

Academic Affairs Report May 17, 2024

Agenda Item #1: Academic Affairs Dashboard

 \boxtimes Information

Action

Discussion

Purpose:

The purpose of this information is to provide key statistics related to Academic Affairs.

Background:

N/A

Suggested Action/Motion:

N/A

President's Recommendation:

N/A

Academic Affairs Dashboard												
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Current Status/ Trends	Notes
Bachelor Degrees Conferred	478	397	398	423	383	399	359	314	297	Not yet available	Û	Source: Registrar
Associate Degrees Conferred	214	174	157	184	122	163	139	145	145	Not yet available	⇔	Source: Registrar
Certificates Conferred	22	20	11	2	2	11	18	17	11	Not yet available	Û	Source: Registrar
Bachelor's Degree Graduation Rate: 4 yr/6 yr Cohort:	16%/39% 2006	17%/42% 2007	18%/43% 2008	17%/40% 2009	21%/42% 2010	30%/46% 2011	27%/53% 2012	30%/48% 2013	31%/50% 2014	Not yet available	仓	Source: IPEDS Data Feedback Report - Bachelor's degree graduation rates of full-time, first-time degree/certificate seeking undergraduates within 4 yrs. & 6 yrs.
Cost of Attendance (tuition and fees)	\$10,248	\$10,517	\$11,019	\$11,427	\$11,895	\$12,255	\$12,744	\$13,200	\$13,728	Not yet available	仓	Source: IPEDS Data Feedback Report
Total Cost of Attendance (tuition, fees, books & supplies, room & board)	\$19,968	\$20,860	\$21,865	\$23,721	\$24,477	\$25,535	\$26,266	\$27,656	\$27,694	Not yet available	仓	Source: IPEDS Data Feedback Report
Average Cost of Attendance After Financial Aid	\$9,941	\$11,030	\$12,220	\$11,272	\$12,310	\$13,568	\$13,583	\$14,336	Not yet available	Not yet available	仓	Source: IPEDS Data Feedback Report
Cohort Default Rate (3-yr.)	6.1%	5.2%	6.3%	5.9%	1.3%	0.0%	not yet available	not yet available	not yet available	Not yet available	Û	Source: Dept. of Education
First Year Retention Rate	70.00%	72.00%	67.00%	77.00%	71.00%	73.00%	67.00%	73.00%	69.11%	Not yet available	Û	Source: IPEDS Data Feedback Report Student Affairs
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Study Abroad	16	27	41	17	27	1	0	0	9	Not yet available	Û	Source: Study Abroad Office
% Students Living on Campus	42%	45%	44%	44%	47%	48%	45%	47%	43%	Not yet available	Û	Source: Institutional Research/Common Data Set
Honors Degree Students Graduating	6	7	2	3	3	5	2	1	1	Not yet available	ţ	Source: Registrar
	T		1	1	1	1	1	1	1	1	1	
% Full-time Faculty with Terminal Degree	57%	61%	65%	68%	67%	59%	68%	68%	70%	71%	①	Source: Provost Office
Student to Faculty Ratio	16:1	15:1	16:1	17:1	16:1	14:1	17:1	16:1	13:1	Not yet available	Û	Source: Institutional Research/Common Data Set
# Instructional Staff (FT/PT)	108/74	109/64	99/59	97/54	93/55	98/56	91/57	93/70	87/46	84/62	Û	Source: Provost Office
	1	r	I	1	1	T	T	I	T	1	r	
Research Expenditures	\$766,524	\$716,397	\$498,824	\$428,783	\$662,407	\$669,364	\$936,301	\$1,754,985	\$2,125,602	Not yet available	仓	Source: LSSU annual financial reports
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Higher Learning Commission (HLC)	Good standing	Good standing	Reaffirmed	Good standing	Good standing	Good standing	Good standing	Good standing	Good standing	Good Standing	\Leftrightarrow	Four-year comprehensive review in AY 2020-2021. Next reaffirmation of accreditation in 2026-27.



Academic Affairs Report May 17, 2024

Agenda Item #2: Approval of Emeritus Faculty Nominations

☐ Information

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Discussion

Purpose:

The purpose of this action is to approve the recommendation to award emeritus faculty status to Dr. Gregory Zimmerman.

Background:

Consistent with University policy, the Board of Trustees may grant emeritus status to a faculty member with academic rank in recognition of demonstrable meritorious teaching, outstanding service, or published research. The designation may be assigned to:

- Associate or full professors, who have terminated their responsibilities as a result of retirement after a minimum of ten years at the University, or
- A faculty member at any rank at retirement after a minimum of twenty years of service to the University.

provided the candidate has attained the age of 55 at the time of retirement.

Recommendations for emeritus status may be initiated through self-nomination by the Emeritus Candidate, by the faculty of an academic school, or by a University administrator.

All recommendations shall include a comprehensive statement attesting to the candidate's consistent record of quality performance as demonstrated by one or more of the following:

- A substantive record of scholarly achievement commensurate with national and international standards within a specific discipline.
- A recognized record of outstanding teaching and educational contributions.
- Clear evidence of service to the University beyond normal expectations.

The Provost will convene a committee of five tenured, full professors to review all submissions and forward recommendations to the Provost.

Consistent with University policy, the committee recommended one faculty member (Dr. Gregory Zimmerman) for emeritus faculty status.

RESOLUTION from the Lake Superior State University Board of Trustees

Whereas, Dr. Gregory Zimmerman faithfully served Lake Superior State University from his initial appointment as an Assistant Professor of Biology in the fall of 1995 until his retirement in December 2023; and

Whereas, *Dr. Zimmerman taught at Lake Superior State University for 28 years, during which he made significant contributions to LSSU and the Sault Sainte Marie communities. Dr. Zimmerman was known for exceptional teaching, scholarship and service, humility, and his genuine concern for the well-being of all people throughout his time of employment; and*

Whereas, Dr. Zimmerman taught Biostatistics, Ecology, Plant Physiology, and Botany throughout his 28 years, and developed courses in Epidemiology, Protected Horticulture, and US Food Systems; and

Whereas, Dr. Zimmerman was a common statistical consultant for nearly all Senior Thesis projects within Biology, Fisheries and Wildlife Management, and Conservation Biology for much of his time at LSSU; and

Whereas, Dr. Zimmerman showed great leadership by serving as Chair of the School of Biological Sciences from 2000 to 2010, Faculty Association President for 2 years, and led the creation of the Conservation Biology and Conservation Leadership programs at LSSU as well as the Food and Ecology Concentration of the Biology Degree; and

Whereas, *Dr. Zimmerman had successful grant funding and publications focused on ecology, wetlands, sustainability, food security and local food systems, public health, teaching and learning, and recreation; and*

Whereas, Dr. Zimmerman co-wrote the title III grant that led to the establishment of what is today the Center for Engaged Teaching and Learning, and was co-founder of the Undergraduate Research Poster Symposium; and

Whereas, Dr. Zimmerman provides evidence for the gold standard of community engagement by LSSU Faculty as he was a major supporter, served as President of, and was a vendor at the Sault Ste. Marie Farmer's Market; worked with the City of Sault Sainte Marie, MI to establish the Ashmun Creek Natural Area; served on the EUP Economic Development Advisory Committee (2008-2015); served on the Binational Public Advisory Council, St Marys River Area of Concern (1998-2017), and consulted as a statistician with the Algoma Health Unit in Sault Sainte Marie, Ontario; now, therefore be it

Resolved, that the Board of Trustees of Lake Superior State University formally extends to Dr. Gregory Zimmerman its sincere appreciation for his loyalty, varied contributions, dedication to his profession, distinguished teaching, and service to this University by bestowing upon him

the rank of Professor Emeritus with all the honors, rights, and privileges appertaining thereunto; be it further

Resolved, that a copy of this resolution of recognition appear in the minutes of this meeting of the Board of Trustees, so that this sincere tribute of respect and gratitude will be included in the permanent records of this University.

Adopted by unanimous vote of the Board of Trustees and given by our hands this 17th day of May 2024.

Suggested Action/Motion:

Award emeritus faculty status to Dr. Gregory Zimmerman.

President's Recommendation:

Approval of emeritus faculty status to Dr. Gregory Zimmerman.



Academic Affairs Report May 17, 2024

Agenda Item #3: Academic Affairs Update

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☐ Action

Discussion

Purpose:

The purpose of this information is to provide an update on progress in the area of Academic Affairs.

Background:

Highlights from the Academic Affairs Update

- The Provost's Office would like to recognize and thank the University Registrar, Ms. Nancy Neve, for her 32 years of distinguished service to the University, with nearly 20 years as Registrar. Nancy will retire from LSSU on May 31st. Nancy has maintained high ethical standards for the Registrar's Office, steadfastly maintained student records, and created a student-first atmosphere in office operations. She has also developed and cross-trained her staff to ensure a smooth transition. Upon Nancy's retirement, Ms. Katie Kelsey, the Coordinator of Technical Operations and International Student Compliance will step into the Registrar role.
- 2. The Native American Center Committee, with the help of the Issues and Intellect Fund, welcomed Dr. Veronica Pasfield to campus to give her talk titled, "Smashed Bugs, Locks Looters & Indian Boarding Schools: How Indigenized histories are better creation stories for the past and present." Dr. Pasfield used historical events from Fort Brady, Bawating, and the Eastern Upper Peninsula as a space to frame a more accurate, interesting, and Indigenized creation story for federal Indian boarding. She is a National Endowment for the Humanities fellow, boarding school scholar and citizen of the Bay Mills Indian Community.
- 3. Faculty, staff, students, alumni, and advisory board members have increased efforts this spring to recruit students. Some events include, but are not limited to, FIRST Robotics events on campus and across the state, the Pi Day Competition, industry-sponsored events, hosting lab tours and activities, presentations at K-12 institutions, and various events at CFRE.
- 4. On April 19, students in nursing, emergency services, fire science, and criminal justice came together to showcase their knowledge and teamwork in the 2024 Spring Interprofessional Exercise. The event provided a unique opportunity for students to apply their learning in a hands-on, realistic environment.

5. On April 19, LSSU held its annual Undergraduate Research Symposium in the Arbuckle Student Activities Center. In this campus-wide event, 131 seniors presented 100 posters about their projects and research.

Suggested Action/Motion:

None

President's Recommendation:

N/A

Special Initiatives, Senior Research Symposium, Colleges, Library and Academic Services, Accreditation and Assessment, and the Office of Sponsored Programs

Update on Special Initiatives

Master's in Business Administration

- 1. We have admitted nine students to the MBA program at this time, with approximately ten more expressing strong interest. We are strategizing how to convert these prospects effectively, especially with notable interest coming from Canada.
- 2. The process of onboarding the admitted students into our system is underway, driven by the enthusiastic collaboration of the Admissions, Registrar's and Business Offices. Together, they are addressing challenges and paving the way for a seamless transition into the MBA program.
- 3. We are devising a communication plan for the summer, including social media ads to maximize outreach. Additionally, the Lukenda School of Business recently hosted informative after-hours events to engage local and regional businesses and organizations, enlightening them about the MBA program's design and objectives. This initiative aims to garner more support and awareness from the corporate sector.
- 4. A special shout-out goes to our marketing team and the alumni association for their efforts in spreading the word and reconnecting with former Lakers. Their communications have been well received and have contributed significantly to our enrollment.
- 5. Currently, our focus is on developing an engaging online orientation for incoming students and refining the course design. We are prioritizing personal connections with students through concise, informative videos. We are also organizing a live event through social media for late May.
- 6. Furthermore, we are actively pursuing new student sign-ups by nurturing existing interests and raising overall program awareness.

Prison Education Program

- 1. A Higher Learning Commission (HLC) Change Panel reviewed and recommended approval for LSSU to offer the Associate in Small Business Administration at Chippewa Correctional Facility. This recommendation was sent to their Institutional Actions Council (IAC) for final approval at their June 3 meeting.
- 2. Progress is moving forward towards the implementation of offering the Associate's degree in Small Business Administration at the Chippewa Correctional Facility.
- 3. Upon HLC approval, the next step is to apply for approval of Pell funding to the US Department of Education. This decision is expected in mid-August.
- 4. The Center for Engaged Teaching and Learning (CETAL) hosted a Lunch N Learn with Trustee Pat Caruso (former MDOC administrator).
- 5. CETAL also hosted a Lunch N Learn with Paul Garceau, a former graduate of a prison education program.
- 6. The Prison Education Committee created and disseminated a campus website for internal use to communicate progress with the entire campus community.

Senior Symposium

On April 19, LSSU held its annual Undergraduate Research Symposium in the Arbuckle Student Activities Center. In this campus-wide event, 131 seniors presented 100 posters about their projects and research.

Participant	Project Title	Department
1. Briney, Sydney	Analysis of Bacteria within Educational Institutions of Sault Sainte Marie, MI	Biology
2. Drockton, Sarah	<i>Effectiveness of Horseradish Peroxidase in the Removal of Hormones from Wastewater Effluent</i>	Biology
3. Lawrence, Margaret	Growth Rate of Eastern White Cedar (Thujaoccidentalis) in Aquaponics vs. Soil	Biology
4. LeVasseur, Zabrina	Cortisol Levels Post Exercise in Athletes vs. Non-Athletes	Biology
5. Mathieu, Marie	Melatonin and Caloric Restriction: Their Effect on Reducing Oxidative Stress	Biology
6. McCallum, Kadin	Capture rate in carnivorous plants of Michigan	Biology
7. McKechnie, Raven	Determining threshold level and sensitivity of Environmental DNA testing for Didymosphenia geminata, an invasive alga"	Biology
8. Quiane, Alexa	Exploring the Use of First Instar Crude Maggot Extract as an Alternative to Live Maggot Therapy for Treatment Against S. aureus & E. faecalis Infections	Biology
9. Sexton, Kyah	Is training non-releasable birds better for their wellbeing?	Biology
10. Smith, Zachary	<i>Systematic Review of the Prevalence and Fetal Fraction of Trisomy 21 within Risk Populations</i>	Biology
11. Webster, Rachel	Best Seat in the House: What is the Snowy Owls Favorite Perch?	Biology
12. Wilder, Jaden	The Impact of Sports Drinks on Female Basketball Players' Hydration Levels	Biology
13. Acker, Morgan	Determining COVID-19 Trends in the United States and Canada	Chemistry
14. Beaudoin, Hayley L.	Applications of Laser Direct Infrared (LDIR) Spectroscopy in Mineralogy: A Comparative Study to Conventional Methods	Chemistry
15. Berto, Martyna A.	Chiral Analysis of Cannabinoids Using High-Pressure Liquid Chromatography	Chemistry
16. Borst, Nicole	Antifungal Abilities of Plant Extracts Against Fusarium oxysporum and Fusarium solani	Chemistry

Participant	Project Title	Department
17. Bowman, Brittany	Removal of Ibuprofen Using Metal Organic Frameworks and Activated Charcoal	Chemistry
18. Cole, Ben	Proteomic Analysis of Fingermark Evidence	Chemistry
19. Fitzpatrick, Isaac	Removal of volatile non-cannabinoid compounds from cannabis distillate	Chemistry
20. Gadwood, Gabriel	Assessment of PFAS Bioaccumulation and Tissue Localization in Lake Superior Rainbow Smelt (Osmerus mordax)	Chemistry
21. Herron, Andrew	Micro X-Ray Fluorescence Applied for Forensic Trace Evidence	Chemistry
22. Hubert, Sydney	Characterization of Inorganic Gunshot Residue (IGSR) in Fetal Pig Skin and Tissue During Decomposition in Cold Climate Conditions	Chemistry
23. Jirsa, Jake	Quantification of Aspergillus sp. in Cannabis	Chemistry
24. Kelley, Kyra	Effects of Firework Displays on Air Quality and Metal Deposition Fluxes	Chemistry
25. Kingsley, Selena	Investigations of Vitamin D Metabolites using Different Ion Mobility Mass Spectrometry (IM-MS) Methods	Chemistry
26. Lensch, Skylar	Effect of Nutrient Dynamics on Algal Blooms in Munuscong Bay	Chemistry
27. Lesnock, Aidan O.	Investigation of Potency Inflation Due to Standard Degradation	Chemistry
28. Maas, Caitlyn	Factors influencing Beach Water Quality in Chippewa County Michigan Inland Lakes	Chemistry
29. Marshall, Abigail	Hypervalent Iodine(III)-Mediated sp3 C-C Bond Functionalization for the Formation of New C-C and C-H Bonds in Dihydroquinazolines	Chemistry
30. Ross, Martin	Assessment of PFAS Bioaccumulation and Tissue Localization in Lake Superior Rainbow Smelt (Osmerus mordax)	Chemistry
31. Stockwell, Mackenzie	Hydrazine Coupling via Plasma-Microdroplet Fusion with Direct Drug Analysis via Paper Spray Mass Spectrometry	Chemistry
32. Strommer, Samuel	Characterization of Bullet Wipe on Different Fabric Materials	Chemistry

Participant	Project Title	Department
33. Thomas, Molly	Prevalence of ticks in the Northern Lower Peninsula of Michigan & Presence of Borrelia burgdorferi	Chemistry
34. Baumann, Ivan Donmez, Elgin Johnson, Loren Spearman, Kevin Stepp, Zachary	CAMEL: Computer Analysis/Modeling Experimental Lab	Computer Science
35. Baumann, Ivan Donmez, Elgin Johnson, Loren Spearman, Kevin Stepp, Zachary	Library Patron Counter	Computer Science
36. Schackmann, Danielle	Unveiling the Female Experience Through Creative Nonfiction	Creative Writing
37. Syers, Flynn	Exploring Trauma and Effective Support Systems Through Fiction	Creative Writing
38. Ward, Bailey	Using Worldbuilding as a Lens	Creative Writing
39. Ward, Brittney	5 AM: The Exploration of Self Through Poetry	Creative Writing
40. Benson, Nolan Kleiman, Charles O'Toole, Molly Shelton, Zachary Tapert, Beck	KRO - Kuka Robotics Optimizer	Engineering
41. Hamilton, Andrew Keup, Ryan Matuzak, Josiah Ranta, Kaaleb Vacek, Scott	PTA - PixelTech Automation	Engineering
42. Demers, Nathan Dudeck, Leo Misiak, Jeremy Pucci, Dom Stark, Carter	APTAS - Automated Platform for Toasting and Slicing	Engineering
43. Cook, Damian Izzard, Jack Reiniche, Ryan Sweet, Ian Traver, Riley	SCRAPE - Shear Compression Reading and Predicting	Engineering

Participant	Project Title	Department
44. Curlett, Nikolas Goldenbogen, Michael Houck, Ryan Jannetta, Chase Pajot, Collin	AMORE - Autonomous Maritime Operations	Engineering and Robotics Engineering
45. Clifton, Stephen Fraile, Julia Hulse, Andrew Postma, Derek Stone, Joseph	SSS -Superior Slapshot Systems	Engineering
46. Hagelthorn, Emily Heiny, Andrew Kelly, Morgan Mangone, Dustin Nobani, Omar	SOD - Systems for Object Detection	Engineering
47. Obringer, Willa	Unraveling the Precambrian Tectonic Evolution of the Black Hills: U-Pb Dating, Structural, SEM and Micro- XRF constraints	Geology
48. Rechtzygiel, Nyla	Western Australia's Ancient Puzzle: Exploring 3.2 billion year old tectonic processes in the Eastern Pilbara Region	Geology
49. Henderson, Ahna	Lifestyle Behaviors Effects on ADHD Symptoms in EUP Residents	Kinesiology
50. Owens, Bailey	Nutritional Needs and Practices of Paramedics: Kinesiology A Meta-Analysis	Kinesiology
51. Sanford, Jordan	Environmental and Nutritional Carcinogens in the EUP: A Meta-Analysis	Kinesiology
52. Spearman, Kevin	A Stochastic Approach to Heat Diffusion	Mathematics
53. Betke, Dominic	Comparing Age Estimated from Different Hard Parts of Alewife (Alosa pseudoharengus)	Natural Resources
54. Cherry, Chevelle	Seed Deposition by White-Tail Deer (Odocoileus virginianus) in the Eastern UP	Natural Resources
55. Christensen, Jared	Effects of Temperature on Germination and growth of European Frog Bit (Hydrocharis morsus-ranae) Turinos	Natural Resources
56. Dunlap, Halee	Heavy Metal Analysis of Waterfowl in the EUP	Natural Resources

Participant	Project Title	Department
57. Gould, Maddison	Small Mammal Trapping to Determine Snowy Owl Diets	Natural Resources
58. Kassuba, Zachary	Restoration of Fire to Litter and Duff Layers in a Pine- Oak Forest Stand	Natural Resources
59. Kirchner, Henry	Changes in Aquatic Macroinvertebrate Assemblages Before and After the Hodenpyle Dam	Natural Resources
60. LaCross, Lillian	Establishing Sense of Place in Local Communities Using Non-Traditional Methods	Natural Resources
61. Landis, Robert	Comparison of Origin and Population Characteristics of Walleye in Reaches of the St. Marys River	Natural Resources
62. Letarte, Bobby	Avian Use of the Lime Island Coal Dock	Natural Resources
63. Olk, Simon	Evaluating the Importance of Environmental Factors on Amphibian Abundance in Southeast Michigan Vernal Pools	Natural Resources
64. Robertson, Clayton	Use of St. Marys River Coastal Wetlands by Black Bass	Natural Resources
65. Russel, Megan	Effects of Enrichment on the Behaviors of Captive Rin-Tailed Lemurs (Lemur catta)	Natural Resources
66. Sawle, Matthew	Development of a Spatially Explicit Predictive Model of Freshwater Mussel Distribution in Michigan Resources	Natural Resources
67. Smeltzer, Lindsay	Temporal variation in deer spotlighting in Chippewa County	Natural Resources
68. Smith, Dakota	Crustacean Zooplankton Exhibit Higher Diel Density and Taxa Richness in Murky Versus Clear Lakes in Southern Michigan	Natural Resources
69. Twork, Amiya	North Country Trail Re-Route Project	Natural Resources
70. VanKampen, Alexandra	Density of Invasive Dressenid Mussels in the Upper Great Lakes in Relation to Chlorophyll a, Zooplankton Density, and larval Coregonine Abundance	Natural Resources
71. Wierda, Anna	Characteristics of Participants' Camping Habits Pre and Post Covid-19	Natural Resources

Participant	Project Title	Department
72. Borowicz, Breanna	Knowledge is Power: Children's Healthy Lifestyle	Nursing
73. Brandow, Ashley	Education on Agriculture: Supporting American Rural Farmers' Mental and Emotional Health	Nursing
74. Coneset, Hannah	Safe Sleep in Infants: What Could Happen with an Unsafe Environment?	Nursing
75. Courneya, Emily	<i>Methods to Reduce Development of Opioid Use Disorder in Post-Surgical Patients</i>	Nursing
76. Cross-Smith, Toni	Harmonizing Healing: The Impact of Music Therapy Education on Mood, Health, and Chronic Pain	Nursing
77. Dutz, Hannah	Elderly Safe Sex Practices: Changing the Focus	Nursing
78. Dziobak, Brooke	Mental Health in High School: How Sports Can Help	Nursing
79. Gough, Cassidy	Teen Vaping: Short- and Long-Term Effects	Nursing
80. Henderson, Ahna	Does Attention-Deficit/Hyperactivity Disorder (ADHD) Belong in the Classroom?	Nursing
81. Krzycki, Grace	Hemochromatosis: Will Providing Healthcare Providers Education Ensure Better Patient Outcomes?	Nursing
82. Lovins, Katelyn	The Link Between Artificial Food Dye and Attention Deficit Hyperactivity Disorder in School-aged Children	Nursing
83. Morris, Maggie	Living with Infertility: Educating Couples to Navigate Through the Relationship	Nursing
84. Paquin, Greg	Night and Day: The Impacts on Limiting Screen Usage on Sleep Quality and Health Outcomes in America's Youth	Nursing
85. Saints, Carlos	Shining a Light on Electrolytes	Nursing
86. Steinmetz, Veronica	Neonatal Abstinence Syndrome: Reduction of Opioid and Substance Use in Pregnancy for Better Outcomes	Nursing
87. Stevens, Olivia	Stress in Nurses: Can Teaching Relaxation Techniques Decrease Stress Levels?	Nursing
88. Throop, Lauren	Where There's a Will, There's a Wound.	Nursing

Participant	Project Title	Department
89. Turner, Jessie	A Silent Battle: Stigma Surrounding Mental Health	Nursing
90. Zabik, Matthew	Holistic Care and Family-Centered Care to Help Improve Care Outcomes	Nursing
91. Donmyer, Emma	Race or Nation? Tribal Views on the Indian Child Welfare Act	Political Science
92. Goetz, Jeremy	Recruitment Boom: Enlisted US Military Recruitment, Enlistment, and Re-enlistment During War on Terror	Political Science
93. Meindertsma, Gabriel	The Doctrine Is In: Protestant Roots of the Social Gospel and Evangelical Movements	Political Science
94. Paris, Brayden	Policy Fusion: Policy Analysis of Fission and Fusion Reactors	Political Science
95. Bowes, Anne K.	Energy Drink Use in College Students: Impacts on Sleep Quality, Academic Performance, and Mental Health	Psychology
96. David, Emma H.	Prevalence of Comorbid GAD, MDD, and SUD Symptoms Alongside Those of ADHD in Adults	Psychology
97. Ennes, Tommissa J.	Difference in Educational Outcomes of College Students in Non-Gender Normative Majors	Psychology
98. Gillis, Rhiannon	Stress and Substance Use: Relationships with Collegiate Standing	Psychology
99. Lavey, Duncan	Ketchup and Mustard: Color's Effect on Us	Psychology
100. Scott, Jacquelyn	Academic Achievement in the Wake of COVID-19: Impact on High School and First-Year College Students in Michigan	Psychology

College of Business, Engineering, Computer Science and Mathematics

Outreach and Recruitment

1. Planned and organized by the School of Engineering and Technology, LSSU hosted a FIRST Robotics competition March 14-16. Forty-two high school teams, made up approximately 650 high school students from across Michigan, attended the successful event. Participants and their families had the opportunity to learn about LSSU programs through an academic showcase and by touring our robotics facilities.



LSSU FIRST Robotics District Event in Cooper Gymnasium

2. The School of Computer Science and Mathematics hosted a Pi Day Mathematics Competition for regional middle school and high school students. There were 10 teachers and 112 students in attendance.



Pi Day Competition 2024

- 3. Various School of Engineering faculty, staff, and Industrial Advisory Board members attended several FIRST Robotics competitions across Michigan during March and April to recruit students.
- 4. The School of Engineering and Technology held a prospective student and alumni gathering at Mission Design and Automation in Holland, MI, with 24 in attendance. A special thanks to engineering alum Scot Lindemann, former Chair of the LSSU Board of Trustees and CEO of Mission Design and Automation, for hosting this event.

Student Accomplishments and Activities

- 1. Andrew Soma was accepted into the Directed Research for Undergraduates in Mathematics and Statistics (DRUMS) REU program at North Carolina State University for this summer.
- 2. Dr. Joni Lindsey and senior math student Aaron Nachazel attended the Alpha Chi National Convention in Birmingham, Alabama. Alpha Chi is an interdisciplinary national honor society. Aaron presented his research, "Prioritization and Selfefficacy in Undergraduate Students taking Calculus for Business and Life Sciences", for which he received an award for "Best Presentation in Education-Research and Scholarship."
- 3. A group of three engineering students from the Superior Slapshot Systems senior project team presented a poster at the Regional ASEE Conference at Western Michigan University. Dr. Paul Weber and Dr. Joe Moening attended the conference as well.
- 4. Six Lukenda School of Business students traveled to New York City to attend Quinnipiac University's Global Asset Management Education (GAME) Forum, which is the largest student-run financial conference in the world.
- 5. Students in Professor Valerie Philips' International Marketing course worked with a young, female entrepreneur in Honduras as consultants this semester through Global Brigades Kambia Project.
- 6. Five Lukenda School of Business accounting students participated in the IRS-sponsored Volunteer Income Tax Assistance program and completed tax returns for over fifty community members this semester.
- 7. An LSSU student programming team made up of Ivan Baumann, Zach Stepp, and Kevin Spearman, from the School of Computer Science and Mathematics took first place at the annual Northern Michigan University Programming Contest. LSSU won third place overall at the event.



Dr. Joni Lindsey, Associate Professor of Mathematics and senior, Aaron Nachazel



Ivan Baumann, Zach Stepp, and Kevin Spearman with their first place award.

8. Emily Anderson, Liberty Wagner, and Maddisen Hoornstra represented the Lukenda School of Business very well at the Northern Ontario Business Case Competition hosted by Algoma University.

- 9. Lyle Mudge, a 1977 graduate, returned to campus and gave a presentation to senior engineering students on career and financial planning.
- 10. Two staff members from Michigan's Office of the Auditor General came to LSSU's campus to present career and internship opportunities to accounting students.

Faculty and Staff Conferences, Presentations, and Publications

- 1. Dr. Jennifer Gorman contributed to the development of the problem for the MathWorks Math Modeling Challenge 2024 as a member of the M3 Challenge Problem Development Committee.
- 2. Dr. Georgi Kalchev presented a paper titled "Fatal Crashes and Marijuana Legalization" at the Eastern Economic Association meeting in Boston in March 2024. Dr. Kalchev also served as chair of the session Microeconomics: Success in College and was a discussant of a paper.
- 3. Professor Koral Fritz delivered a talk on cannabis law changes at Michigan State University in March. She also presented at the U.P. Health Department conference on cannabis community care in February. Professor Fritz will serve as a panelist at the Fourth Annual Cannabis Curriculum Convening.
- 4. Professor Jim Devaprasad, LSSU's Director of Robotics, delivered a presentation at the National Institute of Standards and Technology in Gaithersburg, Maryland in March. He discussed the rapidly growing field of automation and the gap between industry demand and academic training.

In Memoriam

1. Two former faculty members with Professor Emeritus standing passed away: Professor David MacDonald (Electrical Engineering) & Professor Randy Suggitt (Mathematics).

Capstone Projects and Research

All students in the College of Business, Engineering, Computer Science and Mathematics are required to complete a capstone project before graduation. Below is a description of these projects for each school as well as abstracts.

Lukenda School of Business

All business bachelor degree students individually complete and present a comprehensive business plan in BUSN466 Business Policy under the instruction of Dr. Ralf Wilhelms. During the 2023/2024 academic year, 44 students from the main and regional center campuses created business plans in industries related to their unique interests and expertise.

School of Computer Science and Mathematics

Student: Aaron Nachazel (Mathematics – Secondary Teaching)

Research Topic: "Investigating Self-Efficacy and Prioritization in Calculus for Business and Life Sciences"

Project Overview: Aaron completed and presented a research paper that will be submitted to an undergraduate journal.

Student: Jacob Satchell (Mathematics – Secondary Teaching)

Research Topic: "Classroom Instruction through Proof and Reasoning" Project Overview: Jacob created and presented a series of lesson plans and activities based on his research and reflections of his teaching.

Project: Library Patron Counter

Developed By: Ivan Baumann, Engin Dönmez, Loren Johnson, Kevin Spearman, Zach Stepp **Overview:** The Library Patron Counter is a system to help the LSSU library professional staff keep track of the number of patrons in the library at any given time. This system is composed of a server, six sensor pairs, and two Raspberry Pi's. The professional staff having an accurate count of the patrons will allow them to plan events accordingly, to leading an overall better experience within the library.

Project: Computer Analysis Modeling and Experimentation Lab (CAMEL)

Developed By: Ivan Baumann, Engin Dönmez, Loren Johnson, Kevin Spearman, Zach Stepp **Overview:** CAMEL was designed to be a replacement for the prior existing Beowulf Cluster. It consists of a Raspberry Pi cluster with 16 nodes, and two Nvidia Jetson Developer kits. This will allow students and staff in the department to explore and utilize the capabilities of both parallel computing and CUDA programming.

School of Engineering and Technology

Team Name: KRO

Team Members: Zachary Shelton (RE), Molly O'Toole (ME), Nolan Benson (MfgET, EET, & Mechatronics), Charles Kleiman (Mechatronics), Beck Tapert (RE & CE) **Company:** LSSU

Project Description: Team KRO, KUKA Robotics Optimizer, incorporated new features in the 4robot KUKA line at LSSU that was completed by team KRI last year. The new features involve the implementation of safety devices, application of advanced KUKA robotics software, utilization of modern end-of-arm robot tooling, and updated vision technology. An exciting final demonstration will highlight the line's capabilities. The outcome of this project will be used in four LSSU robotics courses and for showcasing LSSU Robotics education.

Team Name: SCRAPE

Team Members: Damian Cook (CE), Jack Izzard (ME), Ryan Reiniche (ME), Bethany Roberts (MfgET), Ian Sweet (CE), Riley Traver (MfgET)

Company: Smithers MSE (Brimley, MI)

Project Description: Smithers Winter Test Center performs winter tire testing on a compacted snow surface to measure the traction coefficients for various brands and models of winter tires. In order to consistently create a testing surface within the criteria defined by various ASTM standards, they carry out shear and compression tests on these surfaces, and these tests are often inaccurate and hard to repeat effectively. The objective of this project was to automate these tests to reduce error and provide quality data to better characterize the snow surfaces.

Team Name: SOD

Team Members: Morgan Kelly (ME), Emily Hagelthorn (ME), Andrew Heiny (ME), Omar Nobani (EE), Dustin Mangone (CE)

Company: LSSU

Project Description: The project goal is to be able to determine, from a distance, the location and depth of hazardous objects buried underground. This will be done by using surface wave reflections. It is anticipated that spectral analysis of these surface wave reflections may be used to infer depth, as physical reasoning suggests wavelengths on the order of the depth would reflect most strongly. Other aspects of the signal are used to determine distance and direction of the object.

Team Name: PTA

Team Members: Ryan Keup (EE), Andrew Hamilton (ME & RE), Josiah Matuzak (RE), Scott Vacek (MfgET), Kaaleb Ranta (RE)

Company: ASO Safety Solutions (Landing, NJ)

Project Description: Our industrial customer, ASO Safety Solutions, tasked our team to modify a robotic cell with the purpose of picking and placing double-sided stickers onto a metal sheet that will be used in the production of safety-rated pressure mats. The modifications include improving the design, testing, and debugging of the current system in order to create a reliable robotic cell that will enhance the current process for ASO Safety Solutions.

Team Name: APTAS

Team Members: Leo Dudeck (ME), Carter Stark (EE), Nathan Demers (MfgET), Dominic Pucci (CE), Jeremy Misiak (ME)

Company: JR Automation (Auburn Hills, MI)

Project Description: Team APTAS was tasked with designing and building a compact, automatic bagel slicer and toaster for industrial kitchens. The user-friendly device will feature an interface for custom toasting and be constructed from food-grade, easy-to-clean materials. The device will be safe to operate and fit on a typical kitchen countertop. Both mechanical and electrical specifications will align with industrial standards.

Team Name: AMORE

Team Members: Michael Goldenbogen (CE & RE), Chase Jannetta (ME & RE), Collin Pajot (Mechatronics), Nikolas Curlett (EE), Ryan Houck (RE)

Company: LSSU

Project Description: Team Autonomous Maritime Operations & Robotics Engineering (AMORE) developed a mobile water quality monitoring system, utilizing an Unmanned Surface Vehicle (USV). Team AMORE integrated a new propulsion system, water quality sensors and mechatronics on the

USV. At the completion of the project, the USV will be capable of sampling water quality data in different bodies of water at specific GPS coordinates, through both remote control and autonomous navigation.

Team Name: SSS

Team Members: Steve Clifton (CE & RE), Júlia Fraile Ratón (MfgET), Drew Hulse (ME & RE), Derek Postma (RE), Joe Stone (EE)

Company: Soo Locks Children's Museum & LSSU

Project Description: Developed multiple ice hockey shooting systems to track the power and accuracy of each shot. These systems will be used as a game for children and prospective students, as well as used for training the collegiate ice hockey teams on campus. The systems primarily use Raspberry Pi's as well as a vision system to obtain the data from each shot.

College of Arts and Letters

Graduate and Professional School Acceptance

- 1. Marie Anel (Biochemistry) was accepted into the Lake Erie School of Pharmacy.
- 2. Haley Carlson (Forensic Chemistry) was accepted into the Chemistry Doctoral Program at the University of Pittsburgh.
- 3. Sadie Drockton (Biology) was accepted into the College of Human Medicine at Michigan State University through the MSU-LSSU Early Assurance Agreement.
- 4. Emilee McDaniel (Biology) was accepted into the Michigan State University Veterinary Medicine Program.
- 5. Willa Obringer (Geology) was accepted into New Mexico Tech to pursue a graduate degree in Geology.
- 6. Rebecca (Ranta) Pittsley (Biology Fall 2021) was accepted into the College of Human Medicine at Michigan State University.
- 7. Alexa Quaine (General Studies) was accepted into the Masters of Public Health Program at Colorado State University.
- 8. Nyla Rechtzygiel (Geology) was accepted into the University of Wyoming to pursue a graduate degree in Economic Geology.
- 9. Laurie Smith (Geology) was accepted into the University of Alaska to pursue a graduate degree in Volcanology.
- 10. Mackenzie Stockwell (Cannabis Chemistry) was accepted into the Analytical Chemistry Doctoral Program at Purdue University.
- 11. Laura Yukich (Biology) was accepted into the College of Human Medicine at Michigan State University through the MSU-LSSU Early Assurance Agreement.

Recruitment

- 1. The Chemistry Department hosted the Sault High School college chemistry class for a number of experiments on March 1st. Thirty-seven students participated in the activities, which also included lunch and a campus tour.
- 2. On April 17, Drs. Derek David Wright (Environmental Science) and Mark Zierden (Chemistry) hosted thirty-four students from Pickford High School on tours of the Crawford Science Labs.
- 3. Faculty in the College of Arts and Sciences have given 12 tours since February 16.

Arts Center

- 1. The Arts Center has hosted forty-five events this academic year with over 2,000 attendees throughout the spring semester alone. Events have included Celtic Christmas, The Complete Works of Shakespeare, Woodland Sky, and the Interprofessional Simulation Event, to name a few. Recurring movie nights have been added for the upcoming fall semester and plans are underway to celebrate 20 years of the Arts Center with an exciting and diverse lineup of performances and events.
- 2. From January 31, to February 2 the Arts Center hosted Woodland Sky. Their visit consisted of a number of workshops and performances to 945 attendees. The Woodland Sky Native American Dance Company was established in 2013 and comprises Native American Ojibwe, Lakota, Potawatomi, Menominee, and Apache dancers. The group represents men's and women's Native American styles of dress including traditional, fancy, jingle, grass, and hoop. Woodland Sky's focus is the telling of historic tales and stories using traditional native songs and dances.
- 3. On February 22, the Arts Center hosted Tomas and the Library Lady. The two performances attracted over 400 local elementary school students. The play was based on the book by Pat Mora, which tells the story of a child developing a love for books and learning, culminating in Tomas becoming a chancellor at the University of California, Riverside.
- 4. Professor Adam St. John (Theater) directed *The Laramie Project* with presentations March 19 through the 22. The event included a community talkback with Sault Pride (Canada), Michigan Soo Pride, and a hate crime lecture with Dr. Aaron Westrick (Criminal Justice). Two students, Nathan Piche (English Language Literature, Secondary Teaching) and Chandler Davis (Pre-Nursing), were nominated for the Irene Ryan Acting Scholarship through the Kennedy Center American College Theater Festival.
- 5. World renowned pianist Andreas Klein performed *Bach, Beethoven, & Beyond* on the Arts Center Steinway piano April 4. The visit was made possible through support by the Al Beamish Music Performance Endowment.

Outreach and Service

- 1. Professor Adam St. John (Theater) attended the regional Kennedy Center American College Theater Festival (KCACTF) at the University of Michigan, Flint from April 9 to the 13 where he adjudicated the first round of the Irene Ryan Acting Scholarship. Additionally, he adjudicated Saginaw Valley State's production *Columbinus* on April 15 as a KCACTF respondent for this region.
- 2. Professor Adam St. John (Theater) became a member of the Actor's Equity, Association of Theatre in Higher Education, and the Association of Theatre Movement Educators.





Conferences and Presentations

 Maggie Lawrence (Biology-Food and Ecology), Anissa Overly (Forensic Chemistry), and Dr. Barbara Evans (Biology) attended the Aquaculture America Conference in San Antonio, Texas from February 18th through the 21st. Dr. Evans gave a presentation titled Avoiding Metal Toxicity in Closed Loop Aquaponics: I Didn't Realize, It Was Always Aquaculture. Ms. Lawrence and Julia Grenn (Biology 2020) organized and ran the Student Subunit Spotlight Session where they also presented on LSSU's World Aquaculture Society Student Subunit.





Aquaculture students visit the Red Cliff Tribal Fish Hatchery while attending the Wisconsin-Minnesota Aquaculture Conference

Perspective by Breaking Down the Bard's Most Famous Soliloquy at the LSSU Library Scholar Series on February 21.

- 3. Dr. Steven Johnson hosted Brian Hanna, Executive Director of the Michigan Cannabis Regulatory Agency, for a talk titled *Cannabis Regulations in Michigan: Where We Are Now and Where We Are Going* on March 21.
- 4. On March 22 and 23 five students attended the Wisconsin-Minnesota Aquaculture Conference in Red Cliff, Wisconsin. Andrew Pothoven (Biology) and Maggie Lawrence (Biology-Food and Ecology) presented posters titled *Determining the Effects of Sediments from Different Water Bodies in Michigan on Zebra Fish (Danio rerio)* and *Growth Rate of Easter White Cedar (Thuja occidentalis) in Aquaponics Versus Soil.*
- 5. Professor Julie Barbour (English) and Dr. Mary Biddinger (University of Akron) presented their recently published book, *A Mollusk Without a Shell: Essays on Self-Care for Writers* during the LSSU Library Poetry Series on April 4.
- 6. Jeremy Goetz (Political Science) presented a poster titled *Recruitment Boom: US Military Recruitment, Enlistment, and Re-Enlistment During the War on Terror* at the Midwest Political Science Conference in Chicago on April 5.
- 7. Jake Jirsa (Cannabis Chemistry) and Dr. Martha Hutchens (Biology) presented a poster *Quantification of Aspergillus sp. in Cannabis* at the Michigan branch of the American Society for Microbiology in Ann Arbor on April 6.



8. Dr. Martha Hutchens (Biology) hosted Dr. Valance Washington from Oakland University on April 12. He presented a talk titled *The Search for Alternative Strategies of Hemostatic Balance* to a number of undergraduate students.

- 9. Dr. Steven Johnson gave a presentation detailing his journey from a graduate student at Michigan Technological University to Dean of the College of Arts and Sciences at LSSU as the Distinguished Alumni Guest Speaker at the annual Chemistry Awards Ceremony at MTU on April 19.
- 10. Sixteen students traveled to Northern Michigan University on April 23 to attend the Great Lakes Cannabis Collaboration Conference. Five students participated in the poster session. Jon Hofmeister (Cannabis Chemistry) and Lanny Stout (Cannabis Chemistry) presented a poster titled *Growth medium affects element distribution in Cannabis sativa CBD hemp strains*. Aidan Lesnock (Cannabis Chemistry) presented *Investigation of Potency Inflation due to Initial Standard Degradation*, Martyna Berto (Chemistry) *Chiral Analysis of Cannabinoids Using High-Pressure Liquid Chromatography*, and Jake Jirsa (Cannabis Chemistry) presented *Quantification of Aspergillus sp. in Cannabis*.
- 11. Allison Cook (Cannabis Business), Professor Ben Southwell (Chemistry), Professor Koral Fritz (Cannabis Business), and Dr. Steven Johnson participated in multiple panels during the 4th National Cannabis Curriculum Convening hosted by Stockton University on April 25 and 26.

Publications and Creative Works

- 1. Dr. Alexei Iretski (Chemistry) published a paper titled "<u>Mechanism of autoxidation of the</u> <u>chromium(II) porphyrins. In situ infrared spectroscopic detection of the peroxo- intermediate</u>" in the journal Inorganica Chimica Acta.
- 2. Dr. Michelle Jarvie (SEWER grant), Dr. Thu Nguyen (Chemistry), Professor Ben Southwell (Chemistry), and Dr. Derek David Wright (Environmental Science) published an article titled "Leveraging wastewater surveillance to actively monitor Covid-19 community dynamics in rural areas with reduced reliance on clinical testing" in the journal Applied Research. The SEWER team has been award over \$4.25 MM dollars in funding for the project to date.
- 3. Dr. Derek David Wright (Environmental Science), Dr. Michelle Jarvie (SEWER Grant), Professor Ben Southwell (Chemistry), and student Carmen Kincaid (Environmental Science) published a paper titled "<u>Elemental Composition of Commercially Available Cannabis Rolling Papers</u>" in the journal ACS Omega. Additionally, the article was chosen as part of the American Chemical Society

(ACS) Editors' Choice Program and will be featured in Chemical and Engineering News, the ACS's general audience magazine.

Miscellaneous

1. An open house to highlight the recently installed Bruker M4 Tornado Plus micro x-ray fluorescence spectrometer (μ XRF), as well as the JEOL scanning electron microscope (SEM), had 150 attendees on February 2. The instruments are part of the new Micro Analysis and Spectroscopic Characterization (MASC) Lab in Crawford Hall. The micro XRF enhances our capability to image the location of elements and heavy metals in biological tissues, engineered materials,



Head of a deer tick magnified 120 times on the JEOL IT-200 scanning electron microscope in the Micro

forensic specimens, and geologic materials. The SEM allows high resolution imaging with magnifications up to 300,000x. The instruments were acquired by two National Science Foundation Major Research Instrumentation (NSF-MRI) grant awards totaling \$574,968.

- 2. Dr. Paul Kelso (Geology) took students enrolled in Tectonic Systems to the Appalachian Mountains in March 2024 to study the formation of the mountains, plate tectonics, and associated geologic processes recorded in the rocks.
- 3. On April 1, faculty and Environmental Science students from Algoma University and Lake Superior State University continued their research partnership, focusing on investigating water quality (heavy metals & petroleum compounds) in the St. Marys River and studying the atmospheric deposition of trace elements and particulate matter in the region. Algoma students, along with Professor Dr. William Dew, have been analyzing their samples using the Agilent 7800 ICP-MS, Agilent 5977 GC-MS, Metrohm 930 Ion Chromatograph, and JEOL IT-200 SEM, all housed in the College of Arts and Sciences at LSSU. Additionally, Dr. Dew is collaborating



Dr. Paul Kelso and geology students visited the Appalachian Mountains to study plate tectonics

with LSSU Professors Dr. Derek David Wright (Environmental Science) and Professor Benjamin Southwell (Chemistry) to examine the effects of the merging contaminants such as the neonicotinoid insecticide Imidacloprid on fish using the Agilent Ultivo LC-MS/MS.

4. Drs. Paul Kelso (Geology) and Nalaka Ranasinghage (Environmental Science) took geology students to Marathon, Ontario on April 5 and 6 to study the geologic processes preserved in the rocks and how they provide evidence for the tectonic processes that impacted our region over the past 2.6 billion years. They stopped at a number of localities with lava flows. igneous intrusion, sediments, and geologic features related to the formation of the Mid Continent Rift which started to break apart North America about 1.1 billion years ago. They also collected data on older granite and greenstones from the Archean Eon (>2.5 billion years old).



Drs. Paul Kelso and Nalaka Ranasinghage and geology students visited Marathon, Ontario to study geologic processes preserved in rocks.

5. Drs. Paul Kelso (Geology) and Matt Spencer (Physics) hosted an eclipse viewing event on April 8. Over 100 attendees gathered to view the event through filtered telescopes and eclipse glasses.



(Left) Students, faculty, and staff gather to view the solar eclipse. (Right) Dean Mindy McCready joins the masses to get a glimpse of the eclipse.

- 6. Over 131 students from over a dozen programs presented their work during the 8th Annual Undergraduate Research Symposium on April 19. Drs. Jun Li (Biology) and Steven Johnson organized the event.
- 7. Five students were inducted into Alpha Chi on April 26. Alpha Chi is a national collegiate honor society that recognizes achievements in scholarship. The inducted students were: Ashley Boyer (Teacher Education), Sawyer Dowd (Psychology), Jessica Johnson (Business Administration), Brooke Landis (Teacher Education), and Amy Ostman (Elementary Education).
- 8. Professor Ben Southwell (Chemistry) was featured in Agilent Technologies <u>Inspiring Customer Stories</u> segment. The story details Southwell's emergence as a recognized leader and expert in the emerging field of cannabis chemistry.

9. Headwaters North (SmartZone) has



Professor Ben Southwell instructs Algoma University students on the operation of the Metrohm 930 Ion Chromatograph.

applied for a five-year extension from the State of Michigan and recently was granted not-for-profit status. Deans Mindy McCready and Steven Johnson represent LSSU on the Executive Committee. SmartZones assist, support, develop, and help grow businesses in the local community. Services are tools for entrepreneurs looking to grow an existing business or develop an idea. 10. Dr. Mark Zierden (Chemistry) and students have harvested the first hemp grown from seed to flower for research in the Experimental Grow Lab.

Awards, Grants, and Donations

- 1. Kevin and Pam Cooper have agreed to sponsor multiple movies in the Arts Center. The first, *Wonka*, was shown Sunday, April 28 at 2 pm and Tuesday, April 30 at 7 pm. Expect a full lineup of shows in the fall semester.
- 2. Dr. Steven Johnson worked with USA Lab to facilitate a donation of more than 250 lab coats valued at over \$7,780. The coats will be distributed throughout labs in the College of Arts and Sciences. Additionally, USA Lab donated a pharmaceutical grade freeze dryer valued at \$14,200 to the College of Arts and Sciences.
- 3. Continued collaboration between Dr. Steven Johnson and Lowtemp Industries has resulted in a \$15,641 donation of equipment to be used throughout programs in the Schools of Chemistry, Environmental, and Geosciences.

New Faces

- 1. Toni Horde has joined the College of Arts and Sciences as the Academic Administrative Assistant for the Schools of Biological Sciences and Chemistry, Environmental, and Geosciences. Toni has worked for LSSU for over thirty years, with roles in the Quarter Deck and Cashier's Office.
- 2. Dr. Lucia Grossman will join the School of Chemistry, Environmental, and Geosciences as a sabbatical replacement for Dr. Derek David Wright (Environmental Science) this fall. Dr. Grossman was a professor at the University of Campinas in Brazil for 23 years prior to beginning consulting work. Most recently, she was the Program Manager of Environmental Sciences at Hocking College in Ohio. Dr. Wright's sabbatical will allow him to investigate metal accumulation and homeostasis in plants. Additionally, he will collaborate with Dr. William Dew from Algoma University on ecotoxicology of contaminate metals on fish olfactory systems and with the Sault Tribe on atmospheric particulate matter.
- 3. Melissa St. John has joined the College of Arts and Sciences as the newly appointed Arts Center Business Manager. With over 15 years of managerial and administrative expertise, Melissa is wellprepared for her role. Melissa's journey in the arts began with her earning her BA in Theatre and Costume Design from Western Washington University. Now, returning to her roots in an arts environment, Melissa is excited to merge her passion for the arts with her extensive professional experience. As she steps into her role at Lake Superior State University, Melissa looks forward to utilizing her unique blend of experience, leadership, and enthusiasm to contribute to the Arts Center and community on campus.
- 4. Casey Snyder will join the College of Arts and Sciences this June as the Music Director and Assistant Manager of Theatre Production. Casey was previously the Pep Band Director. In his previous role, he facilitated the formation of the pep band, community concert band, community choir, and jazz band. Prior to LSSU, Casey was the band teacher at Engadine Consolidated Schools.

College of Great Lakes Ecology and Education Richard and Theresa Barch Center for Freshwater Research and Education (CFRE)

Recruitment, Community and Outreach

- 1. Dr. Sally Childs led two incredible Pathfinders events this spring, which was the first time since 2019, with nine students from Parks and Recreation, Conservation Biology, and Teacher Education. Students provided an orienteering program to elementary students at Grand Traverse Academy, Detour Schools, and they reached over 100 elementary students. The programs also provided hands-on experience for our students and created important engagement with our Charter Schools. CFRE staff, including Kirsten Hindy, Katelynn Coon, and Beth Christiansen provided key support to the events. All costs were funded by a grant through the Office of Charter Schools.
- 2. CFRE provided prospective student tours for 23 students from diverse disciplines and the School of Natural Resources and the School of Education collectively provided 9 prospective student tours.
- 3. The Fisheries and Wildlife Club, in collaboration with CFRE, hosted the International Fly Fishing Film Festival, which attracted more than 65 visitors and raised over \$700 through a silent auction at the event. All proceeds support the Club and the CFRE Undergraduate Research Fund.
- 4. The College of Great Lakes Ecology and Education has had tremendous success integrating their academic units to support student success and unique opportunities. Some examples include:
 - a. Education students were integrated into CFRE programming events (weekend and weekday K-12 visits) to complete a portion of their lab experiences and support K-12 programming; students worked collaboratively with Natural Resource students to plan and implement activities. They all brought great enthusiasm to the activities.
 - b. Natural Resource students and Teacher Education students participated in two literacy nights, which would normally just be education, but was expanded to think about environmental literacy.
 - c. Beth Christiansen hosted students at CFRE from three teacher education courses to participate in school program activities. Five students joined in person and ten participated remotely.
 - d. School of Education senior, Sydney Briney, is mentoring a Girl Scout working on a Silver Award to promote aquatic invasive species awareness.
- 5. CFRE's Great Lakes Discovery Center (GLDC) was open every other weekend this winter and provided special programs for visitors that were designed and led collaboratively by our CoGLEE students (Natural Resources and Education). Events included winter birding at CFRE, March Mussel Madness, and Celebrating Manoomin (Wild Rice). Over 325 visitors came to the Dr. Constance Baker Great Lakes Discovery Center.
- 6. In March, the middle school and high school Native youth from the Indigenous Education Youth Collective presented at the Michigan Indian Education Council Conference at two sessions: *Beyond Reservation Dogs: Influences on Native Youth Identity* and *Better than Tik Tok: The Case for Language, Culture, and Traditional Medicine for Youth.* <u>The IEYC is a research practice</u> <u>partnership between LSSU and the University of Michigan</u> directed by Dr. Chloe Kannan.

- 7. Drs. Jennifer Fager and Anthony Vandarakis served as judges for the EUP Regional History Day on Friday, March 15.
- 8. Dr. Jennifer Fager served as a judge for History Day at Joseph K. Lumsden Bahweting Anishnabe School on February 20.
- 9. EUP Reads (628 participants) was hosted by LSSU in March and included involvement from the School of Education (Drs. Yong Zeng and Jennifer Fager) and CFRE. Dr. Zeng demonstrated a program he developed using AI that illustrated student-developed stories. Three Teacher Education students (Shelby Eavou, Shawna McDonald, Brenna Pavey) planned and coordinated a CFRE station, which was supported by two additional Teacher Education students, Rayanne Bigelow & David Miller, and two CFRE students, Hunter Hinds and Elli Prow (both fisheries and wildlife).



At EUP Reads, CFRE Education and Outreach team member Ellie Prow (junior, fisheries and wildlife; left) runs a fish population count model and Teacher Education senior, Shawna McDonald (right) runs an aquatic insect activity.

10. During Washington Elementary Literacy Night (200 participants, 74 families), four School of Education seniors, Shawna McDonald, David Miller, Brenna Pavey, and Hope Swenor, facilitated aquatic life activity stations along with CFRE outreach students, Hunter Hinds (junior, fisheries and wildlife) and Madison VanWagner (Junior, animal biology) and volunteer, Lauren Schagel (fisheries and wildlife).



CFRE's Education and Outreach team at Washington Elementary Literacy Night. From left, Beth Christiansen, Lauren Schagel, Hunter Hinds, David Miller, Madison Vanwagner, Shawna McDonald, Brenna Pavey, and Hope Swenor

- 11. Two Teacher Education students, Shelby Eavou and Shawna McDonald, helped plan and facilitate a Girl Scout Earth Day event: *Our Blue Planet* (13 participants—8 students, 5 adults) held at CFRE, for local Girl Scouts that increased their awareness of the importance of water to all life on Earth and how important it is to protect.
- 12. We continue to work to build outreach through increased social media activity. The top social media posts from the reporting period highlighted CFRE's faculty, staff, and student attendance at the 2024 Michigan American Fisheries Society conference, as well as a beautiful set of pictures captured by staff of the sunset as seen from our deck at the Barch CFRE building. Over this reporting period, our CFRE social media accounts grew in followers by 2.3-5.2%. College of Great Lakes Ecology and Education follower growth grew by 16-30% and highlights included scholarship recipients and the fly-fishing film festival, which reached nearly 5,000 people.
- 13. As a commitment to increasing engagement with K-12 schools, CFRE hosted six schools during this reporting period, which engaged over 148 students. Fisheries and Wildlife students (Collin Mahaffey and Ellie Prow) and Teacher Education students (David Miller, Shelby Eavou, Kaitlyn Edington, Bethany Dyer) facilitated these experiences for the visiting k-12 classes (see photo below).
 - a. Soo Cooperative Preschool (2 programs, 32 students)
 - b. J. K. L. Bahweting 8th grade Career Readiness class (4 visits, 2 classes, 30 students)
 - c. Rudyard Christian School (K-5th grades, 14 students)
 - d. Bay City Academy Charter School (at CFRE) (10th grade, 28 students)
 - e. Sault Tribe Early Childhood Learning Center (2 programs, 34 students)
 - f. Soo Twp. Rocket & Strong Beginnings (PreK, 10 students)



Shelby Eavou (Junior, Teacher Education) leads an activity for Rudyard Christian School students during their field trip to CFRE.

14. CFRE has continued to support teachers through our NOAA-BWET grant, implementing a 4-hr professional development session for teachers from Pickford, Rudyard, and Brimley schools. Led by CFRE staff Kirsten Hindy and Drew Heckman, this Professional Development centered on data science and support for implementation of local stewardship projects with their classes.

- 15. CFRE continues to support Career Technical Education using a variety of strategies.
 - a. CFRE supports a vibrant CTE course with students from four local high schools. At least three graduates will be enrolling in LSSU in fall 2024 to pursue natural resource-related degree programs.
 - b. CTE students had an opportunity to participate in mock interviews with over a dozen natural resource professionals at CFRE. A number of high school students even received summer employment offers as a result.
 - c. Eight Sault High School students in the Natural Resources CTE course assisted with CTE recruiting week in Rudyard. Students presented an overview of the course and their experiences in the class so far.

Research, Publications, Presentations and Activities

- 1. CFRE hosted the International Consortium on Oil Research this spring, which brought over 24 researchers from the US and Canada together to plan and implement oil spill research; Dr. Bo Liu presented an overview of crude and fuel oils that would potentially be used for the ICRO projects.
- 2. In February and March, Dr. Bo Liu and Shawnee McMillian had two on-site trainings for operation and maintenance of UPLC-MS/MS and GC-MS/MS, as well as method development and data analysis using Chromeleon Chromatography Data System software. All equipment was paid for by external funding and is being supported (including service contracts) through grant and contract research at CFRE.
- 3. Twenty students, faculty, and staff attended the Michigan American Fisheries Society meeting in Lansing, and 10 gave presentations including (*LSSU student):
 - a. Cameron Leitz and Ashley Moerke. *Impact of New Zealand Mudsnails on aquatic macroinvertebrate communities in the Au Sable, Boardman, Manistee, and Pere Marquette Rivers,* a research project led by Dr. Moerke.
 - b. Shawnee McMillian, Britt Ranson, Raven McKechnie*, and Ashley Moerke. *Using* environmental DNA approaches to detect a nuisance freshwater diatom, Didymosphenia geminata.
 - c. Clay Robertson* and Ashley Moerke. *Use of St. Marys River Coastal Wetlands by Black Bass. – Awarded Best Student Poster*.
 - d. James Lapierre*, Cameron Leitz, and Ashley Moerke. *Investigating the impact of New Zealand Mudsnails on algal growth in Michigan Rivers. Awarded Runner-up Best Student Poster*.
 - e. Alexandra VanKampen*, Jose Bonilla-Gomez, Ben Breaker, Kennan Bruening, Ethan DePauw*, Brett Diffin, Silas Dunn*, Simon Freeman*, Ian Harding, Chris Hessell, Andrew Honsey, Joshua Hug, Samuel Johnston*, Jory Jonas, Kevin Kapuscinski, Kevin McDonnell, Gary Michaud, Erik Olsen, Paul Ripple, Katherine Skubik, Jason Smith, Mason Spiess*, Jacob Synnott, Jack Tuomikoski, Christina VanDoornik, Sarah Woody, Jonathan Doubek. 2024. *Density of invasive dreissenid mussels in the Upper Great Lakes in relation to chlorophyll a, zooplankton density, and larval coregonine abundance.*

- f. Elliana Prow^{*}, Jose Bonilla-Gomez, Ben Breaker, Kennan Bruening, Ethan DePauw^{*}, Brett Diffin, Silas Dunn^{*}, Simon Freeman^{*}, Ian Harding, Chris Hessell, Andrew Honsey, Joshua Hug, Samuel Johnston^{*}, Jory Jonas, Kevin Kapuscinski, Kevin McDonnell, Gary Michaud, Erik Olsen, Paul Ripple, Katherine Skubik, Jason Smith, Mason Spiess^{*}, Jacob Synnott, Jack Tuomikoski, Christina VanDoornik, Sarah Woody, Jonathan Doubek. 2024. *Zooplankton beach and nearshore densities and their relation to larval coregonines at day versus night in the Upper Great Lakes*.
- g. Gwendolyn Phillips*, Katelynn Baker*, Jose Bonilla-Gomez, Ben Breaker, Kennan Bruening, Ethan DePauw*, Brett Diffin, Silas Dunn*, Simon Freeman*, Ian Harding, Chris Hessell, Andrew Honsey, Joshua Hug, Samuel Johnston*, Jory Jonas, Kevin Kapuscinski, Kevin McDonnell, Gary Michaud, Erik Olsen, Paul Ripple, Katherine Skubik, Jason Smith, Mason Spiess*, Jacob Synnott, Jack Tuomikoski, Christina VanDoornik, Sarah Woody, Jonathan Doubek. 2024. *The occurrence, abundance, and type of microplastics in larval Lake Whitefish* (Coregonus clupeaformis) diets in relation to water depth and watershed land use.
- h. Dakota Smith* and Jonathan Doubek. 2024. *Crustacean zooplankton exhibit higher density and species richness in murky versus clear lakes in southern Michigan.*
- i. Silas Dunn, Jonathon Doubek, Ariel Edwards (NMU), Brandon Gerig (NMU), Ashley Moerke, and Shawn Sitar (MI DNR). *Seasonal changes in Coregonine diets in Lake Superior*.
- j. Drew Heckman and Ashley Moerke. MiWaterNet: *Enhancing stewardship, research, and management through remote stream monitoring.*
- k. Megan Thompson, Paul Stowe (MDNR) and Aaron Switzer (MDNR). *Overview of Atlantic Salmon rearing in Michigan*.
- 4. Dr. Hari Kandel and his senior research team had the following accepted abstracts in Water Science Conference 2024 of American Geophysical Union to be held on 24-27 June in Saint Paul, Minnesota.
 - a. Integrating Landsat 9 and Sentinel-2 Imageries with In-situ Data to Model Chlorophyll-a in Small Inland Water Bodies in Michigan (Authors: Kandel, H. P., McMillian, S., Patterson, B*, Karner, R*.)
 - b. Deriving Water Depths of Hydropower Reservoir using Sentinel-2 and Worldview-3 Imagery Combined with Field-collected Depth Data (Authors: Sawle, M*., Kandel, H.P., Moerke, A.).
 - c. Studying the Presence of Polycyclic Aromatic Hydrocarbons in Small Inland Lakes Exploring Links with Motorized Boats and Human Impact (Authors: Kandel, H.P., Gilpatrick, M*., Southwell, B., Wright, D.)
- 5. Zachary Kassuba* and Jonathan P. Doubek. 2024. Restoration of Fire to a Pine-Dominated Stand on Hilton Head Island, South Carolina, USA. Poster Presentation, Ecological Society of America Great Lakes Regional Conference, Kalamazoo, Michigan.
- 6. Dr. Chloe Kannan was a panelist for an American Indian College Fund listening session for Native Scholars to help inform higher education policy as it pertains to Native students and faculty.

- 7. Ashley Moerke gave an invited research talk at the UP Invasive Species Council on CFRE's work related to an invasive algae.
- 8. Cam Leitz, Silas Dunn, and Ashley Moerke participated in the Great Lakes Coastal Wetland annual meeting, which involves collaborators from 12 institutions across the US and Canada. The project has employed over 40 LSSU undergraduate students since its inception.
- 9. Ashley Moerke attended the Great Lakes Fishery Commission and participated in the annual meeting in her role as an advisor to the Lake Superior Committee.
- 10. CFRE personnel recently hired 20 student employees for the summer to conduct research on grantfunded projects, rear fish at the CFRE Fish Hatchery, and engage the public at the Great Lakes Discovery Center. Students will work collaboratively with external partners (e.g., Bay Mills Indian Community, US Fish & Wildlife Service, and United States Coast Guard) and many plan to leverage their summer work positions to complete high-impact undergraduate research. Most of these positions are supported by external funding.
- 11. Students from the Conservation Biology course organized a woody invasive species pull and outreach event at Ashmun Bay Park, in collaboration with the Three Shores Cooperative Invasive Species Management Area (CISMA). Over 22 students and community volunteers cut down and pulled 15+ trailer loads of invasive honeysuckle and buckthorn in the woods surrounding the boat launch.
- 12. Zachary Kassuba (Senior, Conservation Biology) presented his research at the ESA Great Lakes regional conference in April 2024. Zach was also recently accepted to Lousiana State University to pursue graduate school.
- 13. Eight LSSU Fisheries & Wildlife Club students attended the Midwest Fisheries & Wildlife Conference this January in South Dakota. Three LSSU students-- Lauren Schagel, Abbi Schrader, and Taylor Gross--were finalists for the Fenske Memorial Award, an award that recognizes and selects 25 finalists that are young professionals across the Midwest.
- 14. Ms. Megan Thompson, student workers & volunteers, and high school students enrolled in the CTE Natural Resources program have been busy at the CFRE Fish Hatchery caring for 44,000 newly hatched larval salmon, administering Thiamine treatments, and clipping fins of age-1 salmon to be stocked out in early June. This is a one-of-a-kind experience for our students and a unique collaboration with the Michigan Department of Natural Resources.
- 15. In TEACH 120, School of Education Freshmen are building and teaching 85-minute lesson plans that are rooted in Understanding by Design Enduring Understandings and Essential Questions. They cannot lecture for longer than 7 minutes and are building, facilitating, and executing learning engagements for their peers like turn and talks, chalk talks, and case studies.



Hatchery student volunteer Emily Perilloux helping administer Thiamine treatments to larval Atlantic Salmon at the CFRE Fish Hatchery

- 16. Katelynn Coon and her Parks and Recreation students led winter survival workshops at the LSSU Snowfest event this winter. They also led activities at Tahquamenon Falls State Park including a snowshoe hike and Fall Fest. They also hosted a Euchre night at Bird's Eye, which brought in over 40 people.
- 17. Three School of Education students presented posters at the Senior Research Symposium as part of the Spring 2024 Campus-Wide event. RayAnne Bigelow, Traci Corrigan, and Kayla Frazier shared their work on early childhood programming integrated into their future employment opportunities regionally.
- 18. College of Great Lakes Ecology and Education hosted a senior sendoff event at Birdseye Outfitters immediately following the campus-wide poster symposium that was attended by over 40 students and their family members. Faculty and staff congratulated the seniors reaching this important milestone in their academic and professional development, and wished them well in their future endeavors.
- 19. Dr. Kevin Kapuscinski and the CFRE team hosted a lure-making event that was attended by 30 students from across campus. Attendees powder-painted and created their own custom jigs.
- 20. The LSSU Fish and Wildlife Club hosted a fly tying event for students at CFRE. Five members of the Fred Waara chapter of Trout Unlimited facilitated the event, which had over 25 participants.



Taylor Gross, Fisheries & Wildlife Management, powder-painting a jig head at the CFRE lure making event, led by Dr. Kapuscinski. Thirty students attended the event sponsored using external funds

21. Four Wildlife and Conservation Biology students, Lauren Schagel, Jack Ware, Collin Mahaffey, and Katie VanWormer attended the Michigan Chapter of The Wildlife Society meeting as well as an acoustic monitoring workshop. Katie VanWormer (Junior, Wildlife) presented her proposed research on loons in Michigan.

Awards, Grants, and Donations

1. Dr. Jon Doubek was funded for a project titled "An Ecosystem-Scale Approach to Understanding Changing Winters in the Great Lakes" by Michigan Sea Grant. Collaborators include: Vick-Majors TJ (PI), H Carrick, D Uzarski, JP Doubek, N Wagner, and G Paterson. \$216,352.

- 2. Dr. Chloe Kannan is a part of a collaborative team of Native community members and scholars who recently submitted a proposal to compete in the <u>MIT Solve Indigenous Communities Fellowship</u> <u>Challenge</u>. The solution works to integrate technology and Indigenous knowledge frameworks to combat the climate crisis.
- 3. Dr. Jill Witt was awarded a Scientist Fellowship Award from the University of Michigan Biological Station to conduct a biannual census of small mammals (mice, shrews, and voles) in Northern Michigan. This 30+ research project is looking to understand the effects of a changing climate on small mammal populations and habitat.
- 4. Dr. Ashley Moerke submitted a Master Agreement to the National Park Service, which would create a direct avenue to pursue collaborative research with Pictured Rocks National Lakeshore and Sleeping Bear Dunes National Lakeshore. Dr. Moerke will receive initial funding to support a research project with six students this summer at Pictured Rocks.
- 5. CFRE was awarded annual funding from the US Fish and Wildlife Service program to support sea lamprey control efforts. The funding also will help offset the costs of summer students working at the hatchery.
- 6. Dr. Moerke was awarded \$54,000 in funding from the US Army Corps to develop models of environmental triggers of Didymo in the St.Marys River.
- 7. Dr. Ashley Moerke and Dr. Ed Roseman (USGS) were awarded \$259,000 in funding from the Great Lakes Fishery Trust to conduct research on fish spawning in the Mackinac Straits. The project will fund five undergraduate students and a post-doctoral research associate over the next two years.
- 8. Dr. Kandel, with support from several College of Great Lakes Ecology and Education team members, organized an oral presentation symposium for seniors graduating from the School of Natural Resources. These 19 students also contributed poster presentations at the campus-wide poster symposium, sharing the results of their senior thesis experience. These presentations are important milestones in our students' capstone experiences and the culmination of their years of hard work. The entire list and photos are below. Four external judges selected the best poster presentations.
 - a. Clay Robertson (Fisheries, mentored by Dr. Moerke) received the Best Poster Presentation Award
 - b. Runner-ups included: Robbie Landis (Fisheries, mentored by Dr. Kapuscinski), Ali Vankampen (Fisheries and Wildlife, mentored by Dr. Doubek), and Jared Christiansen (Fisheries, mentored by Dr. Kapuscinski)



Clay Robertson (left), Katie VanWormer (center), and Ali VanKampen (right).

- 9. Cody Ogdon (Junior, Fisheries) was awarded the Cynthia Kitzman/Fred Waara Scholarship from Trout Unlimited. The scholarship is available to undergraduates and graduates from Lake Superior State University, Northern Michigan University, and Michigan Technological University.
- 10. Elliana Prow (Junior, Fisheries) and Clay Wilton (Junior, Wildlife) received a very prestigious Michigan Sea Grant Undergraduate Environmental Internship for their research this summer. This internship salary is \$9000. Elli will be working with Dr. Doubek on a larval whitefish project at CFRE, and Clay is working with Dr. Jill Witt and Dani Fagen, a US Fish and Wildlife Service Coastal Biologist co-located at CFRE, on bat populations.
- 11. Elliana Prow (Junior, Fisheries) and Gwendolyn Phillips (Junior, Fisheries) each received \$500 through the LSSU Undergraduate Research Grant fund to support to attend and present posters of their research at the American Society of Limnology and Oceanography, an international conference.
- 12. Six Fisheries undergraduate students presented posters at the Michigan American Fisheries Society Conference this March 2024 in Lansing. The students are James Lapereiere, Gwen Phillips, Ellie Prow, Clay Robertson, Dakota Smith, and Ally VanKampen. The presentations included graduate students from Michigan State University, Michigan Technological University, and Grand Valley State University.
 - a. Clay Robertson was awarded the Best Student Poster
 - b. James Laperriere was awarded Runner-up, Best Student Poster
- 13. The School of Education received a King Chavez Parks grant (\$180,000) to build a stronger support system for Teacher Education students from economically and academically disadvantaged backgrounds. The fund will support the implementation of a new freshman orientation experience for Teacher Education students to increase their success in college.
- 14. CFRE faculty and staff acquired four new grants this reporting period, which brings the total to 25 grants since inception for over \$18,541,094.

Curriculum

- 1. The School of Education submitted 21 curriculum changes through the LSSU Curriculum Committee to streamline and update program requirements linking coursework to field work. The results of this work include the development of Apprenticeships at the 100, 200, 300, and 400 levels aligned with the expectations for teacher candidates outlined by the Michigan Department of Education, and it reduced scheduling challenges for students and faculty. Our work will ensure LSSU graduates have engaged in meaningful, supervised clinical practices with children in PK-12 environments prior to certification.
- 2. The School of Natural Resources revised numerous courses and programs including a redesign of the for Bachelor of Science degree in Parks and Recreation to a program in Outdoor Recreation and Leadership.

Operations

- 1. CFRE's new storage building, which is funded entirely by a grant from the US Coast Guard, broke ground in mid-October and is now framed in. A second floor office space was added to support the growth at CFRE and the addition is funded entirely by a donor. The LSSU Physical Plant staff have been assisting with HVAC installation, which saved \$20K. They are incredible.
- 2. Since January, CFRE hosted over 10 events, including community partners—MyMichigan, Michigan DNR Trout Committee, International Consortium on Oil Research, Sault Tribe, Michigan United Conservation Club's annual meeting reception, and Laker Athletics staff meeting. Event revenue exceeded \$13,000 for this time-period and our team provided \$2,500 in in-kind support to LSSU and partner events.
- 3. School of Natural Resources faculty, with support from numerous staff and students, successfully completed a search for an Assistant Professor of Conservation Biology position. Dr. Jenna Parker will be joining the faculty of SNR for the fall semester, and is expected to make especially important contributions to our Conservation Biology and Fisheries & Wildlife Management programs. Searches for a wildlife faculty and education faculty are underway.
- 4. In February, Dr. Moerke presented a request to the City of Sault Sainte Marie to acquire additional land to expand outdoor research facilities, and the city approved the land transfer at no cost. The research facilities will be paid entirely by external grants.
- 5. CFRE has its final approval for a liquor license pending and it is expended in early May. The license will allow CFRE to gain additional revenue during events.
- 6. CFRE is finalizing plans for the Outdoor Mesocosm Experimental Area. Vendors are in place to complete site work and trench a pipe to a permanent water source. A fence will be installed by the end of May to secure the facility.
- 7. CFRE continues to provide tremendous in-kind support to LSSU through events planning (e.g., Commencement Speaker reception, Golden Grads reception, Athletics staff meeting) and time and materials support (e.g., College of Great Lakes Ecology poster printing, snowshoes for Student Life events, and equipment for student projects).
- 8. LSSU is supporting 18 Talent Together students from across Michigan. Talent Together is a partnership led by Michigan Intermediate School Districts and supported by the Michigan Educator Workforce Initiative in collaboration with LSSU and other Michigan Colleges and Universities. These students are currently employed in school districts and are able to participate in the program at no cost to the individual student as all tuition, fees, and materials are covered by the program. Upon completion of the coursework and clinical experiences, graduates are guaranteed a teaching position and are required to commit to teaching at their host school or district for at least 5 years. This program enabled a rapid growth in the Teacher Education program this year, the largest across the schools.

College of Health and Emergency Services

Academic Program Successes

- 1. The LSSU Emergency Management Systems (EMS) program successfully completed their Accreditation assessment site visit this Spring from the Committee on Accreditation for the EMS Professions (CoAEMSP) and the Commission on Accreditation of Allied Health Education Programs (CAAHEP).
- 2. One hundred percent of 2023-24 Paramedic Program candidates successfully passed the NREMT certification exam (85.7% on first attempt, 100% by second attempt)

Events

- 1. The MyMichigan/LSSU Superior Simulation Center held its annual Interprofessional Healthcare Simulation event where Nursing, Emergency Service, Fire Science and Criminal Justice students came together with local and county first responders to showcase their knowledge and work together in an emergency. The "victims" at the scene were even LSSU students. The students trained alongside first responders from Sault Ste. Marie Fire Department and EMS and nurses from MyMichigan Medical Sault. The Mackinac County 911 coordinator and Chippewa County Center Dispatch director were on the scene as well.
- 2. The School of Nursing hosted a webinar event for nursing students, "The RaDonda Vaught Story" related to the criminalization of nursing errors in patient care. Sixty attendees participated in the event.



3. In partnership with the LSSU Student Nurses' Association (LSSNA), the School of Nursing held a presentation on *Implicit Bias and the LGBTQ+ Community* through the Michigan Nursing Action Coalition.

Graduate & Alumni Continued Success

- 1. Spring 2024 BS Kinesiology graduates Zoey Hall and Patrick Stevens have been accepted into the Master's of Public Health program at Grand Valley State University.
- 2. Spring 2024 BS Kinesiology graduate Faith Wojnaroski has been accepted into the Doctorate of Physical Therapy Program at University of Michigan-Flint.
- 3. Julie Herweyer (Armock) (BS Psychology '2013) earned an M.S in Experimental Psychology at Northern Michigan University.
- 4. Katherine Brushaber-Drockton (BS Psychology '2014) earned an M.S in Speech Pathology from Central Michigan and is currently in the doctoral program in Clinical Psychology at Central Michigan.

- 5. LSSU alumni (Kinesiology, 2022) and current GVSU-MPH candidate (May 2024) Raegan Holek has been a leader within the Michigan Public Health Association (MPHA). She moderated a panel of three state epidemiologists regarding "Rural Public Health in Michigan and the Unique Epidemiologic Challenges and Approaches" at the Michigan Public Health Association Epidemiology Conference Spring 2024. Ms. Holek was formally acknowledged by MPHA leadership for her leadership, management, and fundraising for the conference, attended by approximately 500 public health professionals from across Michigan.
- 6. Spring 2024 BS Psychology graduate Emma David has been accepted to MS programs in Experimental Psychology at Northern Michigan University and Central Michigan University.
- 7. Spring 2024 BS Psychology graduate Tommissa Ennes plans to attend Michigan State University's Clinical Master's in Social Work program (also accepted to Northern Michigan University's clinical MSW program).
- 8. Spring 2024 BS Psychology graduate Duncan Lavey plans to attend Law School at Michigan State University with a full-ride scholarship (also accepted to Wayne State University, and University of Pittsburg).
- 9. Spring 2024 BS Psychology graduate Edyn Nettleton plans to attend Michigan State University's School Psychology Education Specialist program.
- 10. Spring 2024 BS Psychology graduate Jacquelyn Scott plans to attend Central Michigan University's School Psychology Specialist program.
- 11. Spring 2024 BS Psychology graduate Sam Schlehuber plans to attend Grand Valley State University Master's in Social Work program.

Student Leadership

1. Two nursing students who are leaders within the LSSU Student Nurses' Association (LSSNA) represented LSSU at the National Student Association Annual Conference in Orlando, Florida.

Scholarship

1. Kinesiology Professor and School of Kinesiology & Psychology Chair Dr. Joe Susi completed the American Kinesiology Association Leadership Institute 2024 Cohort. Dr. Susi was chosen from a large group of his peers, and participated in a yearlong fellowship in advancing the field of Kinesiology at both the National and International level.

Student/Faculty Projects

1. LSSU Kinesiology students Faith Wojnaroski, Katelyn Moore, Madison Pott, Sophie Gibbs, Emily Fleming, Brooke Brazeau, Haley Howe, and Caleb Henderson and Professor Sarah Ouimette attended the *Michigan Special Olympics State Winter Games* in Traverse City January 31-February 2 to provide medical coverage as part of the Medical Team during the Games. LSSU has been assisting with medical coverage at the Games since 2010. These individuals had the opportunity to work with the athletes who participated in Nordic skiing, alpine skiing, snowboarding, snowshoeing, speed skating, and ice-skating while working as part of a comprehensive medical team to make sure that the athletes, coaches, and spectators remain safe throughout the games. This is a tremendous opportunity for the students to get hands-on experience working alongside other medical professionals while witnessing the talents of the incredible athletes.

Conference Presentations

- 1. Kinesiology student Katelyn Moore presented her research on *The effects of aerobic exercise on Parkinson's Disease symptoms* at the Michigan American College of Sport Medicine (MIACSM) conference.
- 2. Six (6) LSSU Psychology students presented their Senior Research Project Posters at the Michigan Undergraduate Psychology Research Conference hosted by Calvin University, Grand Rapids, Michigan. The students were accompanied by their senior research advisor, Dr. Kristina Olson-Pupek, and Professor Stephanie Spray. All project topics originated with the student and were empirically based research studies.
 - a. Anne Bowes: *Energy Drink Use in College Students: Impacts on Sleep Quality, Academic Performance, and Mental Health: Examination of the relationship between consuming energy drinks and academic performance, sleep quality and mental health in college students.* While academic performance was not correlated with frequency of energy drink consumption, both sleep quality and mental health were significantly worse with more frequent consumption of energy drinks.
 - b. Emma David: *Prevalence of Comorbid GAD, MDD, and SUD Symptoms Alongside Those of ADHD in Adults.* Investigation into co-morbidity of ADHD in adults with depression, anxiety, and substance use disorders. Significant correlations were found between ADHD and all three of the disorders, the strongest of which was anxiety.
 - c. Tommissa Ennes: *Difference in Educational Outcomes of College Students in Non-Gender Normative Majors.* She focused on differences between college students in gender normative majors and those in non-gender normative ones. Individuals in non-gender normative fields had significantly lower college GPAs, but significantly higher feelings of belongingness and job satisfaction compared to those in gender normative disciplines.
 - d. Rhiannon Gillis: *Stress and Substance Use: Relationships with Collegiate Standing*. She explored whether college class standing was associated with different types of stress and substance use. No differences were found based on class standing for type of stress experienced as well as between type of stress and risk of substance use. The only significant finding was between type of stress: financial, time management and academic were consistently greater than social and family.
 - e. Duncan Lavey: *Ketchup and Mustard: Color's Effect on Us*. Duncan put the Ketchup and Mustard theory to the test by manipulating the color/contrast of a video and measuring changes in mood and snacks consumed. While there was no significant difference between the high color/contrast and low color contrast groups for mood or appetite, all participants had a significant improvement in mood.
 - f. Jacquelyn Scott: *Academic Achievement in the Wake of COVID-19: Impact on High School and First-Year College Students in Michigan.* Jacquelyn conducted an archival study to understand the impact of the COVID-19 pandemic on high school and first year college students. Data from the academic year 2018-19 (pre-pandemic) were compared to the 2021-22 school year. There was a significant decrease in average SAT scores. The number of students required to take

remedial courses decreased. Finally, retained in grade increased for 9th, 10th, and 11th grades, but decreased for 12th. Overall, there appeared to be a negative impact on student performance since the pandemic.



Bottom row left to right: Rhiannon Gillis, Prof. Stephanie Spray, Jacquelyn Scott. Second row left to right: Emma David, Dr. Kris Olson-Pupek, Anne Bowes. Top row left to right: Tommissa Ennes, Duncan Lavey

Book Publications

- 1. Searight, H.R. (2024-April) Ethical Dilemmas and Future Implications of COVID-19. Cambridge Scholars Press
- 2. Gerrie, J. (2024). The Role of the Legal Nurse Consultant in Mediation: A Bridge to Justice. Fort Myers, FL: LNC Success

Journal Article Publications

- 1. Herweyer, J., Brushaber-Drockton, K., & Searight, HR Emerging Adults' Views of Marriage: Influence of Religion and Sexual History. Journal of Psychology & the Behavioral Sciences, 5.
- 2. Julie Herweyer, after graduation from LSSU received a M.S in Experimental Psychology at Northern Michigan U
- 3. Katherine Brushaber-Drockton, after graduation from LSSU received a M.S in Speech Pathology from Central Michigan and is currently in the doctoral program in Clinical Psychology at Central Michigan

Other Publications

1. As part of her role in the American Nurses Association-Michigan, Professor Jaimee Gerrie worked with fellow members to publish a Position Statement on *Nurse Well-Being* for the publication "The Future of Nursing in Michigan." Volume 10, Number 1 (February 2024)

Library and Academic Services

- 1. The library hosted several lectures series during this reporting period:
 - a. Diversity Series: Lucia Rios (disability advocate) First generation college graduate navigating life with physical and invisible disability
 - b. Library Art Gallery display: Accessibility Services Student display
 - c. Veronica Pasfield: Smashed Bugs, Locks Looters and Indian Boarding Schools: How Indigenized Histories are Better Creation Stories for the Past and Present
 - d. Poetry Series: Julie Barbour and Mary Biddinger Essays on Self Care for Writers
 - e. Writers Series: Richard Hill A Deckhand's Journey On a Great Lakes Freighter
 - f. Scholar Series: Adam St. John That IS the Question: Approaching Shakespeare from an Actor's Perspective by Breaking Down the Bard's Most Famous Soliloquy
 - g. 2 X 2 Art Display featuring students and community art
- 2. The Native American Center hosted several listening sessions with students, faculty and staff to get feedback on campus needs, issues, hopes and concerns regarding the Native American Center to assist in planning for the 2024-2025 academic year and beyond.

Accreditation and Assessment Report

Accreditation

Strategic Plan Goal Strategy 3.4.7. - Maintain good standing with the Higher Learning Commission and appropriate accreditation bodies.

In the past year, HLC has approved our MBA program as well as our Prison Education Program (PEP) locations at the Chippewa and Kinross Correctional Facilities. A separate approval was required for the specific program we will offer at the Chippewa facility. The Higher Learning Commission (HLC) Change Panel reviewed and recommended approval for LSSU to offer the Associate in Small Business Administration at Chippewa Correctional Facility. This recommendation was sent to their Institutional Actions Council (IAC) for final approval at their April 29 meeting. We are awaiting official notification of the HLC Institutional Actions Council (IAC) vote on this matter, which should be received sometime in May.

Following HLC's Focused Visit in October, the review team submitted a report to the Institutional Actions Council (IAC) stating that the team affirmed LSSU was working to address HLC's concerns related to finances, budget planning, and enrollment. The IAC voted in February to approve the team's report, and the recommendation to require our institution to prepare an Interim Report on enrollment, financial and budget planning (Accreditation Criteria 5B and 5C), which is due December 10, 2025.

LSSU will be visited by three program-specific accrediting agencies this fall (2024) to evaluate the business, engineering, and education programs. Faculty, Chairs, and Deans of those Schools have been hard at work preparing for those visits. The School of Engineering and Technology is seeking specialized accreditation for the new BS in Robotics Engineering. The other programs under review have consistently been evaluated to be in good standing with those accrediting agencies.

Assessment

Strategic Plan Goal Strategy 1.1.6 - Enhance a culture of cyclical and systematic assessment to drive continuous improvement and innovation in curricular, co-curricular, and extracurricular programs and services.

The full scope of assessment processes at LSSU includes learning outcome assessments reported by faculty at the course level, program-level learning outcome assessments conducted at the School level by all faculty, and institution-wide assessment of Institutional Learning Outcomes (ILOs) by the University Assessment Committee. That committee also reviews and evaluates the data from the program-level assessment reports. The committee will meet soon, and throughout the summer, to review those data from 2023-2024, and prepare a report with recommendations for future actions and improvements for the Senior Management Team.

Title III Grant

Title III grant and KCP grant staff members continue to work collaboratively to improve retention at LSSU. The two teams meet regularly to coordinate and align retention efforts for both programs, and to ensure that at-risk students who are identified through the Early Alert system get prompt support. Title III funding is also being used over the summer to make improvements in the library's Academic Success Center and for other areas of academic support. Those improvements include new rolling whiteboards and chairs for the tutoring rooms, new software and hardware to support students with dyslexia and

stress-related disabilities or challenges, and a well-equipped area with supportive sensory lighting and white noise machines to help ADHD students focus on their tutoring and study sessions.

Office of Sponsored Programs

Below is a summary of new grant awards since the last board report.

1. Great Lakes Fishery Trust

External Grant Awards							
Sponsor	Amount	Award Period	Budget Highlights	PI			
Great Lakes Fishery Trust	\$259,048	03/21/2024- 4/30/2026	Personnel: \$99,652 Indirect: \$7,452.30	Ashley Moerke			

The project titled, *More than Water under the Bridge: Inventory and Viability Assessment of Fish Spawning and Nursery Habitats in the Straits of Mackinac*, is designed to improve the scientific understanding of fish spawning and nursery habitats in the Straits of Mackinac. The Center for Freshwater Research and Education will lead an interdisciplinary 2-year investigation to inventory spawning and nursery habitats, including characterizing lower trophic level food resources, and physical attributes of habitats.

2. Kansas State University

External Grant Awards						
Sponsor	Amount	Award Period	Budget Highlights	PI		
Kansas State University— Passthrough from USDA	\$8,735	01/01/2024- 12/31/2024	Personnel: \$8,334 Indirect: \$0	Jason Garvon		

LSSU is a subaward under a project led by Kansas State University to implement the Evaluation of Laser and Acoustic Non-Lethal Bird Deterrent Technologies for Fish Farms in the North Central Region project. The project will prepare and monitor deterrent sites in Michigan. LSSU will examine effectiveness of single and integrated pest management approaches to avian predation at aquaculture production facilities.

3. Michigan Technological University

External Grant Awards							
Sponsor	Amount	Award Period	Budget Highlights	PI			
Michigan Technological University—Passthrough from Dept. of Commerce- Great Lakes Observing System	\$14,409	03/01/2024- 04/30/2025	Personnel: \$8,595 Indirect: \$4,814	Robert Hildebrand			

LSSU is a subaward under a project led by Michigan Technological University to provide key environmental data that would contribute to more effective under-ice spill response through increased understanding of wintertime under-ice physical and biogeochemical state. LSSU researchers will implement and operate a cabled observatory in the St. Marys River in coordination with MTU and CFRE.

4. U.S. Fish and Wildlife Service

External Grant Awards							
Sponsor	Amount	Award Period	Budget Highlights	PI			
U.S. Department of the Interior: Fish and Wildlife Service	\$9,330	04/01/24- 09/30/24	Salary/Fringe: \$7,373 Indirect Costs: \$1,401	Ashley Moerke			

The LSSU Sea Lamprey Monitoring project will support two students over a 12-week period to assist the U.S. Fish and Wildlife Service with monitoring the migration of adult sea lampreys in the St. Marys River. The Center for Freshwater Research and Education's (CFRE) location directly on the St. Marys River allows the students to monitor traps continuously. The information collected during the monitoring period is used to estimate the adult sea lamprey population in the St. Marys River and ultimately the Lake Huron estimate, which is used to make decisions on budget and treatment allocation across the Great Lakes.

5. U.S. Army Corps of Engineers

External Grant Awards				
Sponsor	Amount	Award Period	Budget Highlights	PI
U.S. Army Corps of Engineers	\$98,696	02/13/24- 08/13/25	Payment by Service	Ashley Moerke

The *Data Collection for the Development of St. Marys Rapids Performance Indicators* project will conduct research for the International Joint Commission (IJC) to establish performance metrics in the St. Marys Rapids and develop models that relate the biological productivity (i.e. fish stranding or flushing) to flow changes during monthly gate operations.

Marketing

Initiatives

Below are some of the initiatives and activities of the department.

- 1. Currently we are reworking all School/Center logos to be consistent with LSSU branding, yet unique to each area. These will be provided to each school in multiple LSSU colors and file types to use for social profiles, email signatures, and marketing material.
- 2. Leading up to commencement, we have been shining a social media spotlight on a handful of graduates, their LSSU stories, and what they will be doing post-graduation. <u>Example</u>
- 3. LSSU honored the determination and brilliance of all women in higher education who pave the way for a future where excellence knows no gender with an International Women's Day Video <u>Facebook Version</u>, <u>Instagram Version</u>. This video reached 3,934 people on Instagram and 4,315 people on Facebook.
- 4. Marketing is working with the Lukenda School of Business to create an online orientation video for the incoming MBA cohort. This production includes highlighting key areas the MBA students will be exposed to the School Chair, Program Head, Library, Lukenda School of Business, Moodle, and Registrar.
- 5. The website redesign project is in full swing. As we begin the design process, we will focus on crafting each area to meet functional needs while implementing a modern design. Our marketing goals are to create a website that deeply resonates with our target audiences, capturing their attention and fostering engagement. Through thoughtful design, we hope to create an environment where users feel valued, at ease, represented, informed, and eager to return.

Once the development and design phases are completed by the end of spring, with an expected launch date in early summer, our team plans to meet with departments to tailor information and designs that mirror their respective areas and contribute to the overall LSSU identity. We will initiate scheduling for these meetings after the launch. Additionally, the marketing team will provide assistance to help users navigate the new design seamlessly. Currently we are taking updated Faculty/Staff headshots for the new website's school and administration pages.

The marketing team has worked closely with Proforma and Gotcha!, a professional digital marketing platform with thousands of customers nationwide, to enhance LSSU's online presence. We meet weekly to review progress, manage timeline goals, and approve creatives.

- 6. As the new website is being built in the background the current website is still being transformed to condensed current pages to the new structure, remove outdated URLs and content and fulfill ongoing design requests and new page developments. Some examples include:
 - a. Space Mission and Operations: <u>https://www.lssu.edu/school-math-computer-science/space-mission-and-operations/</u>
 - b. Meridian Project page: <u>https://www.lssu.edu/meridian-street-project/</u>
 - c. Cybersecurity: <u>https://www.lssu.edu/school-fire-science-emergency-services/cybersecurity/</u>

- 7. As part of our marketing efforts, we have increased the number of press releases we are sending out to our Laker Community at large:
 - a. <u>Lake Superior State University Honors 2023 Outstanding Comprehensive Student Support</u> <u>Services Recipient</u>
 - b. LSSU's Escanaba And Iron Mountain Regional Center Announces Fall 2023 Dean's List
 - c. Lake Superior State University Launches New Cybersecurity Program
 - d. Lake Superior State University Names Dr. David Travis As The 11th President
 - e. <u>Lake Superior State University Receives Generous Donation Of Doosan Collaborative Robots</u> <u>From Dynamic Machine Of Detroit</u>
 - f. Team AMORE Places In RoboBoat 2024 Competition
 - g. <u>Lake Superior State University Invites You To Ignite The 'Flames Of Renewal' At The 53rd</u> <u>Annual Snowman Burning</u>
 - h. <u>Lake Superior State University Hosts Successful FIRST Robotics Event, Inspiring Future STEM</u> <u>Leaders</u>
 - i. <u>Lake Superior State University Celebrates The Exceptional Achievements And Inspirational</u> Journeys Of The Graduating Class Of 2023-2024
 - j. Lake Superior State University Rolls Out Digital Mental Health Platform To Meet Student Needs
 - k. <u>Remembering Wesley DeJong Jr.: Legacy Endowment Fund Established At LSSU To Honor</u> <u>Beloved Alumnus And Former Hockey Equipment Manager</u>
- 8. Our advertising focus was assessed and we have made some changes, including:
 - a. Sault High School yearbook ad with a QR code leading to the campus tours landing page linked to Google Analytics to track traffic (data will be available once these are published)
 - b. Midland High School yearbook ad with a QR code leading to the campus tours landing page linked to Google Analytics to track traffic (data will be available once these are published)
 - c. Sault Sainte Marie Pure Michigan Magazine ad Landing page for 'Life in the Sault', which is linked to the ad's QR code. The ad and landing page highlight areas on campus that are appealing to tourists
- 9. Continued advertising in the SooLeader (US) and SooToday (Canada). For SooLeader our contract allows for advertising one school each month for the year. We are up in clicks from last year's contract at this time. For SooToday we are focusing on advertising the MBA program.
- 10. We have maintained the Mackinac Bridge under the current contract, but we are considering a new strategy for the coming year.

Results

- 1. Due to the improvements that were made in our social media strategy, we have continued to see growth in our social media following:
 - a. Facebook 15,335 followers, 95K total reaches, 270 new followers, and 27.8K page and profile visits this last quarter.
 - b. X (Twitter) 2,498 followers and 8,658 impressions this last quarter.
 - c. Instagram 5,372 followers, 3.1K page and profiles visit this last quarter, 154 new followers, and 7.8K reaches in this last quarter.
- 2. Website Traffic: 90,000 users 86,000 are new.
- 3. Thirty internal events covered in this reporting period.
- 4. Ninety-four graphics requests completed in this reporting period.



Academic Affairs Report May 17, 2024

Agenda Item #4: Contributions to the Strategic Plan

Information

Action

Discussion

Purpose:

The Board of Trustees approved the Strategic Plan on April 24, 2020. Since that time, we have been working on many areas in the Strategic Plan. I have included several key updates.

Background:

Contributions to the Strategic Plan

1.1.1 Analyze, assess, and refresh traditional general education and liberal arts courses to accentuate their intrinsic value and add appeal and relevancy to current students.

The General Education Committee approved a new course to meet the Diversity General Education Outcome starting in the fall. KINS 202 Diversity and Inclusion in Sport includes historical and contemporary viewpoints that highlight the manner in which sport and exercise reflect social processes of society.

2.5.2 Increase the number of programmatic offerings and activities in the Native American Center on campus and in the community.

LSSU continues to increase the visibility of the Native American Center and increase programmatic offerings. In an effort to gain feedback on these efforts and develop plans for the future, the Native American Center held listening session for students, faculty, and staff in April and have plans for sessions for the community this summer.

3.1.2 Evaluate existing academic programs for overall effectiveness, financial viability, and enrollment growth potential.

The School of Natural Resources evaluated the BS in Parks and Recreation over the 2023-2024 academic year, receiving feedback from employers and experts in the field. They revised the program's curriculum and renamed the program as a BS in Outdoor Recreation and Leadership with possible concentrations in Environmental Education, Outdoor Recreation & Ecotourism, and Parks & Land Management. This new program is more aligned with needs in the field, shows greater growth potential through current job trends, and uses campus resources more wisely.

4.4.6 Expand programming at the University Arts Center to target K-12 students.

A number of events were held in the Arts Center this Spring that were targeted to K-12 students. During the Woodland Sky residency in February, over 600 students from the JKL Bahweting Anishnabe school attended a special performance. The Arts Center also hosted Tomas and the Library Lady, a musical, for 3rd-5th graders from rural and charter school districts. Over 400 students were in attendance. Additionally, the Arts Center showed a movie series this year and several of the movies were targeted to children including Polar Express, Spider-Man: Across the Spider Verse, and Wonka.

Suggested Action/Motion:

None

President's Recommendation:

N/A