



LAKE SUPERIOR
STATE UNIVERSITY

Spring 2026

Campus-Wide

**STUDENT RESEARCH
SYMPOSIUM**

Welcome!

Thank you for attending our 10th Annual Campus-Wide Senior Research Symposium! The projects you see today are a representation of the hard work and dedication students have put into their academics. The purpose of senior projects is to allow students to learn how to develop, execute, and finalize a project within their major. These projects allow Lake Superior State University students to form connections with their peers and external organizations while furthering their academic and professional careers.

Take this time and the opportunity to discuss the projects with their presenters.



Poster Numbers by Topic

Biology.....	1-7
Chemistry.....	8-17
Computer Science.....	18-19
Creative Writing.....	20-23
Education.....	24-26
Engineering.....	27-30
Geology.....	31-32
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Mathematics.....	38-40
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Nursing.....	63-74
Political Science.....	75-77

Psychology.....78-83

No.	Last Name	First Name	No.	Last Name	First Name
1	Adams	Leslie	78	DePeel	Marlee J.
75	Adams	Riley	4	Dibble	Collen
41	Aldea	Abby	5	Dibble	Gavin
18a	Andrei	Stefan	27b	Dillon	Scott
8	Angell	Ellie	43	Docter	Janelle
20	Berlin	Vic	19a	Ellinger	Jackson
29a	Besonen	Jessicca	28a	Engel	Tyler
24a	Besteman	Brooklynn	44	Eurich	Hunter
76	Bias	Ella	45	Fischer	Kevin
2	Boggs	Amelia	30b	Fraile Raton	Jordi
29b	Brehm	Cole	46	Garrison	Grace
16b	Brown	Autumn	28b	Greenlee	Tristan
33	Bupp	Trista	79	Morgan	Groover
42	Burpee	Brenden	11	Haataja	Hannah
9	Calloway	Hannah	27c	Harman	Samuel
63	Cheney	Alicia	36b	Henderson	Caleb
21	Chism	Maggie	47	Herriman	Eli
3	Conger	Brenden	12	Hinson	Matthew
30a	Connell	Michial	25a	Hudson	Anna
10	Corbin	Grace	48	Huhn	Carli
24d	Cornwell	Angelina	64	Jacek	Alexander
27a	Damsteegt	Joshua	65	James	Clay
25d	Deming	Morgan	49	Jannetta	Brynn

No.	Last Name	First Name	No.	Last Name	First Name
28c	Johnson	Sydney	16a	Montemayor	Jessica
37b	Kasprzak	Joe	55	Moran	Madison
50	Kemmerling	Kelsie	32	Mosses	Ella
51	Kennedy (He/Him)	Aaron	67	Mueller	Tyler
80	Kennedy	Keeli	22	Myrick	Tessa
52	Konkle	Kennedy	82	Napletano	Janine
6	Kozlowski	Alyssa	56	Olson	Maddy
32	Kreps	Grace	19b	O'Polka	Joseph
34	Kurth	Michaela	68	Osumili	Ese
53	Lee	Melissa	26c	Paidl	Laci
66	Lenz	Emma	69	Pancheri	Macy
25b	Lipe	Audrey	27d	Parrish	Nathan
81	Loiselle	Haylie	57	Patterson	Blake
29c	Mandoka	Leo	27e	Petersen	Avery
13	Maus	Natalie	25c	Peterson	Brianna
14	Mazzella	Alexandra	29d	Perodi	Valentina
28d	McCoy	Mallory	70	Proctor	McKenzie
54	McFarlane	Breanna	71	Quick	Any
77	McKerchie	Gabriel	58	Reed	Jordyn
31	McQueen	Logan	38	Rivard	David
15	Meehle	Ethan	7	Riveria	Joe
36a	Miklusicak-Whitney	Skyler	37a	Rivers	Brooke
			29e	Rodriguez	Josh
			39	Roznowski	Mason

No.	Last Name	First Name		
17	Rund	Jackson		
59	Scheele	Rex		
60	Scaffer	Elizabeth		
61	Skrodenis	Caitlin		
30c	Sokoloski	Tyler		
23	Spring	Amy		
26c	Stec	Delaney		
72	Steele	Rachel		
73	Sterner	Cheyenne		
24c	Stille	Ashley		
26a	Stubinksy	Micaela		
18b	Sullivan	Joshua		
37c	Swerdon	Vanessa		
18c	Thomas	Colin		
28e	Tidwell	Norman		
19c	Toutant	Hannah		
40	Twining	Daniel		
62	Velting	Brittany		
83	Watson	Katelyn I.		
74	White	Parker		
30d	Wigger	Bradley		
24b	Yiirs	Heidi		

Participant	Project Title	Department
1. Leslie Adams	Climate impact on the breeding sex-ratio of the Great Lakes Piping Plover (<i>Charadrius melodus</i>)	Biology
2. Amelia Boggs	The Effects of Testing on Cortisol and Tourette's	Biology
3. Brenden Conger	Feeding selectivity of larval coregonines in comparison to zooplankton density in Northern Lake Huron	Biology
4. Collen Dibble	Microplastic contamination in Great Lakes waterfowl	Biology
5. Gaven Dibble	Biting Flies as a vector for Avian Influenza	Biology
6. Alyssa Kozlowski	Zebrafish as an Apolipoprotein E (ApoE) gene model in studying Alzheimer's Disease	Biology
7. Joe Riveria	Mitigating Algae in a Koi Aquaponic System	Biology
8. Ellie Angell	Qualitative Analysis of Potentially Toxic Element (PTE) Presence in Whitetail Deer Teeth	Chemistry
9. Hannah Calloway	Lead Bioaccumulation and Biomagnification in Biota at the Gaines Highway Informal Shooting Range near Kincheloe, Michigan	Chemistry
10. Grace Corbin	Mycorrhizal Effects on Copper Uptake by Soy	Chemistry
11. Hannah Haataja	Further Discrimination of Synthetic Polymers by μ XRF	Chemistry
12. Matthew Hinson	Phyto Cannabinoid Extraction Using Cryogenic Ethanol	Chemistry
13. Natalie Maus	Analysis of Ignitable Liquid Retention in Hempcrete and Implications for Arson Investigation	Chemistry
14. Alexandra Mazzella	Phytoremediation potential of Brassica juncea	Chemistry

15. Ethan Meehle	Evaluation of Potential Constraints in Denitrification Rates on Louisiana Shelf Sediments	Chemistry
16a. Jessica Montemayor	Lead Accumulation in Surface Soil at Gaines Highway Informal Shooting Range near Kinross, Michigan	Chemistry
16b. Autumn Brown		
17. Jackson Rund	Laser-Direct Infrared Imaging for Microplastic and Small Particle Analysis in the Solventless Cannabis Extraction Process	Chemistry
18a. Stefan Andrei	Hematology Education Application	Computer Science
18b. Joshua Sullivan		
18c. Colin Thomas		
19a. Jackson Ellinger	Upper Peninsula High-Domain Awareness System	Computer Science
19b. Joseph O'Polka		
19c. Hannah Toutant		
20. Vic Berlin	"Eeya and Isko: Disability and Filipino Culture in Fantasy"	Creative Writing
21. Maggie Chism	"Using Fantastical Fiction to Explore Otherness and Autonomy"	Creative Writing
22. Tessa Myrick	"Tracing Desire, Control, and the Body Through Poetry"	Creative Writing
23. Aimee Spring	"The Importance of Interconnected Elements in Fiction Writing"	Creative Writing
24a. Brooklynn Besteman	Positive Behavior Intervention Support (PBIS) and Relationship-Centered Practices in a Local School	Education
24b. Heidi Yiirs		
24c. Ashley Stille		
24d. Angelina Cornwell		

25a. Anna Hudson	Community, Classroom Management, and Student	Education
25b. Audrey Lipe	Support in a Faith-Centered School	
25c. Brianna Peterson		
25d. Morgan Deming		
26a. Micaela Stubinsky	Formal vs. Informal Assessment: A Comparison of	Education
26b. Delaney Stec	Student Performance Across Grades 1, 2, and 5	
26c. Laci Paidl		
27a. Joshua Damsteegt	Team LSRD-Lake State Robotic Demos	Engineering
27b. Scott Dillon		
27c. Samuel Harman		
27d. Nathan Parrish		
27e. Avery Petersen		
28a. Tyler Engel	Team LVLD-Laker Vehicle Lab Development	Engineering
28b. Tristan Greenlee		
28c. Sydney Johnson		
28d. Mallory McCoy		
28e. Norman Tidwell		
29a. Jessica Besonen	Team NEMO-Navigation for Engineered Maritime	Engineering
29b. Cole Brehm	Operations	
29c. Leo Mandoka		
29d. Valentina Perodi		
29e. Josh Rodriguez		

30a. Michial Connell	Team SLAP-Slapshot Laker Accuracy Project	Engineering
30b. Jordi Fraile Raton		
30c. Tyler Sokoloski		
30d. Bradley Wigger		
31. Logan McQueen	Lava Flow Composition Discriminant Analysis and its Potential for Martian Lava Flow Classification	Geology
32. Ella Mosses	Evidence of paleo-storms in Lake Superior from swales at Vermillion Point	Geology
33. Trista Bupp	Psychological and Physical Rehabilitation on Post-Stroke Depression for Adults	Kinesiology
34. Grace Kreps	Analysis of Sprint Velocity Trends in NCAA Division II Middle-Distance Runners	Kinesiology
35. Michaela Kurth	The Effect of Laser Therapy on Chronic Non-Specific Back Pain: An Annotated Bibliography	Kinesiology
36a. Skyler Miklusicak-Whitney	Effects of Ballroom Dance Intervention on PTSD and Chronic Pain Symptoms in Service Members and Veterans	Kinesiology
36b. Caleb Henderson		
37a. Brooke Rivers	Descriptions of On-Ice Fitness Parameters Through On-Ice Skills Assessment in Club-Level Collegiate Hockey Players	Kinesiology
37b. Joe Kasprzak		
37c. Vanessa Swerdon		
38. David Rivard	Building a GPT from Scratch	Mathematics

39. Mason Roznowski	Dynamical Systems Models in Neuroscience	Mathematics
40. Daniel Twining	Abstracting Nearness: An Independent Study in Topology	Mathematics
41. Abby Aldea	Effects of Climate Change on Breeding Mallards (<i>Anas platyrhynchos</i>) in Michigan	Natural Resources
42. Brendan Burpee	Zooplankton Density and Taxa Richness Between Littoral and Pelagic Zones in Southern Michigan Lakes	Natural Resources
43. Janelle Docter	GIS-Based Prediction of Potential Hemlock Woolly Adelgid (<i>Adelges tsugae</i>) Spread in Michigan's Western Lower Peninsula	Natural Resources
44. Hunter Eurich	Population Characteristics of Wild and Hatchery-reared Adult Steelhead in the Carp River	Natural Resources
45. Kevin Fischer	Spatial and Temporal Variation in Coarse Woody Debris Volume After a Severe Weather Event in Northern Lower Michigan	Natural Resources
46. Grace Garrison	Lead and Other Heavy Metal Concentrations at Gaines Highway Informal Shooting Range	Natural Resources
47. Eli Herriman	Effects of Water Color on Zooplankton Communities and Larval Coregonine Length and Abundance	Natural Resources
48. Carli Huhn	Black Bear (<i>Ursus americanus</i>) Movement in Relation to All-Terrain and Off-road Vehicle Use on Drummond Island, Michigan	Natural Resources
49. Brynn Jannetta	Bird Visitation of Manually Seeded Wild Rice Populations in Chippewa County in Late Summer Through Mid-Autumn	Natural Resources
50. Kelsie Kemerling	Estimating Population Abundance of <i>Peromyscus spp.</i> at the U of M Biological Station, Pellston, Michigan	Natural Resources
51. Aaron Kennedy (He/Him)	Smartphone Use and its Effects on Outdoor Connectivity	Natural Resources

52. Kennedy Konkle	Comparing Bird Diversity Between Burn and Non-Burn Sites	Natural Resources
53. Melissa Lee	Knowledge vs. Practice: Understanding Gaps in Public Comprehension of Leave No Trace Principles	Natural Resources
54. Breanna McFarlane	White-tailed Deer Detections across Habitat types According to Seasonality and Predator Presence	Natural Resources
55. Madison Moran	Buck Rub Activity in Relation to Forest Successional Stage in Algonac State Park's trails	Natural Resources
56. Maddy Olson	Behavioral Response of White-tailed Deer (<i>Odocoileus virginianus</i>) to Halogen Headlights	Natural Resources
57. Blake Patterson	Estimating Chlorophyll in Small Inland Waterways in the Eastern Upper Peninsula of Michigan using Geospatial Methods	Natural Resources
58. Jordyn Reed	Estimating Peromyscus Population Size Using Capture-Recapture Closed-population Models in a Northern Michigan Forest	Natural Resources
59. Rex Scheele	The Effects on Ground Cover in the Jack Pine Barrens within Raco, Michigan, through Prescribed Burns	Natural Resources
60. Elizabeth Schaffer	Copper Accumulation in the Hyphae and Fruiting Bodies of Fungi	Natural Resources
61. Caitlin Skrodenis	Lead Contaminated Soil and Environmental Risks Associated with Backyard Gun Ranges	Natural Resources
62. Brittany Velting	Variations of Elemental Composition of Wild Rice in Eastern Upper Peninsula of Michigan	Natural Resources
63. Alicia Cheney	Impact of Nursing Education on Knowledge and Indoor Tanning Behaviors in Adolescents and Young Adults	Nursing
64. Alexander Jacek	Who's Driving the Diprivan? Outcomes of Nurse-Managed Sedation in the ICU	Nursing
65. Clay James	The Effect of Extracurricular Activities on Children with ADHD	Nursing

66. Emma Lenz	Black Maternal Mortality Rate: A Perpetual Healthcare Crisis in America	Nursing
67. Tyler Mueller	Speaking Against Decline: How Bilingualism Fights Alzheimer's Disease	Nursing
68. Ese Osumili	Reducing Suicide Risk in Depressed Adolescents: The Role of Structured Cognitive Behavioral Therapy Education and Support	Nursing
69. Macy Pancheri	Maternal-Infant Co-Sleeping: Exploring Potential Benefits for Mothers and Infants	Nursing
70. McKenzie Proctor	Pregnant and Postpartum Women: Not Just Baby Blues	Nursing
71. Any Quick	Stiff Person Syndrome and the Impact of Patient Education on IVIG Therapy Outcomes	Nursing
72. Rachel Steele	Workforce Retention and Quality Outcomes: Addressing Understaffing in Nursing Homes	Nursing
73. Cheyenne Sterner	Traumatized and Exhaustion: PTSD in Nursing	Nursing
74. Parker White	Timing Matters: Adults Returning to Pre-Injury Functionality	Nursing
75. Riley Adams	Precarity by Design: Addressing Gig Worker Misclassification in the United States and United Kingdom	Political Science
76. Ella Bias	Expanding the Electorate, Dividing the Vote: Women's Electoral Behavior in U.S. Presidential Elections, 1948-2020	Political Science
77. Gabriel McKerchie	Stirring the Pot: The Disconnect Between Cannabis Scheduling and Public Opinion	Political Science
78. Marlee J. DePeel	Beyond the Grade: How Gender, ADHD, and Support Services Influence High School Academic Performance	Psychology

79. Morgan Groover	The Association Between TikTok Use and College-Aged Women's Self Esteem, Mood, and Body Image	Psychology
80. Keeli Kennedy	Understanding the Link Between Cannabis Use and Suicide Risk in Depressed Adult Males	Psychology
81. Haylie Loiselle	Impact of Music on Mental Health, Academics, and Overall Wellbeing	Psychology
82. Janine Napoletano	The iPad Kid Epidemic: Effects of Screen Time on Preschool-Aged Children's Development	Psychology
83. Katelyn I. Watson	Caffeine Consumption Among Undergraduate Students: Assessing the Impacts on Concentration, Academic Performance, and Mental Health	Psychology

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Entrance