



19TH ANNUAL

Research in the Rotunda

*Showcasing the Work of
UW Undergraduates*



CAPITOL ROTUNDA MADISON, WI MARCH 8, 2023

19TH ANNUAL

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Showcasing the Work of UW Undergraduates

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19TH ANNUAL

RESEARCH IN THE ROTUNDA

March 8, 2023

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SCHEDULE INFORMATION

9:30-10:30am – Set Up Posters

Breakfast 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, University of Wisconsin System

12:15pm – Lunch Served for Registrants Only North Hearing Room

2:30-3:30pm – Dismantle Posters

FROM THE PRESIDENT



Dear Education Partner,

Welcome to the UW System's 19th 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 for both the general public and state government officials.

The research projects on display embody the personal and intellectual growth experienced by the students who created them. They are a tangible representation of the UW System'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 UW System's 2023-2028 Strategic Plan.

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 were significantly involved.

Most importantly, we congratulate the talented students whose work represents the significant and valuable role undergraduate research plays throughout the UW System 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
UW System

BOARD OF REGENTS

Regent Angela Adams
Regent Robert Atwell
Regent Scott Beightol
Regent Amy Blumenfeld Bogost, *Vice President*
Regent Héctor Colón
Regent Mike Jones
Regent Edmund Manydeeds III
Regent John W. Miller
Regent Rodney Pasch
Regent Cris Peterson
Regent Joan Prince
Regent Ashok Rai
Regent Jennifer Staton
Regent Brianna Tucker
Regent Jill Underly
Regent Dana Wachs
Regent Karen Walsh, *President*
Regent Kyle M. Weatherly

CHANCELLORS

Chancellor James Schmidt
University of Wisconsin–Eau Claire

Chancellor Michael Alexander
University of Wisconsin–Green Bay

Chancellor Joe Gow
University of Wisconsin–La Crosse

Chancellor Jennifer Mnookin
University of Wisconsin–Madison

Chancellor Mark Mone
University of Wisconsin–Milwaukee

Chancellor Andrew J. Leavitt
University of Wisconsin Oshkosh

Chancellor Deborah Ford
University of Wisconsin–Parkside

Chancellor Tammy Evetovich (interim)
University of Wisconsin–Platteville

Chancellor Maria Gallo
University of Wisconsin–River Falls

Chancellor Thomas Gibson
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 UW System campus.

Faculty Adviser	Campus	Poster	Legislative District Senate/Assembly	
Erin Giese	UW-Green Bay	1	19	56
Robert Howe	UW-Green Bay	1	30	88
Keir Wefferling	UW-Green Bay	1	30	90
Emily Tyner	UW-Green Bay	2	4	10
Kelly Deuerling	UW-Green Bay (formerly)	2	30	88
Keith Gilland	UW-Stout	3, 4, 5	10	29
Nicole Hayes	UW-Stout	3, 4, 5	10	29
Innisfree McKinnon	UW-Stout	3, 4, 5	10	29
J. Brian Mahoney	UW-Eau Claire	6	31	91
Sarah Vitale	UW-Eau Claire	6	31	91
Lesley Mayne	UW-Eau Claire	7	23	68
Karsten Powell	UW-Eau Claire	7	23	68
Jamie Lyman Gingerich	UW-Eau Claire	8	31	91
David Jewett	UW-Eau Claire	9	31	91
Elizabeth Glogowski	UW-Eau Claire	10	31	91
Lindsey Creapeau	UW-Eau Claire	11	31	91
Jennifer Johs-Artisensi	UW-Eau Claire	11	31	91
Timothy Kaufman	UW-Green Bay	12	30	90
Lisa Rose Lamson	UW-Green Bay	13	30	89
Lisa Grubisha	UW-Green Bay	14	30	90
Todd Hillhouse	UW-Green Bay	15	30	90
Elif Ikizer	UW-Green Bay	16	26	76
Valerie Murrenus Pilmaier	UW-Green Bay	17	9	27
Rebecca Ablor	UW-Green Bay, Manitowoc Campus	18	9	25
Richard Hein	UW-Green Bay, Manitowoc Campus	18	9	25
James Kabrhel	UW-Green Bay, Sheboygan Campus	19	9	25
Heather Walder	UW-La Crosse	20	32	94
Paul Schweiger	UW-La Crosse	21	32	94
John May	UW-La Crosse	22	32	95
Nicholas Bakken	UW-La Crosse	23	32	94
Adam Stivers	UW-La Crosse	24	32	94
William Schwan	UW-La Crosse	25	32	94
Lindsay Kalan	UW-Madison	26	26	77
Kate McCulloh	UW-Madison	27	26	77
Joseph Austerweil	UW-Madison	28	26	76

Faculty Adviser	Campus	Poster	Legislative District Senate/Assembly
Anna Kowalkowski	UW-Madison	29	16 48
Jeffrey Martell	UW-Madison	30	26 77
Megan Zuelsdorff	UW-Madison	31	26 77
Xiaoli Ma	UW-Milwaukee	32	21 61
Priyatha Premnath	UW-Milwaukee	33	7 19
Seok Hyun (Joshua) Gwon	UW-Milwaukee	34	4 10
Dawn Erb	UW-Milwaukee	35	7 19
Sarah Vigeland	UW-Milwaukee	36	4 10
Xiaohua Peng	UW-Milwaukee	37	5 15
Phillip Owens	UW-Milwaukee at Waukesha	38	11 32
Lisa Hager	UW-Milwaukee at Waukesha	39	7 20
Jeremiah Bohr	UW Oshkosh	40	18 54
Matt Richie	UW Oshkosh	41	19 55
Edward Martin	UW Oshkosh	42	19 55
David Krause	UW Oshkosh	43	18 54
Colin Long	UW Oshkosh	44	18 54
Michelle Kuhl	UW Oshkosh	45	18 54
Jessica Orlofske	UW-Parkside	46	21 62
Ilirian Dhimitruka	UW-Parkside	47	22 64
Hom (Henry) Kandel	UW-Parkside	48	22 64
Sylvia Beyer	UW-Parkside	49	21 61
Robert Sasso	UW-Parkside	50	22 64
Adrienne Viramontes	UW-Parkside	51	22 64
Jeff Huebschman	UW-Platteville	52	17 49
Joseph Sanford	UW-Platteville	53	27 80
Danny Xiao	UW-Platteville	54	17 49
Alec Eshelman	UW-Platteville	55	17 49
Ian MacKenzie	UW-Platteville	56	17 49
Mark Levenstein	UW-Platteville	56	26 78
Chris Wilbur	UW-Platteville	57	27 79
David Olson	UW-Platteville	58	27 81
	Baraboo Sauk County		
Bassam Zahran	UW-Platteville	59	17 49
Youngmi Kim	UW-River Falls	60	31 93
Grace Lewis	UW-River Falls	60	31 93
Melkaye Melka	UW-River Falls	61	31 93
Jill Coleman Wasik	UW-River Falls	62	31 93
Daniel Ehlinger	UW-River Falls	63	10 30
Travis Tubre	UW-River Falls	64	31 93
Melanie Ayres	UW-River Falls	65	31 93
Rachel Brashier	UW-Stevens Point	66	24 71
Brian Barringer	UW-Stevens Point	67	24 71
Qiang Sun	UW-Stevens Point	67	24 71
Robert Michitsch	UW-Stevens Point	68	24 71
Daniel Isermann	UW-Stevens Point	69	24 71

Faculty Adviser	Campus	Poster	Legislative District Senate/Assembly
Lisa Izzo	UW-Stevens Point	69	24 71
Scott Wallace	UW-Stevens Point	70	24 70
Lee Willis	UW-Stevens Point	71	24 71
Amanda Barnett	UW-Stout	72	10 30
Tina Lee	UW-Stout	73	10 29
Zach Raff	UW-Stout	73	10 29
Taejo Kim	UW-Stout	74	10 29
Matthew Ray	UW-Stout	75	10 29
Joleen Hanson	UW-Stout	76	10 29
Tyler Skorczewski	UW-Stout	77	31 93
Keith Wojciechowski	UW-Stout	77	31 93
Sakib Mahmud	UW-Superior	78	25 73
Khalil Dokhanchi	UW-Superior	79	25 73
Shevaun Stocker	UW-Superior	80	25 73
Shanna Nifoussi	UW-Superior	81	25 73
Hilary Fezzey	UW-Superior	82	25 73
Eleni Pinnow	UW-Superior	83	25 73
Lourdes Martinez-Nieto	UW-Whitewater	84	11 31
Lynn Gilbertson	UW-Whitewater	84	15 45
Stephen Levas	UW-Whitewater	85	21 62
Stephanie Selvick	UW-Whitewater	86	13 38
Robert Benjamin	UW-Whitewater	87	11 31
Nicholas Tippery	UW-Whitewater	88	13 38
Daniel Zamzow	UW-Whitewater	89	16 47
Tom Klubertanz	UW-Whitewater at Rock County	90	15 44

STUDENT PRESENTERS BY CAMPUS




Poster Number and Poster Title

Student Name, Hometown

FRESHWATER COLLABORATIVE RESEARCH FELLOWS

- 1 A Community Science Analysis of River Mouths Along the Western Lake Michigan Shoreline
Sarah Baughman, UW-Green Bay, Sheboygan, WI
- 2 Characterizing Nutrient Release and Relative Storage Times in an Unconfined Karst Aquifer in Northeastern Wisconsin
Kyle Chaudoir, UW-Green Bay, Sturgeon Bay, WI
- 3 Land Use and Conservation Practices Affect Stream Water Quality in the Red Cedar
Britney Serafina, UW-Stout, Menomonie, WI
- 4 Long-Term Efficacy and Stability of Trout Stream Habitat Restoration in the Red Cedar River Watershed
Kal Breeden, UW-Stout, Lakeville, MN
- 5 Seasonal Patterns of Nutrient Limitation in Two Hypereutrophic Reservoirs
Dylan Kostuch, UW-Stout, Amherst, WI

UW-EAU CLAIRE

- 6 A Comparison of Geologic Influence on Phosphorus Loading through Lacustrine Groundwater Discharge in Three Lakes in Western Wisconsin
Madeline Marchiafava, Blaine, MN
Co-author: Bryanna Rayhorn
- 7 Ask the Parents! What Preservice Teachers Learned About an AAC User 
Anna Lash, Rochester, MN
- 8 Characterizing Intronic Variants of Uncertain Significance Using a Mingene System
Ethan Olerich, Stewartville, MN
Co-author: Claire Dennis
- 9 Educational Intervention to Reduce Postoperative Opioid Use 
Paige Draskowski, Fountain City, WI
- 10 Improving Consumer Paint Technology With Stimuli-responsive Polymer Dispersants 
Cavan Callahan, Menomonie, WI
Santiago Tzintzun, Dorchester, WI
- 11 The Silver Linings of COVID-19 in Long-Term Care
Hannah Keach, Zumbrota, MN

Poster Number and Poster Title

Student Name, Hometown

UW-GREEN BAY

- 12 A Generation of Revenge: An Analysis of Far-Right Youth Radicalization and Holocaust Education in the US Education

Kennedy Himmel, Green Bay, WI

- 13 African American Discrimination in Manufacturing Within Milwaukee County (1960-1967)

Haleigh Pavlat, Algoma, WI

Allie Wisniewski, Hortonville, WI

Co-authors: Tyler Stuart, Dylan Zoelle

- 14 Development of Simple Sequence Repeats for Wild Rice Conservation Genetics

Jennifer Boush, Pulaski, WI

- 15 Evaluation of Antidepressant Reversal of Behavioral and Pharmacological Stress-Induced Depression of Digging Behavior in Mice

Kaitlyn Partridge, Sun Prairie, WI

- 16 Exploring the Correlation Between Levels of Sports Fan Identification and Attitudes Towards Women and Sexual Minorities

Thomas Miller, Hobart, WI

- 17 The Queer/LGBTQ+ Experience Within Social Virtual Reality

Liv Riendeau, Caledonia, WI

UW-Green Bay, Manitowoc Campus

- 18 The Effects of Restoration Projects on Phosphorus Concentrations Throughout Manitowoc County Streams and Lake Michigan

Samantha Frauenfeld, UW-Green Bay, Manitowoc Campus, Cleveland, WI

Tiffany Paalman, UW-Green Bay, Appleton, WI

Lee Watson, UW-Green Bay, Winneconne, WI

Co-authors: Natalie Ford, Christopher Santiago

UW-Green Bay, Sheboygan Campus

- 19 Development of an Unknown Barbier Organozinc Lab for Organic Chemistry

Colleen Yeskie UW-Green Bay, Sheboygan Campus, Sheboygan, WI

Poster Number and Poster Title

Student Name, Hometown

UW-LA CROSSE

20 Comparing Historic Artifacts From Two Archaeological Sites on the Red Cliff Indian Reservation, Gaa-Miskwaabikaang

Faith Kalvig, Fitchburg, WI

21 Determining the Functional Role of the GOX1969 Protein in *Gluconobacter oxydans*

Ky Ariano, Geneseo, IL

22 Investigating the Lipid-binding Properties and Structural Requirements of DcrB, a Salmonella Copper Resistance Protein

Josie Lammers, Waukesha, WI

23 Reducing Risk Upon Reentry: An Examination of Health Risk Behaviors Among Incarcerated Women With a History of Drug Abuse

Madison Riddle, Waterloo, WI

24 Security Selection Model for the Gordon Spellman Fund Phase 2

Brandon Micech, Menomonee Falls, WI

25 Significance of *brpS* Gene Point Mutations on *srtA* Transcription and Biofilm Formation in *Staphylococcus aureus*

Sarah Fleegal, Green Lake, WI

Co-author: Allison Zank

UW-MADISON

26 Cracking Skin Microbe Competition: Finding New Drugs in the Human Skin

Sherrie Wu, Marinette, WI

27 Exploring Fire Tolerance of Wisconsin's Southern Hardwoods: Providing Insight Into Oak Savanna Restoration

Ava Cople, Portage, WI

Co-author: Steven Augustine

28 False Memories and Pattern Separation in Alzheimer's Disease: A Grocery Fluency Task

Samantha Greco, Fullerton, CA

29 Impacts of Imposter Phenomenon and Sense of Belonging in Underrepresented Honors Students

Sarah Almutawa, Hofuf, Saudi Arabia

Isa Butz, Greenfield, WI

30 Laboratory Evolution of Enzymes for Eco-Friendly Plastic Recycling

Maxwell Unger, Sussex, WI

Co-author: Mario Cribari

Poster Number and Poster Title

Student Name, Hometown

31 Lifetime Stressors, Depression, and Cognitive Health in Middle-aged and Older Adults

Emilie Reese, Hazel Green, WI

UW-MILWAUKEE

32 Covalent Organic Framework Membrane for the Removal of Per- and Polyfluoroalkyl Substances

Weiling Xia, Shorewood, WI

33 Design of Drug Loaded Double Layered Microparticles

Marina Slawinski, Whitefish Bay, WI

34 E-Cigarette Use Patterns among Young Adults between Rural and Urban Areas Over Time

Alex Nelson, Milwaukee, WI

35 How Did Galaxies in the Early Universe Grow?

Claire Bolda, Menomonee Falls, WI

36 Observatory Position Error as a Source of Noise in Pulsar Timing Searches for Gravitational Waves

Sparrow Roch, Bay View, WI

37 The Effect of Indomethacin on the Cytotoxicity of Phenylboronic Acid Nitrogen Mustards in Triple Negative Breast Cancer

Dhivyashree Senthil Murugan, New Berlin, WI

UW-Milwaukee at Waukesha

38 Factors Affecting Water Quality in Pit Lakes Across the USA

Lily Pemble, Wind Lake, WI

39 Sexual Violence on College Campuses

Alexandra Kaja, New Berlin, WI

UW OSHKOSH

40 A Computational Text Analysis of Congress's Immigration Discourse on Twitter

Yanet Fernandez, Oshkosh, WI

41 Crime After COVID-19: An Examination of Index Crimes in Winnebago County

Meagan Leach, Monroe, WI

42 Edward Tulane Orchestral Suite

Joe Sandy, Kaukauna, WI



Poster Number and Poster Title

Student Name, Hometown

43 Physiological Changes in *Deinococcus aquaticus* Long-Term Stationary Phase Under Carbon Source Availability Stress

Adam Sobieski, Berlin, WI

Kendal Watwood, Oshkosh, WI

Co-authors: Joshua Bowers, Sydney Covert, Cassidy Detvan, Danielle Dolina, Pedro Hruby, Will Inghram, Mariah Linse, Oliver Long, Mark Putzer, Austin Skenandore, Sam Trout, Catherine Washak

44 Reconsidering Wisconsin's Northern Kettle Moraine: How One Millimeter May Change Our Glacial History

Eric Giese, West Bend, WI

45 The Grass Is Always Greener: Agriculture and American Nineteenth-Century German Immigration Pamphlets

Catie Gullickson, Oshkosh, WI

UW-PARKSIDE

46 Bumblebee Distribution on UW-Parkside's Campus

Abby Lentz, Waterford, WI

Natalie Meyer, Kenosha, WI

Nicholas Winter, Franklin, WI

47 Evaluation of Esters of Hydroxycinnamic Acids as UVB-UVA Filters in Emulsion: A Naturally Sourced Alternative to Synthetic UV Filters in Commercial Sunscreens

Trever Schneider, Franklin, WI

Elise Zevitz, Mount Pleasant, WI

Co-author: Hunter Cheney

48 Fabrication of a Next-Generation Superconducting Quantum Interference Device for Brain and Heart Imaging

Jack Binder, Kenosha, WI

Hillary Cunliffe-Owen, Kenosha, WI

49 Gender Differences in the Accuracy of Self-evaluations of Performance on Math and English Tests

Yincheng Jin, Pleasant Prairie, WI

Payton Leutner, Racine, WI

50 Looking at the Past Through Window Glass: Dating the Construction of Buildings at the Montgomery Site, Kenosha, County, Wisconsin

Karissa Homar, Waukesha, WI

51 Storytelling Through Video Games - A Communication Study

Elisa Kurber, Kenosha, WI

Poster Number and Poster Title

Student Name, Hometown

UW-PLATTEVILLE

52 A New Horizon for the Evening Bat?

Kirsten Magedanz, Platteville, WI

53 Evaluation of Biochar as a Manure Storage Cover

Davin Dahl, Platteville, WI

Zachary Flitsch, Platteville, WI

Jeffrey Smolinski, New London, WI

54 Impact of Anti-Icing on the Durability of Concrete Infrastructure 

Dylan Notsch, Foley, MN

Will Straka, Mineral Point, WI

55 Meta-Analysis of Psychological Profiling: Overall Accuracy and Factors That Influence Accuracy

Kimberly Cummings, Gleason, WI

56 Photochemical Synthesis of Aryl Fluorinated Ethers to Develop the Next Generation of Agrochemicals

Natalie Haen, Luxemburg, WI

Cassie Kniess, Verona, WI

Adia Metz, Darlington, WI

Co-author: Brooke Steeno

57 The Influence of Restricted Abortion on Women's Mate Choices 

Maddie Gehl, Peosta, IA

UW-Platteville Baraboo Sauk County

58 Genetic Identification of Field Mice Species at the Sauk Prairie Recreation Area

Myjah Drews, Cambria, WI

Zachary Larson, Portage, WI

UW-Platteville Richland

59 Social Engineering: New Trends

Chung Chi Yeung, Richland Center, WI

Poster Number and Poster Title

Student Name, Hometown

UW-RIVER FALLS

60 Development of Whey Protein-Lignin Based Film Materials for Food Packaging Applications

Yihong Deng, River Falls, WI

Sierra Kolodjski, River Falls, WI

61 Genome-wide Association Studies of Lifetime Profit Index in Holstein Friesian

Emma Etten, Shawano, WI

Beth McIlquham, Chippewa Falls, WI

62 Heavy Metal Analysis of Wetlands in Northern Wisconsin

Cierra Kirkwood, River Falls, WI

63 Impacts of Attentional Distractors on Spatial Working Memory in a Mouse Model

Dylan Jensen, Racine, WI

Co-author: McKinley Davis

64 Interactive Effects of Performance Level and Managerial Awareness of Psychological Diagnoses on Ratings of Work Performance and Potential

Diego Theisen, River Falls, WI

Co-author: Emily Kupka

65 Effect of Sibling Conflict and Sibling Gender on Empathy Levels

Sophia Cobian, River Falls, WI

Co-author: Ashley Ryckman

UW-STEVENS POINT

66 An Exploration of General Music Curricula Throughout Our Region

Alex St. Louis, Cudahy, WI

67 Comparing Reproductive Traits and Viscin Thread Production in Selfing and Outcrossing Species of *Clarkia*


Morgan Gibbs, Amherst, WI

Meghan Schimka, Columbus, IN

Frankie Will, Saint Germain, WI

68 Composting Deactivation of Chronic Wasting Disease Prions: Final Results

Amber Smith, Pleasant Prairie, WI

69 Initial Insights on the Thermal Ecology of Lake Whitefish in Northwestern Lake Michigan 

Kayla Reed, Sobieski, WI

Poster Number and Poster Title

Student Name, Hometown


70 The Effect of Education on Income Inequality in Wisconsin 

Kyle Pulvermacher, Waupaca, WI

71 The Fight To Tell History: Battles Over the National History Standards in the 1990s

Kyle Beyersdorf, Appleton, WI

UW-STOUT

72 Accessing Mental Health Services Across the Life Course: Barriers and Solutions 

Kacey King, Menomonie, WI

73 Determinants of MSA-Level Employment and Wages

Zachary Helget, Menomonie, WI

74 Development of Rapid, Ready-to-Use, and Cost-Effective Water Test Kits for Detection of E. coli and Coliforms

Caitlyn Lisota, Mukwonago, WI

75 Impact of Personal Care Products on Tensile Strength and Structure of Hair

Jordan Kunze, Merrill, WI

76 Predictable Patterns in Sports Journalism Headlines: Can AI Replicate the Expected Structure and Tone?

Broderick Frye, Whitewater, WI

77 Using Mathematical Modeling to Increase the Crop per Drop for Dark Red Kidney Beans

Noah Royce, Antigo, WI

UW-SUPERIOR

78 Food Insecurity and Sustainability in Wisconsin: Understanding the Influence of Technological Advancements and Labor Mobility

Akira Tanaka, International Student

79 Period Poverty in the Twin Ports and Beyond 

Zöe Tietz, Merrill, WI

80 Predicting Vape Usage


Mackenzie Fredrikson, Superior, WI

81 Stress & Risk: The Effect of Online vs. In-Person Stress


Ailee Miller, Superior, WI

Poster Number and Poster Title

Student Name, Hometown

82 The Real but Incomplete Truth of Women in the Works of Wollstonecraft and Austen 

Hailie Evans, Superior, WI

83 Whole Person Approaches to Sex Offender Treatment 

Shawn Robin, Madison, WI

UW-WHITEWATER

84 Confidence and Preparedness With Multilingual Intervention

Maggie Tienor, Kaukauna, WI

85 Determinization of Sedimentary Phosphorus Levels in Rice Lake, Whitewater WI

Angel Navarrete, Genoa, IL

86 Developing Inclusive Healthcare Environments for Gender-Expansive Individuals With Polycystic Ovarian Syndrome

Elbee Ascherl, Whitewater, WI

87 Kinematics of Red Clump Giants in the Milky Way Galaxy

Logan Mueller, Hubertus, WI

88 Novel Insights on the Genetic Identification of Giant Knotweed Species in Wisconsin (Genus *Reynoutria*, Polygonaceae), Using the Nuclear LEAFY Gene

Morgan Sabol, Middleton, WI

Colin Topol, Lombard, IL

89 Search for Antibiotic-Producing Gene Cluster in *Pseudomonas chlororaphis*

Kira Staehler, East Troy, WI

UW-Whitewater at Rock County

90 Wisconsin Mayflies of the Genus *Tricorythodes* (Ephemeroptera: Leptohiphidae): Field Collections, Rearing, and Identification

Zachary Allen, Janesville, WI

Max Ellefson, Milton, WI

STUDENT PRESENTERS BY WISCONSIN LEGISLATIVE DISTRICT

Legislative District

Senate/Assembly	Student Presenter	Campus	Poster
1 1	Kyle Chaudoir	UW-Green Bay	2
1 1	Natalie Haen	UW-Platteville	56
1 1	Haleigh Pavlat	UW-Green Bay	13
1 3	Tiffany Paalman	UW-Green Bay	18
2 5	Thomas Miller	UW-Green Bay	16
2 5	Joe Sandy	UW Oshkosh	42
2 5	Maggie Tienor	UW-Whitewater	84
2 6	Jennifer Boush	UW-Green Bay	14
2 6	Emma Etten	UW-River Falls	61
4 10	Weiling Xia	UW-Milwaukee	32
5 15	Alexandra Kaja	UW-Milwaukee at Waukesha	39
5 15	Dhivyashree Senthil Murugan	UW-Milwaukee	37
7 19	Alex Nelson	UW-Milwaukee	34
7 20	Sparrow Roch	UW-Milwaukee	36
7 20	Alex St. Louis	UW-Stevens Point	66
7 21	Trever Schneider	UW-Parkside	47
8 22	Claire Bolda	UW-Milwaukee	35
8 22	Brandon Micech	UW-La Crosse	24
8 22	Logan Mueller	UW-Whitewater	87
8 22	Maxwell Unger	UW-Madison	30
8 23	Marina Slawinski	UW-Milwaukee	33
9 25	Samantha Frauenfeld	UW-Green Bay, Manitowoc Campus	18
9 26	Sarah Baughman	UW-Green Bay	1
9 26	Colleen Yeskie	UW-Green Bay, Sheboygan Campus	19
10 29	Kal Breeden	UW-Stout	4
10 29	Cavan Callahan	UW-Eau Claire	10
10 29	Zachary Helget	UW-Stout	73
10 29	Kacey King	UW-Stout	72
10 29	Britney Serafina	UW-Stout	3
11 31	Elbee Ascherl	UW-Whitewater	86
11 31	Broderick Frye	UW-Stout	76
11 31	Angel Navarrete	UW-Whitewater	85
11 31	Colin Topol	UW-Whitewater	88

**Legislative
District**

Senate/Assembly		Student Presenter	Campus	Poster
11	33	Zachary Allen	UW-Whitewater at Rock County	90
11	33	Max Ellefson	UW-Whitewater at Rock County	90
12	34	Frankie Will	UW-Stevens Point	67
12	35	Kimberly Cummings	UW-Platteville	55
12	35	Jordan Kunze	UW-Stout	75
12	35	Noah Royce	UW-Stout	77
13	38	Madison Riddle	UW-La Crosse	23
14	40	Kyle Pulvermacher	UW-Stevens Point	70
14	40	Jeffrey Smolinski	UW-Platteville	53
14	40	Adam Sobieski	UW Oshkosh	43
14	41	Ava Copple	UW-Madison	27
14	41	Sarah Fleegal	UW-La Crosse	25
14	41	Zachary Larson	UW-Platteville	58
			Baraboo Sauk County	
14	42	Myjah Drews	UW-Platteville	58
			Baraboo Sauk County	
16	46	Kaitlyn Partridge	UW-Green Bay	15
17	49	Davin Dahl	UW-Platteville	53
17	49	Zachary Flitsch	UW-Platteville	53
17	49	Maddie Gehl	UW-Platteville	57
17	49	Kirsten Magedanz	UW-Platteville	52
17	49	Dylan Notsch	UW-Platteville	54
17	49	Emilie Reese	UW-Madison	31
17	50	Chung Chi Yeung	UW-Platteville	59
			Richland	
17	51	Meagan Leach	UW Oshkosh	41
17	51	Adia Metz	UW-Platteville	56
17	51	Will Straka	UW-Platteville	54
18	53	Lee Watson	UW-Green Bay	18
18	54	Yanet Fernandez	UW Oshkosh	40
18	54	Catie Gullickson	UW Oshkosh	45
18	54	Kendal Watwood	UW Oshkosh	43
19	56	Kyle Beyersdorf	UW-Stevens Point	71
19	56	Allie Wisniewski	UW-Green Bay	13
20	59	Eric Giese	UW Oshkosh	44
21	61	Hillary Cunliffe-Owen	UW-Parkside	48
21	61	Yincheng Jin	UW-Parkside	49
21	61	Amber Smith	UW-Stevens Point	68

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21	62	Dylan Jensen	UW-River Falls	63
21	62	Abby Lentz	UW-Parkside	46
21	62	Liv Riendeau	UW-Green Bay	17
21	62	Elise Zevitz	UW-Parkside	47
22	64	Jack Binder	UW-Parkside	48
22	64	Natalie Meyer	UW-Parkside	46
22	65	Elisa Kurber	UW-Parkside	51
22	66	Payton Leutner	UW-Parkside	49
23	67	Beth McIlquham	UW-River Falls	61
23	69	Santiago Tzintzun	UW-Eau Claire	10
24	71	Morgan Gibbs	UW-Stevens Point	67
24	71	Dylan Kostuch	UW-Stout	5
24	71	Meghan Schimka	UW-Stevens Point	67
25	73	Hailie Evans	UW-Superior	82
25	73	Mackenzie Fredrikson	UW-Superior	80
25	73	Ailee Miller	UW-Superior	81
25	73	Akira Tanaka	UW-Superior	78
26	76	Sarah Almutawa	UW-Madison	29
26	76	Samantha Greco	UW-Madison	28
26	77	Shawn Robin	UW-Superior	83
27	80	Faith Kalvig	UW-La Crosse	20
27	80	Cassie Kniess	UW-Platteville	56
27	80	Morgan Sabol	UW-Whitewater	88
28	82	Nicholas Winter	UW-Parkside	46
28	83	Caitlyn Lisota	UW-Stout	74
28	83	Lily Pemble	UW-Milwaukee at Waukesha	38
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29	86	Zöe Tietz	UW-Superior	79
30	88	Kennedy Himmel	UW-Green Bay	12
30	89	Kayla Reed	UW-Stevens Point	69
30	89	Sherrie Wu	UW-Madison	26
31	91	Hannah Keach	UW-Eau Claire	11
31	91	Anna Lash	UW-Eau Claire	7
31	91	Madeline Marchiafava	UW-Eau Claire	6
31	91	Ethan Olerich	UW-Eau Claire	8
31	92	Paige Draskowski	UW-Eau Claire	9
31	93	Sophia Cobian	UW-River Falls	65
31	93	Yihong Deng	UW-River Falls	60
31	93	Cierra Kirkwood	UW-River Falls	62

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31 93	Sierra Kolodjski	UW-River Falls	60
31 93	Diego Theisen	UW-River Falls	64
32 95	Ky Ariano	UW-La Crosse	21
33 97	Karissa Homar	UW-Parkside	50
33 98	Josie Lammers	UW-La Crosse	22

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