



UNIVERSITIES OF  
WISCONSIN

**20**  
YEARS

RESEARCH  
IN THE ROTUNDA

MARCH 6, 2024  
CAPITOL ROTUNDA, MADISON, WI



# **20** **YEARS** **RESEARCH** **IN THE ROTUNDA**

*Showcasing the Work of UW Undergraduates*

[wisconsin.edu/research-in-the-rotunda](https://wisconsin.edu/research-in-the-rotunda)

[facebook.com/universitiesofwisconsin](https://facebook.com/universitiesofwisconsin)

[#RITR2024](https://twitter.com/UniversitiesWI)

## 20TH ANNUAL

# RESEARCH IN THE ROTUNDA

March 6, 2024

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## SCHEDULE INFORMATION

### **9:30-10:30am – Set Up Posters, Capitol Rotunda**

*Snacks available for student presenters and faculty advisers*

### **10:30am-2:30pm – Posters Display, Capitol Rotunda**

### **12:00pm – Remarks, Capitol Rotunda**

*Speaker: Jay Rothman, President, Universities of Wisconsin*

*Introduction: Karen Walsh, President, Board of Regents*

### **12:15pm – Lunch, North Hearing Room**

*For registrants only (lunch indicated on back of name tag)*

### **2:30-3:30pm – Dismantle Posters**

# FROM THE PRESIDENT



Dear Education Partner,

Welcome to the Universities of Wisconsin 20<sup>th</sup> annual *Research in the Rotunda: Showcasing the Work of UW Undergraduates*. I am delighted to join you in the Capitol to highlight the research achievements of our undergraduate students.

The research projects on display embody the personal and intellectual growth experienced by the students who created them. Over the 20 years of holding this event, we have featured well over 1,500 undergraduate research projects. They are a tangible representation of the Universities of Wisconsin's ongoing commitment to build the talent pipeline and to expand knowledge and ideas that are vital to the state's success—objectives that are an integral part of our 2023-2028 Strategic Plan. Today highlights our commitment to having at least 25% of our undergraduate students involved in research at each of our universities by 2028.

Through partnering with our accomplished faculty, each student has a rewarding opportunity to enhance their project management, teamwork, and critical problem-solving skills. Students investigated real-life issues affecting local, state, national, and international citizens and communities. Engaging in undergraduate research is a proven practice that leads to student success, not only in school, but also in future careers. The students' research also has the potential to inform public policy and decisions made by the private sector to help resolve the complex challenges our local, state, and global communities face.

We extend our appreciation to those who made this annual event possible, and we offer a special thanks to Wisconsin's elected representatives and state government officials for their participation and support. We also offer congratulations to the families, community supporters, and UW faculty advisers and staff who support the students' research.

Most importantly, we congratulate the talented students whose work represents the significant and valuable role undergraduate research plays throughout the Universities of Wisconsin and beyond. Their efforts to extend knowledge beyond the boundaries of campus and to stimulate society through their research exemplify the Wisconsin Idea and make us all proud of them, our university system, and our state.

Sincerely,

A handwritten signature in black ink, appearing to read "Jay Rothman". The signature is fluid and cursive, with a long, sweeping tail that extends to the right.

Jay Rothman  
President  
Universities of Wisconsin

# BOARD OF REGENTS

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Regent Héctor Colón  
Regent Mike Jones  
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Regent Edmund Manydeeds III  
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Regent Cris Peterson  
Regent Joan Prince  
Regent Ashok Rai  
Regent Jennifer Staton  
Regent Mark Tyler  
Regent Jill Underly  
Regent Dana Wachs  
Regent Karen Walsh, *President*  
Regent Kyle M. Weatherly

# CHANCELLORS

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*University of Wisconsin–Stevens Point*

Chancellor Katherine P. Frank  
*University of Wisconsin–Stout*

Chancellor Renée Wachter  
*University of Wisconsin–Superior*

Chancellor Corey A. King  
*University of Wisconsin–Whitewater*



# FACULTY ADVISERS

Student research cannot occur without the dedication and personal commitment of faculty advisers. We wish to acknowledge the following faculty members for their work to make undergraduate research collaboration possible on every Universities of Wisconsin campus.

Faculty Adviser	Campus	Poster	Legislative District Senate/Assembly	
Joseph Mondloch	UW-Stevens Point	1	24	71
Haoran Wei	UW-Madison	2	27	80
Erin Giese	UW-Green Bay	3	19	56
Robert Howe	UW-Green Bay	3	30	88
Keir Wefferling	UW-Green Bay	3	30	90
Nicole Hayes	UW-Stout	4, 16, 81	10	29
Keith Gilland	UW-Stout	4, 16	10	29
Julia Chapman	UW-Stout	4, 16	10	29
Matthew Winden	UW-Whitewater	5	16	46
John Stoll	UW-Green Bay	5	30	88
Emily Tyner	UW-Green Bay	5	30	88
John Berges	UW-Milwaukee	6	4	10
Patrick Forsythe	UW-Green Bay	7	30	88
Tisha King-Heiden	UW-La Crosse	8, 15	32	94
Daniel Isermann	UW-Stevens Point	10	24	71
Saleh Alnaeli	UW-Stout	11	10	29
Ahmed Elmagrous	UW-Stout	11	10	29
Keith Wojciechowski	UW-Stout	11	10	29
Zhaohui Li	UW-Parkside	12	22	64
Kevin Cullen	WI Maritime Museum	13	9	25
Russ Kashian	UW-Whitewater	14	28	83
Lesley Mayne	UW-Eau Claire	17	23	67
Karsten Powell	UW-Eau Claire	17	23	68
Patricia Cleary	UW-Eau Claire	18	31	91
Kirstin Rossi	UW-Eau Claire	19	31	91
Ryan Weichelt	UW-Eau Claire	20	31	91
Rachel Pierce	UW-Eau Claire	21	31	91
Lorraine Smith	UW-Eau Claire	21	23	67
Hyoseok (David) Hwang	UW-Eau Claire	22	31	91
Alison Jane Martingano	UW-Green Bay	23, 26	2	88
Allen Huffcutt	UW-Green Bay	24	2	5
Zhuoli Axelton	UW-Green Bay	25	30	88
Gaurav Bansal	UW-Green Bay	25	30	88
Sawa Senzaki	UW-Green Bay	27	1	2
Dianne Murphy	UW-Green Bay	28	6	18
David Radosevich	UW-Green Bay	28	30	88
Rebecca Ablor	UW-Green Bay, Manitowoc Campus	29	9	25

<b>Faculty Adviser</b>	<b>Campus</b>	<b>Poster</b>	<b>Legislative District Senate/Assembly</b>	
Richard Hein	UW-Green Bay, Manitowoc Campus	29	9	25
Melissa Bingham	UW-La Crosse	30	32	95
Heather Walder	UW-La Crosse	31, 34	32	95
Bryan Kopp	UW-La Crosse	32	32	96
Elizabeth Peacock	UW-La Crosse	33	32	95
Cord Brundage	UW-La Crosse	35	32	94
Christopher Choi	UW-Madison	36	26	76
Mary Wyman	UW-Madison	37	26	77
Victor Zavala	UW-Madison	38	27	79
Laura Hernandez	UW-Madison	39	27	79
Maichou Lor	UW-Madison	40	26	7
Zhiyuan Yu	Johns Hopkins	40	26	78
Seth Pollak	UW-Madison	41	26	77
Abbie Klein	UW-Madison	41	26	77
Taufeeque Ali	UW-Milwaukee	42	7	19
Xiaohua Peng	UW-Milwaukee	42	8	23
Elizabeth Drame	UW-Milwaukee	43	6	16
Shelley Lund	UW-Milwaukee	44	7	19
Alita Burmeister	UW-Milwaukee	45	4	10
Nathaniel Stern	UW-Milwaukee	46	7	19
Pamela E. Harris	UW-Milwaukee	47	28	84
Christopher Hays	UW-Milwaukee at Washington County	48, 49	20	58
Gregg Jamison	UW-Milwaukee at Waukesha	48, 49	15	45
Ryan Allred	UW Oshkosh	50	18	54
Justyna Olszewska	UW Oshkosh	51	18	54
Maria Graf	UW Oshkosh	52	18	54
Marianne Johnson	UW Oshkosh	53	18	54
Melissa Gregg	UW-Parkside	54	21	62
Ignacio Rivero Covelo	UW-Parkside	55	8	23
Ilirian Dhimitruka	UW-Parkside	56	22	64
Jessica Orlofske	UW-Parkside	57	21	62
Erin Hillard	UW-Parkside	58	22	66
Christopher Noto	UW-Parkside	59	22	64
Ryan Haasl	UW-Platteville	60	17	49
Gretchen Bohnhoff	UW-Platteville	61	17	49
Soma Chattopadhyay	UW-Platteville	62	17	49
Evan Larson	UW-Platteville	63	17	49
James Riser	UW-Platteville	63	17	49
Jenna Zucker	UW-Platteville	64	17	49
Chance Huberty	UW-Platteville	65	17	49
Muthusubramanian	UW-Platteville	65	17	49
Venkateshwaran				
David Olson	UW-Platteville Baraboo Sauk County	66	27	81

<b>Faculty Adviser</b>	<b>Campus</b>	<b>Poster</b>	<b>Legislative District Senate/Assembly</b>
Timothy Lyden	UW-River Falls	67	10 30
Blair Troutt	UW-River Falls	68	10 30
Lowell McCann	UW-River Falls	69	30 88
Andrew Haveles	UW-River Falls	70	10 30
Lori Swanson	UW-River Falls	71	30 89
Chris Hergenrader	UW-River Falls	72	31 93
Shelly Volsche	UW-River Falls	72	10 30
Brian Barringer	UW-Stevens Point	73	24 71
Logan Brice	UW-Stevens Point	73	21 72
Laura Cole	UW-Stevens Point	73	24 71
Ann Impullitti	UW-Stevens Point	73	24 71
Shannon Riha	UW-Stevens Point	73	24 71
Bryant Scharenbroch	UW-Stevens Point	73	24 70
Nikolaus Butz	UW-Stevens Point	74, 78	24 71
Brett Barker	UW-Stevens Point	75	29 85
Qiang Sun	UW-Stevens Point	76	24 71
Sarah Orlofske	UW-Stevens Point	77	24 70
Jason Riddle	UW-Stevens Point	77	24 71
Michael Tetzlaff	UW-Stout	79	10 29
Jennifer Grant	UW-Stout	80	10 29
Nicole Hayes	UW-Stout	4, 16, 81	10 29
Kimberly Zagorski	UW-Stout	82	10 29
Courtney Juelich	UW-Stout	83, 84	10 29
Tina Lee	UW-Stout	83, 84	10 29
Kristopher McConnell	UW-Superior	85	25 73
Kyle Roskoski	UW-Superior	86	25 73
Joel Sipress	UW-Superior	87	25 73
Mike Maguire	UW-Superior	88	25 73
Sergei Bezrukov	UW-Superior	89	25 73
David Potter	UW-Superior	90	25 73
Steven Girard	UW-Whitewater	91	16 47
Ellen Davis	UW-Whitewater	92	11 33
Prajukti Bhattacharyya	UW-Whitewater	93	11 31
Ozgur Yavuzcetin	UW-Whitewater	93	11 31
Brandon Thomas	UW-Whitewater	94	33 98
Ashley Barnes-Gilbert	UW-Whitewater	95	11 31
Courtney Wilt	UW-Whitewater	96	5 31
Matthew Wolfgram	UW-Whitewater	96	16 48
Tom Klubertanz	UW-Whitewater at Rock County	97	15 44


# STUDENT PRESENTERS BY CAMPUS

## Poster Number and Poster Title

*Student Name, Hometown*

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## FRESHWATER COLLABORATIVE RESEARCH FELLOWS

- 1 Adsorption of PFAS in Nanoporous Solids**  
*Anna Hahn, UW-Stevens Point, Stevens Point, WI*  
*Jackson Mikel, UW-Stevens Point, Black River Falls, WI*  
*Olivia Stellpflug, UW-Stevens Point, Omro, WI*
- 2 Analyzing the Viability of Surface-Enhanced Raman Spectroscopy for the Accessible Detection of Toxic “Forever Chemicals” (PFAS) in Drinking Water**  
*Andrew Glasgow, UW-Madison, Madison, WI*  
*Co-author: Hanwei Wang*
- 3 Coastal Bird Use of Small Stream Mouths Along the Western Lake Michigan Shoreline**  
*Sarah Baughman, UW-Green Bay, Sheboygan, WI*
- 4 Comparing the Effects of Restoration Age on Stream Ecosystems and Community Dynamics**  
*Casie Kopischke, UW-Stout, Eagan, MN*
- 5 Economic Impacts of Wisconsin Fishing Supported by the Freshwater Resources of Lake Michigan and Bay of Green Bay**  
*Alaina Jacobs, UW-Whitewater, Sun Prairie, WI*  
*Brooke Bauer, UW-Whitewater, New Berlin, WI*  
*Clare O'Donnell, UW-Whitewater, Whitewater, WI*  
*Madeline Murnion, UW-Green Bay, Green Bay, WI*
- 6 Finding Relationships Between Length, Mass, Carbon, Nitrogen, and Protein in the Invasive Crustacean *Hemimysis anomala***  
*Noah Schrodt, UW-Madison, River Forest, IL*
- 7 Lake Sturgeon Larval Production in the Upper Menominee River**  
*Lauren Klawiter, UW-Green Bay, Seymour, WI*  
*Co-authors: Steve Hughes, Zach Nordstrom*
- 8 Overstimulation of the Innate Immune Response by the Neonicotinoid Pesticide Thiamethoxam: How Does This Contribute to Observed Toxicity in Fish?**  
*Nicole Kooij, UW-La Crosse, Sun Prairie, WI*
- 10 Sex-Based Spawning Behavior Differences in Lake Michigan Walleye**  
*Carly Phalen, UW-Madison, Reedsburg, WI*
- 11 Smart Farming and Precision Agriculture **  
*Aidan Drew, UW-Stout, Lake Mills, WI*  
*Josh Pederson, UW-Stout, Oronoco, MN*

## Poster Number and Poster Title

*Student Name, Hometown*

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- 12 Sorption of Anionic Dye Alizarin Red S from Solution by Carbonate Mineral Dolomite  
*Anna Bowman, UW-Parkside, Libertyville, IL*
- 13 Steamer NIAGARA: Her Demise, Her Artifacts, and Her Significance  
*Nick Quaney, UW-Milwaukee, Auburn, KS*
- 14 The Cost of Clean Water: An Efficiency Analysis of Wisconsin's Water Utilities  
*Arnish Gupta, UW-Whitewater, Frisco, TX*
- 15 The Neonicotinoid Pesticide Imidacloprid Has the Potential to Influence Fish Populations by Interfering With the Immune Response  
*Allie Fowle, UW-La Crosse, Menomonee Falls, WI*
- 16 Urban Stream Corridor Restoration Effects on Sediment Loading  
*Kal Breeden, UW-Stout, Lakeville, MN*

## UW-EAU CLAIRE

- 17 Communication Ability Profile for Employees (CAPE): Connecting Employers and Coworkers as Communication Partners With Employees With Disabilities   
*Gianna Kornaus, Oneida, WI*  
*Kendall Monson, Chippewa Falls, WI*
- 18 Comparison of Overwater and Overland Meteorology and Ozone Pollution Along the Shore of Lake Michigan as Measured by Uncrewed Aerial Systems   
*Darby Schabacker, Janesville, WI*  
*Co-authors: Kelly Koerber, Autumn Sivilay, Aka Torti, Kevin Wangen*
- 19 Designing a Space to Support Sensory Regulation Within the Children's Museum of Eau Claire   
*Grace Groh, Bay City, WI*  
*Rhea Schaberg, Shoreview, MN*
- 20 Perceptions of Sustainable Agriculture in the Chippewa Valley Among Current Farmers   
*Morgan Dekan, Altoona, WI*
- 21 Preventing NicoTEEN Addiction Through Nurse-Led Education on Vaping: Targeting Youth-Serving Adults   
*Christina Forman, Edgerton, WI*  
*Holly Stanislawski, Appleton, WI*
- 22 Special Purpose Acquisition Company (SPAC) and Investor Sentiment   
*Moon Jean Cheah, Selangor, Subang Jaya, Malaysia*  
*Abbey Lawrence, Menomonie, WI*  
*Co-author: Jack Choi*

## Poster Number and Poster Title

*Student Name, Hometown*

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### UW-GREEN BAY

#### 23 Do Empathic People Give More to Charity?

*Colton Anderson, Bonduel, WI  
Ethan Wondrash, Two Rivers, WI*

#### 24 Employment Challenges for People with Autism Spectrum Disorder (ASD)

*Hannah Baker, Gilman, WI  
DeNae Bube, Green Bay, WI  
Megan Dobner, Colgate, WI  
Mia Laufer, Oshkosh, WI  
Noah Oltmanns, Reedsville, WI  
Co-author: Brooke Bayerl*

#### 25 Overcoming Employee Resistance to AI: Fostering Trust through Improved Communication in Pervasive AI Environments

*Krystin Clemo, Green Bay, WI*

#### 26 Paws and Reflect: Pet Ownership's Correlation with Empathic Abilities

*Makenna Bisch, Pardeeville, WI  
Maddie Fischer, Neenah, WI*

#### 27 The Correlation Between Attachment and Physiological Synchrony Between Parents and Early-to-Middle Age Children

*Jaden Kahles, Crivitz, WI*

#### 28 The Effects of Covid-19 on College Student Stress and Resources

*Erika Kunding, Auburndale, WI  
Neveah Schmechel, Hudson, WI*

### UW-Green Bay, Manitowoc Campus

#### 29 Impacts of a Large-Scale Restoration on Phosphorus Loading in Centerville Creek

*Elena Damian, Manitowoc, WI  
Natalie Ford, Manitowoc, WI  
Samantha Frauenfeld, Manitowoc, WI  
Taylor Kautzer, Whitelaw, WI  
Codey Lai, Manitowoc, WI  
Ashley Muench, Fond du Lac, WI  
Co-author: Chris Santiago*

### UW-LA CROSSE

#### 30 A Median Estimator for Three-Dimensional Rotations

*Kacie O'Hearn, Hartford, WI*

#### 31 Analyzing the Spatial Distribution of Lithics at Frog Bay Tribal National Park

*Madeline Meltesen, South Elgin, IL*

## Poster Number and Poster Title

*Student Name, Hometown*

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32 Gone Phishing: A Comprehensive Study of Phishing Prevention Tactics at UWL

*Anatalia Radoc, Saint Paul, MN*

33 How Working Students (Don't) Balance Work and School

*Sidney Paulson, Onalaska, WI*

34 Place-Based Archaeology at the Old Pageant Grounds in Miskwaabikaang (Red Cliff, Wisconsin)

*Sabrina Neurock, Bloomington, MN*

35 Using Bullfrogs to Understand Brainstem Serotonin Networks and the Role of Nicotine in Sudden Infant Death

*Kelsi Bellisle, Oregon, WI*

## UW-MADISON

36 Developing a Wireless Wearable Localization System to Monitor Dairy Cattle Heat Stress Related Behaviors in Real Time

*Trey Standiford, Madison, WI*

37 Effective Inclusion of Family Caregivers into the Mental Healthcare Team for Older Veterans with Memory Loss: Clinician Perspectives

*Madeleine Allen, Imperial Beach, CA*

*Co-author: Hayley Raj*

38 Emerging Chemical Engineering Approaches for Recycling Hard-to-Recycle Plastics

*Evan Erickson, Brookfield, WI*

*Co-author: Jiaze Ma*

39 Molecular Effects of Selective Serotonin Reuptake Inhibitors on the Mammary Gland and Bone Resorption

*Sophia Schoenfeld, Waterford, WI*

40 "No One Talks About It": Understanding Hmong Women's Perinatal Experiences

*Shoua Xiong, Milwaukee, WI*

41 The Effects of Social Connectedness: From Public Housing and Vouchers to the Classroom

*Ellie Thoma, Cottage Grove, WI*

## UW-MILWAUKEE

42 Cancer Studies: Enhanced Activation of ROS-Responsive Prodrugs via Prooxidant ROS Generation

*Alexis Peterson, Muskego, WI*



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**43 Evaluating Black Student Success at a Predominantly White University**

*Marissa Stewart, Milwaukee, WI*

*Faith Adebogun, Mequon, WI*

**44 Examining Communication Access for BIPOC Who Use AAC**

*Gracie Williams, Milwaukee WI*

**45 Investigating Alternatives to Antibiotics Using Phage**

*Chloé Skinner, Milwaukee, WI*

*Co-author: Harleen Tewatia*

**46 Mother Computer: Thinking with Natural and Artificial Intelligences**

*Collin Chesak, West Bend, WI*

*Em Johns, Milwaukee, WI*

*Gwen Knutson, Brookfield, WI*

*Ambrose Schulte, Milwaukee, WI*

*Co-author: Jack Lehtinen*

**47 On the Domination Number for a Family of Semiregular Tiling Graphs**

*Jillian Cervantes, Milwaukee, WI*

### ***UW-Milwaukee at Waukesha***

**48 Forensic Analysis of Replica Skeletons**

*Xavier Arbelo, Hales Corners, WI*

*Miya Skinkis, Menomonee Falls, WI*

**49 The UWM at Waukesha Field Station Farmstead Historical Archaeology Project: New Insights on Past Behavior from Material Culture**

*Jadon Thornton, UW-Milwaukee at Washington County, Hartford, WI*

### **UW OSHKOSH**

**50 Does This Count as Phubbing?: The Role of Bias and Attributions on Perceptions of Phone Usage During Face-to-Face Conversations**

*Olivia Klessig, Howards Grove, WI*

*Co-authors: Brook Branscombe, Ashley Plageman, Peyton Sherry*

**51 The Ideal College in Current Students' Perception**

*Lorena Reid, Fond du Lac, WI*

*Co-author: Makaylee Stewart*

**52 Racial and Ethnic Concordance Between Latino Patients and Health Care Providers in the American Midwest**

*Juan Padilla Mendez, Milwaukee, WI*

**53 Richard T. Ely's Census of Public Utilities**

*Kaleb Walter, DePere, WI*



## Poster Number and Poster Title

*Student Name, Hometown*

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### UW-PARKSIDE

#### 54 An EEG Investigation of Sleep Quality, Memory, and Executive Function

*Pasquale Chianello, Kenosha, WI*

*Tyler Helgesen, Kenosha, WI*

*Jose Herrera, Kenosha, WI*

*Christopher Weiss, Kenosha, WI*

#### 55 Disentangling How Projections from the Ventral Pallidum to the Shell of the Nucleus Accumbens Regulate Non-Homeostatic Feeding

*Markie Peroutka, Pleasant Prairie, WI*

*Zach Wilson, Kenosha, WI*

*Co-authors: Megane Burrow, Ari Hjelmseth, Miranda Johnson, Hedi Morris, Aryan Patel*

#### 56 Microwave-assisted Synthesis of Fluorescent 8-aryl-7-deazaguanines

*Madeline Herbrechtsmeier, Pleasant Prairie, WI*

*Elise Zevitz, Mount Pleasant, WI*

*Co-author: Hunter Cheney*

#### 57 Monitoring Bumblebee Populations on UW-Parkside's Campus

*Hailey Fee, Racine, WI*

*Abby Lentz, Waterford, WI*

*Natalie Meyer, Kenosha, WI*

*Hannah Palmen, Kenosha, WI*

#### 58 Parent-Child Weight and Diet Talk: The Impact of Body Image and the Parent-Child Relationship

*Erik Johnson, New Lenox, IL*

*Dijana Mitrovic, Hales Corners, WI*

#### 59 "Walk This Way" or That Way? Analyzing Shoulder Range of Motion in the Dinosaur Protohadros and Its Implications for Motility

*Caleb Neill, Pleasant Prairie, WI*

### UW-PLATTEVILLE

#### 60 Accuracy of Merlin ID App

*Naomi Cobb, Platteville, WI*

#### 61 Characteristics of Polymer Modified Bentonites Under Variable Chemical Conditions

*Grace Lewis, Oconomowoc, WI*

*Kristin Muench, Lancaster, WI*

*Jenna Springer, Florence, WI*

*Nate Strandberg, Viola, IL*

## Poster Number and Poster Title

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### 62 Interplay of Assembly Conditions in Polyelectrolyte Nanofilms Used for Drug Delivery Applications

*Nathan Francisco, Madison WI*

*Joe Sommers, Deforest, WI*

*Alaina Wolter, Montgomery, IL*

### 63 Submerged Treasure: Dendroprovenancing Lake Superior Sunken Timbers

*Elisabeth Winkler, Platteville, WI*

### 64 The Impact of Race on Willingness to Punish and Punishment Severity

*Madison Rouse, Platteville, WI*

### 65 Understanding the Genetic Basis of How Legumes Associate With Symbiotic Rhizobia

*Melina Debroux, Nashotah, WI*

*Anna Hagemann, Monroe Center, IL*

*Mackenzie Krajco, Hillsboro, WI*

*Jamie Voegeli, Madison, WI*

*Lauren Young, Davenport, IA*

## *UW-Platteville Baraboo Sauk County*

### 66 The Role of *GEFmeso* in the Formation of *Drosophila* Neuronal Active Zones

*Katelyn Haschke, New Lisbon, WI*

*Tyler Schruppf, Dubuque, IA*

## **UW-RIVER FALLS**

### 67 A Comparative 2D/3D Approach to Study the “Morphology of Motility” in Breast Cancer Cells

*Nhi Nguyen, Hudson, WI*

### 68 An Electrochemical Analysis of Pencil Graphite Electrodes for the Replacement of Paraffin Impregnated Graphite Electrodes

*Hailey Beilke, Big Lake, MN*

### 69 Numerical Modeling of a Gyroid Composite's Damping Characteristics

*Jordan Cioni, Green Bay, WI*

### 70 Reconstructing Late Pliocene and Pleistocene Paleoenvironments Using Taphonomy

*Katelyn Marano, New Richmond, WI*

### 71 Teacher and Speech Language Pathologist (SLP) Use and Perspectives on Telegraphic Speech With Children Who Are Deaf and Hard of Hearing

*Lindsey Johnson, Green Bay, WI*

## Poster Number and Poster Title

*Student Name, Hometown*

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- 72 The Effect of Working With Therapy Dogs in the Canine Inspired Change Program on In-Person Communication and Connection Between Same Age Adolescents Model

*Chase Syverud, Waunakee, WI*

*Co-authors: Emma Nackers, Challis Prohaska*

## UW-STEVENS POINT

- 73 A Compost Application Rate for Sustainable Hemp Agriculture in Wisconsin

*Maya Desai, Bowler, WI*

*Natalie Gruben, Stoughton, WI*

*Alaina Hart, Fond du Lac, WI*

*Sydney Paoli, Kronenwetter, WI*

*Addison Pfeil, Nekoosa, WI*

*Rosalind Remsen, Stevens Point, WI*

*Gregor Willms, Augusta, WI*

*Co-authors: Grace Geils, Ben Jore, Ben Loosen, Ben Opaneye, Danielle Singkofer*

- 74 Empowering Wisconsin Communities From Within: Harnessing Asset-Based Community Development (ABCD) for Sustainable, Locally Driven Progress

*Anetha Vogeles, New Lisbon, WI*

- 75 Gold Mountain in the Pinery: Chinese Americans in Rural Wisconsin, 1875-1940

*Jarita Bavido, Stevens Point, WI*

- 76 How Certain Genes in the Stewart's Wilt Causal Pathogen *Pantoea stewartii* Affect the Pathogen Spread and Biofilm Formation in Sweet Corn

*Kade Fink, Cross Plains, WI*

- 77 Preliminary Results for Quantifying Ectoparasite Diversity and Prevalence in Northern Saw-whet Owls (*Aegolius acadicus*) in Central Wisconsin

*Sophie Hauser, Tony, WI*

*Dana Lotz, Milwaukee, WI*

*Sophie Reid, Plainfield, WI*

- 78 Wisconsin Financial Literacy Education: Are Students Prepared for the Complexities of Financial Decision Making?

*Henry Niedbalski, Wisconsin Rapids, WI*

## UW-STOUT

- 79 Kintsugi 3D Viewer: User-Centric Design for Cultural Heritage Accessibility

*Isabel Smith, Greendale, WI* 

*Co-authors: Tyler Betanski, Jacob Buelow*

## Poster Number and Poster Title

*Student Name, Hometown*


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80 Protein Structures of Prion Disease 

*Ava Cinealis, Sheboygan, WI*

81 Temporal Analysis of Toxin-Producing Cyanobacteria

*Ethan Kalin, Maplewood, MN*

82 The Influence of Trust in Science and Political Leaning on Perceptions of Drinking Water Quality 

*Genevieve Czaplewski, Grand Island, NE*

83 What Do Americans Know? A Study on the Relationship Between Students' U.S. Civic Knowledge and Their Demographics

*Emma Nuechterlein, Kewaunee, WI*

84 Will College Students Agree with Political Opinions Along Party Lines?

*Jack Brown, Spring Valley, WI*

## UW-SUPERIOR

85 Evaluation of Gal4-Induced Cell Death in the Ovary of the Fruit Fly

*Niyosha Abdollahpour, Superior, WI*

86 Exploratory Analysis on Fashion Industry and Its Environmental Effect

*Tamami Igeta, Superior, WI*

87 Ojibwe Spiritual Practices from the 1930s-1978

*Dillion Krisik, Bayfield, WI*

88 Slip Glazes With Wild Clay

*Evaline Britton, Superior, WI*

89 Spatial Gesture Recognition With Machine Learning

*Hayk (Aik) Arzumanyan, Superior, WI*

90 The 'Troubles' in Music

*Sami Keller, Brule, WI*

## UW-WHITEWATER

91 Nanostructured Zinc Oxide Gas Sensors

*Nicholas Barmore, Evansville, WI*

*Foster Boom, Pleasant Prairie, WI*

*Spencer Cooper, East Troy, WI*

92 Reshaping the Anatomy and Physiology Classroom: Using Virtual Cadaver Software to Improve Lab Practical Readiness

*Mia Ciancio, Sharon, WI*

## Poster Number and Poster Title

*Student Name, Hometown*

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**93 Simulating Conditions of Slope Failure in the Lab with Sand and Water Using a Multimodal Monitoring Device for Data Collection**

*Heriberto Patino Luna, Janesville, WI*

*Blake Stephens, Mukwonago, WI*

*Co-authors: Jenna Lambert, Corban Larson, Miles McIntosh, Dean Wink*

**94 Time Perception of Affordances: In Relation to the Action Boundary**

*Benjamin Friedl, East Troy, WI*

*Co-authors: Lana Behmke, Jackson Schnabel*

**95 Trans-itioning Academia: Trans & Gender-expansive College Students' Experiences Across Disciplines**

*Jesse Alonzo, Clinton, WI*

**96 UW-W Participatory Action Research for College Students with Disabilities**

*Odin Ehrets, Stoughton, WI*

*Kennedy Vahovick, New Berlin, WI*

*Bella Zeit, Wadsworth, IL*

### ***UW-Whitewater at Rock County***

**97 Collection, Rearing, and DNA Barcoding of Undescribed Wisconsin Mayflies in the Genus *Tricorythodes* (Ephemeroptera: Leptohiphidae)**

*Ashley Duffey, Janesville, WI*

*Kirsten Shuler, Janesville, WI*

*Cade Spoden, Janesville, WI*



# STUDENT PRESENTERS BY WISCONSIN LEGISLATIVE DISTRICT

## Legislative District

Senate/Assembly	Student Presenter	Campus	Poster
1 1	Emma Nuechterlein	UW-Stout	83
1 2	Kaleb Walter	UW Oshkosh	53
1 2	Ethan Wondrash	UW-Green Bay	23
2 4	Madeline Murnion	UW-Green Bay	5
2 5	Lauren Klawiter	UW-Green Bay	7
2 5	Gianna Kornaus	UW-Eau Claire	17
2 6	Colton Anderson	UW-Green Bay	23
2 6	Maya Desai	UW-Stevens Point	73
3 8	Juan Padilla Mendez	UW Oshkosh	52
5 13	Evan Erickson	UW-Madison	38
5 13	Gwen Knutson	UW-Milwaukee	46
5 15	Brooke Bauer	UW-Whitewater	5
5 15	Kennedy Vahovick	UW-Whitewater	96
6 17	Shoua Xiong	UW-Madison	40
6 18	Marissa Stewart	UW-Milwaukee	43
7 19	Nick Quaney	UW-Milwaukee	13
7 19	Jillian Cervantes	UW-Milwaukee	47
7 19	Em Johns	UW-Milwaukee	46
7 19	Chloé Skinner	UW-Milwaukee	45
7 19	Ambrose Schulte	UW-Milwaukee	46
7 19	Gracie Williams	UW-Milwaukee	44
8 22	Megan Dobner	UW-Green Bay	24
8 22	Allie Fowle	UW-La Crosse	15
8 22	Kacie O'Hearn	UW-La Crosse	30
8 23	Faith Adebogun	UW-Milwaukee	43
8 23	Dana Lotz	UW-Stevens Point	77
8 24	Miya Skinkis	UW-Milwaukee at Waukesha	48
9 25	Elena Damian	UW-Green Bay, Manitowoc Campus	29
9 25	Natalie Ford	UW-Green Bay, Manitowoc Campus	29
9 25	Samantha Frauenfeld	UW-Green Bay, Manitowoc Campus	29
9 25	Taylor Kautzer	UW-Green Bay, Manitowoc Campus	29
9 25	Codey Lai	UW-Green Bay, Manitowoc Campus	29
9 25	Noah Oltmanns	UW-Green Bay	24

**Legislative  
District**

<b>Senate/Assembly</b>	<b>Student Presenter</b>	<b>Campus</b>	<b>Poster</b>
9 26	Sarah Baughman	UW-Green Bay	3
9 27	Olivia Klessig	UW Oshkosh	50
9 27	Ava Cinealis	UW-Stout	80
10 28	Katelyn Marano	UW-River Falls	70
10 29	Kal Breeden	UW-Stout	16
10 29	Casie Kopischke	UW-Stout	4
10 29	Abbey Lawrence	UW-Eau Claire	22
10 29	Josh Pederson	UW-Stout	11
10 29	Ethan Kalin	UW-Stout	81
10 29	Genevieve Czaplewski	UW-Stout	82
10 30	Nevaeh Schmechel	UW-Green Bay	28
10 30	Nhi Nguyen	UW-River Falls	67
11 31	Clare O'Donnell	UW-Whitewater	5
11 31	Arnish Gupta	UW-Whitewater	14
11 31	Jesse Alonzo	UW-Whitewater	95
11 32	Mia Ciancio	UW-Whitewater	92
11 33	Bella Zeit	UW-Whitewater	96
11 33	Ashley Duffey	UW-Whitewater at Rock County	97
12 36	Jaden Kahles	UW-Green Bay	27
12 36	Jenna Springer	UW-Platteville	61
13 37	Joe Sommers	UW-Platteville	62
13 38	Aidan Drew	UW-Stout	11
14 42	Makenna Bisch	UW-Green Bay	26
15 43	Kelsi Bellisle	UW-La Crosse	35
15 43	Christina Forman	UW-Eau Claire	21
15 43	Natalie Gruben	UW-Stevens Point	73
15 43	Odin Ehrets	UW-Whitewater	96
15 44	Darby Schabacker	UW-Eau Claire	18
15 44	Heriberto Patino Luna	UW-Whitewater	93
15 44	Kirsten Shuler	UW-Whitewater at Rock County	97
15 44	Cade Spoden	UW-Whitewater	97
15 45	Nicholas Barmore	UW-Whitewater	91
16 46	Alaina Jacobs	UW-Whitewater	5
16 46	Nicole Kooij	UW-La Crosse	8
16 46	Ellie Thoma	UW-Madison	41
16 48	Jamie Voegeli	UW-Platteville	65
17 49	Naomi Cobb	UW-Platteville	60
17 49	Kristin Muench	UW-Platteville	61

**Legislative****District**

<b>Senate/Assembly</b>	<b>Student Presenter</b>	<b>Campus</b>	<b>Poster</b>	
17	49	Nate Strandberg	UW-Platteville	61
17	49	Alaina Wolter	UW-Platteville	62
17	49	Elisabeth Winkler	UW-Platteville	63
17	49	Madison Rouse	UW-Platteville	64
17	49	Anna Hagemann	UW-Platteville	65
17	49	Lauren Young	UW-Platteville	65
17	50	Carly Phalen	UW-Madison	10
17	50	Mackenzie Krajco	UW-Platteville	65
17	50	Katelyn Haschke	UW-Platteville	66
		Baraboo Sauk County		
17	50	Anetha Vogeles	UW-Stevens Point	74
18	52	Ashley Muench	UW-Green Bay,	29
		Manitowoc Campus		
18	52	Alaina Hart	UW-Stevens Point	73
18	52	Lorena Reid	UW Oshkosh	51
18	53	Mia Laufer	UW-Green Bay	24
18	53	Olivia Stellpflug	UW-Stevens Point	1
19	55	Maddie Fischer	UW-Green Bay	26
19	56	Holly Stanislawski	UW-Eau Claire	21
20	59	Jadon Thornton	UW-Milwaukee	49
		at Washington County		
20	60	Collin Chesak	UW-Milwaukee	46
21	61	Markie Peroutka	UW-Parkside	55
21	61	Madeline	UW-Parkside	56
		Herbrechtsmeier		
21	61	Caleb Neill	UW-Parkside	59
21	61	Foster Boom	UW-Whitewater	91
21	62	Elise Zevitz	UW-Parkside	56
21	62	Hailey Fee	UW-Parkside	57
21	62	Abby Lentz	UW-Parkside	57
21	62	Sophia Schoenfeld	UW-Madison	39
22	64	Anna Bowman	UW-Parkside	12
22	64	Zach Wilson	UW-Parkside	55
22	64	Natalie Meyer	UW-Parkside	57
22	64	Hannah Palmen	UW-Parkside	57
22	64	Erik Johnson	UW-Parkside	58
22	65	Pasquale Chianello	UW-Parkside	54
22	65	Tyler Helgesen	UW-Parkside	54
22	65	Jose Herrera	UW-Parkside	54
22	65	Christopher Weiss	UW-Parkside	54
23	67	Kendall Monson	UW-Eau Claire	17

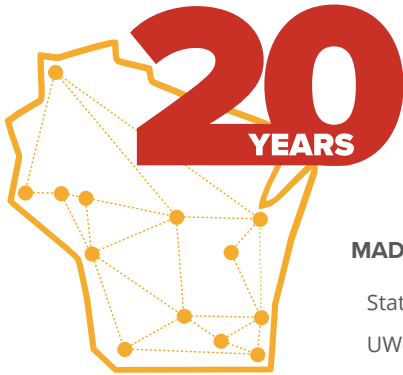


**Legislative****District**

<b>Senate/Assembly</b>	<b>Student Presenter</b>	<b>Campus</b>	<b>Poster</b>
23 68	Morgan Dekan	UW-Eau Claire	20
23 69	Jackson Mikel	UW-Stevens Point	1
24 71	Anna Hahn	UW-Stevens Point	1
24 71	Rosalind Remsen	UW-Stevens Point	73
24 71	Jarita Bavido	UW-Stevens Point	75
24 72	Addison Pfeil	UW-Stevens Point	73
24 72	Sophie Reid	UW-Stevens Point	77
24 72	Henry Niedbalski	UW-Stevens Point	78
25 73	Niyoocha Abdollahpour	UW-Superior	85
25 73	Tamami Igeta	UW-Superior	86
25 73	Evaline Britton	UW-Superior	88
25 73	Hayk (Aik) Arzumanyan	UW-Superior	89
25 73	Sami Keller	UW-Superior	90
25 74	Dillion Krisik	UW-Superior	87
26 76	Trey Standiford	UW-Madison	36
26 77	Andrew Glasgow	UW-Madison	2
26 77	Madeleine Allen	UW-Madison	37
26 77	Noah Schrodt	UW-Madison	6
26 78	Nathan Francisco	UW-Platteville	62
27 79	Chase Syverud	UW-River Falls	72
27 80	Kade Fink	UW-Stevens Point	76
27 81	Tyler Schruppf	UW-Platteville	66
		Baraboo Sauk County	
28 82	Isabel Smith	UW-Stout	79
28 83	Alexis Peterson	UW-Milwaukee	42
28 83	Spencer Cooper	UW-Whitewater	91
28 83	Benjamin Friedl	UW-Whitewater	94
28 84	Xavier Arbelo	UW-Milwaukee	48
		at Waukesha	
28 84	Dijana Mitrovic	UW-Parkside	58
29 86	Erika Kunding	UW-Green Bay	28
29 86	Sydney Paoli	UW-Stevens Point	73
29 87	Hannah Baker	UW-Green Bay	24
29 87	Sophie Hauser	UW-Stevens Point	77
30 88	Krystin Clemo	UW-Green Bay	25
30 88	Jordan Cioni	UW-River Falls	69
30 89	Lindsey Johnson	UW-River Falls	71
30 90	DeNae Bube	UW-Green Bay	24
31 91	Moon Jean Cheah	UW-Eau Claire	22
31 91	Rhea Schaberg	UW-Eau Claire	19
31 92	Gregor Willms	UW-Stevens Point	73

**Legislative****District**

<b>Senate/Assembly</b>	<b>Student Presenter</b>	<b>Campus</b>	<b>Poster</b>
31 93	Grace Groh	UW-Eau Claire	19
31 93	Hailey Beilke	UW-River Falls	68
31 93	Jack Brown	UW-Stout	84
32 94	Sidney Paulson	UW-La Crosse	33
33 97	Blake Stephens	UW-Whitewater	93
32 95	Madeline Meltesen	UW-La Crosse	31
32 95	Sabrina Neurock	UW-La Crosse	34
32 95	Anatalia Radoc	UW-La Crosse	32
33 99	Grace Lewis	UW-Platteville	61
33 99	Melina Debroux	UW-Platteville	65



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