Formal Session of the Board of Trustees
February 25, 2022
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

VII.   Consent Agenda

> **A.   Approval of Minutes**

> **B.   Degrees in Course**

> **C.   Resignations, Retirements, and Off Payroll**

> **D.   Fundraising Productivity Report**

VIII. **Action and Discussion Items**

    A. **Employee Recognition**
Jeffrey Littmann, Chair

    B. **Emeritus Rank**
Jacqueline Huntoon, Provost

    C. **Proposal for the Establishment of a New Master's Degree in Manufacturing Engineering**
Jacqueline Huntoon, Provost

    D. **Proposal to Update Faculty Handbook, Addition of Section 2.5 Role of Innovation and Commercialization**
Jacqueline Huntoon, Provost

    E. **Proposal to Update Faculty Handbook, Addition of Section 2.6 Role of Diversity, Equity, and Inclusion**
Jacqueline Huntoon, Provost

    F. **Resolution to Approve 2023 Room & Board Rates**
Sue Kerry, Treasurer

    G. **Revision to Board Policy 8.9 -Experience Tech Fee**
Sue Kerry, Treasurer

    H. **H-STEM**
Sue Kerry, Treasurer

IX. **Reports**

    A. **Plasma rocket research propels MTU spinoff to commercial success,**
Brad King, Richard and Elizabeth Henes Professor of Space Systems Engineering, Mechanical Engineering-Engineering Mechanics

    B. **3-Minute Thesis (3MT),**
Priyanka Kadav, PhD Candidate, Department of Chemistry

    C. **100 years of Winter Carnival**
Lindsey Hiltunen, University Archivist

    D. **Undergraduate Student Government**
Zack Olson, President

    E. **Graduate Student Government**
Nathan Ford, President

    F. **University Senate**
Samuel Sweitz, 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 29, 2022

XIII. Adjourn

VII. CONSENT AGENDA

These are routine matters that generally do not require discussion or debate. Any Board member can remove any consent item from the agenda by request. They will be considered as one resolution.

A.   Approval of Minutes

B.   Degrees in Course

C.   Resignations, Retirements, and Off Payroll

D.   Fundraising Productivity Report

VII-A. APPROVAL OF MINUTES

RECOMMENDATION: That the Board of Trustees approves the minutes of the formal session of December 17, 2021 as distributed to the Board.

VII-B. DEGREES IN COURSE

Included herein are candidate who have been recommended by their respective faculties and have been certified by the Registrar as having fulfilled all the requirements of their degrees as specified.

RECOMMENDATION: That the Board of Trustees approves the awarding of the degrees as specified, to each of the candidates listed, and offer congratulations.

MEMORANDUM

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

From: Theresa Jacques
            Registrar's Office

Date: February 4, 2022

Subject: Candidates for Degrees – Conferral Term 202108

The attached list of candidates for degrees, beginning with Adam M. Bersano and ending
with Elise Marie Rosky 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:kh

130 Administration Building | 1400 Townsend Drive, Houghton, Michigan 49931-1295
906-487-2319 | f. 906-487-3343 | registrar@mtu.edu | **mtu.edu/registrar**

Michigan Tech is an EOE which includes protected veterans and individuals with disabilities.

Michigan Technological University Registrar's Office February 4, 2022

Associate of Arts in Humanities

- Adam M Bersano*
- Jordan Reyes

Bachelor of Arts in Communication, Culture, and Media

- Taylor Kay Winzer - Magna Cum Laude

Bachelor of Arts in Physics

- Ezra Riley Cotter - Cum Laude

Bachelor of Science in Accounting

- Dustin Michael Armbruster
- Julian W Blann - Magna Cum Laude

Bachelor of Science in Applied Ecology and Environmental Sciences

- Anna C DeBraber - Summa Cum Laude
- Matthew Paul Connolly
- Tyler J Derleth

Bachelor of Science in Biochemistry and Molecular Biology

- Ethan   Burghardt - Cum Laude
- Kayley M Roche - Summa Cum Laude

Bachelor of Science in Bioinformatics

- Brennan Michael Coles - Cum Laude
- Katherine Grace Trudell
- Sarah A Wayward

Bachelor of Science in Biological Sciences

- Aidan Richard Anderson - Cum Laude
- Ashley Nicole Curie
- Dalton Charles Norris

Bachelor of Science in Biomedical Engineering

- Hannah Lee Kranz - Cum Laude

- Katelyn Mackenzie Ramthun - Magna Cum Laude
- Kathryn Ann Miller - Magna Cum Laude
- Monica Renee Newton - Cum Laude
- Samuel Edward Haarman
- Zachary William Miller - Magna Cum Laude

Bachelor of Science in Chemical Engineering

- Matthew Paul Harris - Summa Cum Laude

Bachelor of Science in Chemistry

- Adrian Lara-Ramirez
- Gretchen H Heins - Cum Laude
- Madison Emelyne Pullen
- Steven James Beuther - Magna Cum Laude

Bachelor of Science in Civil Engineering

- Adam Wayne Budzinski - Cum Laude
- Amber R Ronsman
- Anthony M Vang
- Benjamin Charles Holland - Magna Cum Laude
- Bobbi Josie Hulce
- Celia Elizabeth Juntti
- Chase Harley Smith
- Christopher Allan Reitz - Magna Cum Laude
- Cole E Arntsen
- David Joshua Goldfarb
- Elijah James Young
- Erik Thomas Peterson
- Everhett William Biland - Summa Cum Laude
- Frederick Thomas Jones
- Jacob L Paquet
- Jay Louis Czerniak
- Joshua Edward Cain - Cum Laude

- Julia Katherine Jenaway - Magna Cum Laude
- Katelyn Burch
- Mark Abram Anderson
- Mason Howard Dyke - Magna Cum Laude
- Mathieu J St. Amour
- Megyn N Ostrom
- Mihir Sunil Mehendale
- Mitchell Logan Knox
- Owen Elias Mattila - Summa Cum Laude
- Russ Alan Bjorn
- Stephanie Jean Klaysmat - Magna Cum Laude
- Thomas D Gunst
- Trent Alan Ballor
- Trevor James Brandt - Cum Laude

Bachelor of Science in Computational Chemistry and Chemical Informatics

- Alex Joseph Denofre

Bachelor of Science in Computer Engineering

- Addison Jeffery Krueger
- Arielle R Dubrinsky
- Benjamin Lee Baize
- Cole Camden Komrska - Summa Cum Laude
- Daniel Gordon Leppanen
- David Frederick Bellinger - Magna Cum Laude
- Dean Anthony Navaroli
- Declan G King - Cum Laude
- Dominic Chester Espiritu Sobocinski
- Jacob Matthew Carter
- Jacob Thomas Denning
- Jared David Menard
- Jared Lee Smith

- Joshua William Eckert - Magna Cum Laude
- Logan Paul Schexnaydre - Magna Cum Laude
- Mark J Andrusiak - Cum Laude
- Maxwell J Walker
- Noah Nicholas Guyette
- Raymond Jonathan Clifford Essex
- Reo Tang - Magna Cum Laude
- Thomas James Christian
- Wilson J Holmes - Cum Laude

Bachelor of Science in Computer Network and System Administration

- Andrew Robert Youngstrom - Magna Cum Laude
- Blake Velderman
- Gavin J Walters - Magna Cum Laude
- Keenen Ashton Adams

Bachelor of Science in Computer Science

- Aidan D Vandrie - Magna Cum Laude
- Amanda Jennifer Erdmann
- Andrew Michael Fila
- Brett Wyatt Post
- Dax Loki Schoof - Cum Laude
- Elijah Jeffrey Cobb
- Eric William Grant - Magna Cum Laude
- Ethan William Large - Cum Laude
- Josef Daniel Arner - Summa Cum Laude
- Kofi A Anin-Berkoh - Cum Laude
- Logan M Grimason
- Maxwell T Isom - Magna Cum Laude
- Michelle Elise Perini
- Nathaniel Ryan Blichfeldt
- Nicholas Des Biens

- Roman Formicola - Cum Laude
- Samantha Lee Seaman
- Sarah Jaye Matson
- Sarah Jun Shilts - Cum Laude
- Scott Thomas Corbat - Cum Laude
- Simone Yang Tilbury
- Tristin Ross Colenso
- Wyatt Daniel Parsons

Bachelor of Science in Construction Management

- Brendan Todd Thompson
- Cameron Dean Mulka
- Conor Robert Flaherty
- John Michael Dunleavy
- Ross Hugo Oja - Cum Laude

Bachelor of Science in Ecology and Evolutionary Biology

- Katherine Evelyn Kasten

Bachelor of Science in Electrical Engineering

- Alexandra L Patterson - Cum Laude
- Amanda Mai Schlosser
- Audrey Maye Roberts - Cum Laude
- Austin Alan Phelan
- Cameron Roberts Casey
- Carmen Adele Muehlfeld
- Christopher Alan Avery
- Cody James Rorick - Summa Cum Laude
- Daniel Hunter Beebe
- Erik August Ekola
- Evan J Sivec - Cum Laude
- Gunnar J Schultz
- John R Robenault

- Kyle Matthew Koonce
- Louis Lawrence Thom
- Madison Teal Snable - Magna Cum Laude
- Matthew J Peterson
- Nathan Christopher Wichers
- Nathaniel Douglas Moeller
- Paige Elizabeth Fiet
- Quintin A Davis
- Rebecca Lynn Held - Cum Laude
- Richard Charles Bremer
- Ryan Michael Trost - Summa Cum Laude
- Samuel Joseph Gallenberger - Magna Cum Laude
- Simeon Manos Richards
- Thomas Dieterich Ziegler - Summa Cum Laude
- Timothy Charles Seaman - Cum Laude
- Zachary Thomas Okma - Summa Cum Laude
- Zachary Tyler Peitz
- Zoe Ellen Quinn

Bachelor of Science in Electrical Engineering Technology

- Austin Joseph Kucharski
- Tyson Joseph Bethke

Bachelor of Science in Engineering

- Dana C Paiz
- George S Rushlau - Magna Cum Laude
- Jared M Dietzel

Bachelor of Science in Engineering Management

- Benjamin Paul Yahr
- Chase Paul Pietila
- Garrett Keith - Cum Laude
- Kameron Edmund O'Leary

- Trevor Nathaniel Lovelace

Bachelor of Science in Environmental Engineering

- Adam David Pulter
- Bennett Allen Johnson
- Carleigh Jane Lenard
- David Alan Disney
- Ethan Scot Lang - Cum Laude
- Joshua   Solomon - Cum Laude
- Kyle B Zelenak
- Lauryn Leighann Roberts - Magna Cum Laude
- Leah I Goldman
- Maureen Ann Hennenfent - Cum Laude
- Samantha Lee Johnston
- Sarah   Barry - Summa Cum Laude
- Spencer Karl Davis - Magna Cum Laude
- Theresa Maria Passe - Summa Cum Laude

Bachelor of Science in Exercise Science

- Brock Michael Wright
- Gwyneth Taressa Hamlin - Cum Laude
- Katie M Willers
- Rachel Marie Clayton - Cum Laude
- Sarah   Miller - Cum Laude

Bachelor of Science in Finance

- Andrew P Hutchison
- Dominic Zavaglia
- Heather Marie Gruver - Magna Cum Laude
- Mirna   Golac - Magna Cum Laude
- Seth Alan Mosentine - Magna Cum Laude

Bachelor of Science in Forestry

- Grady John Boyle - Magna Cum Laude

- Kiiven Ryleigh Wolf
- Leander Per Wheeler - Summa Cum Laude
- Stephanie Frantti - Magna Cum Laude
- William Odin Webb

Bachelor of Science in Geology

- Emilie Monique Pray - Cum Laude
- Hannah N Hunt
- Sienna Mllee Meekhof

Bachelor of Science in Management

- Garrison Paul Dershem
- Kenner Lee Bartos
- Paul Matthew Gannon

Bachelor of Science in Management Information Systems

- Alisha Mae Lester
- Matthew Chard - Magna Cum Laude

Bachelor of Science in Marketing

- Allison C Shumaker

Bachelor of Science in Materials Science and Engineering

- Devin Deaton
- Henry Garrison Vandermark
- Jason Arthur Seeterlin
- Ross Allan Patterson - Cum Laude

Bachelor of Science in Mathematics

- Adrianna Joy Timmer - Summa Cum Laude
- Erik W Pitcher

Bachelor of Science in Mechanical Engineering

- Adam Lee Strasel - Magna Cum Laude
- Alex John Schneider
- Alexander Christopher Perry
- Alonso Garcia

- Andrew D Stalheim
- Andrew James Lambert
- Andrew Kurt Erickson
- Benjamin   Jewell - Cum Laude
- Benjamin D Lord
- Benjamin David Offner - Cum Laude
- Brandon   Browning - Cum Laude
- Brendan James Morell
- Bryan M Bigelow
- Calub   Niswander - Cum Laude
- Charles Oliver Surratt - Cum Laude
- Cole Robert Alpers - Cum Laude
- Connor Douglas Sreenan
- Connor Timothy Stark - Cum Laude
- Courtney Kirkpatrick Bisbee
- Cullin McManus
- Deliang Li
- Drew Allen Kennedy
- Dylan Carter Mercier
- Dylan Jacob Kiefer
- Edwin Joseph Yazbec - Cum Laude
- Elijah   Newton - Summa Cum Laude
- Emilia Joyce Colman - Magna Cum Laude
- Eric Robert Eschenburg
- Eve Mary Kaczkowski
- Felix S Cloutier
- Forest Drake Collins - Cum Laude
- Francesca Carolina Fusco
- Grace Pauline West
- Jacob Edward Bluemer

- Jacob Henry Aeschliman - Cum Laude
- Jacob John Marchi
- Jacob Matthew Wachholz
- Jake Arthur Pearsall
- James Andrew Klotz
- Jared Robert Shearer - Magna Cum Laude
- Jared Wade Schreier
- Jason P Zemore
- Jon Erik Smeberg
- Jordan John Wolfe
- Jordan Lee Sterbenz - Cum Laude
- Jordan Reyes
- Joseph Ray Eckardt
- Joseph Robert Decker
- Joshua M Golimbieski - Summa Cum Laude
- Katelyn Mackenzie Ramthun - Magna Cum Laude
- Lewis Scott Ekola - Magna Cum Laude
- Liam Cotera Berndt
- Lisa Mirette Downie - Cum Laude
- Luke Aaron Wilson - Cum Laude
- Madeleine Rose Hollman - Magna Cum Laude
- Madison Paige Turner - Magna Cum Laude
- Mallory Margaret Jayne - Cum Laude
- Marlo Amara Schwartzfisher
- Matthew George Madison
- Matthew J Lyden
- Matthew James Simonar
- Matthew Merl Specht
- Matthew P Ruterbusch
- Matthew Scott Fuhrman

- Michael William Messerschmidt - Cum Laude
- Morgan Aleece Kline
- Nathan R Krueger - Magna Cum Laude
- Noah Robert Burk
- Rachel Lee Stites
- Ralph James Weidensee - Cum Laude
- Robert Daniel Head
- Ryan David Heetderks
- Ryan Donald Harrington - Cum Laude
- Ryan Michael Trost - Summa Cum Laude
- Samuel Edward Haarman
- Sean Robert Hanson - Magna Cum Laude
- Sloane Lauryn Zenner - Cum Laude
- Spencer Patrick Collard
- Spencer Roy McEntyre
- Spencer William Seeley
- Sudhanshu Sushil Narkhede - Cum Laude
- Trevor Allen VanDyke
- Trevor Nathaniel Lovelace
- Tyler Edward Rahkola
- Tyler J Lupinski
- William Lane Schonschack
- Wyatt C Conrow - Magna Cum Laude
- Yuchen Li
- Zachery Edwin Champion

Bachelor of Science in Mechanical Engineering Technology

- Colin Jacob LaVigne
- Dilon H Kinnunen
- Eric Matthew Hoffman
- Hunter J Rautiola - Cum Laude

- Ian Paul Jager
- Jack T Lillie
- Jeffrey P Kilikevicius - Magna Cum Laude
- Joseph D Staszek
- Kaelan Patrick Redmond
- Karen J Helppi
- Matthew Floyd Krause
- Mickala Rose Kohtz
- Reed Daniel Aldrich
- Taren Ann Marie Odette
- Thomas P Power - Summa Cum Laude
- William Kaarl Toivonen - Cum Laude

Bachelor of Science in Medical Laboratory Science

- Olivia P McClellan*

Bachelor of Science in Physics

- Renato Pinto Reveggino - Cum Laude

Bachelor of Science in Scientific and Technical Communication

- Troy A Zehnder

Bachelor of Science in Social Sciences

- Ezra Riley Cotter - Cum Laude
- George Patrick Gruver - Summa Cum Laude

Bachelor of Science in Software Engineering

- Bryan David Wandrych
- Duong T Nguyen - Cum Laude
- Eli Michael Hovis
- Kasey Alexander Jackson
- Matthew P Schaumberg
- Michael D Boisvert

Bachelor of Science in Sports and Fitness Management

- Abel James Iacono

- Brooke Leigh Schauer

Bachelor of Science in Statistics

- Christopher Randall Nottke
- Claire E Semenchuk - Magna Cum Laude

Bachelor of Science in Sustainability Science and Society

- Nathan R Hatcher
- Noah Henry Lawrence

Bachelor of Science in Theatre and Entertainment Technology

- Justin Scott Nanzer

Bachelor of Science in Wildlife Ecology and Conservation

- Allie May Johnson - Magna Cum Laude

Bachelor of Science in Wildlife Ecology and Management

- Christian Thomas Benvenuti - Magna Cum Laude
- Michael Patrick Schwartz - Magna Cum Laude
- Sage Vincent Haney
- Teal Marie Sackett

Doctor of Philosophy in Applied Cognitive Science and Human Factors

- Natasha Joy Hardy

Doctor of Philosophy in Applied Physics

- Abu Sayeed Md Shawon

Doctor of Philosophy in Atmospheric Sciences

- Nurun Nahar Lata

Doctor of Philosophy in Biochemistry and Molecular Biology

- Avik Ghosh
- Prajakta Paresh Kokate

Doctor of Philosophy in Biological Sciences

- Kevin Carl Nevorski

Doctor of Philosophy in Chemical Engineering

- Ruiting Zhan

Doctor of Philosophy in Chemistry

- Nicholas Keith Newberry

Doctor of Philosophy in Civil Engineering

- Jessica Kathryn Daignault

Doctor of Philosophy in Electrical Engineering

- Diego Andres Aponte Roa
- Shane William Oberloier

Doctor of Philosophy in Forest Science

- Joseph Peter Shannon
- Robin T Clark

Doctor of Philosophy in Geophysics

- Leonid Surovitskii

Doctor of Philosophy in Materials Science and Engineering

- Meijia Li
- Ninad Mohale
- Xiaoxu Guo

Doctor of Philosophy in Mechanical Engineering - Engineering Mechanics

- Shreyas Sunil Kolapkar
- Steven Michael Whitican
- Suraj Madhav Prabhu
- Xiang Zhou
- Zhihao Zhao

Doctor of Philosophy in Physics

- Sandip Aryal

Doctor of Philosophy in Rhetoric, Theory and Culture

- Emma Maximina Lozon
- Joshua Chase
- Sara Therese Potter

Master of Business Administr. in Business Administration

- Fredrick James Kemp
- Jennifer Nicole Butina

- Marvin Victor Wright
- Nathan Sean Hierl

Master of Engineering Mgmt in Engineering Management

- Ahmed Umair Riyas
- Hunter Vincent Richards

Master of Engineering in Engineering

- Nagendra Tanikella
- Tsai Chen Hsiao

Master of Geographic Info Sci in Geographic Information Science

- Ryan Andrew Williams

Master of Science in Accounting

- Jacob Dylan Mihelich
- Jennifer Michelle Carolan
- Jordan Bruce Janssen
- Joseph Richard Anderson
- Trevor Clayton Salata

Master of Science in Applied Cognitive Science and Human Factors

- Darnishia Lashalle Slade
- Tauseef Ibne Mamun

Master of Science in Applied Ecology

- Lindsey Frances Dolinski

Master of Science in Applied Statistics

- Bogdan R Soroka
- Christine Quattro Hoffman
- Dallas Blowers
- Kendyl Ilene Richter
- Luis Javier Cota
- Mason Steven Yahr
- Michael David Nicodemus
- Nathan Gurzell

- Sara Kay Rittersdorf
- Sheila Marie Flood
- Travis William Froberg

Master of Science in Biological Sciences

- Collin James Diedrich
- Hazen John Keinath
- Tessa Elizanne Steenwinkel

Master of Science in Biomedical Engineering

- Tonie Johnson

Master of Science in Chemical Engineering

- Natalia Parra Alvarez
- Saketh Merugu

Master of Science in Chemistry

- Connor John Hensley

Master of Science in Civil Engineering

- Conrad Butler Truettner
- Hossam Yaqoub
- Isaac Edward Pantti

Master of Science in Computer Engineering

- Aaron Thomas Filip
- Logan Weir Wilkerson

Master of Science in Computer Science

- Daniel Walter Carrara
- Jargal Rinchin
- Junyao Yang
- Pooja Mothukuri
- Sai Akhil Vankamamidi
- Zachary Brian Dekraker

Master of Science in Cybersecurity

- FNU Sankalp Shastry

- Sai Rubini Venkateswaran

Master of Science in Data Science

- Akshata Ravindra Shedge

Master of Science in Electrical Engineering

- Sunita Suresh Bodke
- Swaraj Sanjay Deshmukh

Master of Science in Electrical and Computer Engineering

- Chaitanya Satish Inamdar
- Daniel Harry Grages
- James Thomas Steele
- Nathan Andrew Sukaria
- Thomas Daniel Page
- Vasishtha Sohani
- Veeraja Sohoni

Master of Science in Environmental Engineering

- Camila Elzbieta Dul

Master of Science in Forest Ecology and Management

- Tanner Michael Barnes

Master of Science in Geological Engineering

- Ryan Michael Klida
- Shubham Nandkumar Mahajan

Master of Science in Geology

- Diana Bullen
- Domenicca Mileth Guillen Pachacama
- Nicholas Alexander Potter
- Sanna Jane Mairet

Master of Science in Geophysics

- Kate Mariah Nelson

Master of Science in Health Informatics

- Nikitha Mittapally

Master of Science in Industrial Heritage and Archaeology

- Garand Anders Spikberg
- Michael Garet Madison

Master of Science in Materials Science and Engineering

- Brendan L Treanore
- Emily Elizabeth Miin-Lih Tom
- Matthew Seth Carl Hasbrouck
- Maxim Akhmetov
- Ninad Mohale
- Shreyas Poonamalle Srikanth

Master of Science in Mathematical Sciences

- Emily Elizabeth Anible
- Yasasya Uthpalawarna Ariyadasa Batugedara Batugedara Mohottalalage

Master of Science in Mechanical Engineering

- Abhishek Wadaskar
- Akshay Navaneeth Reddy Soma
- Andrew Lloyd Robare
- Ashish Verma
- Brandon Wayne Howard
- Gita A Deonarain
- Hrishikesh Suhas Gosavi
- Indrani Gadgil
- Jian Chen
- Karan Paragkumar Vaishnav
- Karan Singh
- Kavin Suriyaa Sekar
- Kushal Madhava Kothar
- Mohana Venkata Sai Dinesh Kumar Nujalla
- Muhammad Usman
- Noah Robert Squires

- Palash Ranjan Krishna Kolusu
- Prakhar Taneja
- Prateek Sharma
- Rajat Ratnakar Gadhave
- Ramakrishnan Anand
- Rushikesh Satish Attarde
- Sahil Pradeeep Bakde
- Sanjay Khanna Babu Venkatesh
- Sanket Kishor Kadam
- Satwick Guturu
- Shankara Varma Ponnurangam
- Shantanu Harishchandra Chavan
- Somnath Mondal
- Sreekanth Pengadath
- Tania Sofia Demonte Gonzalez
- Timothy William Diepenhorst
- Vasu Goyal
- Vinay Prudhvi Kona
- Vinayak Vikas Kodkani
- Vishal Mohan Dange

Master of Science in Mechatronics

- Chrispin James Johnston
- Erik Hans-Henry Kocher
- Namratha Karanam
- Nikhil Chowdary Chilukuri
- Sri Krishna Sai Kaushik Kuditipudi

Master of Science in Physics

- Elise Marie Rosky

*Addendum to Conferral

- Degree awarded in term 202105

VII-C. RESIGNATIONS, RETIREMENTS, AND OFF PAYROLL

Attached is a report of resignations, retirements, and off payroll which have been approved by the President and are included for his convenience in recommending acceptance by the Board.

RECOMMENDATION: That the Board of Trustees accepts the resignations, retirements, and off payroll determinations.

BOARD OF TRUSTEES OFF-PAYROLL REPORT
(November 14, 2021 – January 22, 2022)

VII-D. FUNDRAISING PRODUCTIVITY REPORT

Attached is a fiscal year to date comparative report of gifts to Michigan Technological University and the Michigan Tech Fund.

RECOMMENDATION: That the Board of Trustees acknowledges the gifts to Michigan Technological University.

Michigan Technological University
Michigan Tech Fund
Fundraising Productivity Report
July 1, 2021 through January 31, 2022
Compared to Prior Fiscal Year

FY22

Source	YTD Total	Adjustment	FY Goal (in millions)	% of Goal
Individual Giving	10,258,059		20.75	49%
Corporate Giving	1,131,490		2	57%
Foundation & Other Org Giving	1,997,523	8,285,750	5	206%
Corporate Sponsored Research	10,440,400		13	80%
FUNDRAISING TOTAL	**23,827,472**	**8,285,750**	**40.75**	**79%**

FY21

Source	YTD Total	Adjustment	FY Goal (in millions)	% of Goal	FY21 Total
Individual Giving	16,063,592	*2,000,000*	18.25	99%	20,547,746
Corporate Giving	1,496,117		1	150%	2,295,923
Foundation & Other Org Giving	3,119,894	142,359	1	326%	4,187,024
Corporate Sponsored Research	9,191,103		11	84%	14,807,686
FUNDRAISING TOTAL	**29,870,706**	**2,142,359**	**31.25**	**102%**	**43,980,737**

Amt of TOTAL from Gifts-in-Kind	103,786	(included in the source totals above)
Amt of Gifts/Pledges earmarked for the endowment	5,838,572	(included in the source totals above)
Amt of Gifts/Pledges earmarked for unrestricted funds	600,457	(included in the source totals above)

		FY Goal	% of Goal
TOTAL PROGRESS TOWARDS FY GOAL	$ 32,113,222	40.75	79%

Realized Planned Gifts - All	1,562,385	(NOT included in the source totals above)
Amt of Realized Planned Gifts earmarked for the endowment	86,889	

Realized Pledges	742,524	(NOT included in the source totals above)

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).

VIII. ACTION AND DISCUSSION ITEMS

A. Employee Recognition
Jeffrey Littmann, Chair

B. Emeritus Rank
Jacqueline Huntoon, Provost

C. Proposal for the Establishment of a New Master's Degree in Manufacturing Engineering
Jacqueline Huntoon, Provost

D. Proposal to Update Faculty Handbook, Addition of Section 2.5 Role of Innovation and Commercialization
Jacqueline Huntoon, Provost

E. Proposal to Update Faculty Handbook, Addition of Section 2.6 Role of Diversity, Equity, and Inclusion
Jacqueline Huntoon, Provost

F. Resolution to Approve 2023 Room & Board Rates
Sue Kerry, Treasurer

G. Revision to Board Policy 8.9 -Experience Tech Fee
Sue Kerry, Treasurer

H. H-STEM
Sue Kerry, Treasurer

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.) Jiann-Yang (Jim) Hwang – 38 years of service - Professor, Material Science and Engineering

VIII-B. 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 emeritus appointment:

Dr. CK Shene, Professor Emeritus, Department of Computer Science

TO: Michigan Technological University Board of Trustees

FROM: Computer Science

DATE: December 3, 2021

SUBJECT: Recommendation for Emeritus Status

The faculty of the Computer Science voted on December 3,2021 to request that the Michigan Technological University Board of Trustees name Dr. CK Shene as Professor Emeritus upon his retirement on December 31, 2021.

Dr. Shene joined the Department of Computer Science as an Assistant Professor in 1995. He was promoted to Associated Professor in 2001 and to Professor in 2007. Dr. Shene regularly taught courses in concurrent computing, operating systems, graphics and computing with geometry. His research interests span geometric computing, graphics, software visualization and computer science education. He has regularly published across this spectrum of research interests. Most recently much of his publications were in prestigious CS education conferences focusing on his software visualization tools designed to aid student understanding of complex computing concepts. Dr. Shene received multiple grants from the National Science Foundation to support the development of his visualization tools.

Approved

Linda M. Ott
_____   12/03/2021_____
Department Chair/School Dean   Date

DsL
_____   12/03/2021_____
College Dean   Date

Jacqueline E. Huntoon Digitally signed by Jacqueline E. Huntoon
                       Date: 2021.12.08 15:12:53 -05'00'
_____   _____
Provost and Senior Vice President for Academic Affairs   Date

Richard J. Koubek Digitally signed by Richard J. Koubek
                   Date: 2021.12.09 07:50:12 -06'00'
_____   _____
President   Date

Revised 9/21/16

VIII-C. Proposal for the Establishment of a New Master's Degree in Manufacturing Engineering

The faculty in the Department of Manufacturing and Mechanical Engineering Technology, under the umbrella of the College of Engineering, seek to establish an interdisciplinary Master of Science (MS) degree in Manufacturing Engineering. The program was designed to be flexible, with the intent to attract people who currently work in industry and come from a wide range of undergraduate backgrounds. This will allow Michigan Tech to grow its global campus and continuing education program.

The MS in Manufacturing Engineering encompasses the building blocks of advanced manufacturing, allowing working students the ability to complete a project approved by their employer. Additionally, the curriculum is based on the four pillars of manufacturing engineering, developed by the Society of Manufacturing Engineers (SME) through its Center for Education. To be prepared for Industry 4.0, flexible degrees such as this will be key for both employees and employers.

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

RECOMMENDATION: It is recommended that the Board of Trustees approves the Master of Science degree in Manufacturing Engineering.

VIII-D. PROPOSAL TO UPDATE FACULTY HANDBOOK, ADDITION OF SECTION 2.5 ROLE OF INNOVATION AND COMMERCIALIZATION

Though faculty at Michigan Tech are not required to be involved with innovation and commercialization activities, many are. For those who are involved in these activities, their contributions can enhance their teaching, research, and/or service roles at the University. This proposal is intended to make it clear that there should be no penalty or adverse effect for faculty engaged in these types of activities.

Having a clear statement that the University supports innovation and commercialization efforts will be valuable in recruiting and retaining outstanding faculty who have an interest in developing ideas with potential for future commercial viability.

In order to recognize these efforts, the language in red below would become a new section, 2.5, in the Faculty Handbook, titled Role of Innovation and Commercialization.

2.5 Role of Innovation and Commercialization

Innovation and commercialization are consistent with and directly support the education, research and public service goals of Michigan Tech. Innovation refers to the process of creating economic and social value from inventions and discoveries. Commercialization supports innovation and results in the creation of societal and economic value from knowledge, discoveries and experiences. Commercialization can result from a number of activities including applied research, consulting, securing patent rights and technology commercialization through licensing to established businesses or through the formation of new businesses. Faculty participation in innovation and commercialization enhances student education by providing a source of content and context which can directly complement, reinforce and add relevance to course subject matter.

Innovation and commercialization related to teaching, research and scholarly expertise are recognized as having value within the Michigan Tech community. The University acknowledges that additional time and effort are required for involvement in such activities, and is committed to recognizing these efforts. In particular, promotion and tenure and merit evaluations shall recognize innovation and commercialization as an indicator of commitment and expanding traditional boundaries and to the economic prosperity of society.

The proposal was approved by the University Senate and University administration in the spring of 2018, but a referendum vote of the tenured and tenure-track faculty was not conducted at that time. The referendum vote was conducted in Fall 2021 and the proposal was supported by a majority of those who voted.

RECOMMENDATION: It is recommended that the Board of Trustees approves the addition of Section 2.5 Role of Innovation and Commercialization to the Faculty Handbook.

VIII-E. PROPOSAL TO UPDATE FACULTY HANDBOOK, ADDITION OF SECTION 2.6 ROLE OF DIVERSITY, EQUITY, AND INCLUSION

A large number of Michigan Tech faculty actively participate in activities that support diversity, equity, inclusion, and sense of belonging at Michigan Tech. Having a clear statement that the University values, but does not require, such efforts makes it clear that individuals who engage in such activities should not be penalized during reviews conducted for the purposes of tenure, promotion, or reappointment.

If this proposal is approved, the language in red below will become a new section, 2.6, in the Faculty Handbook titled Role of Diversity, Equity and Inclusion.

2.6 Role of Diversity, Equity and Inclusion

Diversity, Equity and Inclusion (DEI) are consistent with and directly support the education, research and service goals of Michigan Tech. Diversity[1] refers to individuals' identities that include race, religion, color, national origin, age, sex, sexual orientation, gender identity, height, weight, genetic information, marital status, disabled veteran status, veteran status, or disability, some of which are not visible. Equity refers to the fair treatment, access, opportunity and advancement of all people, achieved by intentional focus on their disparate needs, conditions and abilities. Inclusion is a set of practices that ensure each member of a community feels they are welcome and valued for their perspectives and experiences.

DEI efforts related to teaching, research, scholarly activity and service are valued within the Michigan Tech community, and include, but are not limited to, activities such as the following: curricular development that furthers diversity, equity, and inclusion; pedagogical practices that promote inclusivity; mentoring and advising of students, faculty, and staff on issues related to diversity, equity, and inclusion; mentoring and advising students, faculty, and staff from underrepresented or underserved groups; and research and scholarship that examines and furthers knowledge and understanding related to diversity, equity, and inclusion. The University recognizes that these activities support the University's vision to be a globally recognized technological university that educates students, advances knowledge, and innovates to improve the quality of life and to promote mutual respect and equity for all people. As such, the University is committed to increased representation of these efforts in promotion, tenure, review, and merit evaluations.

A proposal to add a section on this topic to the Faculty Handbook has been approved by the University Senate, University administration, and through a referendum vote of the tenured and

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[1] Matches the language on our Equal Opportunity page (https://www.mtu.edu/equity/equal-opportunity/#:~:text=It%20is%20required%20by%20federal,veterans%20and%20individuals%20with%20disabilities.%E2%80%9D)

tenure-track faculty. The referendum vote was conducted in fall 2021 and was supported by a majority of those who voted. The language submitted here for Board approval includes editorial changes made to the original version through consultation with the academic deans, provost, and senate officers.

RECOMMENDATION: It is recommended that the Board of Trustees approves the addition of Section 2.6 Role of Diversity, Equity and Inclusion in the Faculty Handbook.

VIII-F.   FY2023 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 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 FY2023 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 rates and apartment rental rates for FY2023.

Housing and Dining Rates 2022- 2023

Douglass Houghton Hall, McNair Hall, Wadsworth Hall

Occupancy Dates: August 20 2022 - December 17, 2022 and January 7, 2023- April 29, 2023

Housing (Regular Occupancy) and Dining	2021-2022 Housing & Unlimited Dining	Proposed Increase	2022-2023 Housing & Unlimited Dining	Percent Change
Wadsworth Hall and McNair Hall				
*Double Occupancy	$ 11,625	$ 403	$ 12,028	3.47%
Single Occupancy	$ 13,361	$ 465	$ 13,826	3.48%
Triple/Quad Occupancy	$ 11,253	$ 310	$ 11,563	2.75%
Wadsworth Hall w/ private bath				
Double Occupancy	$ 12,586	$ 434	$ 13,020	3.45%
Single Occupancy	$ 14,508	$ 496	$ 15,004	3.42%
Douglass Houghton Hall				
Double Occupancy	$ 11,408	$ 620	$ 12,028	5.43%
Single Occupancy	$ 13,361	$ 465	$ 13,826	3.48%
Housing (Reduced/Temporary Occupancy) and Dining	**2021-2022 Housing & Unlimited Dining**	**Proposed Increase**	**2022-2023 Housing & Unlimited Dining**	**Percent Change**
Temporary Housing	$ 9,703	$ 403	$ 10,106	4.15%
Quad to 2	$ 11,842	$ 403	$ 12,245	3.40%
Quad to 3 (not currently offered)	$ 11,718	$ 403	$ 12,121	3.44%
Triple to 1 (not currently offered)	$ 13,361	$ 527	$ 13,888	3.94%
Wads Quad to 2	$ 11,842	$ 372	$ 12,214	3.14%
Triple Suite to 2	$ 12,896	$ 403	$ 13,299	3.13%
DHH Quad Suite to 3	$ 12,896	$ 403	$ 13,299	3.13%

Unlimited Gold dining plan has $200 dining dollars and 8 guest meal swipes per semester. Unlimited Silver dining plan has $100 dining dollars and 4 guest meal swipes per semester, as shown above, minus $248. Guest meal swipes expire at the end of the semester. Dining Dollars carry over from fall to spring semester. Dining Dollars expire at the end of the spring semester.

* Rate reported to US Department of Education Integrated Postsecondary Education Data System

Hillside Place Residence Hall

Occupancy Dates: August 20 2022 - December 17, 2022 and January 7, 2023- April 29, 2023

Single Bedroom and Meal Rate	2021-2022 Housing & 150 Block Dining	Proposed Increase	2022-2023 Housing & 150 Block Dining	Percent Change
Single Bedroom in Shared Apartment	$ 12,494	$ 353	$ 12,847	2.83%
Single Bedroom Apartment	$ 13,424	$ 384	$ 13,808	2.86%

Block meal plans are only available to Hillside Place (required) and Daniell Heights or off-campus students. Meals expire at the end of each semester. The unlimited Dining plan is available as an upgrade in lieu of the Block meal plan.

Daniell Heights Apartments & University Houses

Lease Agreement Dates: July 1, 2022 to June 30, 2023 or August 15, 2022 to June 30, 2023

Monthly Rental Rate	2021-2022	Proposed Increase	2022-2023	Percent Change
Daniell Heights Student Rates				
One Bedroom	$ 755	$ 20	$ 775	2.65%
Two Bedroom	$ 1,070	$ 30	$ 1,100	2.80%
Three Bedroom	$ 1,360	$ 40	$ 1,400	2.94%
Daniell Heights University Employee Rates				
One Bedroom	$ 950	$ 20	$ 970	2.11%
Two Bedroom	$ 1,175	$ 25	$ 1,200	2.13%
Three Bedroom	$ 1,500	$ 40	$ 1,540	2.67%
University Houses				
Efficiency (small) Single	$ 420	$ 20	$ 440	4.76%
Standard Single	$ 550	$ 20	$ 570	3.64%
Deluxe (large) Single	$ 600	$ 20	$ 620	3.33%

Summer Term Residence Hall Rates (Summer 2022)

Housing and Dining	2021-2022 Weekly	Proposed Increase	2022-2023 Weekly	Percent Change
Single Occupancy, shared bath	$ 164	$ 8	$ 172	4.88%
Single Occupancy, private bath	$ 189	$ 9	$ 198	4.76%
Double Occupancy, shared bath	$ 123	$ 6	$ 129	4.88%
Double Occupancy, private bath	$ 147	$ 8	$ 155	5.44%
Dining Plan Rate-no dining dollars	$ 139	$ 4	$ 143	2.88%

VIII-G.   REVISION TO BOARD POLICY 8.9

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

Future year fees will be considered for an increase at the same time as tuition is revisited for first-time, in-state freshmen students entering the institution. The Experience Tech Fee Review Group, comprised of representatives from the Undergraduate Student Government (USG), the Graduate Student Government (GSG), faculty, and staff reviewed the program and is recommending that the program continue.

For FY2023, the group is recommending that the fee be set to $99.00 per fall and spring semesters for undergraduate students and to $80.00 for graduate students. This represents an increase of $3.00 and $2.00 per semester respectively. The last increase to the fee occurred in the fall of 2021.

The recommended changes of the increased fee have the support of the USG. The GSG submitted a non-binding tie vote on the fee increase.

RECOMMENDATION: That the Board of Trustees amends policy 8.9 Experience Tech Fee as presented herein, effective Fall Semester 2022.

VIII-H. FINAL APPROVAL FOR H-STEM ENGINEERING AND HEALTH TECHNOLOGIES COMPLEX – PHASE I PROJECT

FINAL APPROVAL for H-STEM Engineering and Health Technologies Complex – Phase I Project

Michigan Technological University's H-STEM Engineering and Health Technologies Complex-Phase 1 project was approved for construction by the State Building Authority in December of 2020, and the Governor signed into law Act no. 257 which was effective on December 29, 2020. This authorized a total cost of $44,700,000, and approved the State Building Authority share of $29,699,800, the State General Fund share of $200, and the University share of the project $15,000,000.

Based on current market conditions, a budget modification is required to attain the same University goals and scope. The new total cost will be $53,100,000 with the State Building Authority share of $29,699,800, the State General Fund share of $200, and the University share of the project $23,400,000.

The H-STEM Engineering and Health Technologies Complex-Phase 1 construction documents have been approved by the State of Michigan. Our construction manager, Granger, has subsequently solicited bids for construction of this phase.   Program design goals are being met and construction bids are within the revised budget.

RECOMMENDATION: That the Board of Trustees authorizes the Administration to proceed with the construction of the H-STEM Engineering and Health Technologies Complex-Phase 1 at a cost not to exceed the revised Project Budget of $53,100,000, and to execute the necessary documents for the project contingent on the final State of Michigan authorization.

IX.   REPORTS

A.   Plasma Rocket Research Propels MTU Spin-off to Commercial Succcess,
Brad King, Richard and Elizabeth Henes Professor of Space Systems Engineering, Mechanical Engineering-Engineering Mechanics

B.   3-Minute Thesis (3MT),
Priyanka Kadav, PhD Candidate, Department of Chemistry

C.   100 years of Winter Carnival
Lindsey Hiltunen, University Archivist

D.   Undergraduate Student Government
Zack Olson, President

E.   Graduate Student Government
Nathan Ford, President

F.   University Senate
Samuel Sweitz, President

IX-A. PLASMA ROCKET RESEARCH PROPELS MTU SPINOFF TO COMMERCIAL SUCCESS
Brad King, Richard and Elizabeth Henes Professor of Space Systems Engineering,
Mechanical Engineering-Engineering Mechanics

IX-B. 3-MINUTE THESIS (3MT)
Priyanka Kadav, PhD Candidate, Department of Chemistry

What are proteins?

-Most important component of our body.

-Proteins keep us alive and some cause sickness.

Why is protein purification important?

-To find a cure, one must purify the trouble-causing proteins first and then study them.

ACE2 protein of Human

Spike protein of Coronavirus

Two proteins are causing a global pandemic
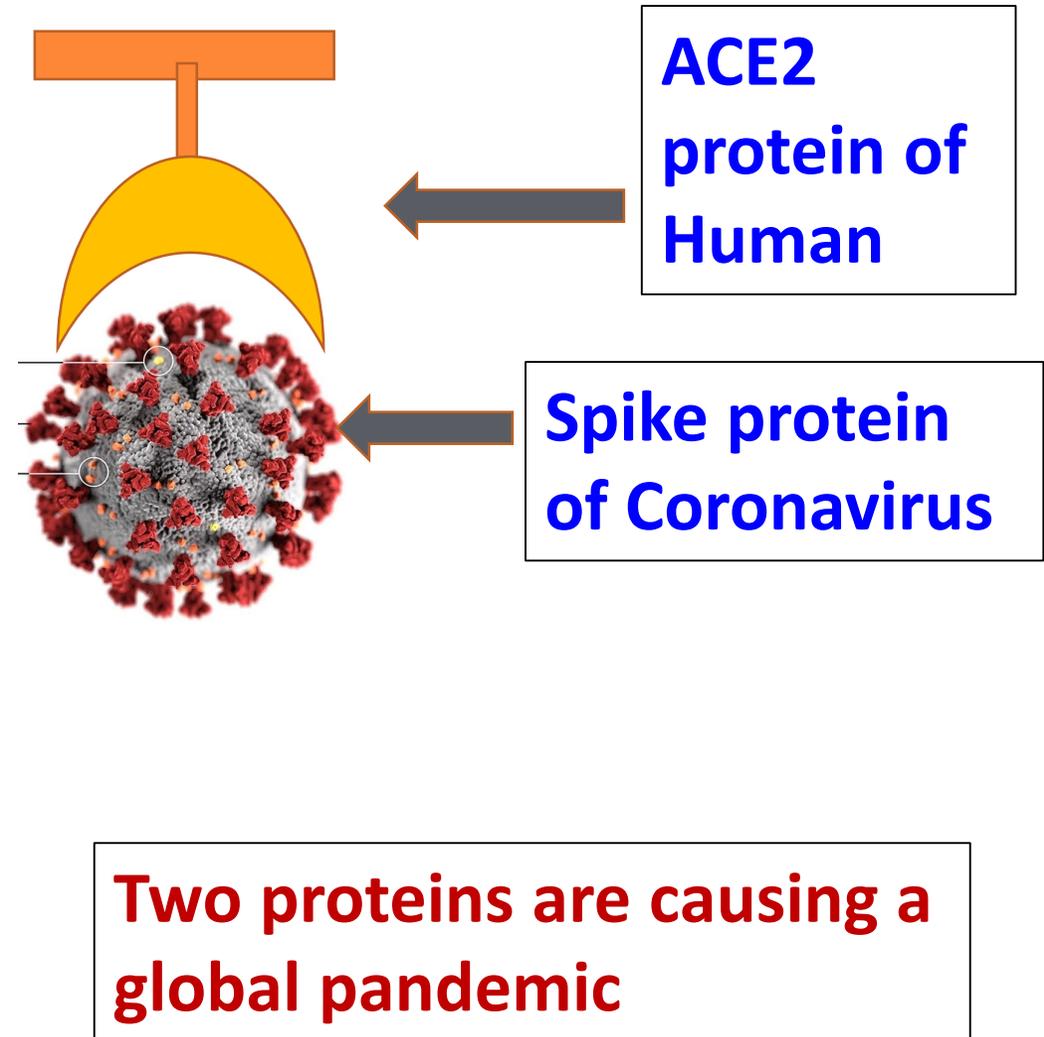
Protein purification is a painful process
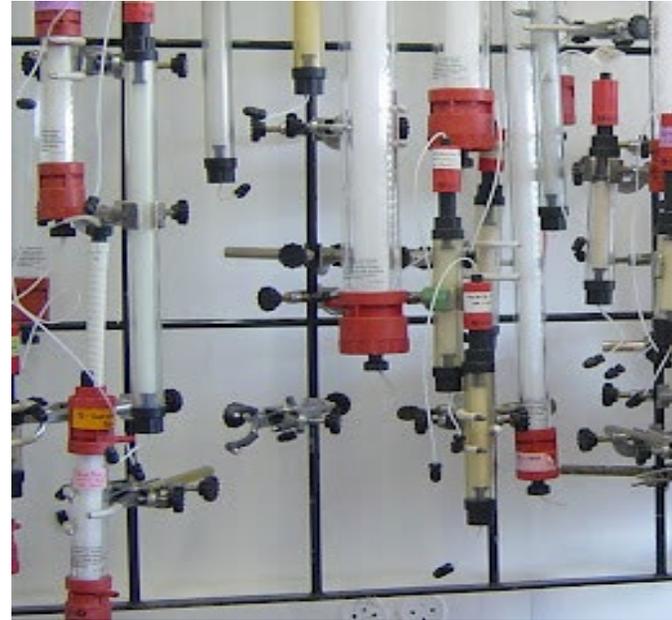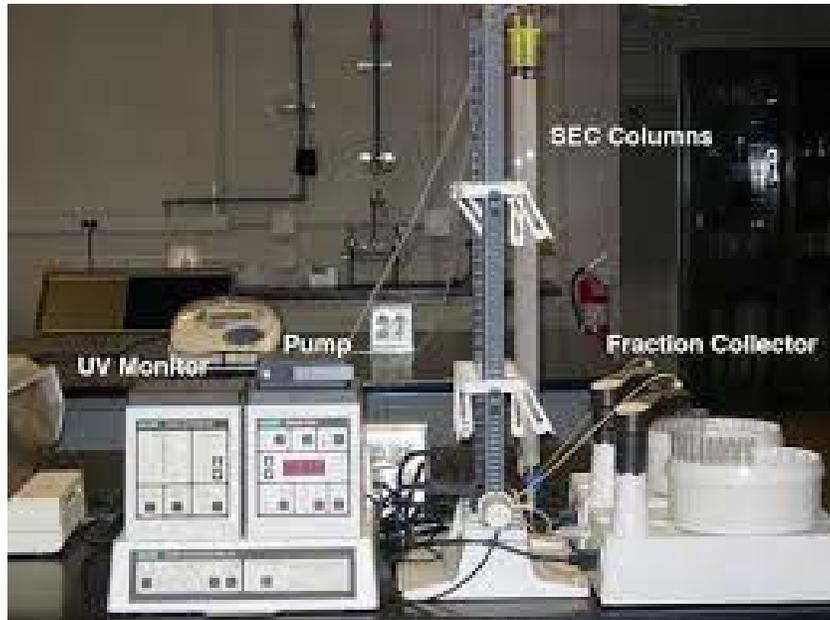
Cold room
Column
Cash $$
Clutter
Time

Our method CaRe (Capture and Release) makes protein purification simple

No cold room
No column
Very little cash
No clutter
Fast

Capture and Release (CaRe): A novel protein purification technique

Specific bait (capturing agent)

Target fish (protein)

Other fishes (proteins) in the lake

CB frees the target from it's initial bait

Addition of a competitive bait (ligand) (CB)

Filtration

Purified target fish (protein)
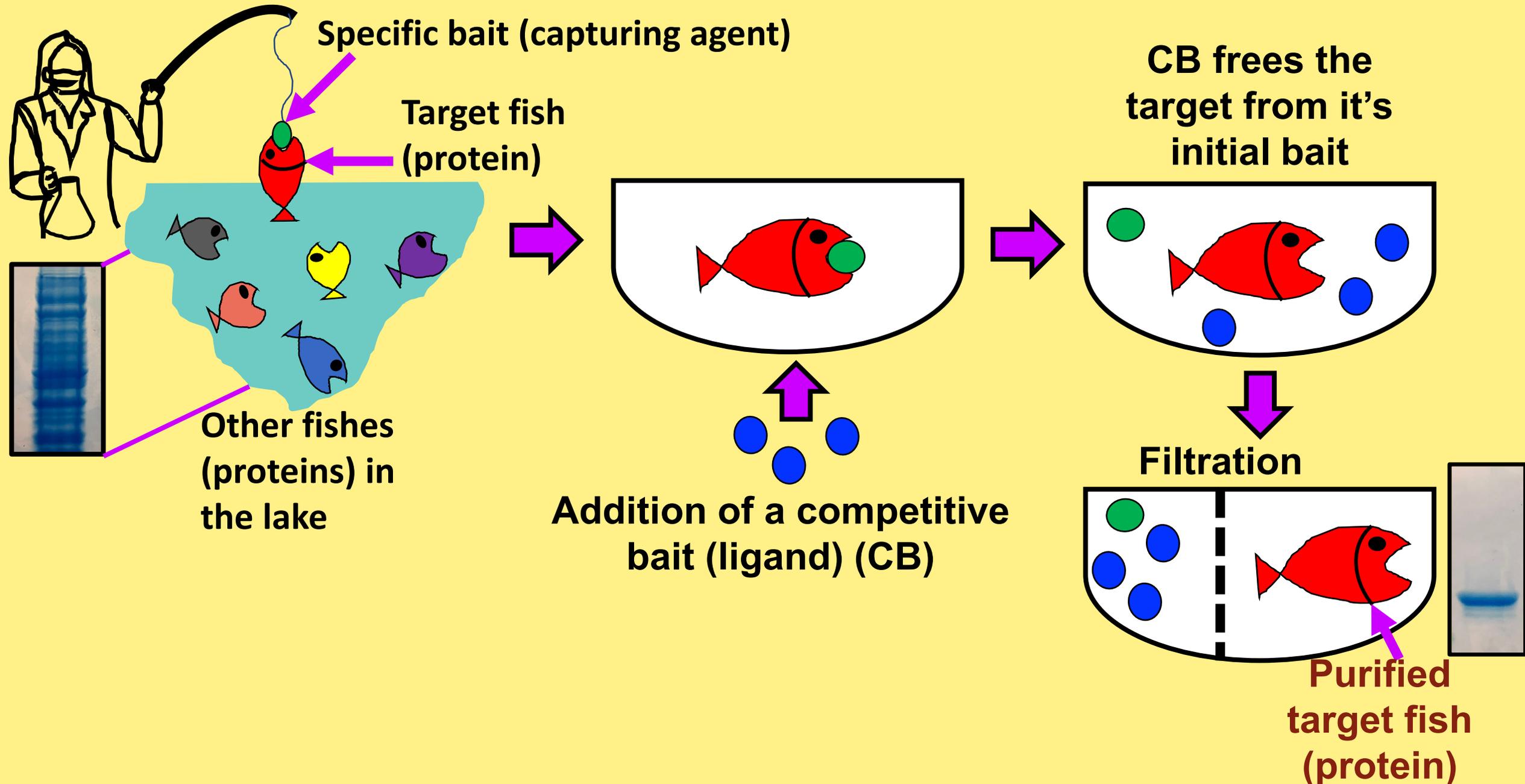
IX-C. 100 YEARS OF WINTER CARNIVAL
Lindsey Hiltunen, University Archivist

Winter Carnival 100 Years

Lindsay Hiltunen, University Archivist and PhD Student

Board of Trustees, February 25, 2022
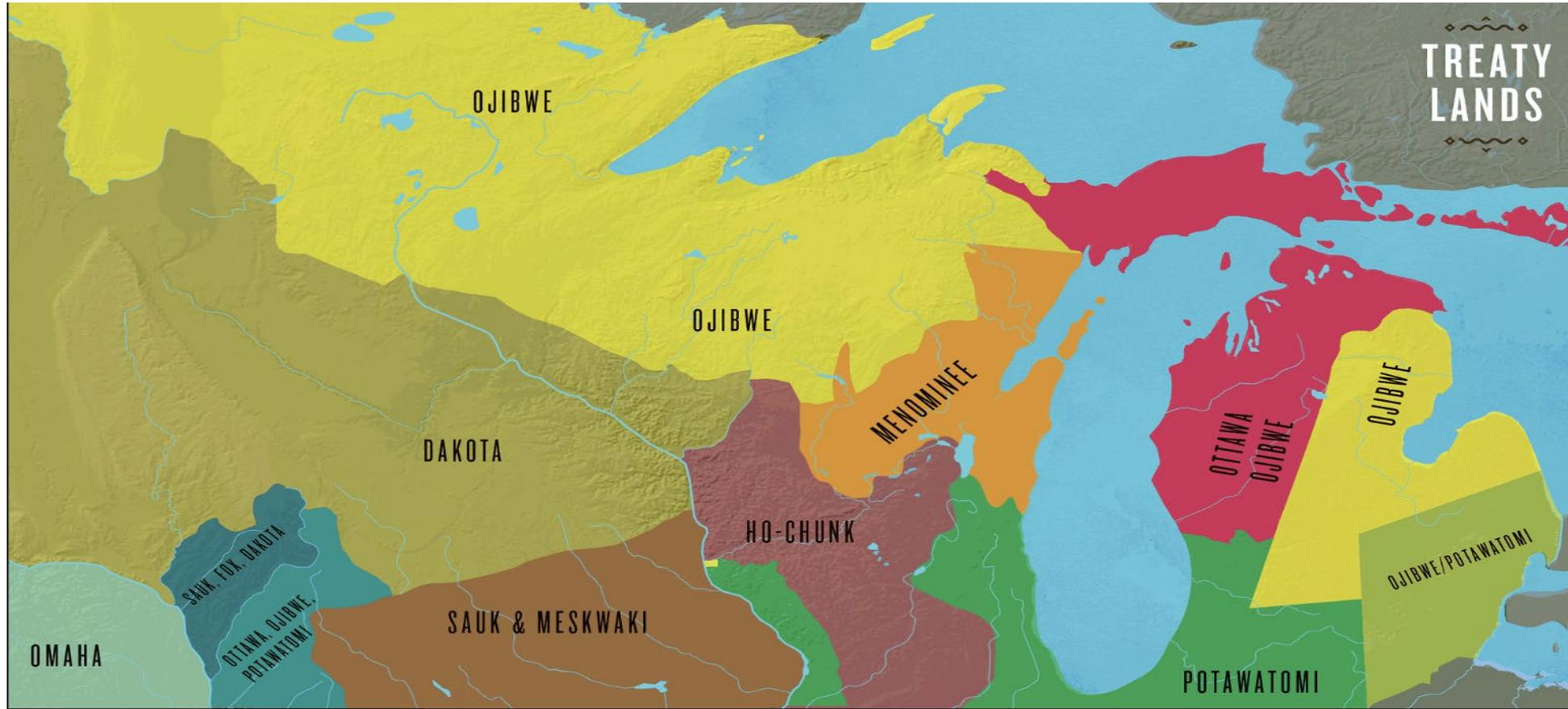
Michigan Technological University is located within Ojibwa (Chippewa) homelands and ceded-territory established by the Treaty of 1842, the territory of Native American nations in Gakiiwe'onaning (Keweenaw Bay), Gete-gitgaaning (Lac Vieux Desert), Mashkii-ziibing (Bad River), Odaawaa-zaaga'iganing (Lac Courte Oreilles), Waaswaaganing (Lac Du Flambeau), Miskwaabikong (Red Cliff), Wezaawaagami-ziibiing (St. Croix), and Zaka'aaganing (Sokaogon Mole Lake).

About Me

- Native Yooper
- Spent my youth in the SDC
- Tech Alum (SS '03)
- Worked in libraries since 2006
  - Began with DCPL
  - Worked at GMU, WIU, and FinnU before coming to Michigan Tech
- Active in several associations
  - Chair Oral History Section for SAA
  - Vice President of MAA
  - Recently published in the Legends magazine, the official publication of the Hockey Hall of Fame in Toronto

About the Michigan Tech Archives

The Archives documents the history of Michigan Tech and the western Upper Peninsula.

- Large regional book collection
- Manuscript, photograph, vertical files and state records collections document the region
- Over 25,000 flat files, including maps, architectural renderings, and blue prints
- Digital archives include winter carnival pictorials, an image database, and forthcoming mine employee records from Calumet & Hecla
- Open by appointment, M-Th, 1-5 p.m.

Michigan Tech
1885

Carnival Origins 1922

Winter Carnival began in 1922, when the Student Organization presented a one-night Ice Carnival. The show consisted of circus-style acts, with students dressed up in animal costumes, music, student skits, and skating contests.

The show was presented at the old Amphidrome, now the site of Dee Stadium.

Amphidrome from Portage Lake, Houghton, Mich.—6

Photo by A.W Buck.

Michigan Tech

Poll Question #1

What popular Winter Carnival event debuted in 1928?

- Snow Statues

- The Queen Competition

- The Beard Competition

- All of the Above

Michigan Tech

HALF PAGE IMAGE SIZE EXAMPLE

Photo courtesy of Michigan Tech Archives · 2017

Queens

- The queen coronation began in 1928

- That year the event also added a parade to the festivities

- An early 1928 Winter Carnival video is available on the Blue Key website

Michigan Tech

1929-1939

The circus theme lasted in some form through most of the 1920s carnivals. After 1929, there was a four-year hiatus. Taking note of the missing festivities, Blue Key brought back the carnival in 1934. Some highlights included a faculty/business owner hockey game, float competitions, and…

Carnival from the early years kept humor close at hand. This image from the 1939 Winter Carnival proves that. "Next time you forget the tripod, you're fired."

…Snow Statues, which began in 1936.

King Winter was the winning statue that year. The statue was sturdy enough to allow carnival goers to climb and pose on the statue's lap.

Photo courtesy of Michigan Tech Archives - 2017

Michigan Tech

The Snowshoe Race

Photo courtesy of Michigan Tech Archives · 2018

Michigan Tech

The 1940s

In 1940, Ripley Hill installed a ski tow and the Michigan State Amateur Ski Championship met during Winter Carnival.

The 40s saw the statues getting larger and more intricate.

In 1943 the event was fizzling out. A blizzard ruined statues that year and the looming war threat put festivities on hold until 1946.

Michigan Tech

1946

Skits and performances had been part of carnival, but this year it became a competitive element. The skits took place in the beautiful Kerredge Theatre in Hancock, which burned down in 1959.

Michigan Tech

The 1940s Brought Fun and Fashion

The Beard Competition began in 1947.These photographs sum up the whimsy and flair of carnival contests. As the years went on, fashions, beard lengths, and the competitiveness of the events really heated up. The queen competition remained popular, as can be seen in Barbara Green's smile, queen 1947.

Michigan Tech

The 1950s

This era was one of change as Winter Carnival organizers sought to keep the event fresh. Professional ice revues at Dee Stadium became popular, but by 1952 the formal ice show was replaced by a skating and dance party.

In 1953 the skating party was replaced by a Boom Copper gambling hall. Chorus lines, skits, and a soft drink bar were popular 1950s touches.

The Dee event was later dubbed Fun Night and it lasted into the 1960s.

Michigan Tech

A Pictorial Glimpse at the 1950s

1951 queen candidate Mary Lou Salani, an ice revue star 1958, and a class A winning statue.

Michigan Tech

1958, the Peak Year of the Ice Revue!

Photo courtesy of Michigan Tech Archives - 2017

HALF PAGE IMAGE SIZE EXAMPLE

Photo courtesy of Michigan Tech Archives - 2018

An Alumnus Story from 1959

Bill Bowman, class of '59, served as co-chairman that year. He was in charge of the snow statue judging. He noted some challenges in recruiting judges but was able to assemble a team of locals. What happened next was not readily known…

Michigan Tech

The 1960s

Fun Night was replaced by a concert series in 1962. The Four Preps performed, sponsored by the Student Council.

In the early 60s, the ski hill lit up the night with a rekindled Flare Pageant. Skiers with colorful torches made beautiful patterns down the hill.

In 1963 a short-lived storytelling contest made its debut. The event was known as the Tall Tales Tournament.

Michigan Tech

Poll Question #2

In 1966 the Winter Carnival organizers started shipping snowballs out of state so a sister university could have a snowball fight to coincide with Michigan Tech's carnival. What was the lucky university?

- Virginia Tech
- Colorado School of Mines
- Southwest Texas State University
- University of Texas at Austin

Michigan Tech

Southwest Texas State University

The snowball tradition began in 1966 and lasted over a decade. Winter Carnival organizers would ship about 500 pounds of snowballs to Texas. This image is from 1973.

The 1970s

This decade saw Michigan Tech amplifying many of the events that had become steadfast traditions.

The statues were bigger. The queen competition began planning early in the fall semester.

Skit competition entries were at max capacity and the concert series blossomed.

Michigan Tech

The First Place Skit from 1970; Delta Sigma Phi

The premise of the skit, as recalled by Greg Switek (class of '72), is a group that would be a ROTC commander's "worst nightmare." Some of the rehearsal errors, including a wrong turn and a hustle to catch-up by Greg, stayed in the final production to big laughs.

Michigan Tech

The Beauties and Beards of the 70s

Photo courtesy of Michigan Tech Archives · 2017

Photo courtesy of Michigan Tech Archives · 2018

Michigan Tech

WINTER CARNIVAL
QUEEN

DANNI CROOM

Danni's reign begins.

Queen Danni Croom

Michigan Tech

Poll Question #3

What year did Billboard chart toppers, The Guess Who, perform at Winter Carnival?

- 1977
- 1978
- 1979
- 1980

Michigan Tech

The Guess Who Rocked Sherman Gym in 1979

Photo courtesy of Michigan Tech Archives · 2018

THE GUESS WHO

237

Michigan Tech

The 1980s

With decades worth of tradition in place, the 80s saw some experimentation with statue construction and a continuation of "statue secrets" that were handed down from generation to generation.

New visual technology and faster turnaround time for developing film saw a huge uptick in the photo documentation of Winter Carnival events.

Michigan Tech

"Sailed the Ocean for the Wizard's Potion" 1983

Photo courtesy of Michigan Tech Archives · 2018

Michigan Tech

Statue Construction in 1984.

Michigan Tech

A Rustic Bridge in Snow, 1984.

Michigan Tech

The 1990s

The games and contests section of Winter Carnival flourished in the 1990s.

A tug-of-war on ice competition was added and human bowling was soon to follow.

The human dog sled race, a staple famous in the mid-century carnivals, was brought back as a popular main event.

Michigan Tech

Sound Mixing and Royalty, 1998

Photo courtesy of Michigan Tech Archives - 2018

Photo courtesy of Michigan Tech Archives - 2018

Michigan Tech

"Icy Story of Lumberjack's Glory" 1998

Photo courtesy of Michigan Tech Archives · 2018

Ice Bowling, 1999

Photo courtesy of Michigan Tech Archives - 2018

Michigan Tech

The 2000s and Beyond

The Saturday events of Winter Carnival have been electric in the 2000s, with spectacular fireworks displays and the torchlight parade gracing Mont Ripley.

The Rozsa stage has welcomed talent like the late Bob Saget, John Oliver, Judah Friedlander, and Josh Blue to name a few.

Varsity hockey matchups sell out like hotcakes at the SDC and curling, ice bowling, snow volleyball, and broomball continue to be popular all through carnival.

The Winter Carnival Photo Contest has also been a fun way to engage people and to capture the spirit of the season.

Michigan Tech

Winter Carnival, Fun for Everyone, 2014

The Magic of Snow
The Beauty Belle Finds, 2014

Lighting Up the Night

Racing to Fun, Then and Now…

Thank You!

Lindsay Elizabeth-May Hiltunen

University Archivist, PhD Student
Michigan Technological University

lehalkol@mtu.edu | copper@mtu.edu |
(906) 487-3209

www.mtu.edu/library/archives

https://cchi.mtu.edu

IX-D. UNDERGRADUATE STUDENT GOVERNMENT
   Zachary Olson, President
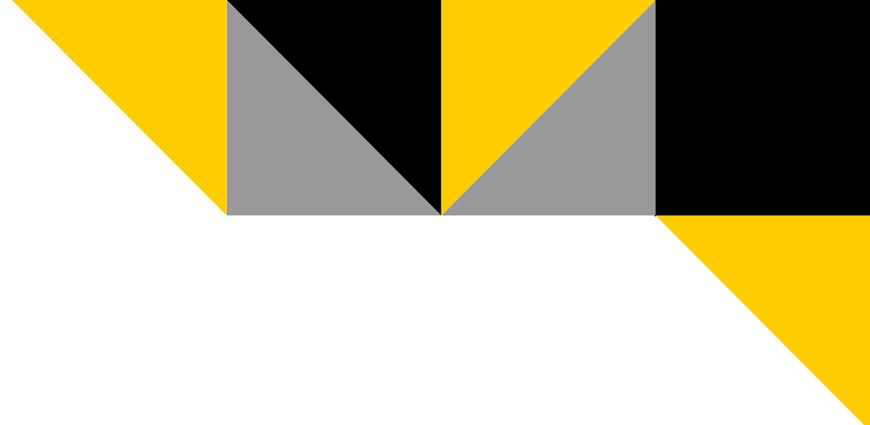
USG BOARD OF TRUSTEES UPDATE

Zachary Olson, USG President
February 25, 2022
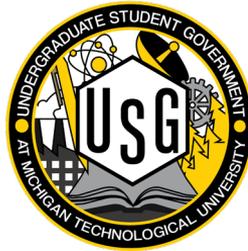
FALL BREAK

- USG Resolution No. 2021-2022 #002

- Working group with University Senate, GSG, Registrar, and other administration groups

- Focused on institutional wellness, and the benefits of Fall Break to students, faculty, and staff.

RELATIONS WITH UNIVERSITY LEADERSHIP

- Participation in "Pizza with the President" lunches between students, Dean Southerland, and President Koubek.

- Establishing recurring meetings between USG college representatives and their college deans.
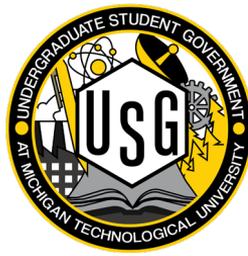
ELECTIONS

- Officers and At-Large Representatives

  - Feb. 21-25

- General Representatives

  - Mar. 21-25
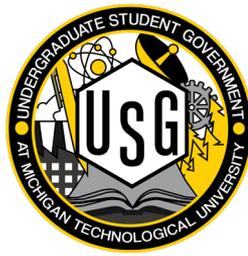
STUDENT ORGANIZATION FINANCES

- Voted to renew Special Budgetary Group (SBG) status for all SBGs until 2024
  - Film Board, SLS, MUB Board, WMTU, *The Lode*

- Budget hearings for 200+ Registered Student Organizations Feb. 24-27.

OTHER INITIATIVES

- Formed COVID-19 Subcommittee to collect student feedback on MTU's COVID response

- Sent a 10-person delegation to UM Flint for annual conference of all public university student government associations in Michigan

SERVICE

- Volunteered as crossing guards on US-41 and handed out chili during Winter Carnival

- Sponsored annual Winter Carnival Chili Van in partnership with Alumni Board of Directors and GSG

THANK YOU! QUESTIONS?

CONTACT

Zachary Olson

Undergraduate Student Government,
President

usg-president@mtu.edu | zaolson@mtu.edu

(989) 439-6884

IX-E. GRADUATE STUDENT GOVERNMENT
Nathan Ford, President

Advocacy • Enrichment • Community

Graduate Student Government

Nathan Ford

February 25, 2022
Board of Trustees
Michigan Technological University

Agenda

- **Spring Semester Start**

- **Spring Semester Plans**

- **Travel and Career Enrichment Grant Report**

Grad Commons

- **Plans Finalized**
- **Renovation Plan**
- **Goal to have the space open by the end of the Spring Semester**

Not to scale

New house for graduate students
New home for GSG

Grammarly @EDU

- **Pilot Program Finished**
  - **Over 1100 registered users with 800 active users**
  - **Great feedback!**
- **Feedback survey conducted**
- **Working with Grammarly to analyze data**
- **Will submit report to IT/Admin by end of Spring Semester**

Community

Looking Ahead

- **Advocacy**
  - **Husky GEAR**
  - **Travel Grant Program**
  - **Accessibility Report**
- **Enrichment**
  - **Graduate Research Colloquium**
  - **Merit Awards Program**
  - **More Seminars!**
- **Community**
  - **Wine and Pottery Night**
  - **Snowshoeing with OAP**
  - **Last Friday Social**

Travel and Career Enrichment Grants

Travel Grant Stats (as of 9/29/21)

- **Total Applications : 46 (PhD - 40, MS - 6)**
  - **Presenting - 37 (PhD - 34, MS - 3)**
  - **Attending - 9 (PhD - 6, MS - 3)**

Career Enrichment Grant Stats

- **Total Applications : 12 (PhD - 7, MS - 5)**

Thank You

IX-F.   UNIVERSITY SENATE
    Samuel Sweitz, President

University Senate Update

Sam Sweitz, Senate President

Michigan Tech

Continuing Business from Fall 2021

30 Numbered Proposals/Resolutions/Charters and counting…

- Resolution 19-22: Uses of Student Evaluations of Instruction: Best-Practice and Minimal Standards

    AIPC & APC working jointly on proposal

    Full proposal to Senate at April 6th meeting

    Early awareness campaign to jump start charter process

Michigan Tech

Agenda Items for Spring 2022

- Updates to Senate Chair (XX-22) and Dean (17-22) Review Policies

- Proposal 14-22:Proposal on the Scheduling of Examinations, Projects, Presentations, and Papers on Election Day

- Proposal 15-22: Proposed change to Senate Policy 706.1.1 section 8 on timing of sabbatical applications

- Proposal 20-22: Proposed College-level Tenure and Promotion Review Process

Michigan Tech

Agenda Items for Spring 2022 cont.

- Proposal 27-22: Proposal to Modify Senate Policy 413.1: Accelerated Master's Programs

- Calendar: Fall start date, Fall Break, Spring Break, universal meeting time

- Ad hoc committees to update Senate Constitution and Bylaws

Michigan Tech

Tenure Process Referendum

Faculty Handbook additions:

Section 2.5 Role of Innovation and Commercialization

Section 2.6 Role of Diversity, Equity, and Inclusion to the Faculty Handbook

Michigan Tech

X.   INFORMATIONAL ITEMS

     A.   Analysis of Investments

     B.   Research & Sponsored Programs

     C.   Advancement and Alumni Relations

     D.   Media Coverage

     E.   Employee Safety Statistics

     F.   Disposal of Surplus Property Report

X-A.   ANALYSIS OF INVESTMENTS

MICHIGAN TECH UNIVERSITY
INVESTMENT PORTFOLIO
JUNE 30, 2021 THROUGH DECEMBER 31, 2021

	Market Value 6/30/2021	Market Value 12/31/2021	Fiscal-Year Investment Return	Benchmark Return	Benchmark
Money Market Fund	$ 2,227,371	$ 2,335,821	0.00%	0.03%	*ICE BofA Merrill Lynch US T-Bill Index*
Equity Funds:					
Core Equity Fund	11,505,342	9,478,610	10.80%	11.67%	*S&P 500*
Commonfund Strategic Solutions Equity Fund	6,888,970	7,155,495	12.64%	11.67%	*S&P 500*
Total Equity Funds	18,394,312	16,634,105			
Fixed Income Funds:					
Intermediate Term Fund	8,896,448	10,318,674	-0.56%	-0.47%	*ICE BofA Merrill Lynch 1-3 Yr Treasury*
Commonfund Contingent Asset Portfolio	8,892,319	10,311,129	-0.43%	-0.47%	*ICE BofA Merrill Lynch 1-3 Yr Treasury*
High Quality Bond Fund	6,760,565	6,140,885	-0.11%	0.06%	*Bloomberg Barclays US Aggregate Bond Index*
Multi-Strategy Bond Fund	-	6,137,617	-0.15%	-0.26%	*Bloomberg Barclays US Aggregate Bond Index*
Total Fixed Income Funds	24,549,332	32,908,305			
Total	$ 45,171,015	$ 51,878,231	4.19%		

Current Asset Allocation

Cash Equivalents, 5%
Equities, 35%
Fixed Income - Long Duration, 20%
Fixed Income - Short Duration, 40%

Target Asset Allocation

Cash Equivalents, 5%
Equities, 35%
Fixed Income - Long Duration, 25%
Fixed Income - Short Duration, 35%
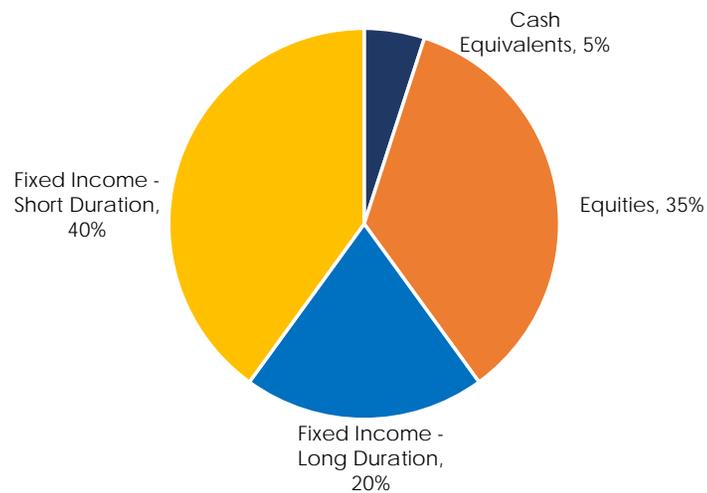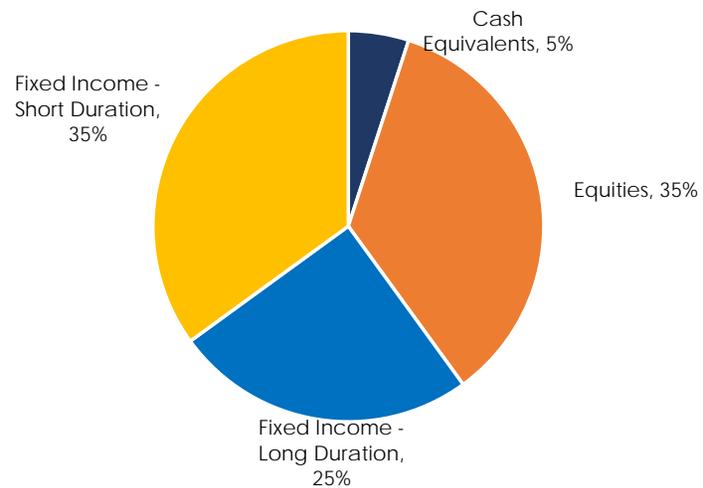
X-B. RESEARCH AND SPONSORED PROGRAMS

Sponsored Awards
Fiscal Year 2022
2nd Quarter
Ended Dec 31, 2021

TOTAL: $44,673,773

Pre-Proposals Submitted

(excluded from Proposals Submitted figures below)

FYTD 2021: 14
FYTD 2022: 9

Pie chart labels:
- US Department of Energy 4,554,573
- US Department of HHS 886,583
- US Department of Transportation 918,097
- Other Federal Agencies* 3,693,445
- US Department of Education 225,551
- State of Michigan 2,926,028
- Industrial 4,328,150
- US Department of Defense 9,263,835
- Foreign 654,698
- All Other Sponsors 1,353,975
- US Department of Agriculture 1,076,005
- NASA 4,298,648
- National Science Foundation 9,163,604

| Sponsor	Proposals Submitted FY '22 as of 12/31	Proposals Submitted FY '21 as of 12/31	Awards Received FY '22 as of 12/31	Awards Received FY '21 as of 12/31	Awards Received ($) FY '22 as of 12/31	Awards Received ($) FY '21 as of 12/31	Variance $	Variance %
NASA	56	52	18	18	4,298,648	1,163,918	3,134,730	269.3%
National Science Foundation	83	63	32	22	9,163,604	5,146,196	4,017,408	78.1%
US Department of Agriculture	32	35	17	33	1,076,005	1,856,702	-780,697	-42.0%
US Department of Defense	50	61	47	55	9,263,835	11,241,264	-1,977,429	-17.6%
US Department of Education	1	1	2	-	225,551	-	225,551	N/A
US Department of Energy	22	27	18	25	4,554,573	3,939,362	615,211	15.6%
US Department of HHS	16	28	3	5	886,583	958,847	-72,264	-7.5%
US Department of Transportation	10	6	8	4	918,097	859,675	58,422	6.8%
Other Federal Agencies*	23	24	30	21	3,693,445	1,890,425	1,803,020	95.4%
Federal Agency Total	293	297	175	183	34,080,341	27,056,389	7,023,952	26.0%
State of Michigan	31	31	20	19	2,926,028	3,152,374	-226,346	-7.2%
Industrial	78	108	76	77	4,328,150	3,875,728	452,422	11.7%
Foreign	6	7	6	9	654,698	595,776	58,922	9.9%
All Other Sponsors	38	42	29	21	1,353,975	501,154	852,821	170.2%
Subtotal	446	485	306	309	43,343,192	35,181,421	8,161,771	23.2%
Gifts**	N/A	N/A	126	122	1,325,570	1,751,120	-425,550	-24.3%
Crowdfunding	N/A	N/A	2	6	5,011	8,150	-3,139	-38.5%
Grand Total	446	485	434	437	44,673,773	36,940,691	$7,733,082	20.9%

Federal award dollars do NOT include $19,356,604 CRRSAA HEERF II [Covid Relief] from US Department of Education; received in last two quarters of FY21.

* US Dept of Commerce, US Environmental Protection Agency, US Dept of the Interior, National Endowments for the Arts & Humanities, US Dept of Homeland Security, 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 2022
2nd Quarter
Ended Dec 31, 2021

TOTAL: $44,673,773

Keweenaw Research Center
4,798,795

Michigan Tech Research Institute
7,720,677

Great Lakes Research Center
1,205,657

College of Sciences & Arts
7,925,416

Administration
2,485,026

Advanced Power Systems Research Center / MEEM
99,222

College of Business
145,299

College of Computing
1,348,833

College of Forest Resources & Env Science
2,176,391

College of Engineering
16,768,457

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

Submitting Proposals since 07/01/2021
47.5%

On Active Projects as of 12/31/2021
61.2%
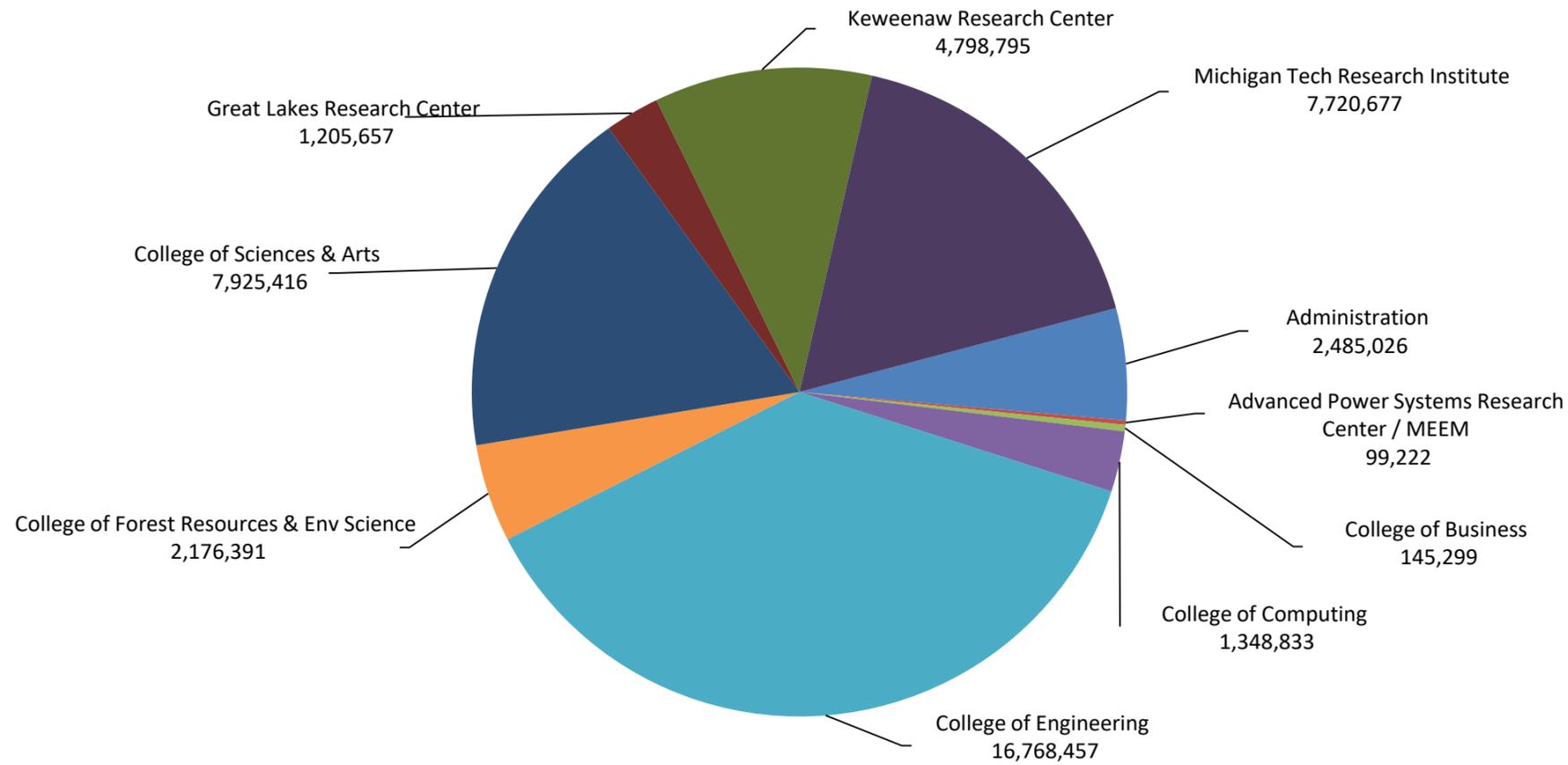
SPO & OIC Metrics[1]	Administration	Advanced Power Systems Research Center / MEEM	College of Business	College of Computing	College of Engineering	College of Forest Resources & Env Science	College of Sciences & Arts	Great Lakes Research Center	Keweenaw Research Center	Michigan Tech Research Institute	Pavlis Honors College	Totals	Fiscal Comparison	Percent Change
Proposals Submitted	17	10	1	27	217	49	53	16	25	31	N/A	446	485	-8.0%
Awards Received	78	2	4	18	177	35	36	19	24	41	N/A	434	437	-0.7%
Federal	237,466	-	50,000	1,122,582	9,520,483	1,476,862	6,776,062	695,529	2,700,764	1,243,362	-	**23,823,110**	20,622,903	15.5%
Federal Pass-Through	1,021,621	-	-	122,498	2,122,130	138,737	311,098	326,124	-	6,215,023	-	**10,257,231**	6,433,486	59.4%
Foreign	-	-	-	-	12,770	-	616,099	-	25,829	-	-	**654,698**	595,776	9.9%
Gifts	673,306	-	10,640	102,000	402,719	39,259	77,646	-	20,000	-	-	**1,325,570**	1,751,120	-24.3%
Crowdfunding	-	-	-	1,753	-	-	3,258	-	-	-	-	**5,011**	8,150	-38.5%
Industry	-	49,222	-	-	1,647,759	331,575	17,500	-	2,044,802	237,292	-	**4,328,150**	3,875,728	11.7%
Other	13,575	-	84,659	-	969,952	68,400	123,753	61,236	7,400	25,000	-	**1,353,975**	501,154	170.2%
State of MI	539,058	50,000	-	-	2,092,644	121,558	-	122,768	-	-	-	**2,926,028**	3,152,374	-7.2%
Total $ by Division	**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**	**N/A**	**44,673,773**	36,940,691	20.9%
Fiscal Comparison	1,745,003	N/A	7,000	603,091	11,571,430	3,988,691	5,140,153	1,136,973	7,077,907	5,200,096	470,347	36,940,691		
Percent Change	42.4%	N/A	1975.7%	123.7%	44.9%	-45.4%	54.2%	6.0%	-32.2%	48.5%	N/A	20.9%		
Disclosures Received[2]	-	-	-	-	66.66%	11.76%	9.82%	-	11.76%	-	-	**17**	9	88.9%
Nondisclosure Agreements	5	2	-	-	23	2	-	-	9	8	-	**49**	44	11.4%
Patents Filed or Issued[2]	-	-	-	-	53.30%	-	36.70%	-	-	10.00%	-	**10**	17	-41.2%
License Agreements	-	-	-	-	3	-	1	-	-	-	-	**4**	7	-42.9%
Gross Royalties[2]	-	-	-	-	8.33%	-	-	-	-	91.67%	-	**26,445**	33,440	-20.9%

Federal award dollars do NOT include $19,356,604 CRRSAA HEERF II [Covid Relief] from US Department of Education; received in last two quarters of FY21.

[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 2022
2nd Quarter
Ended Dec 31, 2021

TOTAL: $10,679,565

Pie chart labels:
- College of Sciences & Arts 614,473
- Great Lakes Research Center 20,663
- College of Forest Resources & Env Science 358,334
- Keweenaw Research Center 2,073,840
- College of Engineering 2,333,149
- College of Computing 159,998
- College of Business 640
- APRSC / MEEM 99,222
- Administration 473,477
- Michigan Tech Research Institute 4,545,769

Sponsored Awards & Gifts	Administration	APRSC / MEEM	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	Pavlis Honors College	Totals	Fiscal Comparison	Percent Change
Automotive	167,000	49,222	640	-	621,030	-	-	-	1,954,703	197,331	-	**2,989,926**	2,356,313	26.9%
Business & Economics	3,725	-	-	-	18,000	-	-	-	-	-	-	**21,725**	14,000	55.2%
Chemical	38,000	-	-	-	155,500	-	-	-	-	-	-	**193,500**	289,129	-33.1%
Civil	2,000	-	-	-	36,250	-	-	-	-	-	-	**38,250**	224,100	-82.9%
Consumer Products	12,500	-	-	-	351,438	198,225	4,985	-	-	-	-	**567,148**	620,531	-8.6%
Defense & Space	48,998	-	-	50,000	460,027	-	-	-	55,762	4,258,477	-	**4,873,264**	3,085,024	58.0%
Energy	22,500	-	-	-	162,884	-	-	-	-	-	-	**185,384**	873,003	-78.8%
Environmental	21,079	-	-	-	20,685	-	-	12,663	-	39,961	-	**94,388**	1,500	6192.5%
Health	26,666	-	-	-	124,537	-	591,988	-	63,375	-	-	**806,566**	140,017	476.0%
Industrial Engineering	6,000	-	-	-	80,567	-	-	-	-	-	-	**86,567**	340,160	-74.6%
IT Services	3,000	-	-	60,000	29,610	-	-	-	-	-	-	**92,610**	74,615	24.1%
Mining & Metals	6,500	-	-	-	190,900	133,350	-	-	-	-	-	**330,750**	343,311	-3.7%
Other	88,509	50,000	-	-	35,500	26,759	17,500	-	-	-	-	**218,268**	313,786	-30.4%
Technology	27,000	-	-	49,998	46,221	-	-	8,000	-	50,000	-	**181,219**	495,350	-63.4%
Total $ by Division	**473,477**	**99,222**	**640**	**159,998**	**2,333,149**	**358,334**	**614,473**	**20,663**	**2,073,840**	**4,545,769**	**N/A**	**10,679,565**	9,170,839	16.5%
Fiscal Comparison	224,361	N/A	7,000	514,317	2,297,850	965,352	259,795	1,500	2,023,225	2,728,339	149,100	9,170,839		
Percent Change	111.0%	N/A	-90.9%	-68.9%	1.5%	-62.9%	136.5%	1277.5%	2.5%	66.6%	0.0%	16.5%		

Michigan Technological University
Total Research Expenditures by College/School/Division
Fiscal Year 2022 & 2021
As of December 31, 2021 and December 31, 2020

College/School/Division	FY2022	FY2021	Variance	%
Administration*	2,572,182	1,625,866	946,316	58.2%
Advanced Power Systems Research Center (APSRC) / MEEM	444,876	N/A	444,876	N/A
College of Business	912,699	738,287	174,412	23.6%
College of Computing	2,472,527	2,038,064	434,463	21.3%
College of Engineering	15,479,229	14,924,772	554,457	3.7%
College of Forest Resources & Environmental Science	3,118,574	2,510,327	608,247	24.2%
College of Science & Arts	7,935,548	6,797,793	1,137,755	16.7%
Great Lakes Research Center**	699,176	580,631	118,545	20.4%
Pavlis Honors College	N/A	283,559	(283,559)	-100.0%
Keweenaw Research Center (KRC)	4,802,790	4,263,351	539,439	12.7%
Michigan Tech Research Institute (MTRI)	6,204,059	5,144,064	1,059,995	20.6%
Total	**44,641,660**	**38,906,714**	**5,734,946**	**14.7%**

*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
Michigan Tech Board of Trustees
February 25, 2022

2021-2022 Goals and Initiatives to be achieved in collaboration with administrative and academic leadership and the Michigan Tech Fund Board of Directors.

- Campaign prep (completion of the feasibility study, following through on recommendations)
  - Review the fee structure to be sure it's in accordance with our peers and appropriate for a campaign
  - Review of the MTF bylaws
  - Ensure Donor integrity and intention in every aspect of our business
  - Evaluate private assets as an investment vehicle for the endowment
  - Revitalize alumni engagement with services and programs virtually and across the nation
- Rebrand and refocus annual giving toward engaging more first time donors
- Implement Customer Relationship Management (CRM) software
- Engage alumni, principal and major gift donors and corporate/foundation partners in a virtual and hybrid environment
- Launch Alumni DEIS Advisory Board for Fall and establish alumni board liaison

Recent Activity
- Fundraising activity and travel continues with a few cancellations due to alumni/donor level of comfort.
- $54 million pending asks from 196 individual donors.
- Establishing principal gifts totaling $20 million for endowed scholarships, chairs, and program support in the Colleges of Business, Engineering, Sciences and Arts, and University priority discretionary funds.
- 13% of Michigan Tech employees have donated $121,677 to the Campus Campaign.
- To ensure maximum awards to students, the award criteria of 531 donor funded endowed scholarships were reviewed.
- Provided key research and strategy support to Summer Youth Programs' 50 Anniversary fundraising, Athletics' paver project and revisioning the Huskies Club.
- Incorporated recent wealth-screening results to create current, data-rich portfolio information to front-line fundraisers.
- Took advantage of complimentary fundraising professional development provided by our planned giving service provider, Crescendo Interactive.
- Raised over $27.9 mm to date 69% of the $40.75 mm goal (as of 12-31-21)
- Feasibility study is complete.
- Secured $40,000 gift from General Motors to continue supporting the annual Ride the Waves program provided by the Center for Science & Environmental Outreach.
- Received commitment from 3M to support a $40,000 outreach event during Michigan Tech spring break, hosted by Minneapolis/St. Paul schools in partnership with Center for Educational Outreach.
- Coordinated collaboration between Advancement, Career Services, IPEC, and College of Forest Resources and Environmental Science in developing multilateral partnerships between Michigan Tech, IKEA and Linnaeus University in Sweden. Pillars of collaboration include co-ops in Sweden (beginning this summer), an MOU for future research projects, and exploring gifts supporting Enterprise.
- Hosted several companies (including Milwaukee Tool, Nucor, Ariens) on tours of recent corporate-sponsored labs in EERC, prompting multiple requests for proposals due Spring 2022.
- Hosted (2) GLI Pregame socials in-person in December, one in Ann Arbor, one in East Lansing. More than 70+ people at each, Bill Sproule '70 was in attendance selling and signing his Michigan Tech 100 years of Hockey book at both events.

- Regional alumni volunteers helped us host 7 gatherings or streaming hockey game watch events, including one holiday party for 9 alumni hosted by Peipei Zhao '09 in Shanghai.
- The Alumni Engagement Office hosted the traditional Commencement Reception on Saturday, December 18.
- Winter Carnival 2022:
    - Alumni Board of Directors were in town for activities and meetings Wed Feb 9-Sat Feb 12:
        - All-Nighter snow statue on Wed Feb 9 in front of the Alumni House, in addition to serving chili to students on the Alumni House porch that evening.
        - Selected new Directors for terms to begin July 1, 2022.
        - Selected winners for the Alumni Awards.
    - Alumni-Student Broomball tournament on Sat Feb 12.
    - Alumni Social at the Alumni House on Sat Feb 12 between 10 am -12 pm.
    - ME-EM department has arranged a skybox scholarship social + raffle of signed jerseys of John Scott '10 (hockey) and Joe Berger '04 (football), John and Joe will be in town for the social and jersey raffle.
- Mark your calendars for Reunion Weekend 2022: August 4-6, 2022.
    - Affinity reunions we will be partnering with other offices on campus for that weekend include Summer Youth Program 50th and Men's Ice Hockey 100th.
- Kick off meetings began in January with Ellucian for the CRM conversion project.
    - Data clean up and process documentation in preparation for the conversion
- Donor Impact reports for calendar year 2021

Principal Giving/Presidential Outreach Upcoming Events

SW Florida - March 2022

- March 1 - Naples - Principal Giving event hosted by Mike '86 and Liz '88 Pulick.
- March 2 - Seminar event hosted by President Koubek featuring Dr. Caryn Heldt - Chemical Engineering, Dr. Thomas Werner - Biological Sciences and Dr. Bill Sproule - retired Civil and Environmental Engineering and current hockey historian, to talk on the 100 years of MTU hockey
- March 3 - Venice - President's Society event hosted by Mike '75 and Carol Horan in Venice

Admissions Events with Presidential Involvement

- January 2022 - Chicago. Hosted by Scott '81 and Jenny Pattullo
- February 2022 - Detroit. Hosted by Ron '77 and Linda Staley
- February 2022 - Minneapolis/St Paul. Hosted by Russ Becker
- September 2022 - Calumet. Hosted by Mike '82 and Marie '82 Cleveland

Fundraising totals as of January 31, 2022

$ 4,133,783 in major outright gifts and pledges
$ 4,269,800 in planned gifts
$ 1,854,476 in annual gifts under $10,000
$ 1,131,490 in corporate support
$ 10,283,273 in foundation gifts
$ 1,562,385 in realized planned gifts

75 illustrations, proposals, and gift agreements were provided for donors
28 executed gift agreements

X-D.   MEDIA COVERAGE

Media Report: Nov. 30, 2021 to Feb. 8, 2022
Michigan Technological University
Regular Meeting of the Board of Trustees
Feb. 25, 2022

Overview

Articles	2,451
Total engagement	116,950
Average engagement	56
Journalist shares	783
Journalist reach	~ 28.89M
Average unique visitors per month (UVM)	~ 2.38M
Total UVM	~ 4.88B

Between Nov. 30, 2021 to Feb. 8, 2022, a total of 2,451 online articles mentioned Michigan Technological University:

02/25/2022 Michigan Tech Board of Trustees Regular Meeting, Media Report - Articles
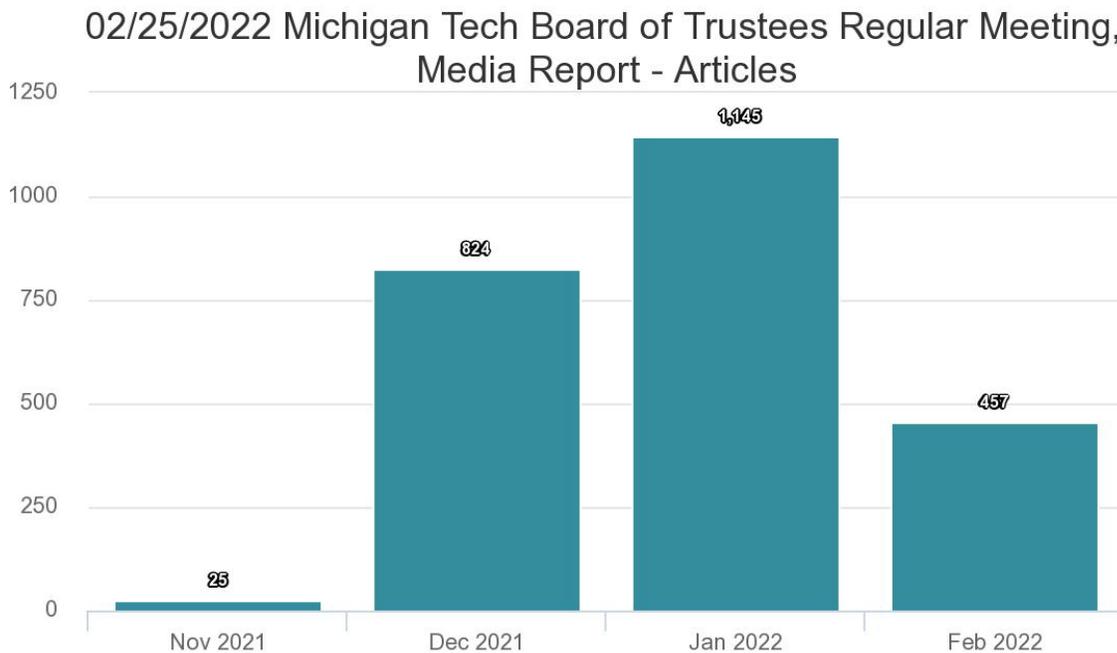
MUCK RACK

Those 2,451 articles were shared, commented on, or liked on social media roughly 116,950 times, for an average engagement of 56 shares, comments, or likes per article:

02/25/2022 Michigan Tech Board of Trustees Regular Meeting, Media Report - Article Engagement
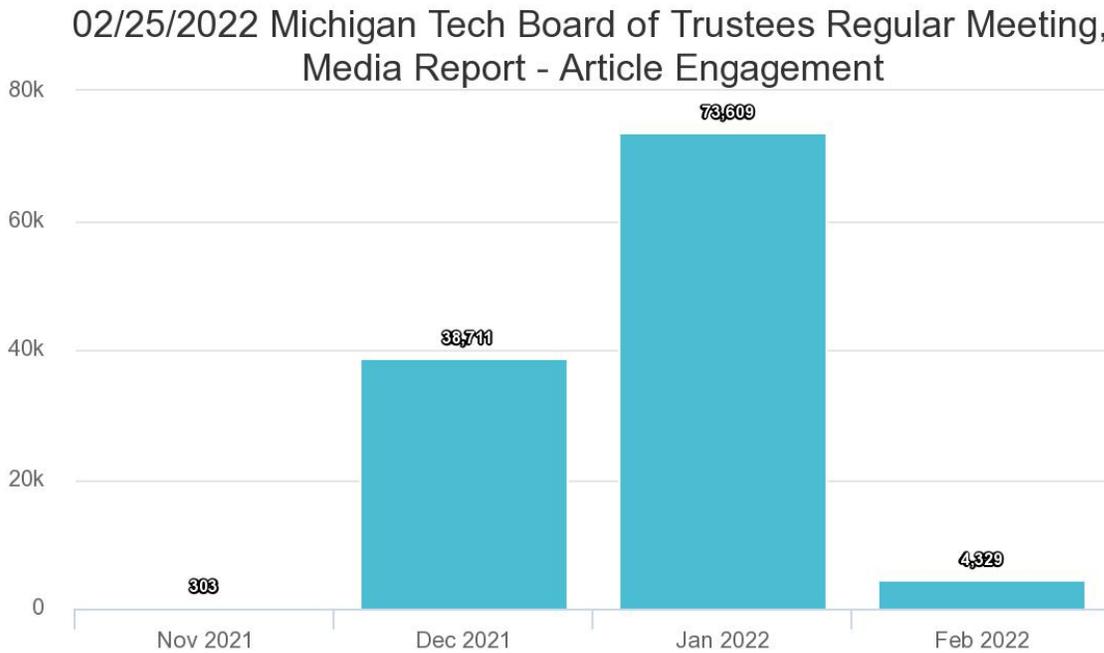
Journalists shared the articles on Twitter 783 times, resulting in a reach of roughly 28.89 million people:

02/25/2022 Michigan Tech Board of Trustees Regular Meeting, Media Report - Shares by Journalists

02/25/2022 Michigan Tech Board of Trustees Regular Meeting, Media Report - Journalist Reach
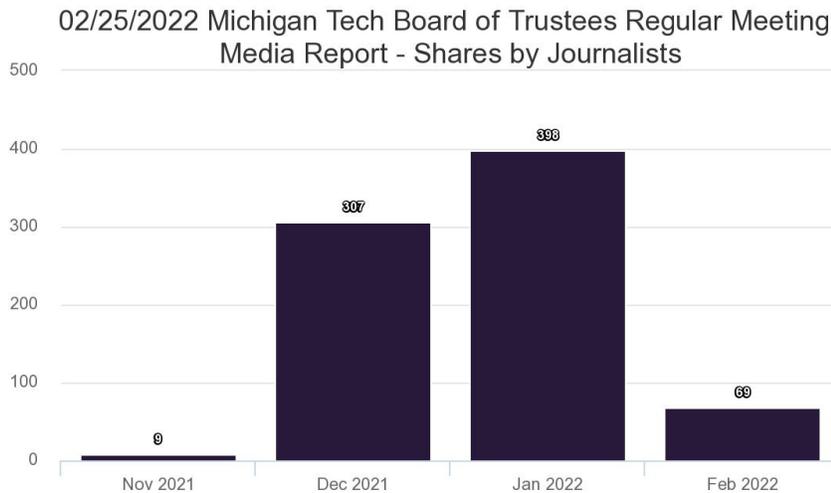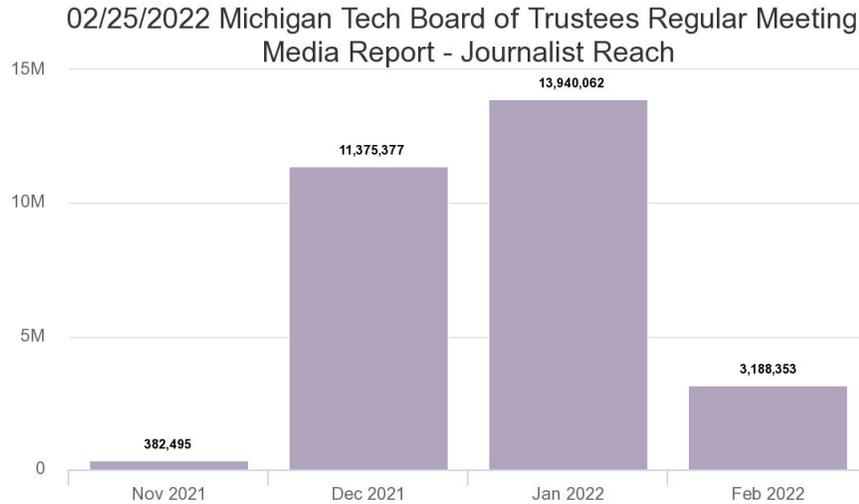
News Highlights:

Research News
Research by Kristin Brzeski (CFRES) into red wolf DNA within the Galveston Island wolf population was the subject of a New York Times feature article.

The Michigan Department of Health and Human Services announcement that Michigan Tech and three other state universities will receive $18.5 million in federal funding to help the state of Michigan expand sequencing for COVID-19 and other infectious diseases was picked up by Michigan Radio, CBS Detroit, WLNS 6 (Lansing), the Daily Mining Gazette and ABC 10.

Valoree Gagnon (CFRES/GLRC) was quoted in a Washington Post Magazine story about forever chemicals in Lake Superior and their effect on local Indigenous communities.

Sarah Green (CHEM) was quoted in a Mashable Climate 101 series installment about recent reports from NASA and NOAA documenting that 2021 was among the hottest years recorded on Earth.

Yu Cai (AC) was quoted by The Detroit News in an article on cyberattacks targeting local and county governments. Cai explained that the attackers most commonly use ransomware attacks and phishing emails, and can use hijacked systems as steppingstones to launch further attacks.

Rolf Peterson (CFRES) was interviewed by CBC News about an extraordinarily long-lived cow moose whose skull was recovered in Isle Royale National Park in August. Peterson estimated the moose was 22 years old when it died.

General News
ABC 10 wrote a story on the "Staying Healthy & Safe During COVID-19" video created by graduate students in the Department of Kinesiology and Integrative Physiology.

Darnishia Slade (PHC) was mentioned in WLUC TV6 and WJMN Local 3 news stories about Northern Michigan University's Martin Luther King Jr. Day celebration. Slade was the keynote speaker at the event.

Michigan Tech's Winter Carnival was listed among "the coolest winter ice castles and sculptures in America" by Fox News. The list was picked up by regional and local news stations.

X-E.   EMPLOYEE SAFETY STATISTICS

EMPLOYEE SAFETY STATISTICS 2021 ANNUAL REPORT

January 1 - Dec 31, 2020/2021

Michigan Technological University 1885

	Category	Years	Employee Classification							
			AFSCME	**Faculty**	**Non-Exempt**	**POA**	**Professional**	**Temporary**	**UAW**	**Total**
Number of Recordable Injuries	Injury Only w/Medical - No Lost Time	2020	6	0	0	0	1	0	1	**8**
		2021	2	0	0	0	3	0	0	**5**
	Lost Time Cases	2020	5	1	0	0	2	0	0	**8**
		2021	6	0	0	0	2	0	0	**8**
	Restricted Work Cases	2020	2	0	0	0	0	0	0	**2**
		2021	1	0	0	0	1	0	0	**2**
	Occupational Safety and Health Administration (OSHA) Recordable Injuries (Total of above)	2020	**13**	**1**	**0**	**0**	**3**	**0**	**1**	**18**
		2021	**9**	**0**	**0**	**0**	**6**	**0**	**0**	**15**
Number of Days	Injury Lost Time 3	2020	60	12	0	0	64	0	0	**136**
		2021	191	0	0	0	19	0	0	**210**
	Restricted Work Days 3	2020	273	0	0	0	0	0	0	**273**
		2021	30	0	0	0	14	0	0	**44**
Hours Worked	Total Work Hours	2020	224,917	788,284	115,767	17,679	1,152,000	49,985	180,325	**2,528,957**
		2021	237,992	766,640	96,899	17,292	1,100,493	71,143	157,580	**2,448,039**
	Percentage of Work Hours	2020	**8.9%**	**31.2%**	**4.6%**	**0.7%**	**45.6%**	**2.0%**	**7.1%**	**100.0%**
		2021	**9.7%**	**31.3%**	**4.0%**	**0.7%**	**45.0%**	**2.9%**	**6.4%**	**100.0%**
Rates	Lost Time Case Rate 1	2020	**4.4**	**0.3**	**0.0**	**0.0**	**0.3**	**0.0**	**0.0**	**0.6**
		2021	**5.0**	**0.0**	**0.0**	**0.0**	**0.4**	**0.0**	**0.0**	**0.7**
	Frequency Rate 2 (Recordable)	2020	**11.6**	**0.3**	**0.0**	**0.0**	**0.5**	**0.0**	**1.1**	**1.4**
		2021	**7.6**	**0.0**	**0.0**	**0.0**	**1.1**	**0.0**	**0.0**	**1.2**

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

1 The Lost Time Case Rate is calculated by multiplying the number of Lost Time Cases by 200,000 then dividing by the labor hours at the University.

2 The Frequency Rate is calculated by multiplying the number of recordable cases by 200,000 then dividing by the labor hours at the 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 2020 reports, for Colleges and Universities over 1,000 employees; the average LOST TIME CASE RATE of days away from work was 0.5 and the average FREQUENCY RATE was 1.2.

X-F.   DISPOSAL OF SURPLUS PROPERTY REPORT

Michigan Technological University
Surplus Property Sales
November 1, 2021 - December 31, 2021

Date	Description	Amount
11/01/21	EEG System, Mitsar 202-31	$ 1,918.00
11/01/21	SourceMeter Instrument, Keithley 2450	2,680.00
11/01/21	Wireless EMG System, Delsys Trigno	6,731.00
11/01/21	Network Analyzer, Keysight E5061B	18,173.00
11/01/21	Embroidery Machine, Janome Memory Craft 400E (1 of 2)	800.00
11/01/21	Embroidery Machine, Janome Memory Craft 400E (2 of 2)	800.00
11/01/21	Oscilloscope, PicoScope 4424	436.00
11/01/21	Mixed Domain Oscilloscope, Tektronix MDO3014	1,228.00
11/01/21	Power Analyzer, Tektronix PA1000	860.00
11/01/21	Function/Arbitrary Waveform Generator, Siglent SDG1025	98.00
11/01/21	System Electrometer, Keithley 6514	1,936.00
11/01/21	Linear Actuator Setup	300.00
11/01/21	Mixed Electronic Parts/Components	500.00
11/30/21	2005 Ford Explorer	190.00
12/14/21	Google Pixel 2 XL	26.00
12/14/21	Verizon iPhone 8 Plus - 64GB	220.00
Total		**$ 36,896.00**