

17TH ANNUAL

Research in the Rotunda

Showcasing the Work of UW Undergraduates

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17TH ANNUAL

RESEARCH IN THE ROTUNDA

March 11, 2020

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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

12PM – REMARKS, CAPITOL ROTUNDA

Speaker: Ray Cross, 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 17th annual *Research in the Rotunda: Showcasing the Work of UW Undergraduates*. We are proud to highlight the research achievements of our undergraduate students for 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 instrumental to the state's success.

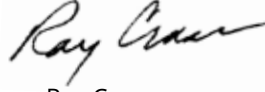
Through partnering with our accomplished faculty, each student has a rewarding opportunity to enhance their project management, teamwork, and critical problem-solving skills. Students investigated real-life issues affecting local, state, national, and international citizens and communities. Engaging 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 very proud of them, our university system, and our state.

Cordially,

A handwritten signature in black ink, appearing to read "Ray Cross". The signature is written in a cursive style with a large, prominent "R" and "C".

Ray Cross
President

BOARD OF REGENTS

Regent Robert Atwell
Regent Scott Beightol
Regent José Delgado
Regent Michael M. Grebe, *Vice President*
Regent Eve Hall
Regent Mike Jones
Regent Tracey L. Klein
Regent Becky Lezvow
Regent Edmund Manydeeds III
Regent Janice Mueller
Regent Andrew S. Petersen, *President*
Regent Cris Peterson
Regent Jason R. Plante
Regent Carolyn Stanford Taylor
Regent Torrey Tiedeman
Regent Karen Walsh
Regent Olivia Woodmansee

CHANCELLORS

Chancellor James Schmidt
University of Wisconsin–Eau Claire

Chancellor Sheryl Van Gruensven (interim)
University of Wisconsin–Green Bay

Chancellor Joe Gow
University of Wisconsin–La Crosse

Chancellor Rebecca Blank
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 Dennis J. Shields
University of Wisconsin–Platteville

Chancellor Dean Van Galen
University of Wisconsin–River Falls

Chancellor Bernie L. Patterson
University of Wisconsin–Stevens Point

Chancellor Katherine P. Frank
University of Wisconsin–Stout

Chancellor Renée Wachter
University of Wisconsin–Superior

Chancellor Dwight C. Watson
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	
Dong-Fang Deng	UW-Milwaukee	1	3	8
Brad Carter	UW-Eau Claire	2	31	91
Michael Carvan	UW-Milwaukee	2	4	10
Michael Holly	UW-Green Bay	3	30	88
Sean Hartnett	UW-Eau Claire	4	31	91
J. Brian Mahoney	UW-Eau Claire	5	31	91
Sarah Vitale	UW-Eau Claire	5	31	91
Carmen Aguilar	UW-Milwaukee	6	7	19
Russell Cuhel	UW-Milwaukee	6	7	19
Stephen Levas	UW-Whitewater	6	28	83
Nadia Carmosini	UW-La Crosse	7	32	95
Gregory J. Sandland	UW-La Crosse	7	32	95
Eric Jamelske	UW-Eau Claire	8	31	91
Kim Pierson	UW-Eau Claire	9	31	91
Kaishan Kong	UW-Eau Claire	10	31	91
Crystal Del Valle	UW-Eau Claire	11	10	30
Robert J. Pignolo	Mayo Clinic	12		
Abhishek Chandra	Mayo Clinic	12	23	68
Nicole Schultz	UW-Eau Claire	13	31	91
Ganga Vadhavkar	UW-Eau Claire	13	31	93
Wufeng Tian	UW-Eau Claire	14	25	75
Suzanne Truman	UW-Eau Claire at Barron County	15	25	75
Allen Huffcutt	UW-Green Bay	16	30	90
Georgette Heyrman	UW-Green Bay	17, 21	30	88
Paul Mueller	UW-Green Bay	17	30	88
Debra Pearson	UW-Green Bay	17	30	88
Emily Ransom	UW-Green Bay	18	30	90
Timothy Kaufman	UW-Green Bay	19	30	90
Patrick Forsythe	UW-Green Bay	20	30	88
Robert Howe	UW-Green Bay	20	30	88
Mandeep Bakshi	UW-Green Bay	21	30	88
Rebecca Abler	UW-Green Bay, Manitowoc Campus	22	9	25
Richard Hein	UW-Green Bay, Manitowoc Campus	22	9	25
Patricia Terry	UW-Green Bay	23	30	88
Michael Zorn	UW-Green Bay	23	30	88

Faculty Adviser	Campus	Poster	Legislative District Senate/Assembly	
Mark Klemp	UW-Green Bay, Marinette Campus	23	2	4
Renee Richer	UW-Green Bay, Marinette Campus	23	30	89
Nicholas Bakken	UW-La Crosse	24	32	94
Barbara Bennie	UW-La Crosse	24	32	95
Kelly Gorres	UW-La Crosse	25	32	95
Carol Miller	UW-La Crosse	26	32	94
Melissa Collum	UW-La Crosse	27	32	96
Ryan McKelley	UW-La Crosse	28	32	94
William Schwan	UW-La Crosse	29	32	95
Helen Blackwell	UW-Madison	30	26	77
Daniel Manson	UW-Madison	30	26	77
Betty Slinger	UW-Madison	30	26	77
Dominic Ledesma	UW-Madison	31	26	77
Daniel Cobian	UW-Madison	32	26	78
Mikel Joachim	UW-Madison	32	26	78
Keith Knurr	UW-Madison	32	26	78
Kate Henderson	UW-Madison	33	26	78
Dylan Plaskon	UW-Madison	33	26	78
M. Thomas Record, Jr.	UW-Madison	33	16	47
Tonya Roberts	UW-Madison	34	14	42
Erika Marin-Spiotta	UW-Madison	35	26	77
M Mahmun Hossain	UW-Milwaukee	36	28	82
Brooke Slavens	UW-Milwaukee	37	4	10
Jacqueline Stuhmiller	UW-Milwaukee	38	4	10
Deborah Hannula	UW-Milwaukee	39	7	21
Fred Helmstetter	UW-Milwaukee	39	4	10
Dawn Erb	UW-Milwaukee	40	4	10
David Kaplan	UW-Milwaukee	40	4	10
Arijit Sen	UW-Milwaukee	41	7	19
Tricia Wessel	UW-Milwaukee at Washington County	42	8	23
Gregg Jamison	UW-Milwaukee at Waukesha	43	27	80
Michael Jasinski	UW-Oshkosh	44	18	54
Yoko Mogi-Hein	UW-Oshkosh	44	1	2
Kristi Wilkum	UW-Oshkosh	45	18	54
Stephen Kercher	UW-Oshkosh	46	19	55
Justyna Olszewska	UW-Oshkosh	47	18	54
Benjamin Artz	UW-Oshkosh	48	18	54
Matt Richie	UW-Oshkosh	49	19	55
Warren Vaz	UW-Oshkosh, Fox Cities campus	50	19	57
Meredith McGinley	UW-Parkside	51	22	64
Francis Mann	UW-Parkside	52	22	64
Ross Astoria	UW-Parkside	53	22	64
Cathy Mossman	UW-Parkside	54	21	61

Faculty Adviser	Campus	Poster	Legislative District Senate/Assembly	
Jessica Orlofske	UW-Parkside	54	21	62
Zaid Altahat	UW-Parkside	55	5	13
John Skalbeck	UW-Parkside	56	22	64
Mehdi Roopaei	UW-Platteville	57	17	49
Raymond Pugh	UW-Platteville	58	17	49
Hal Evensen	UW-Platteville	59	27	80
Kameko Halfmann	UW-Platteville	60	17	49
John Peterson	UW-Platteville	61	17	49
Jeff Cowley	UW-Platteville	62	17	49
David Olson	UW-Platteville	63	27	81
	Baraboo Sauk County			
Faye Peng	UW-Platteville Richland	64	27	79
Holly Dolliver	UW-River Falls	65	10	30
Matthew Digman	UW-River Falls	66	10	30
Youngmi Kim	UW-River Falls	66	10	30
Roger Easton Jr.	Rochester Institute of Technology (RIT)	67		
Tania Kleynhans	Rochester Institute of Technology (RIT)	67		
David Messinger	Rochester Institute of Technology (RIT)	67		
Ross Jilk	UW-River Falls	68	10	30
Samuel Alvarado	UW-River Falls	69	10	30
Matthew O'Reilly	UW-River Falls	70	10	30
Andy Felt	UW-Stevens Point	71	24	71
Brad Mapes-Martin	UW-Stevens Point	71	24	71
Nisha Fernando	UW-Stevens Point	72	24	71
Rob Michitsch	UW-Stevens Point	73	24	71
Nikolaus Butz	UW-Stevens Point	74	24	71
Bryant Scharenbroch	UW-Stevens Point	75	24	71
David Barry	UW-Stevens Point	76	24	71
Jess Bowers	UW-Stevens Point	76	24	71
Ashley Driver	UW-Stevens Point	77	24	71
Scott Sybeldon	UW-Stevens Point at Wausau	78	29	85
Zach Raff	UW-Stout	79	10	29
Chelsea Lovejoy	UW-Stout	80	10	29
Lindsay Heidelberger	UW-Stout	81	10	29
Tina Lee	UW-Stout	82	10	29
Sakib Mahmud	UW-Superior	83	25	73
Amy Eliot	UW-Superior	84	25	74
Jenean O'Brien	UW-Superior	84	25	73
Steven Steblay	UW-Superior	85	25	73
Allison Willingham	UW-Superior	85	25	73
Lynn Goerd	UW-Superior	86	25	73
Kat Werchouski	UW-Superior	87	25	73
Eleni Pinnow	UW-Superior	88	25	73

Faculty Adviser	Campus	Poster	Legislative District Senate/Assembly
Karl Brown	UW-Whitewater	89	15 45
Lynn Gilbertson	UW-Whitewater	90, 95	15 43
Linda Yu	UW-Whitewater	90	15 43
Molly Benjamin Patterson	UW-Whitewater	91	15 43
Nathaly Cormier	UW-Whitewater	92	15 43
Ozgur Yavuzcetin	UW-Whitewater	92	11 33
Carolyn Morgan	UW-Whitewater	93	15 43
Daniel Stalder	UW-Whitewater	93	33 97
Rocio Duchesne-Onoro	UW-Whitewater	94	15 43
Lynn Gilbertson	UW-Whitewater	95	15 43
Nicholas Tippery	UW-Whitewater	96	15 43
Daniel Zamzow	UW-Whitewater at Rock County	96	13 37

STUDENT PRESENTERS BY CAMPUS

Poster Number and Poster Title

Student Name, Hometown

WATER RESEARCH FELLOWS

- 1 Impact of Polyethylene on the Great Lakes Fish: Growth, Survival, and Health of Yellow Perch (*Perca flavescens*) Fingerlings Exposed to Polyethylene through Feeding

Emma Kraco, UW-Milwaukee, Milwaukee, WI

- 2 Investigating Gene-Environment Interactions of Methylmercury Using Zebrafish

Elizabeth Johnson, UW-Eau Claire, Eau Claire, WI

- 3 Low-Cost Method for Detection of Per- and Polyfluoroalkyl Substances through Cleavage of Fluorine Bonds with Sodium Biphenyl

LeeAnn Bellow, UW-Green Bay, Green Bay, WI

Jacob Harper, UW-Green Bay, Brussels, WI

- 4 On-water Bathymetric Survey of the 1,237-Acre Old Abe Flowage in Chippewa County Utilizing a Lowrance Integrated GPS/HD-Sonar

Wyatt Pajtash, UW-Eau Claire, Delta, WI

- 5 Phosphorus Contamination in Surface Water and Groundwater in Western Wisconsin: Understanding Pathways

Jacob Erickson, UW-Eau Claire, Maplewood, MN

Madeline Palubicki, UW-Eau Claire, Mondovi, WI

- 6 Shell Composition and Trace Metal Scavenging by Invasive Bivalve Mollusks in Southeastern Wisconsin Waters

Jessica Darling, UW-Whitewater, Kenosha, WI

- 7 The Influence of Water Chemistry on the Toxicity of a Copper Pesticide (EarthTec QZ) Towards Aquatic Native and Invasive Snails

Zach Hanson, UW-La Crosse, Kimberly, WI

UW-EAU CLAIRE

- 8 A Continuing Examination of Food Purchasing through the Supplemental Nutrition Assistance Program (SNAP) and the Women, Infants and Children Program (WIC): A Case Study of Grocery Stores and Farmers' Markets with an Emphasis on Fruits and Vegetables

Olivia Jonasen, Kiel, WI

Katelyn Reckin, Menomonie, WI

Hailey Reynolds, Hopkins, MN

Co-authors: Karlien Asplund, Ethan Blaney, Zach Ledwith, Aubrey Liew, Shelly Stephani

- 9 Creating an Affordable Solar Water Heater System

Rebecca Tollakson, Mahomet, IL

Co-authors: Julia Kocen, Jack Tyler

Poster Number and Poster Title

Student Name, Hometown

- 10 Impact of Foreign Language Acquisition on Undergraduate Marketability
Caitlin Hedberg, Carver, MN
Co-author: Alexander Richert
- 11 Investigating Gp93 Biology Via Cloning Drosophila Toll and Integrin Genes
Ruby Gravrok, Eau Claire, WI
Ceana Olson, Max, MN
Ashley Walker, Eau Claire, WI
- 12 Pathophysiology of Osteoporosis
Megan Schleusner, Colfax, WI
- 13 Social Media Engagement and Domestic Intercultural Immersion Trips:
An Examination of Social Media Platforms as Avenues for Assessment of
Student Learning in Higher Education
Ta'Leah Van Sistine, Green Bay, WI

UW-Eau Claire - Barron County

- 14 Mathematical Analysis of an Alternative Power System in a Northern
Wisconsin Home
Haoyu Xu, Dalian, China
- 15 Poached
Olivia Blik, Chippewa Falls, WI
Cygel Matousek, Minong, WI

UW-GREEN BAY

- 16 And Then What? The Effects of Allowing Response Probing in Behavior
Description Interviews
McKenzie Diny, Greenleaf, WI
Emily Doran, Germantown, WI
Emily Fritsch, New Holstein, WI
Rosalyn Stoa, Green Bay, WI
Co-authors: Lindsey Casper, Kelsey Flaskrud, Richard Kellog, Fifi Muhidin,
Kassidy Murphy, Tara Polk, Alexis Smith, Kyle VandeVenter, Laura
VanRemortal
- 17 Evaluation of Synergism Vitamin D and ω -3 Fatty Acids in Ovarian Cancer
Cells
Brooke Breitrack, Bowler, WI
Ruchita Patel, Clintonville, WI
- 18 Mother Knows Best: Maternal Agency and Midwifery in Titus Andronicus
Hannah Majewski, Green Bay, WI
- 19 Researching Diverse Learners: A Qualitative Study on the Use of
Multimodality Instruction in the Classroom
Emily Wolf, Allenton, WI

Poster Number and Poster Title

Student Name, Hometown

20 Restoring Wetlands in Green Bay for Apex Predator: *Esox lucius*

Claire Stuart, Sullivan, WI

21 Sustainable Conversion of Contaminated Water into Potable Water

Akanksha Gurtu, De Pere, WI

UW-Green Bay, Manitowoc Campus

22 Monitoring of Water Quality Within the Restoration Area and Headwaters of Centerville Creek in Manitowoc County, WI

Kyle Deacy, Antigo, WI

Olivia Claybrook, Manitowoc, WI

Jacalyn Crom, Kiel, WI

Makenna Pucker, Rosendale, WI

UW-Green Bay, Marinette Campus

23 Bioremediation of Heavy Metals Using Cyanobacteria

Sarah Klemp, Green Bay, WI

Becky Berry, Marinette, WI

UW-LA CROSSE

24 Analyzing the Impacts of Co-Occurring Mental Health and Substance Use Disorders on Criminal Activity in Young Adults

Jillian Hebert, Glenview, IL

25 Characterizing a Protein that Regulates Epstein-Barr Virus Replication: Potential Antiviral Target

Alex Robbins, Marathon, WI

26 Cultural Disconnect in the Waterpark Capital of the World

Megan Wallen, Wisconsin Dells, WI

27 Online International Phonics Professional Development for Non-Native English Speaker Educators in Developing Nations: Facilitating Direct Interaction between Professional Development and Instruction

Morgan Alexander, Viola, WI

28 The Relationship between Past Trauma and Coping Strategy Formation

Lucas Marinack, Almond, WI

29 The Role the MW2284/MW2285 Two-Component Regulatory System Plays in *Staphylococcus aureus* Biofilm Production

Lillian Schulte, New Prague, MN

Poster Number and Poster Title
Student Name, Hometown

UW-MADISON

30 Novel Strategies to Target Bacterial Infection: Chemical Modulators of Bacterial Cell to Cell Communication

Rebecca Gillis, Shoreview, MN

Michael Kuehne, Seymour, WI

Akshith Mandepally, La Crosse, WI

31 Project Hais Lus: Perspectives on Language Access, Cultural Barriers, and Multilingualism in Wisconsin's Hmong Communities

Ariana Thao, Weston, WI

32 Quadriceps Activation Patterns during Running and Jumping after Anterior Cruciate Ligament Reconstruction in Collegiate Athletes

Jeremy Portillo, Louisville, KY

33 Reversible Initiation Kinetics of RNAP with Physiological Pyrophosphate

Claire Evensen, Verona, WI

Co-author: Ben Palatnik

34 Staff Barriers to Fulfilling Older Adult Preferences in Long Term Care Settings

Jillian Parks, Manhattan Beach, CA

35 The Effects of Intraspecific Genetic Variation in *Populus tremuloides* on Belowground Microbial Communities and Soil Organic Matter Pools

Olivia Lopez, Milwaukee, WI

UW-MILWAUKEE

36 Asymmetric Synthesis of the Anticancer Agent (+)-Elacomine

Ryan Majinski, New Berlin, WI

Co-author: M Shahnawaz Ali

37 Evaluation of Gait in Children with Hypermobile Type Ehlers-Danlos Syndrome

Nicole Vigon, Kenosha, WI

38 Magical Animal Transformations: Medieval Commentary on Sexualized Violence and Toxic Masculinity

Bailey Flannery, Sturtevant, WI

39 Materials Associated with Aversive Value Capture Attention

Tessa Miskimen, Lodi, WI

40 Multiwavelength Astrophysics at UWM

Bob Aloisi, Sheboygan Falls, WI

Nikolaus Prusinski, Saint Francis, WI

41 Urban Safety and Resistance: Sherman Park, Milwaukee

Bella Biver, Milwaukee, WI

Poster Number and Poster Title
Student Name, Hometown

UW-Milwaukee at Washington County

42 Self-Regulated Learning Strategies Influence Learning
Valerie Verhunce, Saukville, WI

UW-Milwaukee at Waukesha

43 Archaeological Analyses of Prehistoric Native American Projectile Points
at UWM-Waukesha: New Insights into Technology, Raw Materials, and
Variability
Skyler Miller, Arbor Vitae, WI

UW-OSHKOSH

44 Community Socioeconomic Indicators and Intra-Head Start Student
Performance
Stacey Sparks, Neenah, WI

45 Exploring Supportive Communication within Family Estrangement
Megan Elger, Hartford, WI

46 Influence of the Oneida Government Boarding School on the Oneida Indians
of Wisconsin
Megan Robertson, Appleton, WI

47 Memory for Familiar and Unfamiliar Logos
Brenna Prieto, Oshkosh, WI

48 The Cornell Note-Taking Method and Student Performance
Angel Camacho, Kenosha, WI

49 The Mental Health Race Track: A Qualitative Examination of Readmission at
a Mental Hospital
Baylee Tkaczuk, Channahon, IL

UW-Oshkosh, Fox Cities campus

50 Design and Fabrication of a Basic Utility Vehicle
Cesar Campos-Martinez, Appleton, WI
Co-authors: Roque Matos Martinez, Bingrui Xiao, Chin Yan Lee,
Collin R. Durkin, Matthew Velie

UW-PARKSIDE

51 Associations of Alternative Educational Methods with Depression, Anxiety,
and Social Climate of Adolescent Classrooms
Sarah Rybacki, Oak Creek, WI

Poster Number and Poster Title

Student Name, Hometown

52 Biosynthesis of E,Z,E-GGPP – a Novel Bacterial Compound

Lara Ferrari, Kenosha, WI

Leah Poulos, Kenosha, WI

53 Constitutionality of the USA Patriot Act and Infringement of Civil Liberties of Marginalized Populations

Loveneet Kaur Sidhu, Oak Creek, WI

54 Effects of Trophic Pressures on Nocturnal Activity in Wisconsin Microbats (Chiroptera: Vespertilionidae)

Grace Wampole, Racine, WI

Co-authors: Mitchell Anderson, Zach Williams, Shannon O'Malley,

Kyle Bergendahl

55 Insight and Analytics from Git Repositories

Yan Berezkin, Gurnee, IL

Jordan Brekke, Franksville, WI

Timothy Guilfoyle, Richmond, IL

Victor Huarota, Racine, WI

56 Source Water Contribution in Albion Basin Wetlands Based on Spring and Surface Flow Measurements

Kristen Carlson, Twin Lakes, WI

Benjamin Sieren, Waterford, WI

Co-author: Daniel Kerstan

UW-PLATTEVILLE

57 Device Analytics for Disaster Response Applications

Logan Shefchik, Luxemburg, WI

Jonas Wagner, Oshkosh, WI

58 Learning Biochemistry the Write Way: Applying Writing To Learn in STEM Education

Hannah Frank, Dodgeville, WI

RevaLu Ronnfeldt, La Farge, WI

Michael Schneider, Stratford, WI

Frances Tempesta, Racine, WI

59 Nanoscale Vacuum-Channel Field Emission Transistor

Kayla Golden, Greendale, WI

60 The Relationship Between Dopamine and Utilitarian Moral Judgment

Dana Mueller, Sturgeon Bay, WI

61 Thermal Ecology of *Ophidiomyces ophidiicola*, the Cause of Snake Fungal Disease, in Free-Ranging Snakes in Wisconsin

Sarah Bauer, Greenfield, WI

Allison Sheldon, Beaver Dam, WI

Poster Number and Poster Title
Student Name, Hometown

62 Yoga Improves Body Composition and Balance in Sedentary Adults

Brooke Kunkel, Kieler, WI

Ann Larson, Cumberland, WI

UW-Platteville Baraboo Sauk County

63 Prairie Plant Genetic Diversity on Campus Remnants

Emily Forbush, Baraboo, WI

Brooke Martin, Baraboo, WI

UW-Platteville Richland

64 The Catch-up Effect in the Vietnam Economy

Ha Nguyen, Vietnam

UW-RIVER FALLS

65 Behavior of Nitrogen in Frac Sand Waste Fines

Paul Tietz, Waunakee, WI

66 Enzyme-Assisted Protein Isolation from Alfalfa Leaves

Virginia Lee, Mequon, WI

67 Evaluating the Spectral Power of a Light Source for Use on Aged Parchment

David Kieke, Marshfield, WI

68 Method Development for the Characterization of Fatty Acids on Pennycress Oil

Christopher Daggett, River Falls, WI

69 Producing Polymer-Quantum Dot Composite Materials Through Direct Ligand Reaction

Kimberly Mackiel, Lake Elmo, MN

Cordell Schrank, De Pere, WI

70 The Preparation of Enantiopure Emmacin Analogs for Characterization of the Enantiospecific Activity

Kirsten Ruud, Fort Atkinson, WI

UW-STEVENS POINT

71 A Mixed-Linear Programming Model for Political Redistricting

Shane Olsen, Waupaca, WI

72 Biophilic Design: Connecting Interiors with Health and Wellbeing

Cassandra Ostertag, Plover, WI

73 Composting Deactivation of CWD Prions

Susanna Baker, Columbus, WI

Poster Number and Poster Title

Student Name, Hometown

74 Hiring for Grit: How Passion and Perseverance Are Used to Predict Employee Success in Rural Economies

Emily Gruber, Stevens Point, WI

75 The Effects of Biochar and Biosolids on Soil Quality and Relative Tree Health of *Quercus Macrocarpa*

Laurel Deitch, Stevens Point, WI

76 The Role of Religion in Social Work Practice

Marisa Skajewski, Medicine Lake, MN

77 Utilizing CRISPR-Cas9 to Define the Role of Hsd17b7 in Cell Structure and Function

Kaleb Tenhagen, Sturtevant, WI

UW-Stevens Point at Wausau

78 Building Value and Increasing Engagement in Voluntary Employee Enrichment Programs

Ana Capetillo, Withee, WI

Kieran Talley, Rothschild, WI

UW-STOUT

79 Democracy and Interpersonal Relationships in Danger: Political Divisiveness

Madalaine McConville, Augusta, WI

80 Demographic Analysis of Bias and Privilege at a Small Midwestern University

Brandon Beaulieu, Sun Prairie, WI

81 The Exploration of the Hmong Diet Among Hmong Students

Choua Xiong, Milwaukee, WI

82 The Influence of Media on Statewide Political Knowledge and Attitudes: Gerrymandering in Wisconsin

Cassie Boulanger, New Franken, WI

Daniel Polson, Menomonie, WI

UW-SUPERIOR

83 Dark Store Theory in the Retail Industry and Its Impacts on the City of Superior

Ramesh Shrestha, Superior, WI

84 Investigating Viability of Wild Rice Beds at Varying Water Depths

Brittany Brown, Superior, WI

Poster Number and Poster Title

Student Name, Hometown

85 Meeting the Needs of Crime Victims with Disabilities: An Exploratory Study

Sarah Fjeran, Superior, WI

Katie Foerst, Superior, WI

Alicia Jatkola, Superior, WI

86 Mindfulness Techniques and the Impact in Social Work Practice

Rachel Turner, Duluth, MN

87 Missing and Murdered Indigenous Women

Jessica Smith, Cloquet, MN

88 The Relationship Between Well-Being and Financial Stress in College Students

Rachael Tuve, Superior, WI

UW-WHITEWATER

89 A League of Legends: A Historical Analysis of the League of Women Voters - Whitewater Area

Elizabeth Farrey, Whitewater, WI

90 Assessing and Improving Financial Literacy

Amanda Battle, Little Chute, WI

91 Modern Standard Arabic Accessibility: Developing Resources for the BVI and Dyslexic Communities

Chris Mathews, Cedarburg, WI

92 Optimizing Atomic Force Microscopy Techniques to Identify Amyloid Fibrils in the Seminal Plasma of Bovine Ejaculates

Ian Ruble, Deer Park, WI

93 Racial Bias in News Media and Its Effects on Black Males Self-Image

Purcell Pearson, Milwaukee, WI

94 Remote Sensing of the Urban Heat Island Effect in Wisconsin

Kayla Bradford, Walworth, WI

UW-Whitewater at Rock County

95 An Evaluation of Real-Time Captioning Applications for Chrome Books and iPads in Simulated Classroom Acoustical Environments

Aja Hill, Edgerton, WI

96 Palmitoylation of Frontal Cortex Proteins and Spatial Memory in Aging Mice

Crystal Karas, Janesville, WI

STUDENT PRESENTERS BY WISCONSIN LEGISLATIVE DISTRICT

Legislative District

Senate/Assembly	Student Presenter	Campus	Poster
1 1	Jacob Harper	UW-Green Bay	3
1 1	Logan Shefchik	UW-Platteville	57
1 1	Dana Mueller	UW-Platteville	60
1 1	Cassie Boulanger	UW-Stout	82
1 2	McKenzie Diny	UW-Green Bay,	16
1 2	LeeAnn Bellow	UW-Green Bay	3
1 3	Zach Hanson	UW-La Crosse	7
1 3	Megan Robertson	UW-Oshkosh	46
1 3	Amanda Battle	UW-Whitewater	90
2 4	Hannah Majewski	UW-Green Bay	18
2 4	Sarah Klemp	UW-Green Bay	23
2 5	Michael Kuehne	UW-Madison	30
2 6	Ruchita Patel	UW-Green Bay	17
3 7	Olivia Lopez	UW-Madison	35
6 16	Choua Xiong	UW-Stout	81
6 17	Purcell Pearson	UW-Whitewater	93
7 19	Emma Kraco	UW-Milwaukee	1
7 19	Bella Biber	UW-Milwaukee	41
7 20	Nikolaus Prusinski	UW-Milwaukee	40
7 21	Sarah Rybacki	UW-Parkside	51
7 21	Loveneet Kaur Sidhu	UW-Parkside	53
8 24	Emily Doran	UW-Green Bay	16
8 24	Virginia Lee	UW-River Falls	66
9 25	Olivia Claybrook	UW-Green Bay, Manitowoc Campus	22
9 26	Bob Aloisi	UW-Milwaukee	40
9 27	Jacalyn Crom	UW-Green Bay, Manitowoc Campus	22
9 27	Olivia Jonasen	UW-Eau Claire	8
9 27	Emily Fritsch	UW-Green Bay	16
10 28	Ian Ruble	UW-Whitewater	92
10 29	Katelyn Reckin	UW-Eau Claire	8
10 29	Daniel Polson	UW-Stout	82
10 30	Christopher Daggett	UW-River Falls	68
11 31	Kayla Bradford	UW-Whitewater	94
11 31	Crystal Karas	UW-Whitewater	96
11 33	Claire Stuart	UW-Green Bay	20

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11 33	Kirsten Ruud	UW-River Falls	70
12 34	Skyler Miller	UW-Milwaukee at Waukesha	43
12 35	Brooke Breitrick	UW-Green Bay	17
12 35	Kyle Deacy	UW-Green Bay	22
13 37	Allison Sheldon	UW-Platteville	61
13 37	Susanna Baker	UW-Stevens Point	73
14 40	Shane Olsen	UW-Stevens Point	71
14 41	Megan Wallen	UW-La Crosse	26
14 42	Tessa Miskimen	UW-Milwaukee	39
15 43	Elizabeth Farrey	UW-Whitewater	89
15 43	Aja Hill	UW-Whitewater at Rock County	95
16 46	Brandon Beaulieu	UW-Stout	80
17 49	Morgan Alexander	UW-La Crosse	27
17 49	Brooke Kunkel	UW-Platteville	62
17 50	Ha Nguyen	UW-Platteville Richland	64
17 51	Hannah Frank	UW-Platteville	58
18 53	Makenna Pucker	UW-Green Bay, Manitowoc Campus	22
18 54	Brenna Prieto	UW-Oshkosh	47
18 54	Angel Camacho	UW-Oshkosh	48
18 54	Baylee Tkaczuk	UW-Oshkosh	49
18 54	Jonas Wagner	UW-Platteville	57
19 55	Stacey Sparks	UW-Oshkosh	44
19 56	Cesar Campos-Martinez	UW-Oshkosh, Fox Cities campus	50
20 59	Emily Wolf	UW-Green Bay	19
20 59	Megan Elger	UW-Oshkosh	45
20 60	Valerie Verhunce	UW-Milwaukee at Washington County	42
20 60	Chris Mathews	UW-Whitewater	91
21 61	Kristen Carlson	UW-Parkside	56
21 62	Jordan Brekke	UW-Parkside	55
21 62	Benjamin Sieren	UW-Parkside	56
21 62	Frances Tempesta	UW-Platteville	58
21 63	Bailey Flannery	UW-Milwaukee	38
21 63	Victor Huarota	UW-Parkside	55
21 63	Kaleb Tenhagen	UW-Stevens Point	77
21 63	Grace Wampole	UW-Parkside	54

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22	64	Nicole Vigon	UW-Milwaukee	37
22	64	Lara Ferrari	UW-Parkside	52
22	64	Leah Poulos	UW-Parkside	52
22	64	Yan Berezkin	UW-Parkside	55
22	64	Timothy Guilfoyle	UW-Parkside	55
22	65	Jessica Darling	UW-Whitewater	6
23	67	Megan Schleusner	UW-Eau Claire	12
23	68	Olivia Blik	UW-Eau Claire – Barron County	15
23	68	Ana Capetillo	UW-Stevens Point at Wausau	78
23	68	Madalaine McConville	UW-Stout	79
23	69	Michael Schneider	UW-Platteville	58
23	69	David Kieke	UW-River Falls	67
24	71	Cassandra Ostertag	UW-Stevens Point	72
24	71	Emily Gruber	UW-Stevens Point	74
24	71	Laurel Deitch	UW-Stevens Point	75
24	71	Marisa Skajewski	UW-Stevens Point	76
24	72	Lucas Marinack	UW-La Crosse	28
25	73	Cygel Matousek	UW-Eau Claire – Barron County	15
25	73	Ramesh Shrestha	UW-Superior	83
25	73	Brittany Brown	UW-Superior	84
25	73	Sarah Fjeran	UW-Superior	85
25	73	Katie Foerst	UW-Superior	85
25	73	Alicia Jatkola	UW-Superior	85
25	73	Rachel Turner	UW-Superior	86
25	73	Jessica Smith	UW-Superior	87
25	73	Rachael Tuve	UW-Superior	88
25	74	Wyatt Pajtash	UW-Eau Claire	4
25	75	Haoyu Xu	UW-Eau Claire – Barron County	14
25	75	Ann Larson	UW-Platteville	62
26	76	Rebecca Gillis	UW-Madison	30
26	76	Jeremy Portillo	UW-Madison	32
26	76	Jillian Parks	UW-Madison	34
27	79	Paul Tietz	UW-River Falls	65
27	80	Claire Evensen	UW-Madison	33
27	81	Emily Forbush	UW-Platteville Baraboo Sauk County	63

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27	81	Brooke Martin	UW-Platteville Baraboo Sauk County	63
28	82	Kayla Golden	UW-Platteville	59
28	82	Kimberly Mackiel	UW-River Falls	69
28	84	Ryan Majinski	UW-Milwaukee	36
28	84	Sarah Bauer	UW-Platteville	61
29	85	Kieran Talley	UW-Stevens Point at Wausau	78
29	86	Alex Robbins	UW-La Crosse	25
29	86	Ariana Thao	UW-Madison	31
30	88	Rosalyn Stoa	UW-Green Bay	16
30	88	Akanksha Gurtu	UW-Green Bay	21
30	88	Cordell Schrank	UW-River Falls	69
30	89	Ta'Leah Van Sistine	UW-Eau Claire	13
30	89	Becky Berry	UW-Green Bay, Marinette Campus	23
30	89	Tatum Lardinois	UW-Superior	85
31	91	Elizabeth Johnson	UW-Eau Claire	2
31	91	Jacob Erickson	UW-Eau Claire	5
31	91	Hailey Reynolds	UW-Eau Claire	8
31	91	Rebecca Tollakson	UW-Eau Claire	9
31	91	Caitlin Hedberg	UW-Eau Claire	10
31	91	Ruby Gravrok	UW-Eau Claire	11
31	91	Ashley Walker	UW-Eau Claire	11
31	93	Madeline Palubicki	UW-Eau Claire	5
31	93	Ceana Olson	UW-Eau Claire	11
32	95	Jillian Hebert	UW-La Crosse	24
32	95	Lillian Schulte	UW-La Crosse	29
32	95	Akshith Mandepally	UW-Madison	30
32	96	RevaLu Ronnfeldt	UW-Platteville	58

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