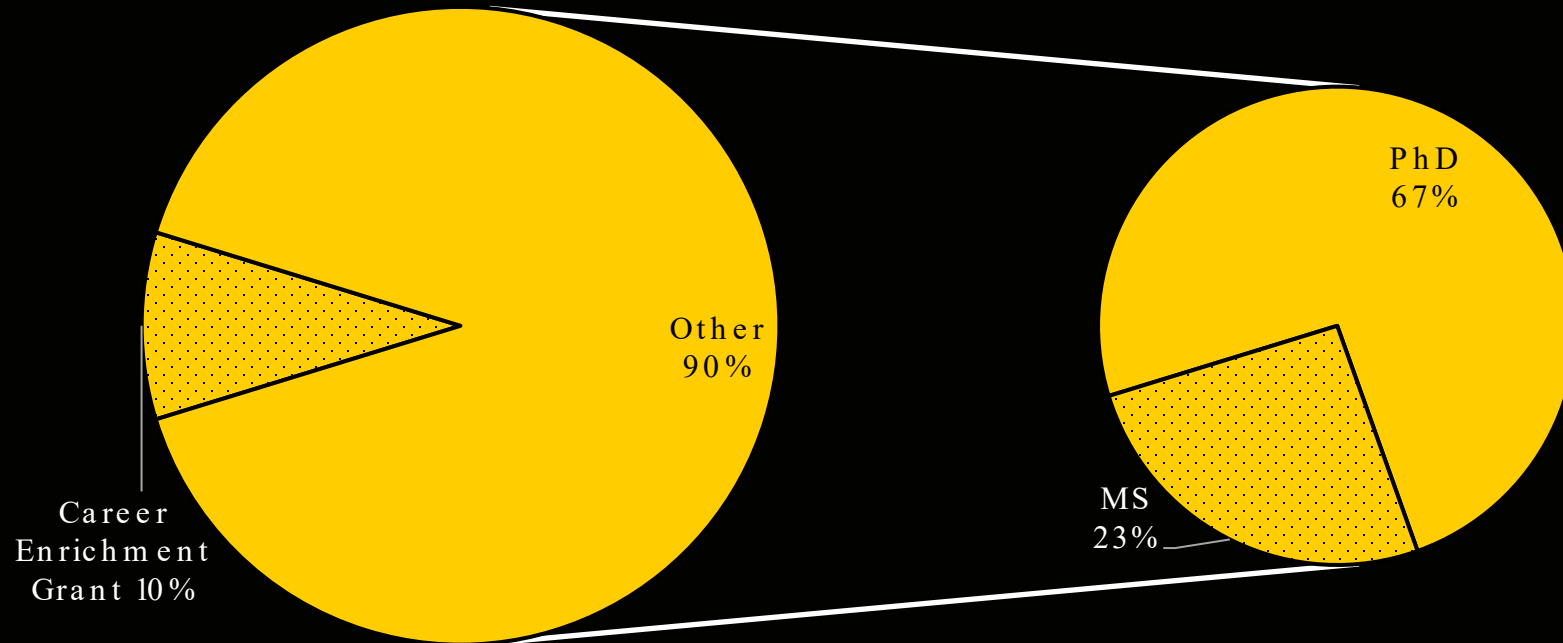
“Good time, nice space. I like to hang out here and study”

**as of January 31st*





TRAVEL AND CAREER ENRICHMENT GRANT

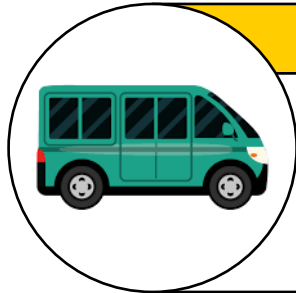


#105 Travel Grant*

#11 Career Enrichment Grant*



ADVOCACY AND INITIATIVES



HANCOCK SHUTTLE – *Pilot*

Running 5 days a week on 3 shifts for everyone with a valid Michigan tech ID. We are tracking usage and collecting feedback.



TRAVEL GRANT

After 34 years, we will increase the travel grant amount from \$250 to \$500 for presenting in the US and to \$750 for presenting internationally. This is made possible by the generous donation from *Dr. Yongbin Yuan* and *Mrs. Hejia Pan*.



GTI RESPONSIBILITIES

While GTIs work as an instructor on records, teach classes and even at times design their own curriculum, they do not receive any recognition. We are working with the graduate school and the Provost's office to identify ways to remedy this.



ADVOCACY AND INITIATIVES

- **Accessibility Ad-Hoc Committee**
- **Non-motorized Transportation on Campus**
- **Student Activity Fee Reallocation**
- **Advising and Mentorship**
- **Grad student - sense of belonging**
- **Student health and wellbeing**
- **Housing**





PARTNERS, COLLABORATORS AND FRIENDS



Michigan Technological University
Van Pelt and
Opie Library



Michigan Technological University
Facilities Management



Michigan Technological University
Alumni & Friends



Michigan Technological University
Graduate School



Michigan Technological University
Career Services



Michigan Technological University
International Programs
and Services



Michigan Technological University
Dean of Students



Michigan Technological University
Vice President for Research



PORTAGE LAKE DISTRICT
LIBRARY



BLACK ICE
Comics & Books





THANK YOU

 /GraduateStudentGovernment

 /gsg.mtu

 /Graduate Student Government of Michigan Tech

Email: gsg@mtu.edu

Website: <https://gsg.mtu.edu>

Office: Admin 405 / Grad Commons

IX-D. University Senate

Mike Mullins, President

University Senate Spring Semester Preview

Michael Mullins, Senate President

February 24, 2022



Michigan Tech

Completed Business from Fall

- 3-23: Elimination of Shelved Programs
- 6-23: Proposal to Shelve the Bachelor of Arts in Theatre and Electronic Media Performance (SEMP)
- 8-23: Proposal to Change Eligibility for Emeritus Status
- 9-23: Amending the Scheduling of the October Recess in Senate Procedure 101.1.1
- 10-23: Update 2023-2024 Academic Calendar and Provisional 2024-2025 Academic Calendar to Include October Recess
- 11-23: Assist Michigan Tech's Iranian Community
- 12-23: Update Student Computing Device Requirements



Upcoming Business for Spring

- Implementation of several new academic programs and degrees.
- Work on the new Essential Education program proposal.
- Searches for key administrative positions including provost and CFO.
- Enhancing the involvement and participation of professional staff in the Senate.
- Developing guidelines for a fair and neutral senate ethics policy (revise15-95)
- Process for Joint Appointment Procedures for Tenure and Promotion Review.
- Revision of Academic Integrity Procedures (109.1.1).
- Examine job security and contracts for instructional track faculty.



Upcoming Business for Spring cont.

- Revise the evaluation and selection processes for Chairs.
- Recommend changes to the Senate Bylaws to clarify officer qualifications, elections, and removal processes.
- Continue recommendations on the improvement of employee benefits.
- Clarify ownership/copyright/royalties for on-line education materials (amend 23-14).
- Re-examine on-line course, summer, and overload compensation.
- Work with the administration to enhance safety and proper behavior on campus.
- Recommend a living wage for all employees of the University.
- Revisit parking, non-motorized travel, and larger transportation issues.
- Increasing tenure track faculty numbers from near all-time lows.



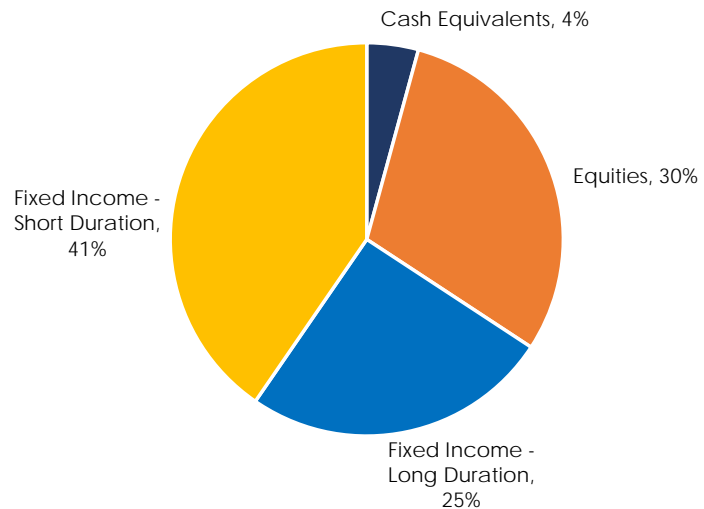
X. Informational Items

A. Analysis of Investments

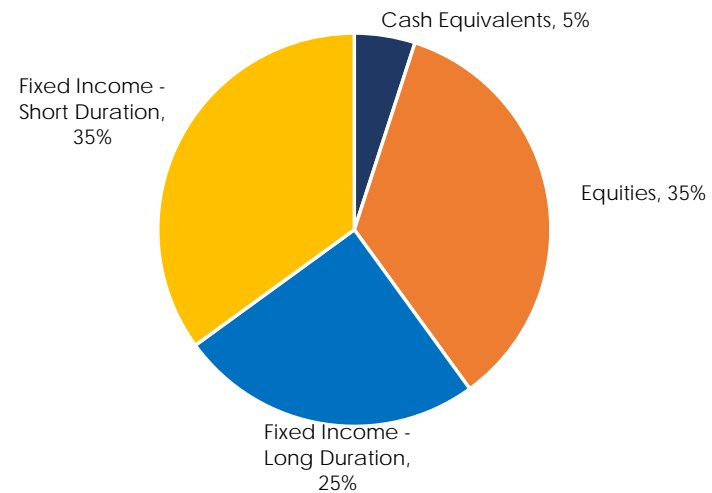
**MICHIGAN TECH UNIVERSITY
INVESTMENT PORTFOLIO
JUNE 30, 2022 THROUGH DECEMBER 31, 2022**

	Market Value 6/30/2022	Market Value 12/31/2022	Fiscal-Year Investment Return	Benchmark Return	Benchmark
Money Market Fund	\$ 2,094,114	\$ 2,083,766	1.40%	1.37%	<i>ICE BofA Merrill Lynch US T-Bill Index</i>
Equity Funds:					
Core Equity Fund	8,446,297	8,283,444	1.99%	2.31%	<i>S&P 500</i>
Commonfund Strategic Solutions Equity Fund	6,476,270	6,450,144	4.44%	2.31%	<i>S&P 500</i>
Total Equity Funds	<u>14,922,567</u>	<u>14,733,588</u>			
Fixed Income Funds:					
Intermediate Term Fund	9,410,365	9,916,591	-0.72%	-0.85%	<i>ICE BofA Merrill Lynch 1-3 Yr Treasury</i>
Commonfund Contingent Asset Portfolio	9,384,710	9,930,314	-0.01%	-0.85%	<i>ICE BofA Merrill Lynch 1-3 Yr Treasury</i>
High Quality Bond Fund	5,650,449	6,228,601	-3.54%	-2.97%	<i>Bloomberg Barclays US Aggregate Bond Index</i>
Multi-Strategy Bond Fund	5,649,010	6,230,821	-3.52%	-2.97%	<i>Bloomberg Barclays US Aggregate Bond Index</i>
Total Fixed Income Funds	<u>30,094,534</u>	<u>32,306,327</u>			
Total	<u>\$ 47,111,215</u>	<u>\$ 49,123,681</u>	<u>0.10%</u>		

Current Asset Allocation



Target Asset Allocation



X-B. Research & Sponsored Programs

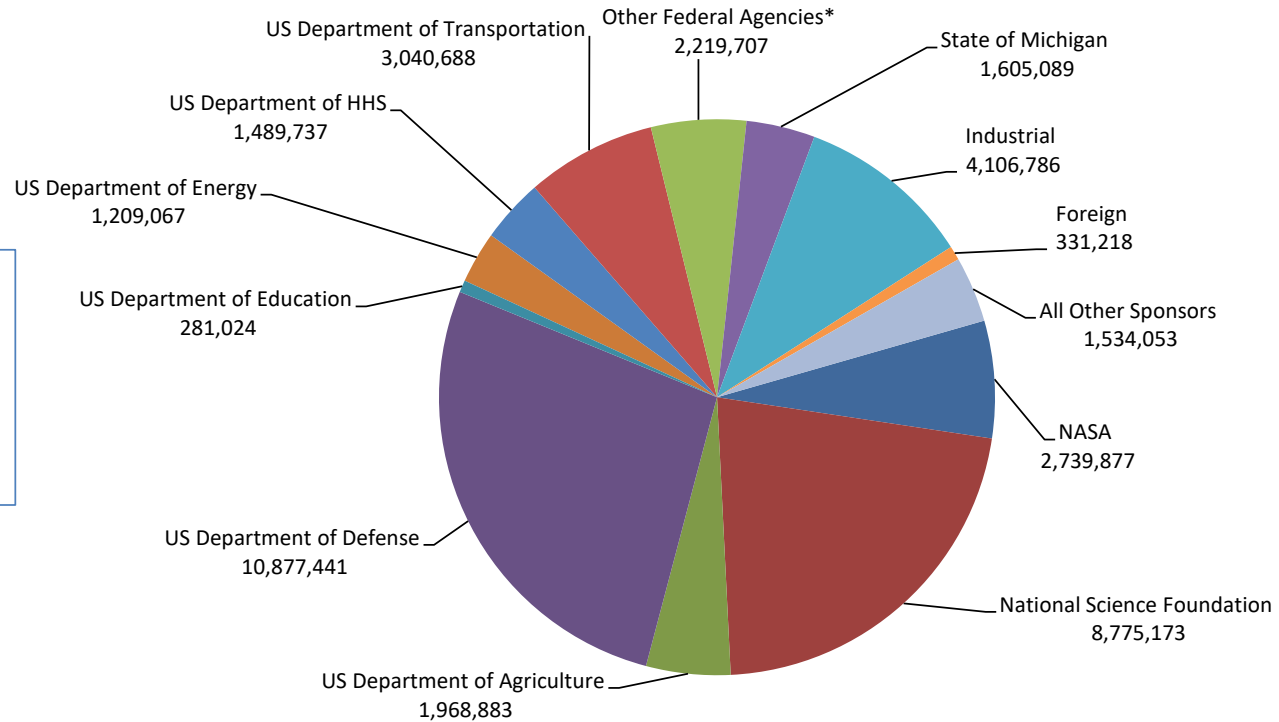
**Sponsored Awards
Fiscal Year 2023
2nd Quarter
Ended Dec 31, 2022**

TOTAL: \$41,980,914

Pre-Proposals Submitted

(excluded from Proposals Submitted figures below)

**FYTD 2022: 9
FYTD 2023: 33**

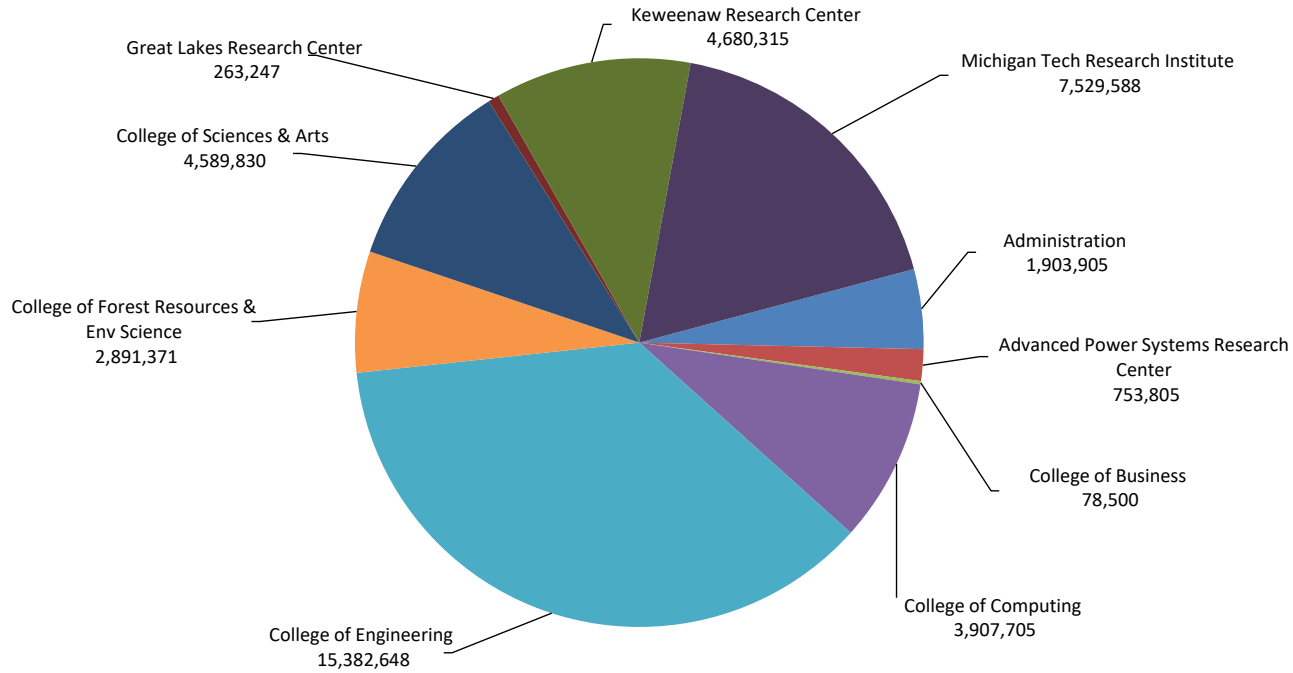


Sponsor	Proposals Submitted		Awards Received		Awards Received (\$)		Variance \$	Variance %
	FY '23 as of 12/31	FY '22 as of 12/31	FY '23 as of 12/31	FY '22 as of 12/31	FY '23 as of 12/31	FY '22 as of 12/31		
NASA	45	56	18	18	2,739,877	4,298,648	-1,558,771	-36.3%
National Science Foundation	77	83	30	32	8,775,173	9,163,604	-388,431	-4.2%
US Department of Agriculture	37	32	26	17	1,968,883	1,076,005	892,878	83.0%
US Department of Defense	44	50	46	47	10,877,441	9,263,835	1,613,606	17.4%
US Department of Education	2	1	2	2	281,024	225,551	55,473	24.6%
US Department of Energy	26	22	17	18	1,209,067	4,554,573	-3,345,506	-73.5%
US Department of HHS	26	16	6	3	1,489,737	886,583	603,154	68.0%
US Department of Transportation	19	10	11	8	3,040,688	918,097	2,122,591	231.2%
Other Federal Agencies*	23	23	15	30	2,219,707	3,693,445	-1,473,738	-39.9%
Federal Agency Total	299	293	171	175	32,601,597	34,080,341	-1,478,744	-4.3%
State of Michigan	24	31	15	20	1,605,089	2,926,028	-1,320,939	-45.1%
Industrial	75	78	70	76	4,106,786	4,328,150	-221,364	-5.1%
Foreign	3	6	5	6	331,218	654,698	-323,480	-49.4%
All Other Sponsors	34	38	16	29	1,534,053	1,353,975	180,078	13.3%
Subtotal	435	446	277	306	40,178,743	43,343,192	-3,164,449	-7.3%
Gifts**	N/A	N/A	121	126	1,800,890	1,325,570	475,320	35.9%
Crowdfunding	N/A	N/A	4	2	1,281	5,011	-3,730	N/A
Grand Total	435	446	402	434	41,980,914	44,673,773	-\$2,692,859	-6.0%

* National Endowment for the Arts and Humanities, US Dept of Commerce, US Dept of the Interior, US Dept of Labor, US Environmental Protection Agency, US Dept of Justice

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

Vice President for Research
Fiscal Year 2023
2nd Quarter
Ended Dec 31, 2022
TOTAL: \$41,980,914



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

Submitting Proposals since 07/01/2022
49.5%

On Active Projects as of 12/31/2022
59.1%

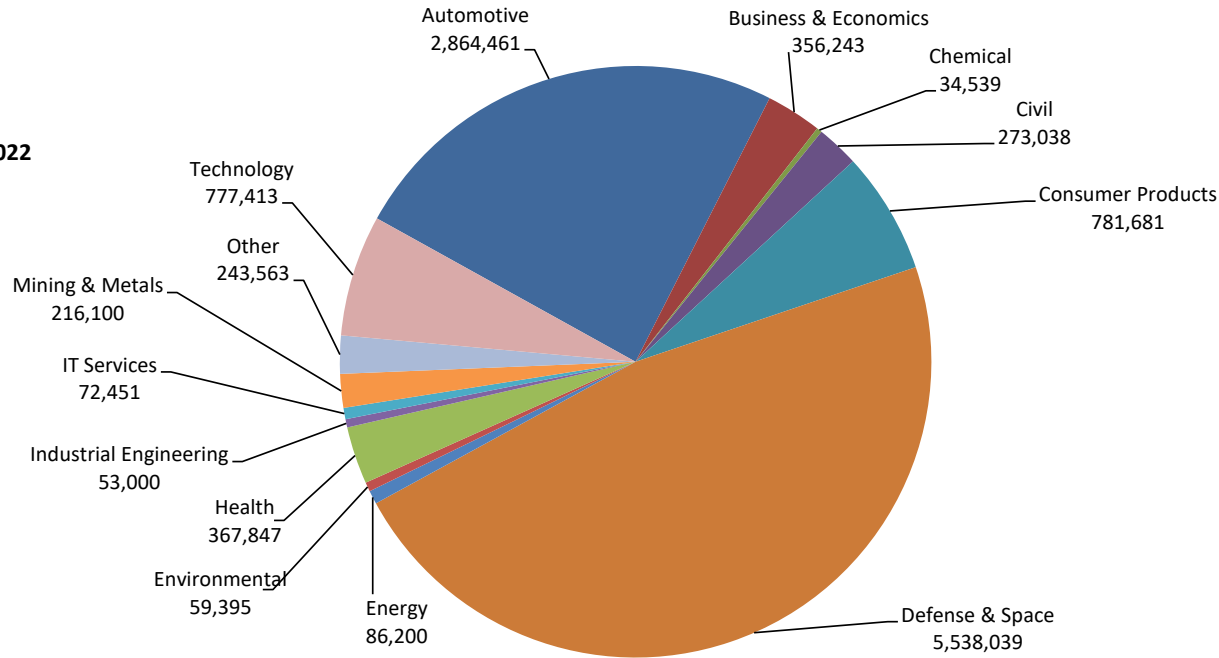
SPO & OIC Metrics ¹	Administration	Advanced Power Systems Research Center	College of Business	College of Computing	College of Engineering	College of Forest Resources & Env Science	College of Sciences & Arts	Great Lakes Research Center	Keweenaw Research Center	Michigan Tech Research Institute	Totals	Fiscal Comparison	Percent Change
Proposals Submitted	9	6	2	26	202	60	54	8	33	35	435	446	-2.5%
Awards Received	59	6	3	14	171	39	36	7	33	34	402	434	-7.4%
Federal	704,337	-	-	2,748,170	7,099,067	2,116,784	3,965,959	208,946	2,150,326	2,246,425	21,240,014	23,823,110	-10.8%
Federal Pass-Through	2,500	248,009	-	1,078,245	3,945,013	485,111	420,426	26,605	18,000	5,137,674	11,361,583	10,257,231	10.8%
Foreign	-	-	-	-	306,000	-	-	25,218	-	-	331,218	654,698	-49.4%
Gifts	1,043,963	-	68,500	81,290	322,215	100,000	134,922	-	-	50,000	1,800,890	1,325,570	35.9%
Crowdfunding	-	-	-	-	-	462	819	-	-	-	1,281	5,011	-74.4%
Industry	10,000	366,948	-	-	1,096,046	89,016	36,440	1,347	2,506,989	-	4,106,786	4,328,150	-5.1%
Other	30,000	28,848	10,000	-	1,258,454	74,998	31,264	-	5,000	95,489	1,534,053	1,353,975	13.3%
State of MI	113,105	110,000	-	-	1,355,853	25,000	-	1,131	-	-	1,605,089	2,926,028	-45.1%
Total \$ by Division	1,903,905	753,805	78,500	3,907,705	15,382,648	2,891,371	4,589,830	263,247	4,680,315	7,529,588	41,980,914	44,673,773	-6.0%
Fiscal Comparison	2,485,026	99,222	145,299	1,348,833	16,768,457	2,176,391	7,925,416	1,205,657	4,798,795	7,720,677	44,673,773		
Percent Change	-23.4%	659.7%	-46.0%	189.7%	-8.3%	32.9%	-42.1%	-78.2%	-2.5%	-2.5%	-6.0%		
Disclosures Received ²	-	-	-	17.65%	76.47%	-	5.88%	-	-	-	5	17	-70.6%
Nondisclosure Agreements	1	5	-	1	34	1	-	-	4	9	55	49	12.2%
Patents Filed or Issued ²	-	-	-	-	64.29%	-	35.71%	-	-	-	7	10	-30.0%
License Agreements	-	-	-	-	3	-	-	-	-	2	5	4	25.0%
Gross Royalties ²	-	-	-	1.25%	17.50%	-	-	-	-	81.25%	29,940	26,445	13.2%

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

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

**Sponsored Awards
-Industry-
COMBINED
Fiscal Year 2023
2nd Quarter
Ended December 31, 2022**

TOTAL: \$11,723,970



Industry Segment	Proposals Submitted		Awards Received		Awards Received (\$)		Variance \$	Variance %
	FY '23 as of 12/31	FY '22 as of 12/31	FY '23 as of 12/31	FY '22 as of 12/31	FY '23 as of 12/31	FY '22 as of 12/31		
Automotive	28	28	45	41	2,864,461	2,989,926	-125,465	-4.2%
Business & Economics	3	3	6	8	356,243	21,725	334,518	1539.8%
Chemical	-	2	3	4	34,539	193,500	-158,961	-82.2%
Civil	3	1	22	11	273,038	38,250	234,788	613.8%
Consumer Products	15	14	27	23	781,681	567,148	214,533	37.8%
Defense & Space	16	29	22	33	5,538,039	4,873,264	664,775	13.6%
Energy	1	5	9	12	86,200	185,384	-99,184	-53.5%
Environmental	2	4	11	14	59,395	94,388	-34,993	-37.1%
Health	4	8	7	11	367,847	806,566	-438,719	-54.4%
Industrial Engineering	5	3	4	6	53,000	86,567	-33,567	-38.8%
IT Services	3	2	5	7	72,451	92,610	-20,159	-21.8%
Mining & Metals	9	10	16	15	216,100	330,750	-114,650	-34.7%
Other	9	5	13	15	243,563	218,268	25,295	11.6%
Technology	7	9	10	11	777,413	181,219	596,194	329.0%
Total	105	123	200	211	11,723,970	10,679,565	1,044,405	9.8%

*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.

Michigan Technological University
Total Research Expenditures by College/School/Division
Fiscal Year 2023 & 2022
As of December 31, 2022 and December 31, 2021

College/School/Division	FY2023	FY2022	Variance	%
Administration*	2,921,092	2,572,182	348,910	13.6%
Advanced Power Systems Research Center (APSRC)	706,289	444,876	261,413	58.8%
College of Business	992,880	912,699	80,181	8.8%
College of Computing	2,388,571	2,472,527	(83,956)	-3.4%
College of Engineering	17,264,410	15,479,229	1,785,181	11.5%
College of Forest Resources & Environmental Science	3,804,784	3,118,574	686,210	22.0%
College of Science & Arts	8,472,233	7,935,548	536,685	6.8%
Great Lakes Research Center (GLRC)**	816,064	699,176	116,888	16.7%
Pavlis Honors College	N/A	N/A	N/A	N/A
Keweenaw Research Center (KRC)	3,621,527	4,802,790	(1,181,263)	-24.6%
Michigan Tech Research Institute (MTRI)	6,479,184	6,204,059	275,125	4.4%
Total	47,467,034	44,641,660	2,825,374	6.3%

*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.

X-C. Advancement & Alumni Relations

Advancement and Alumni Engagement Narrative
Michigan Tech Board of Trustees
February 24, 2023

2022-2023 Goals and Initiatives to be achieved in collaboration with administrative and academic leadership and the Michigan Tech Fund Board of Directors.

FY23 AAE Working Goals

- Initiate Campaign Leadership Phase
- Prepare campaign materials including: Case for Support, Campaign View Book, Gift Recognition plan and other materials
- Develop a comprehensive volunteer management strategy
- Launch our Days of Giving
- Host multiple regional events preparing for the Leadership phase of our campaign
- Ensure Donor integrity and intention in every aspect of our business
- Add \$3 million cash to the endowment

FY23 MTF Working Goals

- Donors First- integrity and intention in every aspect of our business
- Move into Campaign Execution Phase
- Review of the MTF Investment Policy
- Consider alternative asset classes
- Enhance cash flow management
- Leverage New Governance Committee

Highlights

- Raised \$24. M to date, 59% of the \$41.77M goal (as of December 31, 2022)
- \$44.7 M in outstanding asks from individuals
- Campaign Preparation:
 - Hosted three campaign preparation meetings
 - Final Case Statement comments
 - Campaign Committee volunteers
 - Campaign Executive Committee will consist of 10-12 proven leaders who represent Michigan Tech
 - Honorary Chair will be selected
 - Hosted individual college dean strategy meetings
 - Hosted college dean and CCS campaign meeting
- Hosted 57th GLI in Grand Rapids, MI on December 27
- Winter Carnival 2023
 - Held Days of Giving event from 4 p.m. on February 8 through 4 p.m. on February 10 for annual and first time donors make contributions.
 - Hosted the Alumni Board on campus for meetings and activities.
- Mark your calendars for Reunion Weekend 2023: August 3-5, 2023.

Fundraising totals as of January 31, 2023

- \$10,036,000 in planned gifts
- \$655,293 in realized planned gifts
- \$4,299,151 in major outright gifts and pledges
- \$1,576,539 in annual gifts under \$10,000
- \$1,194,126 in corporate support
- \$ in foundation gifts

- FY23 Campus Campaign: \$74,399 (9% participation - 125 donors). The campus campaign start was moved to February to coincide with the Days of Giving.
- 47 illustrations, proposals, and gift agreements were provided for donors
- 26 executed gift agreements

Principal Giving

As we enter the Leadership phase of the campaign, our focus has been on the identification, strategy, cultivation and solicitation of our most interested and capable alumni and friend donors.

Advancement and Gift Planning

Collectively raised \$12.5 million fiscal year to date with \$13 million in discussion with donors for closing by June 2023.

Launched Michigan Tech's second day of giving over Winter Carnival. Frontline fundraisers collaborated with generous donors to secure over \$500,000 in challenge gifts for this event.

Hosted a second round of collaborative strategy meetings with Deans, the Director of Athletics, and Advancement frontline fundraisers to develop donor-centric engagement plans focused on expanding donor participation, strengthening corporate and foundation partnerships, and defining tactics to advance top donors' support and involvement in MTU's mission. Coordinating donor visits for deans and faculty.

Provided analytical insights to develop our pool of top donors and stakeholders for early-stage participation in our upcoming comprehensive campaign

Testing data and drafting dashboards for new CRM.

Posting for an assistant director for major gifts for the College of Engineering.

Collaborated with Enrollment Services to identify alumni (donors) to sponsor Michigan Tech Evenings of Excellence recruiting events.

Advancement Services

- CRM data verification continues with the goal of all Banner data updates to be completed prior to the data extract on February 24. Staff training will begin in late March.
- Days of Giving communications planning is complete and communications support for Alumni Engagement initiatives across the country continues to increase.
- The review of donor relations activities across campus is complete and a document providing recommendations and examples of best practices will be distributed to all units on campus.

Alumni Engagement

- Events
 - AE professional staff set a goal to host 100 [Regional events](#) this year, currently 70+ in the works or already hosted.
 - Also aiming for variety -including game watches, pregame socials, family-friendly events like snowshoe hikes, informal gatherings at local pubs, and a golf event for July 2023 in Traverse City is pending.

- Next [Traveling Tech Talks](#) event to be hosted in Brookfield, WI on May 18, 2023. Featured speaker will be Heath Nunnemacher '08 '10, moderator will be Mari Buche. More details to come soon.
- [Reunion 2023](#) planning already underway, save the date for August 3-5, 2023. A full weekend of events, including flagship traditions + new activities are in the works.
- Volunteerism
 - NEW [Time & Talent initiative](#) - has a goal of bringing alumni back to campus for guest lecture opportunities, hopefully leading to other volunteer or engagement opportunities, to round out current volunteerism offerings. Still in very early stages, current focus is on adding alumni to the talent roster, and on getting faculty to submit areas of need to match to alumni's talents on the roster..
 - Alumni Board of Directors committee work:
 - Recognition & Recruitment Committee: working on naming the slate of [Alumni Awards](#) recipients to honor for 2023. Nominations closed in late December, this committee reviews all documentation and makes recommendations to the full Alumni Board who votes on the slate during their Winter Carnival meeting. Award winners will be notified first, their acceptance will be collected before publicly naming/promoting all winners later this spring. The Alumni Awards Ceremony will take place Friday, August 4 during Reunion Weekend.
 - [Student Initiative Support Program \(SISP\)/Alumni Resource Matchmaking \(ARM\)](#) Committee: working on launching a crowdfunding campaign for the first time ever this April (in coordination with AVP of Alumni Engagement + Development team members to utilize Scalefunder technologies and our RNL vendor - used for Days of Giving), re-naming expanded SISP to ARM. The crowdfunding campaign will feature a small selection of student orgs who previously applied for traditional SISP funds.
 - Communications Committee: working on increasing ABOD visibility and regional event activity/host variety increase with AE staff.
- Communications
 - New channel: texting incorporated. Initial attempts around reunion, commencement, and Winter Carnival yielded positive results. Will utilize for other engagement purposes with targeted groups around targeted moments.
 - Increased strategy for social media has led to more followers and more engagement - showing impacts to event attendance and alumni staying informed.
- Special projects
 - Working with Reunion 2023 class giving chairs on reunion giving solicitations
 - PCA Induction: A new slate of PCA members will be inducted September 14-15, 2023. Nominations are currently open for departments (limit 2 nominations per department) or current PCA members (limit 1 per current PCA member) to submit.

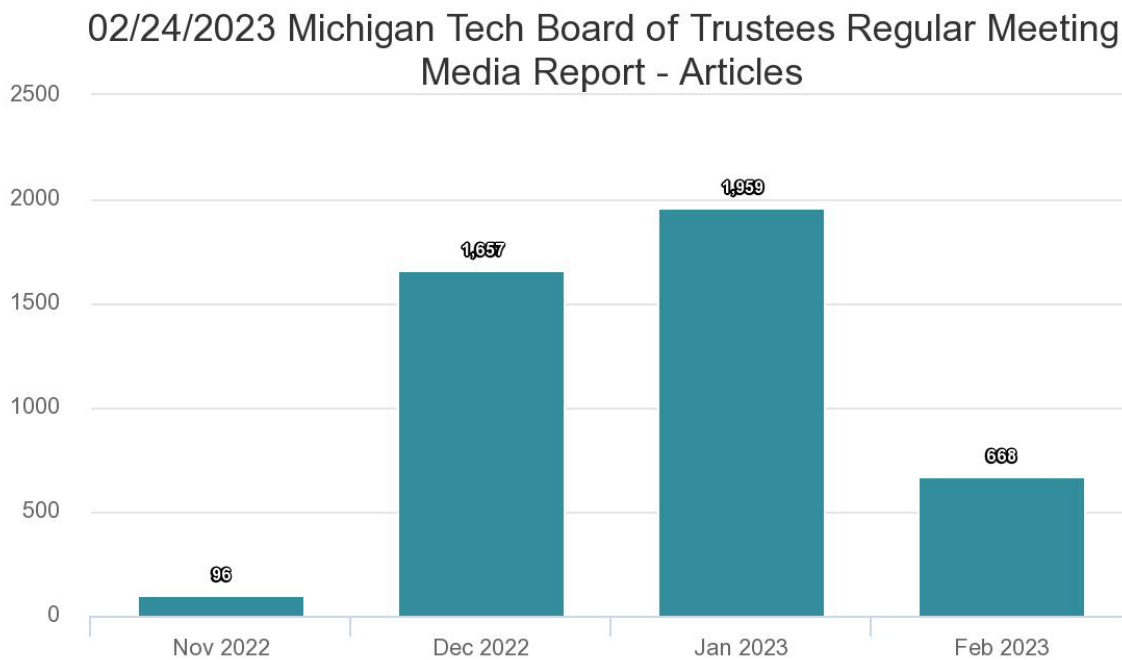
X-D. Media Coverage

Media Report: Nov. 29, 2022 to Feb. 9, 2023
 Michigan Technological University
 Regular Meeting of the Board of Trustees
 Feb. 24, 2023

Overview

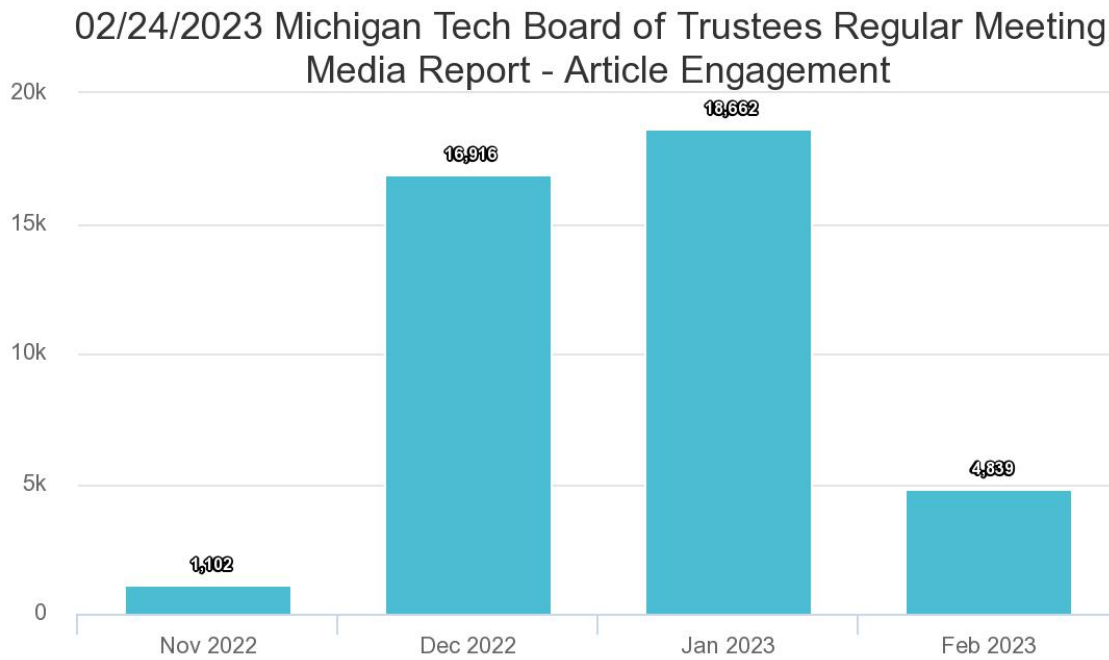
Articles	4,380
Total engagement	41,519
Average engagement	10
Journalist shares	465
Journalist reach	~ 18.21M
Average unique visitors per month (UVM)	~ 1.52M
Total UVM	~ 5.81B

Between Nov. 29, 2022 to Feb. 9, 2023, a total of 4,380 online articles mentioned Michigan Technological University:



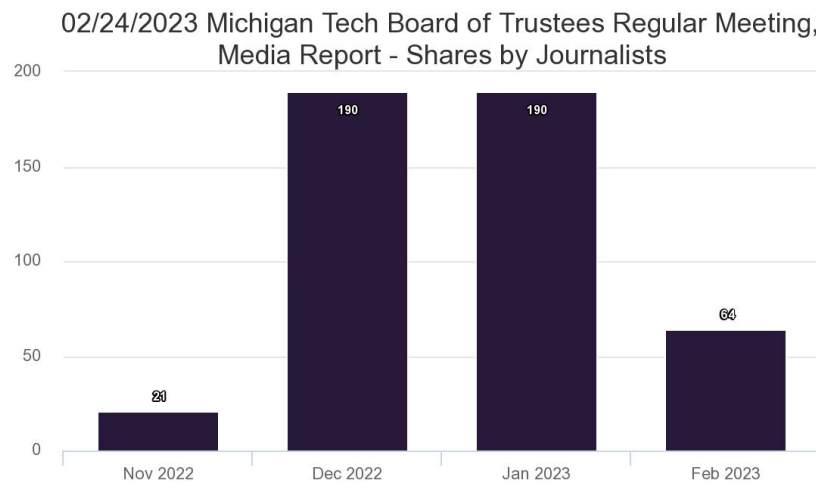
MUCK RACK

Those 4,380 articles were shared, commented on, or liked on social media roughly 41,519 times, for an average engagement of 10 shares, comments, or likes per article:

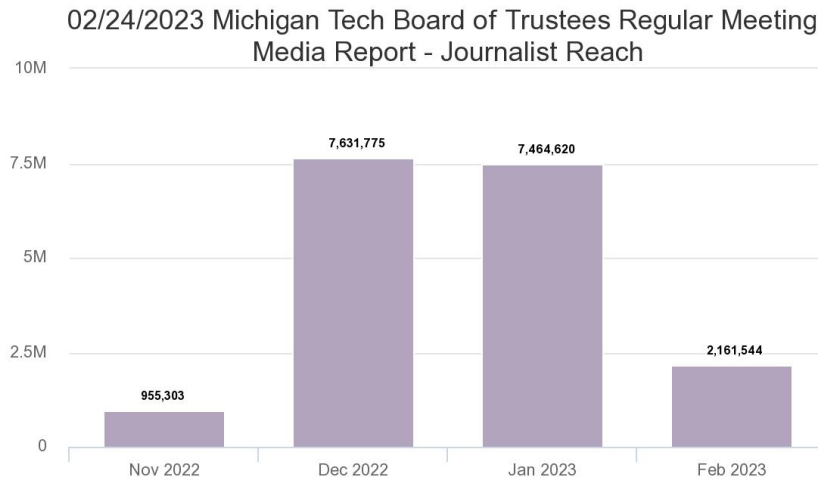


MUCK RACK

Journalists shared the articles on Twitter 465 times, resulting in a reach of roughly 18.21 million people:



MUCK RACK



MUCK RACK

News Highlights:

Research News

Lei Pan (ChE) was quoted by [WJMN Local 3](#), [WLUC TV6](#), [ABC 10](#), the [Iron Mountain Daily News](#) and [Radio Results Network](#) in coverage of Michigan Tech and Eagle Mine’s \$8.1 million collaboration to prove new research technologies that develop sustainable processes to supply critical minerals for battery manufacturing. The project was also talked about by [U.S. President Joe Biden](#), who mentioned Michigan Tech in a speech at SK Siltron CSS Facility in Bay City, Michigan, on Nov. 29. In addition, Pan and Michigan Tech President Rick Koubek were quoted by [Tech Transfer Central](#) and [UPWord](#) in stories about Michigan Tech’s collaboration with Eagle Mine. Pan was also quoted by [Mining Magazine](#), [CoalZoom](#), and [Battery Industry](#) in a story about Michigan Tech’s \$2.5 million U.S. Department of Energy ARPA-E MINER award for carbon storage and extraction of critical minerals from mine tailings..

Simon Carn (GMES) was a guest on a BBC [Science In Action](#) podcast episode titled “One year on from the Tonga eruption.” The episode discussed what made the January 2022 eruption of the Hunga Tonga-Hunga Ha’apai volcano so powerful and unpacked its long-lasting impacts.

Jeremy Bos (ECE) was quoted and Ph.D. student Zach Jeffries (electrical engineering) and Akhil Kurup '22 (Ph.D., computer engineering) were mentioned by [Green Car Congress](#), [Tech Xplore](#), [Bioengineering.org](#), [SCIENMAG](#), [ADAS & Autonomous Vehicle International](#), [Automotive Testing Technology International](#), and [Photonics Media](#) in a story about a three-year effort to develop tests and performance standards for lidars used in autonomous vehicles (AVs) and advanced driver assistance systems (ADAS). Bos led the testing through its first year with Jeffries’ assistance. The team’s findings are detailed in an [open-access paper](#) published in Optical Engineering.

General News

A profile of former Husky Garrett Lord, co-creator of the Handshake app, was the Dec. 1 daily cover story in [Forbes](#).

Michigan Tech was mentioned in the transcript of Gov. Gretchen Whitmer's State of the State Address published by the [Detroit Free Press](#). Whitmer's speech named Michigan Tech's engineering program as a possible place for students to put their Michigan Achievement Scholarship to use. The story was picked up by regional outlets including Grand Rapids' [13 On Your Side](#), Lansing's [WILX 10](#) and [ABC 57](#) of South Bend, Indiana.


[Yahoo! News](#), [MLive](#), [Crain's Detroit Business](#), the [Traverse City Record-Eagle](#), the [Ticker](#), [WILX News 10](#) and [UpNorthLive](#) mentioned Michigan Tech in coverage of \$1.6 million in federal funding allocated toward construction of the planned Freshwater Research and Innovation Center in Traverse City. The center is a collaboration between MTU, 20Fathoms, the Discovery Center & Pier, Northwestern Michigan College and Traverse Connect.

[MLive](#) mentioned Michigan Tech in a story about stabilizing enrollment at Michigan colleges. A report released the week of Jan. 30 measured a drop of less than 1% for all Michigan colleges between fall 2021 and fall 2022. Michigan Tech is one of three colleges in the state where enrollment has increased over the past decade.

[Crain's Detroit Business](#) mentioned Michigan Tech in two of five stories covering Traverse City's research boom. In one, Crain's highlighted how Michigan Tech has "been notably expanding its reach" with a [series of collaborations with Traverse City-based institutions](#). The other covered Michigan Tech and partners' [ongoing development of a new freshwater research center](#) at the city's Discovery Center and Pier.

The [Detroit News](#), [Detroit Regional Chamber News](#), [Crain's Detroit Business](#) and [WWJ NewsRadio 950](#) mentioned Michigan Tech in stories about a \$2 million grant aimed at funding projects to expand Michigan's high-tech workforce and build talent pipelines for the state's auto, mobility and tech sectors. The grant will fund a pilot project involving Michigan Tech and Kettering University to "engage, track, guide and retain" Michigan high school students in FIRST Robotics, Square One Network and VEX programs.

X-E. Employee Safety Statistics

 EMPLOYEE SAFETY STATISTICS 2022 ANNUAL REPORT January 1 - Dec 31, 2021/2022										
	Category	Years	Employee Classification							Total
			AFSCME	Faculty	Non-Exempt	POA	Professional	Temporary	UAW	
Number of Recordable Injuries	Injury Only w/Medical - No Lost Time	2021	1	0	0	0	3	0	0	4
		2022	0	0	0	0	1	0	0	1
	Lost Time Cases	2021	7	0	0	0	2	0	0	9
		2022	5	0	0	1	3	1	0	10
	Restricted Work Cases	2021	1	0	0	0	1	0	0	2
		2022	0	0	0	0	1	0	0	1
	Occupational Safety and Health Administration (OSHA) Recordable Injuries (Total of above)	2021	9	0	0	0	6	0	0	15
2022		5	0	0	1	5	1	0	12	
Number of Days	Injury Lost Time 3	2021	250	0	0	0	19	0	0	269
		2022	171	0	0	6	44	42	0	263
	Restricted Work Days 3	2021	30	0	0	0	14	0	0	44
		2022	0	0	0	0	7	0	0	7
Hours Worked	Total Work Hours	2021	237,992	768,974	85,969	17,292	1,109,152	70,481	157,580	2,447,440
		2022	246,720	770,773	86,267	17,226	1,145,152	72,978	152,663	2,491,779
	Percentage of Work Hours	2021	9.7%	31.4%	3.5%	0.7%	45.3%	2.9%	6.4%	100.0%
		2022	9.9%	30.9%	3.5%	0.7%	46.0%	2.9%	6.1%	100.0%
Rates	Lost Time Case Rate 1	2021	5.9	0.0	0.0	0.0	0.4	0.0	0.0	0.7
		2022	4.1	0.0	0.0	11.6	0.5	2.7	0.0	0.8
	Frequency Rate 2 (Recordable)	2021	7.6	0.0	0.0	0.0	1.1	0.0	0.0	1.2
		2022	4.1	0.0	0.0	11.6	0.9	2.7	0.0	1.0

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 2021 Injury, Illness, and Fatalities, Table 1 reports for Colleges and Universities; the average LOST TIME CASE RATE of days away from work was 0.6 and the average FREQUENCY RATE was 1.4.

X-F. Disposal of Surplus property

**Michigan Technological University
Surplus Property Sales
November 1, 2022 - December 31, 2022**

Date	Description	Amount
11/21/22	Miscellaneous scrap metal	\$ 123.60
12/15/22	2005 Osprey Fisherman 24' Boat and Eagle Trailer	24,601.00
12/19/22	Refractometer, Maselli, UR24	8,560.00
12/19/22	Computer, Dell, Precision 7920	3,215.00
12/19/22	Desktop CNC, Minitech, Mini-Mill/3 Pro	5,294.00
12/19/22	Vacuum Chamber, Lesker, BX1242455	5,584.00
12/19/22	Optiforms Reflector	1,751.00
12/19/22	HMI Electronic Ballast	1,743.00
12/19/22	Solar Simulator, Newport Oriel 91192	1,660.00
12/19/22	Computer, Dell, Precision 7810	1,073.00
12/19/22	Miscellaneous Metal/Plastic Plates and Tubes	540.00
Total		\$ 54,144.60