



13TH ANNUAL

# Posters in the Rotunda

*Showcasing UW Undergraduate Research*

CAPITOL ROTUNDA | MADISON, WI | APRIL 13, 2016

**13TH ANNUAL**

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*Showcasing UW Undergraduate Research*

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## 13TH ANNUAL

# POSTERS IN THE ROTUNDA

***April 13, 2016***

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## SCHEDULE INFORMATION

### **9:30-10AM – WELCOME CEREMONY**

*Grand Army of the Republic Room  
417N and 413N, State Capitol*

**Speaker: Ray Cross, President, University of Wisconsin System**

### **10AM-3PM POSTERS DISPLAY, CAPITOL ROTUNDA**

# FROM THE PRESIDENT



**MARCH 16, 2016**

Dear Education Partner,

Welcome to the UW System's 13th Annual Posters in the Rotunda Undergraduate Research Event. We are proud to sponsor this opportunity for students and faculty to present their research achievements to the general public and the state legislature.

The research projects on display embody the personal and intellectual growth that the students who created them have experienced. Put another way, they are a tangible representation of our ongoing commitment to expanding human knowledge and improving the human condition, the cornerstone of our educational mission. These projects also represent the kind of ideas and knowledge that are critical to the future of our economy.

Working with our talented faculty, each student has a unique opportunity to challenge themselves and develop critical skills that will serve them throughout their careers. Beyond the knowledge gained in their respective fields of study, students involved in these endeavors develop their ability to manage a project, work with a team, and communicate their ideas clearly. The benefits go far beyond the classroom and far beyond the poster on display.

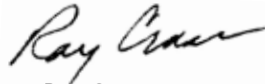
The impact of these projects extends beyond the campuses as well. Issues addressed or investigated in this research are real-life issues affecting Wisconsin citizens and communities. The research being done here has the potential to inform public policy and decisions made by the private sector. This is a powerful illustration of the UW's ongoing commitment to the Wisconsin Idea.

Finally, these posters are a reminder that the UW System, our students, our institutions, and our faculty and staff are the engines that drive the Wisconsin economy. Experts estimate that the UW System has nearly a \$20-billion impact on Wisconsin's economy every year. That impact is delivered through the workers, entrepreneurs and leaders we help develop, and the talent and ideas they bring to the workforce. This event celebrates that.

We extend our appreciation to those who have again made this event possible and offer a special thanks to Wisconsin's elected representatives for their participation and support. We also offer congratulations to the families, community supporters, and UW faculty and staff who played an important role as well.

Most importantly, we congratulate the talented students whose work represents the unique and critical role research plays throughout the UW System. Their effort to extend knowledge beyond the boundaries of the campus and to stimulate society through their research exemplifies the Wisconsin Idea and makes us all very proud of our System and our state.

Cordially,

A handwritten signature in black ink that reads "Ray Cross". The signature is fluid and cursive, with the first letters of "Ray" and "Cross" being capitalized and prominent.

Ray Cross  
President

# BOARD OF REGENTS

Regent John Behling, *Vice President*

Regent Mark J. Bradley

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Regent Eve Hall

Regent Nicolas Harsy

Regent Tim Higgins

Regent James A. Langnes III

Regent Edmund Manydeeds

Regent Regina Millner, *President*

Regent Janice Mueller

Regent Drew Petersen

Regent Charles Pruitt

Regent S. Mark Tyler

Regent José F. Vásquez

Regent Gerald Whitburn

# UW CHANCELLORS

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*University of Wisconsin–Eau Claire*

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*University of Wisconsin–La Crosse*

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*University of Wisconsin–Madison*

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*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 Bob Meyer  
*University of Wisconsin–Stout*

Chancellor Renée Wachter  
*University of Wisconsin–Superior*

Chancellor Beverly A. Kopper  
*University of Wisconsin–Whitewater*

# UW COLLEGES REGIONAL DEANS

Regional CEO/Dean Keith Montgomery, North

*UW-Barron County*

*UW-Marathon County*

*UW-Marshfield/Wood County*

*UW-Marinette*

Regional CEO/Dean Martin Rudd, Northeast

*UW-Fond du Lac*

*UW-Fox Valley*

*UW-Manitowoc*

Regional CEO/Dean Jackie Joseph-Silverstein, Southeast

*UW-Sheboygan*

*UW-Washington County*

*UW-Waukesha*

Regional CEO/Dean Charles Clark, Southwest

*UW-Baraboo/Sauk County*

*UW-Richland*

*UW-Rock County*



# 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 campus.

<b>Faculty Adviser</b>	<b>Institution</b>	<b>Poster</b>	<b>Legislative District Senate/Assembly</b>	
Melissa Hage	UW-Baraboo/Sauk County	1	27	81
Musa Ayar	UW-Baraboo/Sauk County	2	27	79
Tom Neal	UW-Baraboo/Sauk County	3	26	76
Marc Seals	UW-Baraboo/Sauk County	4	27	81
Gregg Jamison	UW-Fond du Lac	5	27	80
David Demezas	UW-Fond du Lac	6	18	52
Beth Johnson	UW-Fox Valley	7	19	57
Richard Hein	UW-Manitowoc	8	9	25
Caleb Bush	UW-Marshfield/Wood County	9, 10	23	69
Norlene Emerson	UW-Richland	11	17	50
Mark Schmitz	UW-Sheboygan	12, 13	9	27
Mohamed Ayoub	UW-Washington County	14	20	58
Quintin Bendixen	UW-Waukesha	15	33	98
Karen Mumford	UW-Eau Claire	16	31	91
J. Brian Mahoney	UW-Eau Claire	17	31	91
Stephen Sellwood	UW-Eau Claire	17	26	78
Eric Jamelske	UW-Eau Claire	18	31	91
Sydney				
Chinchanachokchai	UW-Eau Claire	18	31	91
Tom Sather	UW-Eau Claire	19	31	91
Jerry Hoepner	UW-Eau Claire	19	31	91
Elizabeth Glogowski	UW-Eau Claire	20	31	91
Kelly Biers	UW-Eau Claire	21	31	91
Robert Howe	UW-Green Bay	22	30	88
Sawa Senzaki	UW-Green Bay	23	2	4
Kevin Fermanich	UW-Green Bay	24	30	88
Christopher Houghton	UW-Green Bay	25	1	1
Patrick Forsythe	UW-Green Bay	25	30	88
Ryan Holzem	UW-Green Bay	26	30	88
Gaurav Bansal	UW-Green Bay	27	30	88
Ryan Currier	UW-Green Bay	28	2	4
Georjeanna				

<b>Faculty Adviser</b>	<b>Institution</b>	<b>Poster</b>	<b>Legislative District Senate/Assembly</b>	
Wilson-Doenges	UW-Green Bay	29	30	88
Benjamin Zuckerberg	UW-Madison	34	26	77
Rupa Sridharan	UW-Madison	35	26	27
Nasia Safdar	UW-Madison	36	26	78
Susan Paskewitz	UW-Madison	37	26	77
Gerald Kulcinski	UW-Madison	38	26	78
Cora Lee Kluge	UW-Madison	39	26	77
Wail Hassan	UW-Milwaukee	40	28	84
Russell Cuhel	UW-Milwaukee	42	7	19
Carmen Aguilar	UW-Milwaukee	42	7	19
James Moyer	UW-Milwaukee	43	7	19
Ben Church	UW-Milwaukee	45	22	66
Kevin Crawford	UW-Oshkosh	46	18	53
Sabrina Mueller-Spitz	UW-Oshkosh	46	18	54
Marianne Johnson	UW-Oshkosh	47	18	54
Robert Sipes	UW-Oshkosh	48	19	56
Victoria Beck	UW-Oshkosh	49	18	54
Traci Lee	UW-Parkside	50	22	66
Jessica Orlofske	UW-Parkside	51	21	62
Derek Riley	UW-Parkside	52	21	63
Xun (George) Wang	UW-Parkside	53	22	64
Michael Gurtman	UW-Parkside	54	22	64
Melissa Gregg	UW-Parkside	55	21	62
Brian Barry	UW-Platteville	56	17	49
Raja Annamalai	UW-Platteville	57	26	76
Muthusubramanian				
Venkateshwaran	UW-Platteville	57, 60	17	49
John Peterson	UW-Platteville	58	17	49
Ryan Haasl	UW-Platteville	61	17	49
Hal Evensen	UW-Platteville	62	27	80
Cheng-chen Huang	UW-River Falls	63	10	30
Fred Bonilla	UW-River Falls	64	10	30
Joe Shakal	UW-River Falls	65	10	30
Joel Peterson	UW-River Falls	65	10	30
David Zlesak	UW-River Falls	66	10	30
Joseph O'Kroy	UW-River Falls	67	10	30
David Trechter	UW-River Falls	68	10	30
Terry Ferriss	UW-River Falls	68	10	30
Travis Tubre	UW-River Falls	68	10	30

<b>Faculty Adviser</b>	<b>Institution</b>	<b>Poster</b>	<b>Legislative District Senate/Assembly</b>
Nathan Bowling	UW-Stevens Point	69	24 71
Sarah Jane Alger	UW-Stevens Point	70	14 41
Holly Schmies	UW-Stevens Point	71, 72	24 71
Beth Kinslow	UW-Stevens Point	71, 72	24 71
Valerie Barske	UW-Stevens Point	73	24 70
Jason D'Acchioli	UW-Stevens Point	74	24 71
Nels Paulson	UW-Stout	77	10 29
Tina Lee	UW-Stout	78	10 29
Edward Burkett	UW-Superior	81	25 73
Richard Stewart	UW-Superior	82	25 73
Zamira Simkins	UW-Superior	83	25 73
Maria Stalzer			
Wyant Cuzzo	UW-Superior	84	25 73
Lorena Rios Mendoza	UW-Superior	85	25 73
Diek Carlson	UW-Superior	86	25 73
Cheng Thao	UW-Whitewater	87	15 43
Lynn Gilbertson	UW-Whitewater	88	15 45
Greg Jeffers	UW-Whitewater	89	33 97
Christina Jones	UW-Whitewater	90	11 33
James Levy	UW-Whitewater	91	15 43
Kirsten Crossgrove	UW-Whitewater	92	11 33

## STUDENT PRESENTERS BY INSTITUTION

### Student Name, Hometown Poster Number and Poster Title

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#### UW-BARABOO/SAUK COUNTY

Rachel Lizzadro-Mcpherson, Baraboo WI

- 1 *Asking the Tough Questions: How to Create an Effective Survey*

Malachi Persche, Baraboo WI

- 2 *Economic Analysis of Winter Greenhouse Production in Baraboo*

John William Washa, Reedsburg WI

- 3 *Hydraulic Fracturing and Its Possible Effects on the Environment*

Corbach Toolis, Baraboo WI

- 4 *Peeling Back Layers of Truth: A Fresh Exploration of "The Yellow Wallpaper" by Charlotte Perkins Gilman*

Erika Traver, Baraboo WI

- 4 *Peeling Back Layers of Truth: A Fresh Exploration of "The Yellow Wallpaper" by Charlotte Perkins Gilman*

#### UW-FOND DU LAC

Melanie Gruenstern, Fond du Lac WI

- 5 *Mogollon Ceramic Analysis: From Pots to People*

Drew Hraban, Waupun WI

- 5 *Mogollon Ceramic Analysis: From Pots to People*

Emily Belling, Fond du Lac WI

- 6 *Allelopathic Potential of Garlic Mustard*

#### UW-FOX VALLEY

Kathryn Lenz, Potter WI

- 7 *Monitoring Carbon Dioxide and Methane Levels Above Active Landfill, Retired Landfill, and Forest Control Sites in the Fox Cities Area of Wisconsin with a Tethered Aerostat to Determine Remediation Effectiveness*

Jeshanah Zolkowski, Neenah WI

- 7 *Monitoring Carbon Dioxide and Methane Levels Above Active Landfill, Retired Landfill, and Forest Control Sites in the Fox Cities Area of Wisconsin with a Tethered Aerostat to Determine Remediation Effectiveness*

Jesse Banick, Kaukauna WI

- 7 *Monitoring Carbon Dioxide and Methane Levels Above Active Landfill, Retired Landfill, and Forest Control Sites in the Fox Cities Area of Wisconsin with a Tethered Aerostat to Determine Remediation Effectiveness*

Jonathan Sanders, Green Bay WI

- 7 *Monitoring Carbon Dioxide and Methane Levels Above Active Landfill, Retired Landfill, and Forest Control Sites in the Fox Cities Area of Wisconsin with a Tethered Aerostat to Determine Remediation Effectiveness*

## **UW-MANITOWOC**

Aubri Urbanek, Two Rivers WI

- 8 *Impact of Rainfall on Water Quality of the Tributary Creeks of Lake Michigan in Manitowoc, Wisconsin*

Paige Arneson, Newton WI

- 8 *Impact of Rainfall on Water Quality of the Tributary Creeks of Lake Michigan in Manitowoc, Wisconsin*

Chelsy Coutermarsh, Two Rivers WI

- 8 *Impact of Rainfall on Water Quality of the Tributary Creeks of Lake Michigan in Manitowoc, Wisconsin*

## **UW-MARSHFIELD/WOOD COUNTY**

Ciera Griepentrog, Marshfield WI

- 9 *Following Nuclear Fallout: The Ongoing Effects of Fukushima Nuclear Disaster*

Ryan Kizer, Marshfield WI

- 10 *Water Pollution and Regulation in Wisconsin*

## **UW-RICHLAND**

Ashley Thompson, Wonewoc WI

- 11 *Examining Coastal Beach Sands in North America*

## **UW-SHEBOYGAN**

Ryan Kisiolek, Sheboygan WI

- 12 *Evolution of a Trophic Polymorphism Between Blue and Gold Walleye (*Sander vitreus*) in Ontario, Canada, by Gut Content and Stable Isotope Analysis*

Jason Karls, Sheboygan WI

- 12 *Evolution of a Trophic Polymorphism Between Blue and Gold Walleye (*Sander vitreus*) in Ontario, Canada, by Gut Content and Stable Isotope Analysis*

Amanda Drews, Sheboygan WI

- 13 *Growth Performance of Four Varieties of Sweet Basil Grown in a Greenhouse with Both Aquaponics Effluent and Soil*

## Student Name, Hometown Poster Number and Poster Title

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### UW-WASHINGTON COUNTY

Ross Kluczinske, Mequon WI

14 *Nonconventional Hydrogen Bonding: Natural Bond Orbital Study*

Patrick Leonard, Saukville WI

14 *Nonconventional Hydrogen Bonding: Natural Bond Orbital Study*

Morgan Vanderschaegen, Hartford WI

14 *Nonconventional Hydrogen Bonding: Natural Bond Orbital Study*

Tyler Ross, Germantown WI

14 *Nonconventional Hydrogen Bonding: Natural Bond Orbital Study*

### UW-WAUKESHA

Mariah Ehmcke, South Milwaukee WI

15 *From Spring City to Dry City*

### UW-EAU CLAIRE

Rory Smuhl, Eau Claire WI

16 *Are Energy Use Intensity and LEED Certification Connected?*

Adam Wiest, Green Bay WI

17 *Establishing an Environmental Baseline for Surface and Groundwater Chemistry in Western Wisconsin*

Samantha Bartnik, Cedarburg WI

17 *Establishing an Environmental Baseline for Surface and Groundwater Chemistry in Western Wisconsin*

Joseph Hunt, Woodbury MN

18 *Evidence from the USDA Fresh Fruit and Vegetable Program in Washington State Elementary Schools and Implications for Wisconsin Policy*

Lorena Garceau, Elburn IL

18 *Evidence from the USDA Fresh Fruit and Vegetable Program in Washington State Elementary Schools and Implications for Wisconsin Policy*

Kjirstin Martell, Chippewa Falls WI

18 *Evidence from the USDA Fresh Fruit and Vegetable Program in Washington State Elementary Schools and Implications for Wisconsin Policy*

Josh Bodnar, Nashotah WI

18 *Evidence from the USDA Fresh Fruit and Vegetable Program in Washington State Elementary Schools and Implications for Wisconsin Policy*

Carissa Baier, Eau Claire WI

19 *Exploring Snapchat as a Dynamic Capture Tool for Social Exchange in Persons with Aphasia*

Elizabeth Stubbs, Eau Claire WI

20 *Thermoresponsive Property Investigation of Smart Diblock Copolymers*

Madeline Tautges, Eau Claire WI

21 *Walloon in Northeastern Wisconsin*

Bobbi Freagon, Chippewa Falls WI

21 *Walloon in Northeastern Wisconsin*

## **UW-GREEN BAY**

Cody Becker, Sheboygan WI

22 *Aerial Surveying and Vegetation Mapping Using Drone Technology at the Point au Sable Nature Reserve*

Kortney Krajewski, Little Suamico WI

23 *Cultural Competency: Before and After Studying Abroad*

Noel Craig, Green Bay WI

24 *Determination of Water Extractable Phosphorus for a Northeast Wisconsin Soil Quality Index*

Jeremiah Shrovnal, Green Bay WI

25 *Growth Rate Analysis of Coastal Wetland and Near Shore Great Lakes Fish Using Otolith Dating*

Matthew Nichols, Wausau WI

26 *Manure Lagoon Additive Performance Evaluation*

Kyle Marshall, New Franken WI

27 *Moral Beliefs and Organizational Information Security Policy Compliance: The Role of Gender*

Kayla Hodorff, Malone WI

27 *Moral Beliefs and Organizational Information Security Policy Compliance: The Role of Gender*

Zachary Ashauer, Hortonville WI

28 *The Lashly Mountains of Southern Victoria Land, Antarctica: Investigating a Possible Ancient Volcano*

Kelli Hutchinson, Trevor WI

29 *Timing and the Influence of Visualization on Sports Performance*

**Student Name, Hometown  
Poster Number and Poster Title**

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**UW-LA CROSSE**

Johnny Glaunert, Onalaska WI

30 *Exposing the Oppressor Within: Heteronormative Language Attitudes Among Gay Men in Buenos Aires*

Lauren Bradley, Janesville WI

32 *The Direct Effect of Cycling on Neuromuscular Control of Running in Triathletes*

Emma Neuberger, Appleton WI

32 *The Direct Effect of Cycling on Neuromuscular Control of Running in Triathletes*

Emily Durham, La Crosse WI

32 *The Direct Effect of Cycling on Neuromuscular Control of Running in Triathletes*

Patrick Griffith, La Crosse WI

32 *The Direct Effect of Cycling on Neuromuscular Control of Running in Triathletes*

Lisa Roemhildt, Janesville MN

33 *Understanding Women's Representation in Chile*

**UW-MADISON**

Colleen Miller, Madison WI

34 *Allen's Rule and the Impact of Warming Winters on Northern Cardinal Morphology*

Cesar Martinez, Appleton WI

35 *Analysis of the Epigenome in Pluripotency*

Caroline Zellmer, Madison WI

36 *Efficacy of Two-Hand Hygiene Methods for Clostridium Difficile Spore Removal*

Marjorie Kersten, Waunakee WI

37 *Expanding Entomophagy: Investigating Potential Barriers to Mealworm and Cricket Consumption in Zambia and the United States*

Alexander Strange, Sussex WI

38 *Helium Ion Energy Measurement for a Solar Wind Implantation Device*

Calla Buttke, Wausau WI

39 *Taking Center Stage: Bringing Light to the Golden Era of the Milwaukee German Theater*



## **UW-MILWAUKEE**

Ndeye Drame, Milwaukee WI

40 *Comparative Analysis of CD8+ T Cells in Young and Aged Rhesus Macaques*

Ian Clavel, Milwaukee WI

41 *Immune Suppressor Cell Subsets Do Not Colocalize Within Breast Cancer Tumors*

Michelle Soderling, Milwaukee WI

42 *What's Feeding Your Fish? Phytoplankton in Lake Michigan*

Brett Fulleylove-Krause, Chilton WI

43 *Quantifying Changes in Medial Prefrontal Cortex IEG Expression as a Function of Aging-related Cognitive Decline*

Rosetta Washington, Milwaukee WI

44 *Striving to Create Healthier Birth Outcomes through Innovative Partnerships and Sisterhood: Early Findings from the Birthing Project Milwaukee*

Nisrit Pandey, Milwaukee WI

45 *Wettability of Separator Sheets in Advanced Lead Acid Batteries*

## **UW-OSHKOSH**

Alyssa Valentyne, Kimberly WI

46 *Bacterial Degradation of Low Molecular Weight Polycyclic Aromatic Hydrocarbons; Naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene by Mycobacterium*

Isaac Johnson, Neenah WI

47 *Grand Master Gammon - A Backgammon Risk/Reward Calculator*

Hailey Parker, Papillion NE

48 *The Relationship Between High School Athletes' Intention to Report and Athletes' and Parents' Concussion Knowledge*

Mackenzie Hagan, Oshkosh WI

48 *The Relationship Between High School Athletes' Intention to Report and Athletes' and Parents' Concussion Knowledge*

Michaela Otto, Appleton WI

49 *Women in Law Enforcement: An Examination of Female Interest in Policing*

## Student Name, Hometown Poster Number and Poster Title

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### UW-PARKSIDE

Rebekah Mokry, Caledonia WI

50 *Assessing Met31 and Met32 Protein Levels Upon Sulfur Limitation in MET31 and MET32 Promoter Replacement Strains*

Liv Grieko, Kenosha WI

51 *Ecological Restoration Progression of a Coastal Wetland Ecosystem (Samuel Myers Park, Racine, WI, USA) Based on Aquatic Invertebrate Biodiversity*

Kyle Zawacki, Racine WI

52 *Ready Badger Mobile Application*

Molly Lake, Waterford WI

53 *Socioeconomic Status and Food Access in Racine County*

Victoria Ferstein, Vernon Hills IL

54 *Universalism in the Context of the Five Factor Model of Personality*

Michele Gloede, Racine WI

55 *Visual Memory is Superior to Auditory Memory Despite Extensive Auditory Training*

### UW-PLATTEVILLE

Jessica Bruggen, Lake Villa IL

56 *Catalyst Design Towards Oxidative Addition of Stable Bonds*

Keyton Feller, Preston IA

56 *Catalyst Design Towards Oxidative Addition of Stable Bonds*

Sara Rubeck, Rockford IL

57 *Characterizing the Role of Volatile Organic Compounds in Plant-Microbe Symbioses*

Kendell Welch, Platteville WI

57 *Characterizing the Role of Volatile Organic Compounds in Plant-Microbe Symbioses*

Katherine Macco-Webster, De Pere WI

58 *Comparing Survey Techniques for Wisconsin's Endangered Cricket Frog*

Allison Wells, Moline IL

58 *Comparing Survey Techniques for Wisconsin's Endangered Cricket Frog*

Samantha Tomczewski, Platteville WI

58 *Comparing Survey Techniques for Wisconsin's Endangered Cricket Frog*

Erin Geddes, Platteville WI

59 *Effect of Pathway-Interconnectors in SEB-Induced Apoptosis Related Events in Human PBMCs*

Kendell Welch, Platteville WI

60 *Genetic Suppressor Screening to Identify New Regulators of Symbiotic Genes in the Model Legume *Medicago truncatula**

Leanna Oltz, Harvard IL

60 *Genetic Suppressor Screening to Identify New Regulators of Symbiotic Genes in the Model Legume *Medicago truncatula**

Emily Hefty, Mount Horeb WI

60 *Genetic Suppressor Screening to Identify New Regulators of Symbiotic Genes in the Model Legume *Medicago truncatula**

Briseida Oceguera Perez, Rockford IL

61 *Population Distribution and Genetics of the Invasive Species Japanese Hops*

Kellin Myers, Sun Prairie WI

62 *Population Distribution and Genetics of the Invasive Species Japanese Hops*

Reese Hussey, McFarland WI

61 *Population Distribution and Genetics of the Invasive Species Japanese Hops*

Charles Nelson, Saint Paul MN

62 *The Construction, Sensing, and Analysis of Carbon Nanotube Transistors*

Lynsey Hanley, Spooner WI

62 *The Construction, Sensing, and Analysis of Carbon Nanotube Transistors*

Michael Viola, Crystal Lake IL

62 *The Construction, Sensing, and Analysis of Carbon Nanotube Transistors*

## **UW-RIVER FALLS**

Noah Stueven, Sheboygan WI

63 *A11, a Potential Drug for Melanoma Cancer*

Rebekah Hite, River Falls WI

64 *Local Collaboration Project on Nitrogen Fixing Bacterium Inoculum for Potential Use in Seed Treatment for Crops*

Mitch Breuer, Goodhue MN

65 *Small Grains Winnower*

Siri Doyle, Hayward WI

65 *Small Grains Winnower*

Kaitlynn Graven, River Falls WI

66 *Testing of Target Antibiotics Against Classified Endophytic Contamination in Main Culture Lines in the Plant Tissue Growth Room at UW-River Falls*

Matthew Pechacek, Prescott WI

67 *The Effect of Foot Inclination Angle on Lower Extremity Kinematics and Ground Reaction Forces During Running*

Alison Miotke, South Saint Paul MN

68 *The Impact of a Living Greenwall on Student Attitudes, Moods, and Academic Performance*

**Student Name, Hometown**  
**Poster Number and Poster Title**

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**UW-STEVENS POINT**

Zak Driscoll, Oxford WI

69 *Design of Modern Electronics Through Organic Chemistry*

Victoria Nellessen, Bartlett IL

70 *Do Pair Bond and Nesting Behaviors Indicate Reproductive Success in a Captive Zebra Finch Colony?*

Nick Lemke, Stevens Point WI

71 *Do You Need More Than Water During Your Workout? An Examination of Intra-workout Carbohydrate Consumption and Exercise Performance*

Samuel Joswiak, Weston WI

71 *Do You Need More Than Water During Your Workout? An Examination of Intra-workout Carbohydrate Consumption and Exercise Performance*

Ramona Marquardt, Green Bay WI

71 *Do You Need More Than Water During Your Workout? An Examination of Intra-workout Carbohydrate Consumption and Exercise Performance*

Sarah Pettit, Racine WI

71 *Do You Need More Than Water During Your Workout? An Examination of Intra-workout Carbohydrate Consumption and Exercise Performance*

Jamie Destache, Sussex WI

71 *Do You Need More Than Water During Your Workout? An Examination of Intra-workout Carbohydrate Consumption and Exercise Performance*

72 *Does Sport Specialization Affect Lower Extremity Biomechanics and Injury Risk?*

Chelsie Harrison, Wonewoc WI

72 *Does Sport Specialization Affect Lower Extremity Biomechanics and Injury Risk?*

Sarah Vitale, Stevens Point WI

72 *Does Sport Specialization Affect Lower Extremity Biomechanics and Injury Risk?*

Madalyn Sawdey, Medford WI

72 *Does Sport Specialization Affect Lower Extremity Biomechanics and Injury Risk?*

Valerie Mielke, Green Bay WI

72 *Does Sport Specialization Affect Lower Extremity Biomechanics and Injury Risk?*

Michael Marichal, Appleton WI

73 *Globalization and Japan: Gender, Nationalism, and New Media*

Alan Bustamante, Stevens Point WI

73 *Globalization and Japan: Gender, Nationalism, and New Media*

Neil Foegen, Appleton WI

74 *Oxidation States "Naturally": A Natural Bond Orbital Method for Determining Transition Metal Oxidation States*

## **UW-STOUT**

Morgan Wolf, New Berlin WI

75 *Assessing Diversity Competence in Resident Advisors*

Jeffrey Lynch, Chippewa Falls WI

76 *A Younger Vision for Chippewa Falls, Wisconsin*

Joshua Herron, Marshfield WI

77 *Getting Farmers Connected: BMPs and Social Networks*

Megan Verhagen, Appleton WI

78 *Hegemonic Masculinity as a Predictor of Body Satisfaction*

Justin Olson, Arcadia WI

79 *Promoting Egg Donor Compensation to Enhance Stem Cell Research and Human Health*

Allison Roush, Phillips WI

80 *Well for Wellbeing*

## **UW-SUPERIOR**

Paige Arneson, Spring Valley MN

81 *Use of Super Resolution Microscopy to Characterize the Two Component Measles Virus Fusion Complex*

Gavin Johnson, Cloquet MN

82 *An Analysis of Status of Undergraduate Transportation Management Education in the United States*

Brian Honness, Superior WI

83 *Economic Impact of Tower Avenue Closing and Reconstruction*

Randy Bender, Canyon MN

84 *From Japan to Nepal: What Constitutional Case Studies Tell Us*

Kanishka Wijesekera, Superior WI

85 *Impact of Microplastic on Daphnia and Algae*

Donald Simmons, Ashland WI

86 *Survey of Ashland and Bayfield County Residents on the Potential Economic and Environmental Impact of the Proposed Concentrated Animal Feeding Operation in Bayfield County, Wisconsin*

## UW-WHITEWATER

Nyia Lor, Wausau WI

87 *Interactive Web-based Hmong Language Teaching Tool: Hmong Language*

Liza Thies, Sussex WI

88 *Noise Exposure of Amusement Ride Operators*

Shyterria Sparkman, Milwaukee WI

89 *The Social Context of Serial Killing in the United States: 1990-2012*

Jessica Maiers, Deforest WI

90 *Supportive Communication Across Social Classes: The Fort Atkinson Food Pantry*

Aaron Broadwater, Milwaukee WI

91 *The Factors Affecting Success Rates of Black Owned Businesses in Milwaukee, Wisconsin*

Austin Chriske, Wind Lake WI

92 *Using Lifespan Assays in *Caenorhabditis elegans* as a Model System to Study Nutritional Supplements*

# STUDENT PRESENTERS BY WISCONSIN LEGISLATIVE DISTRICT

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1 2	Chelsy Coutermarsh	UW-Manitowoc	8
1 3	Alyssa Valentyne	UW-Oshkosh	46
1 3	Megan Verhagen	UW-Stout	78
2 5	Jesse Banick	UW-Fox Valley	7
2 5	Jeremiah Shrovnal	UW-Green Bay	25
5 15	Rosetta Washington	UW-Milwaukee	44
6 17	Aaron Broadwater	UW-Whitewater	91
7 21	Mariah Ehmcke	UW-Waukesha	15
7 19	Ndeye Drame	UW-Milwaukee	40
7 19	Ian Clavel	UW-Milwaukee	41
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8 23	Ross Kluczinske	UW-Washington County	14
8 24	Tyler Ross	UW-Washington County	14
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10 30	Kaitlynn Graven	UW-River Falls	66
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33 98	Liza Thies	UW-Whitewater	88

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