



FRIDAY, APRIL 12



Undergraduate
SYMPOSIUM
PROGRAM 2019

Celebrating research, creative endeavor, and service learning

Undergraduate Symposium 2019

Celebrating Research, Creative Endeavor, and Service-Learning

University of Wisconsin–Madison
Union South
April 12, 2019

7:30 a.m.–9 a.m. Poster Set-up—Varsity Hall
8 a.m.–1:15 p.m. Registration—Varsity Hall Entrance
3–4:30 p.m. Poster Takedown

Oral Presentations, Poster Sessions, and Performances

9–10:15 a.m. Session I
10:30–11:45 a.m. Session II
12–1:15 p.m. Session III

1:30–2:30 p.m. Celebrating 21 Years of the Undergraduate Symposium—Varsity Hall
Presiding: Steven M. Cramer, Vice Provost for Teaching and Learning
Friends & Family Reception
Undergraduate Mentoring Awards

Refreshments will be available in Varsity Hall during Sessions I–III.
Light hors d'oeuvres will be served during the Friends & Family Reception.

We are very pleased you are joining us for the 21st Annual Undergraduate Symposium at the University of Wisconsin-Madison. Our university proudly honors its multifaceted mission of leading-edge knowledge discovery and quality undergraduate education. The two meet in the Undergraduate Symposium. Our 21st anniversary is an extraordinary milestone demonstrating our steadfast commitment to providing a Wisconsin Experience to our undergraduate students and the continual initiative they bring to their pursuit of new knowledge.

*Steven M. Cramer, Vice Provost for Teaching and Learning
University of Wisconsin–Madison*

We would like to thank our major sponsors and partners:

<i>Brittingham Trust</i>	<i>Undergraduate Academic Awards Office</i>
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<i>Morgridge Center for Public Service</i>	<i>Wisconsin Union</i>
<i>Office of the Provost</i>	<i>The Writing Center</i>

2019 Undergraduate Symposium Organizing Committee: Hannah Bailey, Carina Carreno, Liza Chang, Steven M. Cramer, Doug DeRosa, Sarah Hagedon (coordinator), Emilie Hofacker, Marina Kelly, Laurie Mayberry, Yvonne Quamme, Samantha Samreth, Amber Smith, Julie Stubbs, and Beth Tryon.

A special thanks goes to Stephanie Diaz de Leon of The Wisconsin Union; Jay Ray and Crague Cook at College Library; Mandy Morrow at DesignLab; Jeff Crucius and Steve Devoti of the Division of Information Technology; and College Library Computer & Media Center.



Key

Format

AT	Artist Talk
F	Film
PF	Performance
PS	Poster
PR	Project Display
T	Talk/Lightning Style Talk

Session Time

I	Session 1: 9–10:15 a.m.
II	Session 2: 10:30–11:45 a.m.
III	Session 3: 12–1:15 p.m.

Room

Ag-A,B	Agriculture-A,B
AL	Alumni
F	Forward
FN	First Nation
GV	Governance
IN-A,B	Industry-A,B
LM-A,B	Landmark-A,B
MT	Marquee Theatre
NW-A,B	Northwoods-A,B
SC	Scholars
SW	Sift & Winnow
TR	Traditions
VH	Varsity Hall
WI	Wisconsin Idea

Index

Last Name, First	Format	Time	Room	#
Badger, Buckingham	PS	III	VH	123

In this example, Bucky Badger will be presenting a poster during Session III from 12–1:15 p.m. in Varsity Hall.

The poster number is 123.

Artist Talks

Session 2: 10:30–11:45 a.m.

MARQUEE

Title	Presenters and Mentors
Pleasing	Megan Schimke, Liz Sexe (Mentor)
Elliptical Body Mappings for Garment Design	Michael Sachen, Marianne Fairbanks (Mentor)
People over Politics: Articulating Resistance within Climate Justice Movements	Vic Barrett, Heather Owens, Marina Kelly (Mentor)
Narrative Psychoeducation: The Art of Mental Health	Tiffany Ike, Stephanie Graham (Mentor)
Webcomic as Contemporary Medium and “Outsider Art”	Benjamin Koziol, Frederick Stonehouse (Mentor)
Ike Cech: Capsule Collection	Ike Cech, Mary Hark (Mentor)

Lightning Style Talks

Session 1: 9–10:15 a.m.

NORTHWOODS A

Title	Presenters and Mentors
Monuments and Morality: Messages in the Iconography and Design of the Ara Pacis	Jackson White, William Aylward (Mentor)
A Citizen Science Approach to Estimating Titanium Dioxide Released from Personal Care Products	Samantha Mael, Fan Wu, Andrea Hicks (Mentor)
Developing Connected and Automated Vehicle Highway System	Calvin O'Donnell, Yang Cheng (Mentor)
Light Microscopy in Cell Biology	Jocelyn Cao, Aussie Suzuki (Mentor)
Characterization of Toll-Like Receptors in the Human Larynx	Madhu Gowda, Susan Thibeault (Mentor)
Observing Gradients in Synthetic X-ray Maps of Galaxy Clusters in Simulations of AGN Feedback	Andrew Heinrich, Yi-Hao Chen, Sebastian Heinz (Mentor)
Investigating Ice Streams, an Important Contributor to Sea-Level Rise, Using the Rheology of Ice to Gain Knowledge on the Grain Structure as It Is Sheared	Eve Meltzer, Lucas Zoet (Mentor)
Effects of Overexpressing Legume Cytokinin Receptor in the Non-Legume <i>Populus Sp</i>	Joshua Boadu, Lucas Gontijo Silva Maia (Mentor)
Symbiotic Relationship between Nitrogen Fixing Bacteria and Sorghum Plants	Angelo, Madrugá, Apoorv Kondapelli, Vania Pankiewicz (Mentor)

NORTHWOODS B

Title	Presenters and Mentors
Bim Expression Requirement for Treatment of Neovascular Eye Diseases	Barbara Hanna, Christine Sorenson (Mentor)
Factors That Influence Participation in Lumbar Punctures	Madeleine Blazel, Cynthia Carlsson (Mentor)
Influences of Paternal Kin and/or Male Peer Models on the Ways Fathers Returning from Prison Approach Parenting	Layne Wetherbee, Luke Muentner, Pajarita Charles (Mentor)
The Influence of Hidden Curriculum on Academic Success	Rachel Alsbury, Oona-Ife Olaiya, Janean Dilworth-Bart (Mentor)

Continued on next page

Lightning Style Talks *continued*

Developing Tolerogenic Model Using the T-cell Immunosuppressive Effects of Pd-I1 and Ido

Travis Drow, Pradyut Paul (Mentor)

Exploring Child's Ability to Understand Vocabulary in Relation to Parent Word Count: Results from the Create Study

Chantel Browne, Janean Dilworth-Bart (Mentor)

The Effects of Negative and Harsh Parenting Behavior on Childhood ADHD Over Time

Shyenney Tung, James Li (Mentor)

Session 2: 10:30–11:45 a.m.

NORTHWOODS A

Title	Presenters and Mentors
Learning View Invariant Semantic Segmentation for UAV Video Sequences	Abhay Venkatesh, Vikas Singh (Mentor)
Modern Yoga is Beneficial for Athletes: Comparison Study of Modern Yoga Practice Among Athletes	Logan Steinike, Logan Steinike, Gudrun Buhnemann (Mentor)
Digital tools for Cytology Education	Jenny Zheng, Kaitlin Sundling (Mentor)
Statewide Life Cycle Assessment on North Carolina Recycled Materials Usage	Sydney Klinzing, Angela Pakes (Mentor)
Survey of Racial Disparities in Madison	Darion Allen, Bianca Baldrige (Mentor)
Connected and Autonomous Highway Systems	Siddharth Aneja, Yang Cheng, Bin Ran (Mentor)
Effects of Sporadic <i>monocytogenes</i> on Dairy Cattle Fecal Microbiota	Alexander Kur Johnson, Justin Chow, Tu Anh Huynh (Mentor)
Seed Predation in Tallgrass Prairies Changes throughout the Year and Is Affected by Litter Cover	Genevieve Anderegg, Ellen Damschen, Jonathan Henn (Mentor)
Explore Diversity in Dietetics within the UW Didactics Program	Samantha Miller, Cassandra Vanderwall (Mentor)

NORTHWOODS B

Title	Presenters and Mentors
Using Their Ways of Thriving to Promote Health: What We Learned from Vulnerable Low-Income Adults Living with Multiple Disabilities	Carley Richards, Linda Oakley (Mentor)
Studying the Metabolism of <i>Toxoplasma gondii</i> through Mutagenesis: BPGM/PMFP	Charlotte Urban, Will Olson, Laura Knoll (Mentor)
Relationship of Stress, Immune System Functioning and Health in Caregivers of Children with Autism	Christian Simon, Manish Patankar, Elizabeth Larson (Mentor)
Why Do Democracies Rollback? The Case of Turkey	Jacqueline Beaulieu, Eunsook Jung (Mentor)
Investigating the Origins of Oxygen Abundance Gradient Anomalies with MaNGA	Jalyn Krause, Adam Schaefer, Cameren Swiggum, Celeste Keith, Christy Tremonti (Mentor)
Exploring Relationships between Environmental Pollutants and Child Development	Joana Arengo, Janean Dilworth-Bart (Mentor)
Quantitative Polymerase Chain Reaction Analysis of Gene Expression of Immune Markers in Mouse Melanoma	Kevin Thayyil, Mario Otto (Mentor)
Dating Apps and Sexual Behavior among College Students	Megan Haug, Megan Moreno (Mentor)
Structural Investigation of the Bacterial Phytochrome Knot	Nicholas Koranda, Katrina Forest (Mentor)

Session 3: 12–1:15 p.m.

NORTHWOODS A

Title	Presenters and Mentors
Neoliberalism against Public Libraries: The Fight to Keep Knowledge Accessible in Argentina	Isabelle Szerenyi, Isabelle Szerenyi, Professor Ksenija Bilbija (Mentor)
Game Theoretic Model of Pre-Disaster Relocation	Andrew Simovic, Yuqun Mark Zhou, Hongru Du, Vicki Bier (Mentor)
The Potential Correlation between Health Literacy and Adherence to Type Two Diabetes Medication	Anya Beric, Yen-Ming Huang (Mentor)
Stimwave Single 4 Electrode	Christopher Mitry, Alaa Abd-Elsayed (Mentor)
Networking Mapping to Form Intra-Connectivity Design	Laura Younan, Nicole Werner (Mentor)
Smart Sustainable Manufacturing	Lynette Gao, Sangkee Min (Mentor)
Smart Sustainable Manufacturing	Patrick Day, Sangkee Min (Mentor)
Media, Trust, and Citizenship in Multicultural Digital World	Devon Wanasek, Seline Wiedemer, Sue Robinson (Mentor)
Patient-Collected Audio for Performance Assessment of the Clinical Encounter	Diana Garcia-Vidal, Kelsey Baubie (Mentor)

NORTHWOODS B

Title	Presenters and Mentors
Social Isolation as Predictor of Post-Emergency Department (ED) Visit Follow-up by Older Adults	Nia Cayenne, Manish Shah (Mentor)
Effects of Vimentin on Cellular Senescence	Murt Jatoi, Darcie Moore, Katrina Hunt, Tiaira Porter (Mentor)
Contrasting Implicit and Explicit Affordances of Physical and Virtual Representations for Learning of Abstract Chemical Concepts	Radhika Patel, Martina Rau (Mentor)
Assessing Gait in Rhesus Macaques Prenatally Exposed to Zika	Sabrina Kabakov, Aubre Poole, Kathryn Bach, Karla Ausderau (Mentor)
Exploring the Work of Informal Caregivers of Patients with Dementia Using Human Factors Engineering Approach	A.J. Lingg, Nicole Werner (Mentor)
Conceptual Understanding through Signs, Symbols, and/or Objects	Samantha Visintainer, John McGinty (Mentor)
Social Judgement in Safety Situations	Jessica O'Neill, Kristin Shutts (Mentor)
Online Learning in HoloClean	Jordan Vonderwell, Theodoros Rekasinas (Mentor)
Navigating Symbol-Exclusive Learning Experiences	Nate Jones, John McGinty (Mentor)

Film

Session 3: 12–1:15 p.m.

MARQUEE

Title	Presenters and Mentors
Black Protest in U.S. Newswire Stories 1994–2010	Karinton Deville, Nzinga Acosta, Laura Moore, Abril Pereznegron, Pamela Oliver (Mentor)
The Undocumented Migration Project: In the Peak of Summer at The U.S.-Mexico Border	Francisco Velazquez, Philip Dennis (Mentor)

Live Performance

Family & Friends Reception: 1:30–2:30 p.m.

VARSITY HALL

Title	Presenters and Mentors
Investigating Prospects	Jessica Robling, Li Chiao-Ping (Mentor)
The Humane Experiment	Jasmine Kiah, Colleen Conroy (Mentor)

Talks

Session 1: 9–10:15 a.m.

AGRICULTURE A

Title	Presenters and Mentors
Towards Pan-Group Activator of the Quorum Sensing System in the Common Pathogen <i>Staphylococcus epidermidis</i>	Wenqi Shen, Helen Blackwell (Mentor)
Development of Chemical Tools to Probe Quorum Sensing in <i>Escherichia coli</i>	Stephen Early, Matthew Styles, Helen Blackwell (Mentor)
Multilingual Language Awareness	Teagan Twombly, Kristin Shutts (Mentor)
Dynamic Changes of Crucial hMSC Transcription Factor Gene Expression, Differentiation Potential, Proliferation Capability, and Morphology in the In Vitro Aging Process	Athill Sivapatham, Wan-Ju Li (Mentor)
Cultivation and Metabolomic Characterization of Anaerobic Ammonium Oxidizing Bacteria	Coty Weathersby, Christopher Lawson (Mentor)

ALUMNI

Title	Presenters and Mentors
Media Multitasking and Its Effect on Task Switching Abilities	Maria Szalkowski, Shawn Green (Mentor)
Engineering <i>Escherichia coli</i> for Production of Poly(3-Hydroxyoctanoic Acid) from Sugars	Ke Xu, Brian Pflieger (Mentor)
Strengthening Local Food Systems: Improving Hospitals and Farmers Market Partnership	Judy Zheng, Alfonso Morales (Mentor)
Characterizing Transient Intermediates in Productive RNAP Transcription Initiation	Claire Evensen, M. Thomas Record (Mentor)
Investigating the Role of the ComFA ATPase in Powering DNA Uptake during Bacterial Transformation	Xiaoxuan Lin, Hannah Foster, Briana Burton (Mentor)

INDUSTRY A

Title	Presenters and Mentors
Euler-Lagrangian Data Assimilation of Complex Turbulent Flows	Yuchen Li, Nan Chen (Mentor)

Improving Clinical Training and Data Analysis through Adaptive Artificial Intelligence
Peter Rehani, Quan Chen, Joshua Medow (Mentor)

Farmers Market for All? Look into the True Accessibility of Farmers Markets
Chloe Green, Alfonso Morales (Mentor)

Does Real-World Object Size Unconsciously Influence Memory for Objects?
Cole Cimoch, Emily Ward (Mentor)

Pancreatic Islet Morphology in Prenatally Androgenized PCOS-like Rhesus Macaques in Relation to Type 2 Diabetes
Emily Poellinger, Aiden Jacobs, David Abbott (Mentor)

INDUSTRY B

Title	Presenters and Mentors
Consideration of Time, Temperature, and Host Plant in the Rearing of Red-Headed Flea Beetles	Stephanie Rink, Benjamin Jaffe (Mentor)
Bhikkhunis and Mei Chis: Contrasting, Complex Experiences with Women's Empowerment	Rachel Sina, Gudrun Buhemann (Mentor)
RNA Binding Protein Bruno Regulates Indirect Flight Muscle Function in <i>Drosophila</i>	Andi Pan, Maria Spletter (Mentor)
Kernza: New Perennial Grain and Forage Crop For Environmental Stewardship	Selma Fairach, Valentin Picasso Risso (Mentor)
Word Choice between Near Synonyms	Jacqueline Erens, Joseph Austerweil (Mentor)

LANDMARK A

Title	Presenters and Mentors
Designing for Caregivers: Rapid Prototyping to Enhance Application Development	Jacob Volcensek, Siddarth Ponnala, Rachel Zenker, Dustin Weiler, Nicole Werner (Mentor)
The Cytotoxic Effect of GIFT15 Regulatory Cells on CD4+ Cells	Adam Kelly, Jacques Galipeau (Mentor)
Cost-Efficiency of Implementing Genetic Screening for G6PD-Deficiency for Pregnant Women with Malaria on the Thai-Myanmar Border	Diane Xue, Jason Fletcher (Mentor)
Providing an Accessible Art Education for Children	Masha Vodyanyk, Doug Rosenberg (Mentor)
How Creating Intimacy Versus Discussing Information Affects Ability to Reach Consensus	Maeve Swackhamer, Lyn Van Swol (Mentor)

LANDMARK B

Title	Presenters and Mentors
Optimal Control of Superconducting Qubit with Single Flux Quantum Pulse Sequences	Kangbo Li, Robert McDermott (Mentor)
The Effects of IFN-Gamma and SGI-110 on HLA Expression in Prostate Cancer Cell Lines	Tahseen Shaik, Tamara Rodems (Mentor)
An Experimental Study of Glacial Sliding	Laura Arneson, Lucas Zoet (Mentor)
Developing Human Erythroid Differentiation System to Enable Mechanistic Analyses	Miao Cao, Emery Bresnick (Mentor)
Analysis of Filamentary Molecular Cloud Candidates in Southern Galactic Star-Forming Cloud	Nathan Derenne, Audra Hernandez (Mentor)

SIFT & WINNOW

Title	Presenters and Mentors
Queer Epistemology as Pedagogy: Challenging Epistemic Injustice in the Classroom	Melady Elifritz, Hadley Cooney (Mentor)
Perceived Barriers and Points of Access to Mental Health Care in Puebla, Mexico	Gabriella Gaus Hinojosa, Melanie Benito, Stephen Quintana (Mentor)
Who Must We Save: Reconciling Trade-off Situations	Grace Gecewicz, Harry Brighthouse (Mentor)

Continued on next page

Talks *continued*

An Exploration of Community-Owned Land Conservation

Hannah Gordon, Anna Zibinski, Lena Carlson,
Jim Berkelman (Mentor)

Seedling Ecophysiological Response to Water Stress among Longleaf and Loblolly Pines

James Hart, Kim O'Keefe (Mentor)

TRADITIONS

Title	Presenters and Mentors
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Discovering Causal Heterogeneity in Medicaid Utilization with Tree-Based Machine Learning Method

Jiongyi Cao, Hyunseung Kang (Mentor)

Patterns of Micro-Anatomical Leaf Traits in Ferns among Environmental Gradients

Chad Kluender, Kim O'Keefe (Mentor)

Kinematics of Ionized Gas and the Evolution of the Interacting Galaxy NGC 7465

Lauren Laufman, Jay Gallagher (Mentor)

The Toroidal Helicon Experiment

Haoran Li, Oliver Schmitz (Mentor)

"Trigger Fingers Turn to Twitter Fingers": The Social Media(ted) Criminalization of Black Girls in Schools

Tashiana Lipscomb, Bianca Baldrige (Mentor)

First-Generation Academic Professionals and Writing

McKenzie Maccaux, Calley Marotta (Mentor)

Session 2: 10:30–11:45 p.m.

AGRICULTURE A

Title	Presenters and Mentors
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The Wisconsin Rebound: The Fall and Rise of Housing Prices in Wisconsin during the Great Recession

James Klau, Bryan Luetzgen, Grant Haxton,
William Gartner (Mentor)

A Low-Cost and Open-Source Platform for Automated Imaging

Max Lien, Philip Townsend (Mentor)

Chasing Down Variable Stars from Decade-Long Dataset

Nikki Noughani, Ralf Kotulla (Mentor)

Evaluation of Novel Surgical System for Osteochondral Allograft Transplantation

Alexander Teague, Corinne Henak (Mentor)

The Americanization of French Language and Culture

Samantha Zeid, Jan Miernowski (Mentor)

ALUMNI

Title	Presenters and Mentors
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Natural Transformation: The Role of *ecsA* and *ecsB* in *Bacillus subtilis*

Christian Loyo, Briana Burton (Mentor)

Strengthening Local Food Systems: Improving Function and Accessibility in Farmers Markets

Arden He, Chloe Green, Alfonso Morales (Mentor)

Paroisses Indociles (Unruly Parishes): Reconsideration of Habitant Loyalties and the Historiography of the American Revolution in Canada, 1774–76

Sebastian Van Bastelaer, Gloria Whiting (Mentor)

Behavioral Response of Dairy Cows after Subcutaneous Insertion of Real-Time Temperature Detecting Biosensor: Pilot Study

Kehan (Sky) Sheng, Christopher Choi, Younghyun Kim,
Sabrina Brounts, Hanwook Chung,
Jennifer Van Os (Mentor)

Recent Stress, Cortisol Dysregulation, and Cognition in Middle-Aged and Older Adults

Amy Hobday, Megan Zuelsdorff (Mentor)

INDUSTRY A

Title	Presenters and Mentors
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Using Echo Dots to Reduce Patient Distress during the Perioperative Period

Ashley Squires, Megan Draheim, Mary Beth Henry (Mentor)

CS@MSL: postmortem

Skylyn Worzalla, Maxine McKinney de Royston (Mentor)

Emotion Regulation across Sociodemographic Contexts

DK Jang, Yuri Miyamoto (Mentor)

Examining the Diversity of Social Identities among U.S. Medical School Students

Haley Sisel, Alaa Abd-Elseyed (Mentor)

Technology Adoption in Solar Energy

Yipei Zhang, Sarah Johnston (Mentor)

INDUSTRY B

Title	Presenters and Mentors
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Does Hypothalamic Estrogen Receptor Alpha Regulate Body Weight in Prepubertal Female Rhesus Macaques?

Sona Perlin, David Abbott (Mentor)

The Effect of Bilingualism on Children's Communication Skills

Queila Griffin, Margarita Kaushanskaya (Mentor)

Informal Settlements and Sustainable Urban Development: The Role of NGOs in Rio de Janeiro Favelas

Laura Bunn, Kathryn Sanchez (Mentor)

College Readiness for Students of Color through Diverse Programming

Abigail Catania, Thomas Browne (Mentor)

Ruxolitinib on MSC Immunobiology

Molly Ryan, Jacques Galipeau (Mentor)

LANDMARK A

Title	Presenters and Mentors
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Biobank-Wide Association Scan Identifies Risk Factors for Late-Onset Alzheimer's Disease and Endophenotypes

Donghui Yan, Qiongsi Lu (Mentor)

Enhancing Treatment Options for Patients with Neuroendocrine Tumors

Christopher Babiarz, Dustin Deming (Mentor)

Effects of Cdc42-Interacting Protein 4 (CIP4) on Cortical Neuronal Migration In Vivo

Justin Carrington, Kendra Taylor, Erik Dent, Russell Taylor (Mentor)

Developing Cell-Intrinsic Control of Cardiomyocyte Differentiation Utilizing Genome Editing

Ethan Church, Gyuhyung Jin (Mentor)

Chemical Ecosystem Selection and the Origin Of Life

Brandon Dawning, Lena Vincent, Jennifer Heinritz,
Gage Louis Siebert, Jacob Cosby, David Baum (Mentor)

LANDMARK B

Title	Presenters and Mentors
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The Effects of Drug Trade on Conservation Efforts: Mexico and the World

Shelby Herring, Joshua Phillips, Jim Berkelman (Mentor)

Carnivores and Prey: Comparing the Behavioral Changes of Spotted Hyenas and Zebra Following Lion Reintroduction to Akagera National Park, Rwanda

Jessica Knackert, Adrian Treves (Mentor)

Measuring State-Business Relations Under Dictatorships

Daniel Ledin, Susanne Mueller (Mentor)

Does the Milky Way Have Heart Abnormality?

Eowyn Liu, John Gallagher (Mentor)

Understanding Health Disparities for Individuals with Intellectual Disability Using Photovoice

Savi Lurie, Karla Ausderau (Mentor)

SIFT & WINNOW

Title	Presenters and Mentors
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Using Toolkit to Support Families with Children with Autism in Cultural Institutions

Nicole Nelson, Karla Ausderau (Mentor)

Testing the Requirements for Anaerobic Growth in Yeasts

Ritika Punathil, David Krause (Mentor)

A Qualitative Analysis: Impact of Opioid Pain Medications on the Lives of Patients with Opioid Treated Chronic Low-Back Pain.

Sam Rivera, Aleksandra Zgierska (Mentor)

High Black Infant Mortality Rates in Wisconsin: Critical Issue for the Progress toward Reproduction Justice

Janae Winston, Christine Garlough (Mentor)

International Students in the Writing Center: What Support Do Students Want?
Zhiyun Zhao, Calley Marotta (Mentor)

TRADITIONS

Title	Presenters and Mentors
Assessment of Teaching and Learning in the Operating Room	Narik Riak, Sarah Sullivan (Mentor)
Developing Cell-Intrinsic Control of Cardiomyocyte Differentiation Utilizing Genome Editing	Ethan Church, Sean Palecek, Gyuhyung Jin (Mentor)
Evaluating Use of Patient-Collected Audio Recorded Encounters for Provider Audit Feedback to Reduce Contextual Errors	Nikki Prado, Nasia Safdar (Mentor)
Effects of Disease-Associated Mutations on the Enzymatic Activity and Disassembly of AtCDC48/p97	Hannah Lier, Sebastian Bednarek (Mentor)
"Trigger Fingers Turn to Twitter Fingers": The Social Media(ted) Criminalization of Black Girls in Schools	Tashiana Lipscomb, Bianca Baldrige (Mentor)

Session 3: 12–1:15 p.m.

AGRICULTURE A

Title	Presenters and Mentors
Relationship FLAGS (For Leaders, Advocates, and Greek Students)	Lauren Silber, Tracy Schroepfer (Mentor)
Characterization of the Effects of Orf73 In Vitro on the Bacteriophage Lambda's Promoters	Madeline Akbari, Richard Gourse (Mentor)
Student Memory, Then and Now	Rena Newman, Catherine Phan (Mentor)
A Forgotten Community: Poverty, Race, and Policy Implications in Crisp County, Georgia	Alyssa Meurer, Leann Tigges (Mentor)
DCC Rescues Neuronal Maturation Deficits of MBD1-Deficient Neurons	Johnson Hoang, Xinyu Zhao (Mentor)

ALUMNI

Title	Presenters and Mentors
Potential Role of Soil Moisture and Group 15 Herbicide Selection in the Control <i>Amaranthaceae</i> Species	David Wang Wang, Lina Liu, Rodrigo Werle (Mentor)
Elucidation of the Regulatory Mechanism of Tyr Production In <i>Arabidopsis thaliana</i>	Yusen Men, Hiroshi Maeda (Mentor)
Gender Differences in Naturally Occurring Social Functional Smiles	Zoe Hansen, Paula Niedenthal (Mentor)
Sense of Belonging: Students of Color at PWI	Mai Chia Xiong, Brad Brown (Mentor)
Epidemiologic Survey of <i>Legionella</i> Antigen Tests at Aurora Health Care	Caroline Toberna, Dennis Baumgardner (Mentor)

INDUSTRY A

Title	Presenters and Mentors
Development of an In Situ Cancer Vaccine via Combinational Radiation and Bacterial Membrane Nanoparticles	Abigail Jaquish, Ravi Patel (Mentor)
Investigation into the Core Spaceflight Response Gene BAG6 and its Possible Role in Heat Shock and ROS Related Signaling	Jacob Hotvedt, Simon Gilroy (Mentor)
Human-Hyena Conflicts: Study of Hyena Activity in Local Communities around Akagera National Park, Rwanda	Jacob Olson, Adrian Treves (Mentor)
Tianlai Pathfinder	Calvin Osinga, Peter Timbie (Mentor)

Quantifying Silencing of Estrogen Receptor Alpha Expression in the Hypothalamus of Female Marmosets

Hannah Yohnk, Alli Biskowitz, Sarah Novack, David Abbott (Mentor)

INDUSTRY B

Title	Presenters and Mentors
Development of an Automated Analysis Tool to Characterize Ventilation Defects in Children and Adolescents via 3He Magnetic Resonance Images	Carter Griest, Sean Fain (Mentor)
Suppressors of ADH2 Mutation in <i>Arabidopsis thaliana</i>	Caroline Hanson, Hiroshi Maeda (Mentor)
Non-Invasive Measurement of Early-Stage Diabetic Retinopathy	Andrew Suscha, Nader Sheibani (Mentor)
Influence of Earthworm Invasion on Sugar Maple Root Growth and Mycorrhizal Colonization	Kevin Hobbins, Kim O'Keefe (Mentor)
Effect of Trail Obstruction on Leaf Transport in <i>Atta cephalotes</i>	Nicholas Maxfield, Catherine Woodward (Mentor)

LANDMARK A

Title	Presenters and Mentors
Morphological Evolution of Galaxies in Arp 2197: From Supergroups to Clusters: Preprocessing and the Jellyfish	Ian Norwood, Jay Gallagher, Ralf Kotulla (Mentor)
Medical Imaging: Bleeds	Zoha Cochinwala, Dane Morgan (Mentor)
Managing for the Effects of Feral and Free-Ranging Dogs on People and Wildlife	Brenna Denamur, Nadia Swanson, Cybill Biehlmann, Nicole Florence Pietruni, Jim Berkelman (Mentor)
Scientist Collaboration	Saketram Durbha, Reece Washington, Thomas Ngo (Mentor)
Government Inspectors in the Roman Empire and Han China	Max Fuller, Marc Kleijwegt (Mentor)

LANDMARK B

Title	Presenters and Mentors
Biocatalytic Synthesis and Purification of Noncanonical Gamma-Hydroxy Amino Acids	Eric Geunes, Andrew Buller (Mentor)
Relief for Back Pain: Qualitative Study of What Helps Individuals with Opioid-Treated Chronic Low-Back Pain	Nguyen Hua, Aleksandra Zgierska (Mentor)
Effects of FGF8 on Development of GnRH Neurons through Cell Differentiation	Isaac Johnson, Kim Keen, Ei Terasawa Grilley (Mentor)
Early Introduction of STEM through Sustainable Engineering	Tyler Klink, Angela Pakes (Mentor)
Examining the Effects of Choice in Utility-Value Interventions	Lisa Larson, Judith Harackiewicz (Mentor)

SIFT & WINNOW

Title	Presenters and Mentors
Sequential Erosion Tissue Imaging of Thick Fluorescent Samples	Yiqun Ma, Niklas Gahm, Kevin Eliceiri (Mentor)
Construction of Blue Laser Cooling System for Multiplexed Strontium Optical Lattice Clock	Brett Merriman, Shimon Kolkowitz (Mentor)
Trajectory Analysis using Epistemic Network Analysis	Melanie Rogers, Elizabeth Rybacki, Harshita Bhatt, Brendan Eagan (Mentor)
Conveying Your Message; Qualitative Analysis of the Earned Media Coverage Obtained by the Wisconsin Obesity Map	Charles Rojas, Martin Brubaker (Mentor)
Effects of Dysregulated Cortisol on Predicting Pulsatility for Cerebrovascular Health	Alexander Romantz, Megan Zuelsdorff (Mentor)

TRADITIONS

Title	Presenters and Mentors
Niche Partitioning in Communities Featuring Different Avian Scavenger Richness	Kate Silverthorne, Jonathan Pauli (Mentor)
Machine Learning Approaches to Reduce Preventable Emergency Department Return Visits	Marvin Tan, Brian Patterson (Mentor)
Quantification of Eosinophil Motility	Samantha Zaug, Deane Mosher (Mentor)
Investigating the Role of Tcf19 in Mouse β -Cell Function in Response to Metabolic Stressor Using Immunohistochemistry	Rachel Geroux, Dawn Davis (Mentor)
Estrogen Receptor Alpha (Era) Gene Silencing in the Hypothalamus Reduces Reward Salience in Adult Female Rhesus Monkeys	Molly Willging, David Abbott (Mentor)

WISCONSIN IDEA

Title	Presenters and Mentors
Food Security at Madison College: Wolves Share Initiative	Susan Maloney, Randy Stoecker (Mentor)
Quantifying Expression of Neurodevelopmental Genes in Down Syndrome using Human iPSCs	Drew Quiriconi, Anita Bhattacharyya (Mentor)
Blogs vs. Vlogs: End-of-Life Expression by AYAs with Cancer	Sophia Schmidt, Megan Moreno (Mentor)
Game Theoretic Model of Pre-Disaster Relocation	Andrew Simovic, Vicki Bier (Mentor)
Absent Father's Perceived Roles as Caregivers to Children in Co-Parenting Relationships	Isaac Trussoni, Janean Dilworth-Bart (Mentor)

Posters

Session 1: 9–10:15 a.m.

VARSITY HALL

PS#	Title	Presenters and Mentors
1	Investigation of the Enzymes Required for <i>serine</i> Biosynthesis in <i>Mycobacterium tuberculosis</i>	Thomas Anderson, Hazel Holden (Mentor)
4	miStudio-A Web Application for Microbiome Sequencing Data Analysis	Weipeng Zhou, Zhengzheng Tang (Mentor)
7	On the Translates of General Dyadic Systems on R	Connor Olson, Theresa Anderson, Zeyu Wei, Bingyang Hu, Liwei Jiang, Betsy Stovall (Mentor)
10	Comparison of TROPOMI NO ₂ Retrievals with Ground-Based Measurements in Los Angeles	Madankui Tao, Tracey Holloway (Mentor)
13	Do Gestures Alter Children's Understanding of Novel Words?	Grace McCune, Jenny Saffran (Mentor)
16	Radiosensitization of Head and Neck Cancer using FGFR-inhibitor	Gopika Senthilkumar, Randall Kimple (Mentor)
19	Conditional Expression of Vimentin-mNeonGreen in Neural Stem Cells	Katrina Hunt, Tiaira Porter, Darcie Moore (Mentor)
22	Modulation of Intestinal Peptidase Activity in Response to Multiple Dietary Macronutrient Signals in Domestic Chickens	Elizabeth Morrow, Yushi Oguchi, William Karasov (Mentor)
25	Modulation of Chicken Intestinal Maltase Activity by Dietary Starch, Protein, and Lipid Signals	Don Mai, William Karasov (Mentor)
28	Policy Determinants of Mental Health and Risky Behaviors	Brianna Boecker, Anita Mukherjee (Mentor)

PS#	TITLE	Presenters and Mentors
31	Voices of Hip-Hop in Madison	Toni Ray, Elisa Guerrero, Maire Cait Mullen, Randy Stoecker (Mentor)
34	Vertical Distribution of CMAQ NO ₂ Over Los Angeles	Matilyn Bindl, Tracey Holloway (Mentor)
37	Examining the Relationship between Sleep and Learning Outcomes within Concreteness Fading Instructional Design	Alicia Evans, John McGinty (Mentor)
40	UWellness Study	Paula Bianca Yvette Clemente, Lauren Papp (Mentor)
43	Rescue of Neurogenic and Cognitive Deficits of Fragile Mice through Genetic Reduction of MDM2	Lucy Zhao, Xinyu Zhao (Mentor)
46	Attention Bias Modification in Undergraduate Students: Novel Training Paradigm	Maureen Butler, Seth Pollak, Rista Plate and Brian Leitzke (Mentor)
49	The Influence of Hurricane Maria on Soil Carbon Dynamics	Lily Weglarek, Elliot Vaughan (Mentor)
52	Systematic Study of Genus <i>Lucanus scopoli</i> from China	Zhihong Zhan, Craig Brabant (Mentor)
55	Sleep Apnea—An Unrecognized Risk in Pregnancy	Natalie Jacobson, Mihaela Bazalakova (Mentor)
58	Development of Powered Dynamic Walking Robots to Study Effects of Hip-Ankle Gait Actuation and Torso Angles on Energy Consumption	Thana Pongcharoenyong, Peter Adamczyk (Mentor)
61	A Goodness-of-Fit Test to Study the History of Group of Species Based on Genome Sequences	Ruoyi Cai, Cecile Ane (Mentor)
64	Versican Production is Driven by both Epithelial and Stromal Cells in Pancreatic Cancer	Hanna Rainiero, Dustin Deming (Mentor)
67	Examining the Effects of Radio Galaxies on their Environment	Katherine Kolman, Eric Wilcots (Mentor)
70	Burnout and Distress in MD-PhD Students Evaluated through Wellness Curricula	Pahder Moua, Jessica Babal (Mentor)
73	Applying Machine Learning Algorithms to Medical Imaging	Katy Dong, Dane Morgan (Mentor)
76	Effect of Community-Based Ballroom Dance and Balance Education Program on Cognition in Older Adults	Alexis Mashl, Susan Frikken (Mentor)
79	Successor CEOs	James Kardatzke, Yaron Nili (Mentor)
82	Understanding the Function of the C-terminal Domain in the Hsp70 Molecular Chaperone Ssb	Paige Hill, Brenda Schilke (Mentor)
85	Biochemical Characterization of Putative Epigenetic Regulatory Protein Complex	Morgan Lentz, John Denu, Spencer Haws (Mentor)
88	Development of Near Frequency Communications Fish Tag	Alex Wolff, Terence Berry (Mentor)
91	Can Child's Ability to Manipulate Touchscreen Predict Their STEM Learning from Interactive Screen Media?	Erin Matusinec, Heather Kirkorian (Mentor)
94	A Hamiltonian Monte Carlo Approach to Continuous-Variable Phylogenetic Inference	Yichen Yang, Bret Larget (Mentor)
97	Regulation of Transcription through Phosphorylated Tyrosine-1 on the RNA polymerase II CTD	Ryan Kempen, Aseem Ansari (Mentor)
100	Should You Turn the Lights off in the Bathroom?	Jacob Bartelt, Cathy Middlecamp (Mentor)
103	The Correlation between Fluorescence and Positron-Emission Tomography (PET) Imaging of H ₂ S-Activable Nanoparticle Photosensitizer	Cerise Siamof, Weibo Cai (Mentor)

PS#	TITLE	Presenters and Mentors
106	Oral Histories of Tribal Food Sovereignty	Isabelle Paulsen, Becca Jo Dower (Mentor)
109	Assessing Sources of Genetic Resistance to Colorado Potato Beetle	Mary Magnuson, Mike Crossley, Benjamin Pelissie (Mentor)
112	Comparison of External Beam Radiation and Molecular Targeted Radiation on Immune Activation in Cancer	Sai Gungurthi, Ravi Patel (Mentor)
115	Fluorescently Labeled Monoclonal Antibodies for the Study of EBV-Driven Lymphomagenesis	Matthew Dandan, Dana Baiu (Mentor)
118	Using Nonsymbolic Ratios to Promote Fractions Knowledge	Nya Pottinger, Percival Matthews (Mentor)
121	Effects of Hurricane Maria on Soil Carbon and pH	Alexander Roman, Elliot Vaughan (Mentor)
124	Special Education Services for Children with ASD	Gabrielle Eull, Sigan Hartley (Mentor)
127	Effects of Income on Family Dynamic in ASD Families	Jordan Bondeson, Sigan Hartley (Mentor)
130	AUDIT Cross Validation	Maggie Mataczynski, John Curtin (Mentor)
133	Analyses of Enzymes Required for GDP-fucose Biosynthesis in <i>Mycobacterium tuberculosis</i>	Cory James Call, Hazel Holden (Mentor)
136	Role of miR146a-5p in Preeclampsia-dysregulated Fetal Endothelial Function	Sana Fathima, Chi Zhou (Mentor)
139	Haze Formation is Associated with Anthocyanin Loss in Grape and Cranberry Juices	Danielle Voss, Bradley Bolling (Mentor)
142	The Barley Respiratory Burst Oxidase Homologue (Hvrboh1) Gene and Its Role in the Germination and Malting of Barley	Jenna Rosinski, Ramamurthy Mahalingam (Mentor)
145	External Beam Radiotherapy Required for Tumor Regression When Using CpG-Oligodeoxynucleotide and Anti-Ox40 in an Immunologically Cold Tumor Model	Luke Zangl, Ravi Patel (Mentor)
148	Ability of Molecular Targeted Radionuclide Therapy and Anti-CTLA-4 to Prevent Spontaneous Metastases in Preclinical Lewis Lung Carcinoma Model	Ryan Brown, Ravi Patel (Mentor)
151	How Children Learn to Place Fractions on the Mental Number Line	Erin Plummer, Edward Hubbard (Mentor)
154	Recognition and Retrieval Memory: Which Better Facilitates Children's Word Learning?	Karissa Ebert, Kylie Lowen, Haley Vlach (Mentor)
157	Understanding the Relationship between GVHD Probability and Mononuclear Cells' Stimulatory Capacity in Different HSCT Graft Sources	Isabel Monti, Jenny Gumperz (Mentor)
160	Efficacy of Polyethylene Glycol 6000 Induced Drought on Mini-Core Population of Barley (<i>Hordeum vulgare</i>) as Proxy for Drought Resistance	Liam Murphy, Mali Mahalingam (Mentor)
163	Region-Specific Remodeling of Atrial Myocytes in Heart Failure Downregulates Caveolae Structures and Disrupts Subcellular Calcium Release	Ashley Irwin, Alexey Glukhov (Mentor)
166	Using Human Neural Progenitor Cell Models to Conduct Large-Scale Drug Screens for Fragile Syndrome	Ryan Risgaard, Xinyu Zhao (Mentor)
169	Are There Sex Differences Seen in Proliferation after Injury in <i>Drosophila</i>	Bailey Spiegelberg, Kassi Crocker (Mentor)
172	Protein Interactions Involved in Positive-Strand RNA Virus Replication	Jessica Thornton, Johan den Boon (Mentor)
175	Combining FGFR Inhibitor AZD4547 with Radiation in Head and Neck Cancers.	Margot Miller, Saakshi Kaushik, Lindsey Abel, Randy Kimple (Mentor)

PS#	TITLE	Presenters and Mentors
178	Identification of the Mechanism of Mitotic Checkpoint Protein Mad1 Localizing to the Golgi Apparatus	Rebecca Thiry, Beth Weaver (Mentor)
181	Electrocatalytic Oxidation of Imines to Azines via Copper Catalyst for Hydrazine Synthesis	Yeon Jung Kim, James Gerken (Mentor)
184	Testing Insect Temperature Tolerance	Kyle Vandervere, Sean Schoville (Mentor)
187	Modification of the Parent-Child Early Relational Assessment to Represent Families of Children with Autism Spectrum Disorder.	Madeline Attewell, Karla Ausderau (Mentor)
190	Satellite Witnesses Traffic Pollution	Andrew Kieckhefer, Tracey Holloway (Mentor)
193	Modeling the Discussion of Controversial Topics using Epistemic Network Analysis	Sara Tabatabai, Brendan Eagan (Mentor)
196	Length of Parent-Child Separation Due to Parental Incarceration in Relation to Child Behavioral Problems in School	Andie Asher, Julie Poehlmann-Tynan (Mentor)
199	The Midbody: One Cell's Trash is Another Cell's Treasure	Caitlin Marks, Randall Dahn (Mentor)
202	Using CRISPR-Cas9 to Knockout ADE2 in <i>cerevisiae</i>	Hayley Stoneman, Russell Wrobel (Mentor)
205	Button-Snap Latching: New Method of Functionalizing Graphene	Isabelle Tigges-Green, Martin Zanni (Mentor)
208	The Synthesis of Interrelated Pentadienenitrile Isomers: Molecules of Astrochemical Significance	Danny Lee, Sam Kougiass (Mentor)
211	SCD-1, FGF21, and Adiponectin Interaction May Prevent Weight Gain in LKO Mice on HSVLF diet	Abbey Stoltenburg, Sarah Lewis (Mentor)
214	Analyzing Middle School Students' Learning in Science	Emerson Ankenbauer, Sadhana Puntambekar (Mentor)
217	Reconstructing Past and Predicting Future Species-Climate Relationships with Modern Pollen Surface Samples from Eastern North America	Jordan Schutz, Allison Stegner, Jack Williams (Mentor)
220	Responsive Design and the Local Environmental Modeling App	Jon Erbe, Brendan Eagan (Mentor)
223	The Midbody: One Cell's Trash is Another Cell's Treasure	Elif Kurt, Randall Dahn, Ahna Skop (Mentor)
226	Post Tail Dynamic Analysis of Financial Time Series	Zeyu Wei, Zhengjun Zhang (Mentor)
229	Could Cholecystokinin Treatment in Beta Cell Counter the Hypoxic Apoptosis?	Steve Sacotte, HyungTae Kim (Mentor)
232	Application of the Information-Motivation-Behavioral (IMB) Model: A Community-Based Peer Group for African Americans with Type 2 Diabetes	Ariana Song, Olayinka Shiyabola (Mentor)
235	Pseudoknot vs. Stem-Loop: Elucidating the Functional Frameshift Element in HIV-1	Jacob Kentala, Magdalena Murray, Samuel Butcher, Nathan Sherer (Mentor)
238	Improving Energetic Particle Confinement in Stellarators	Luquant Singh, Aaron Bader (Mentor)
241	Pregnancy Associated Plasma Protein-AA Promotes Neuron Survival by Regulating Mitochondrial Function	Emily Daykin, Marc Wolman (Mentor)
244	Predicting Modeling of Algal Blooms on the Lakes of Madison, WI	Alliot Nagle, Dimitris Papailiopoulos (Mentor)
247	Measuring Parental Consistency: Construct and Predictive Validity	Samuel Vincent, James Li (Mentor)
250	Measuring Physician Burnout In Pediatric Department	Madeline Kieren, Sarah Webber (Mentor)

Continued on next page

Posters *continued*

PS#	TITLE	Presenters and Mentors
253	Math Education Learning and Development Lab	Italo Paz-Cuervo, Percival Matthews (Mentor)
256	Utilizing NK Cells in Vaccine Model Against Neuroblastoma to Improve Anti-Tumor Effects	Katharine Tippins, Kirsti Walker, Adeela Ali, Sabrina Kabakov, Christian Capitini (Mentor)
259	Citrullines Next to Certain Amino Acids are More Commonly Found in Antigens and More Commonly Targeted by Autoantibodies in Rheumatoid Arthritis	Lauren Fahmy, Miriam Shelef (Mentor)
262	It Takes Village to Save Family: The Impact of Community and Doula Support on Black Infant Mortality	Malik Williams, Larissa Duncan (Mentor)
265	Corporate Governance Plagiarism	Christopher Kardatzke, Yaron Nili (Mentor)
268	Relationship Status and Drinking Behaviors among First-Year College Students	Megan Bartuch, Megan Moreno (Mentor)
271	Growth-Defense Trade-Offs and Their Influence on Genetic Variation	Joel Bravo, Oliva Cope (Mentor)
274	Predicting the Thermodynamic Stability of Perovskite Oxides using Machine Learning Models	Yaseen Najeeb, Lane Enrique Shultz (Mentor)
277	Effect of Community-Based Ballroom Dance and Balance Education Program on Cognition in Older Adults	Alexis Mashl, Susan Frikken (Mentor)
280	hERG Potassium Channel Modulation to Treat Cardiac Arrhythmia	Aliyah Keval, Gail Robertson (Mentor)
283	In Vivo Characterization of the Spliceosome Protein ECM2 in <i>Saccharomyces cerevisiae</i>	Brandon Nikolai, Charles Schneider, Clarisse van der Feltz, Aaron Hoskins (Mentor)
286	Cooperative Visualizations: The Intersection of Spatial Skills and Nonverbal Collaboration on Developing Chemistry Intuition	Briana Alvarez, Martina Rau, Lydia Nyachio, Miranda Zahn (Mentor)
289	Small Gestational Age Babies and One-Month Iron Status in Neonatal Intensive Care Unit	Maria Vandenlangenberg, Christine Brichta, Sally Norlin, Pamela Kling (Mentor)
292	Using Satellite Data to Assess Formaldehyde Over Cities Globally	Clara Jackson, Tracey Holloway (Mentor)
295	Role of MicroRNA-192 in Preeclampsia-Dysregulated Fetal Endothelial Function	Colman Freel, Chi Zhou (Mentor)
298	Growth of Antibiotic Producing Soil Bacteria Similar on Luria Broth (LB) vs. Potato Dextrose Agar (PDA)	Elizabeth Whelan, Emma Bolduc, Joshua Pultorak (Mentor)

Session 2: 10:30–11:45 a.m.

VARSITY HALL

PS#	Title	Presenters and Mentors
2	Informal Science Education: Out-of-School Learning for Teens in Juvenile Detention	Laurn Branham, Kevin Niemi, Anna Bishop Courtier (Mentor)
5	Effect of Heat Shock Protein Expression on <i>Arabidopsis thaliana</i> Response to Gravitropic Stimuli	Noah Kinscherf, Richard Barker, Simon Gilroy (Mentor)
8	Robotically Assisted Sonic Therapy (RAST) with Histotripsy for Transcostal Hepatic Ablation in Porcine Model	Emily Knott, Fred Lee (Mentor)
11	Brain Structure and Function Alterations in Childhood Chronic Stressors: Implications for Future Research on Childhood Chronic Health Conditions	Kara Waier, Anne Ersig (Mentor)

PS#	TITLE	Presenters and Mentors
14	Identification as High Fall Risk: Older Adult Patients' Perceptions	Madeline Lindhart, Barbara King (Mentor)
17	Interaction at the Antiparallel Coiled-Coil of Spc42 Protein	Kasey Kroiss, Ivan Rayment, Amanda Drennan (Mentor)
20	Protein dynamics in Micelle vs. in Bilayer: Molecular Dynamics Simulation of Voltage-Gated Potassium Channel Voltage-Sensor Domain	Stephen Pan, Baron Chanda (Mentor)
23	End-of-Life Issues in the LGBTQ Community: Review of the Literature	Elizabeth Alleman, Kristen Pecanac (Mentor)
26	A Comparison of the Paravertebral Block versus Pectoralis Block in Controlling Bilateral Post-Mastectomy Pain in Setting of Tissue Expander Placement	Christina Vulpitta, Elizabeth Wilson (Mentor)
29	Frequency and Distribution of Cutting Maneuvers among Female College Ultimate Frisbee Players	Paul Slaughter, Peter Adamczyk (Mentor)
32	Functional Studies of the Bicc1 Translational Repressor Protein	Tommaso Tonelli, Michael Sheets (Mentor)
35	Assessing Cognitive Decline in the Pink1-/- Rodent Model of Early-Onset Parkinson Disease	Asha Jain, Michelle Ciucci, Cynthia Kelm-Nelson (Mentor)
38	Light Availability and Biomass Production in Swedish Boreal Lakes	Matthew Chotlos, Jake Vander Zanden, Holly Embke (Mentor)
41	Local and National News Coverage of Mass Public Shootings: Textual Analysis	Maggie Bushman, Megan Moreno (Mentor)
44	The Impact of Conflicting Emotional Cues on Facial Expression Intensity Ratings Across Development	Gwyneth Delap, Seth Pollak (Mentor)
47	Understanding Pathogenic Success by Identifying <i>Ralstonia solanacearum</i> 's Nutrient Sources in Planta	Olivia Steidl, Corri Hamilton, Caitilyn Allen (Mentor)
50	Anxiety-Related Differences in Structural Connectivity of the <i>Uncinate Fasciculus</i> in Adolescent Girls	Alison Casey, Lisa Williams, Ned Kalin (Mentor)
53	Measuring the Behavior Outcomes of Daughters and Sons with Incarcerated Fathers	Lulu Zhou, Kerrie Ann Fanning, Julie Poehlmann-Tynan (Mentor)
56	Malleability of Categorization in Typically Developing and Physically Abused Children	Emily Weiss, Seth Pollak (Mentor)
59	Marmoset Toy Preference	Kavya Ayalamayajula, Peter Pierre (Mentor)
62	Advancing Silvopasture in Wisconsin	Tz-Ruei Liu, Diane Mayerfeld (Mentor)
65	Association between Parenting Style and Parent-Child Relationship in Families of Children With ASD	Taylor Krahn, Brianna Gambetti (Mentor)
68	Evaluation of Rat Ultrasonic Vocalization Acoustics After Methyphenidate Administration	Amy Regenbaum, Cynthia Kelm-Nelson (Mentor)
71	School Rules About Social Media: Do Teens Really Follow Them?	Amanda Zhang, Bradford Brown (Mentor)
74	The Level of Family Engagement in Nursing Home Care Conferences	Emilie Price, Tonya Roberts (Mentor)
77	Predicting Molecular Properties from Molecular Description with Machine Learning	James Wang, Dane Morgan (Mentor)
80	Schema-Based Previews Support Learning in Educational Programs	Yi Tong, Heather Kirkorian (Mentor)
83	The Impact of Television on Children's Attention, Physiological Responses and Memory	Tiffany Bricco, Heather Kirkorian (Mentor)

PS#	TITLE	Presenters and Mentors
86	Social Class Concealment: Daily Diary Study of Low-Income College Students	Mayra Dominguez, Mun Yuk Chin (Mentor)
89	The Return-to-learn Experience of Undergraduate College Students who Sustain Concussion versus Musculoskeletal Injury while Enrolled at University	Leeah Eisch, Traci Snedden (Mentor)
92	Psychological Resilience and Growth Following Hematopoietic Stem Cell Transplantation	Alanna Burkart, Erin Costanzo (Mentor)
95	Concurrent Validity Between CKTA Performance-Based Tasks and BRIEF	Taylor Bradley, Elizabeth Larson (Mentor)
98	EphA2 is Novel Target in Human Cetuximab-Resistant Head and Neck Cancer	Grace Kang, Deric Wheeler (Mentor)
101	Differential Expression in Aspen Genotypes with High and Low Levels of Constitutive Defenses Exposed to Herbivory	Thomas Matoska, Jennifer Riehl (Mentor)
104	Culture Influences Perceptions of High-Conflict Dating Relationships	Ellen Converse, Yuri Miyamoto (Mentor)
107	Building Healthy Communities through Community-Based Participatory Research	Harleen Arora, Amy Hilgendorf (Mentor)
110	Facebook Diagnoses Undergraduate Alcohol Use Disorder	Diane Camarda, John Curtin (Mentor)
113	Nature Based Shorelines on the Great Lakes	Briana Shea, David Hart (Mentor)
116	Strong Solutions to the Forced Fractional Euler Alignment System	Tyler Wolter, Trevor Leslie (Mentor)
119	Familial History of Alzheimer's Disease and the Cerebrovascular Response to Metabolic Stimulus	Alyson Zimmerman, Jill Barnes (Mentor)
122	Comparative Analysis of Food and Health Inequities in Urban and Rural Counties in Wisconsin	Lauren Jorgensen, Leann Tigges (Mentor)
125	An Entanglement Model for Cascaded Strings	Wangping Ren, Jean-luc Thiffeault (Mentor)
128	Regenerative Capacity of Adult <i>Drosophila</i> Brains with and without Brat Mutation	Kent Mok, Grace Boekhoff-Falk (Mentor)
131	FOMO: Behind the Posts	Isabel Fernandez, Bradford Brown (Mentor)
134	Modeling the Contributions of Individuals to Collaborative Problem Solving using Epistemic Network Analysis	Zheming Lian, Zachari Swiecki (Mentor)
137	Strain Mediated Switching of Bloch Skyrmions in FeGe Nanodisk	Sam Christianson, Jiamian Hu (Mentor)
140	Using <i>Caenorhabditis elegans</i> to Study Protein-Coupled Receptors from Parasitic Nematodes	Eric Chen, Nic Wheeler (Mentor)
143	To Compare or Space? The Role of Visual Attention in Children's Science Learning	Ellen Weber, Haley Vlach (Mentor)
146	Can Preschoolers Intentionally Forget?	Hailey Miller, Haley Vlach (Mentor)
149	The Relative Difficulties of Learning Various Atomic Representations in Chemistry	Marshal Jahnke, Sally Wu (Mentor)
152	Watershed Restoration Practices and techniques in NE Pacific region	Michal Michiels, James Berkelman (Mentor)
155	The Effectiveness of Different Problem-Solving Methods in an Engineering Class	Kyle Byrnes, Sally Wu (Mentor)
158	Sphagnum Moss	Danielle Gygi, Kevin Barrett (Mentor)
161	That's Not Offensive! The Perpetuation of Stereotypes through Internet-Based Memes	Imani Wilson, William T.L. Cox (Mentor)

PS#	TITLE	Presenters and Mentors
164	Relationship between the Number and Mass of Nodules and Above Ground Nitrogen Use by Soybeans	Victor Hinardi, Teal Potter (Mentor)
167	The Effect of pH and Antimicrobials on the Growth and Survival of <i>Listeria monocytogenes</i> in High-Moisture Model Cheese.	Kory Anderson, Kathleen Glass (Mentor)
170	Evaluating Axonal Projections of Regionalized Human Motor Neurons in the Developing Chick Embryo	Stephanie Cuskey, Randolph Ashton (Mentor)
173	Acclimation Responses of Marquette Grapevine Buds with Exposure to Above and Below Freezing Temperatures	Elizabeth Geboy, Mike North (Mentor)
176	The Importance of Polyamines for <i>Salmonella enterica</i> Survival on Alfalfa Sprout Roots	June Pen, Jeri Barak (Mentor)
179	Improving Function after Nerve Injury via Microparticles	Christopher Mitry, Amgad Hanna (Mentor)
182	Impact of Cancer-Associated Mutations in SF3B1 on Yeast pre-mRNA Splicing	Brent Groubert, Harpreet Kaur (Mentor)
185	The Impact of Large-Group Collaboration on Learning Outcomes	Kristen Younan, Sally Wu (Mentor)
188	The Effect of Varying Concept Representations on Learning	Michael Bartley, John McGinty (Mentor)
191	Girls vs. Boys with Autism Spectrum Disorder (ASD): Differences in Symptom Presentation	Theresa Schinkowitch, Sigan Hartley (Mentor)
194	Effectiveness of Number of Languages Spoken on Learning Outcomes	Dema Jaber, John McGinty (Mentor)
197	Real-Time Solutions to Stop the Spread of Fake News	Yogesh Balaje Mahendran, Varun Jog (Mentor)
200	Endemism in Tropical Montane Ecosystems	Auna Kaufmann-Schwartz, James Berkelman (Mentor)
203	Assessing the Crystal Fabrics and Mineralogy of Speleothems from Cave of the Mounds, Blue Mounds, WI	Rui Qiong Tan, Shaun Marcott (Mentor)
206	The Inhibitory Heterotrimeric protein, Gz, Regulates Alpha-Cell Active Glucagon-Like Peptide 1 (GLP-1) Levels	Brooke Carroll, Kathryn Carbajal (Mentor)
209	Effects of Variations in Concreteness Fading on Mathematics Domains	Chloe Lee, John McGinty (Mentor)
212	How Students Learn Abstract Chemistry Concepts using Think Aloud Strategies	Marisa Gasparri, Sally Wu (Mentor)
215	Interpolation Schemes that Don't Ruin Stars	Zachary Way, Rich Townsend (Mentor)
218	Expansion of Canine Natural Killer Cells for Immunotherapy of Solid Tumors	Adeela Ali, Matthew Forsberg (Mentor)
221	Learning by Objects, Icons and Symbols.	Jacob Rock, John McGinty (Mentor)
224	Teaching Styles	Nicholas Perron, John McGinty (Mentor)
227	<i>E. coli</i> RNAP Transcription Initiation Kinetics and Promoter Escape	Jack Prazich, Kate Henderson (Mentor)
230	Role of City Planning in Early State-Level Societies	Emma Axelrod, Nam Kim (Mentor)
233	Evaluating Right Ear Advantage Using Dichotic Vowel-Evoked Envelope Following Responses	Regan Flaherty, Viji Easwar (Mentor)
236	Monochromatic Pulsed Photon Source for Calibration of X-ray Microcalorimeter	Mari Mcpheron, Dan McCammon (Mentor)
239	Content Analysis of Depression Personal Account Videos on YouTube	Quintin Gaus, Megan Moreno (Mentor)

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Posters *continued*

PS#	TITLE	Presenters and Mentors
242	Modeling the Impact of Nutrient Availability on Synthetic Gut Microbiome Community	Emma Groblewski, Ophelia Venturelli (Mentor)
245	Fibrotic Matrix Composition and Mechanical Cue Interaction	Brandilyn Bennett, Suzanne Ponik (Mentor)
248	Investigating the Mechanics of the Lytic Cycle of Proliferation of the Epstein-Barr Virus	Lily Zemelko, Adityarup Chakravorty (Mentor)
251	Nitrogen Fixation through Symbiotic Associations between <i>Medicago</i> and <i>Rhizobia</i>	Hibah Hafeez, Thomas Irving (Mentor)
254	Philosophy 101: Then and Now	Jessica Lipaz, Harry Brighthouse (Mentor)
257	Community Supervision in Wisconsin	Francisca Ana Corona, Cecelia Klingele (Mentor)
260	Mapping Ertan Project	Yixian Gan, Rania Huntington (Mentor)
263	Radiosensitization of HRAS-Mutant Bladder Cancer	Aastha Pandey, Randall Kimple (Mentor)
266	The Role of Neurotransmitters Following Traumatic Brain Injury in <i>Drosophila</i>	Amanda Scharenbrock, David Wasserman (Mentor)
269	Swimmer's Itch in Wisconsin	Chloe Baumbach, Daniel Preston (Mentor)
272	Increasing Efficiency for High-Throughput Major Histocompatibility Complex Genotyping	Emma Neumann, Roger Wiseman (Mentor)
275	CRISPR-Cas 9 Mediated Genetic Modification to Improve Survival and Growth Rate of Zebrafish Larvae	Henry Benchimol, Dhanansayan Shanmuganayagam, Dominic Schomberg (Mentor)
278	Combination of CCR4 Antagonist and Radiation Induces Tumor Growth in Neuroblastoma Mouse Model	Mackenzie Rabas, Ankita Shahi, Mario Otto (Mentor)
281	Keep Your Enemies Closer: Benefits of Taking the Advice from an Opponent	Mary Lu, Lyn Van Swol (Mentor)
284	A Test of Plant Allocation Theory: Implications for Plantation Forest Production	Samuel Jaeger, Rick Lindroth, Clay Morrow (Mentor)
287	Flow Cytometry Displays Expression of CXCL12 and CXCR4 in Neuroblastoma and Rhabdomyosarcoma Cancer Cell Lines	Simran Kaur, Ankita Shahi De, Mario Otto (Mentor)
290	Single-Molecule FRET Studies on Nascent Protein Folding by Custom-Assembled Confocal Microscopy Apparatus	Tess Carlson, Silvia Cavagnero (Mentor)
293	Combining Simultaneous and Spaced Presentations: Distributed Pairs in Children's Generalization of STEM Concepts	Lindsay Schoff, Alexis Hosch, Haley Vlach (Mentor)
296	Using MKL-1 as Potential Fluorescent Cellular Stiffness Reporter	Maiilee Her, Brian Burkel, Suzanne Ponik (Mentor)
299	Investigation of the Structure-Function Relationship of <i>subtilis</i> SSB Monomer Interfaces	Thanh Phuong Nguyen, James Keck, Katarzyna Dubiel (Mentor)

Session 3: 12–1:15 p.m.

VARSITY HALL

PS#	Title	Presenters and Mentors
3	The Complexity of Seeing Complex with the UW's Small Radio Telescope	Delano Yoder, Brian Babler, Jacqueline Beran, Cameron Campbell, Kyra Eierman, Matthew Kalscheur, Margaret Klein, Nicholas Schnoor, Bangzheng Sun, Cameren Swiggum, Samuel Szotkowski, Snezana Stanimirovic (Mentor)
6	Characterization of 100 Extended Major Histocompatibility Complex Haplotypes in Indonesian <i>Cynomolgus</i> Macaques	Cecilia Shortreed, David O'Connor (Mentor)
9	REFRESHing Occupational Fatigue in Nursing	Rebecca Kish, Linsey Steege (Mentor)
12	GABAergic CRF Neurons Act within the PFC to Modulate Working Memory in Rats	Kort Driessen, Craig Berridge (Mentor)
15	Defining Motor Deficits in the Rodent Model of Hereditary Spastic Paraplegia	Maya Charan, Molly Lettman, Anjon Audhya (Mentor)
18	Mosquito Species Identification using GoogLeNet	Tayfield Reed, Duncan Carlsmith (Mentor)
21	Dyspnea and Fatigue in Heart Failure: Are They Related to Brain Flow?	Anna Klar, Lisa Bratzke (Mentor)
24	RNA Binding Properties of the Lsm1–7 Ring from <i>Schizosaccharomyces pombe</i>	Johanna Virta, Eric Montemayor, Samuel Butcher (Mentor)
27	Cytoskeletal Dynamics of Photoreceptor Terminals vs. Retinal Ganglion Cell Growth Cones	Yochana Kancherla, Sarah Rempel, Timothy Gomez (Mentor)
30	Resiliency Skills Curriculum on Medical Students	Judy Chen, Jessica Babal (Mentor)
33	Wait, You Say What? Brand Names and Lexical Semantic Change	Madeline Cheyne, Joe Salmons (Mentor)
36	Using Pulsars to Develop New Model for the Density of Electrons in the Milky Way Galaxy	Benjamin Havlicek, Ben Havlicek, Robert Benjamin (Mentor)
39	Sex Specific Differences in Parkinson Disease	Samantha Lettenberger, Cynthia Kelm-Nelson (Mentor)
42	Measuring Anxiety in Rat Model of Early-Onset Parkinson Disease	Natalie Pahapill, Cynthia Kelm-Nelson (Mentor)
45	An Image Analysis Pipeline for Quantification of Carotenoid Pigments in Carrot Roots	Nathan Bosch, Philipp Simon, Kevin Coe (Mentor)
48	Investigating White Matter Pathways Associated with Ratio Processing in School-Aged Children	Monica Janz, Yunji Park, Edward Hubbard (Mentor)
51	Elucidating Genotype-Phenotype Relationship in <i>Saccharomyces cerevisiae</i> via the Effect of Strain Background and Gene Expression on Stress Sensitivity	Ruoyi Cai, Audrey Gasch (Mentor)
54	Strengthening Local Food Systems: Improving Interdisciplinary Relations	Linda Zhao, Alfonso Morales (Mentor)
57	Mechanisms Controlling the Activity of the Stem-Cell Regulator Zelda during Development	Jack Schnell, Melissa Harrison (Mentor)
60	Placenta Geometry in 2nd Trimester Assessed with Volumetric MRI	Archana Dhyani, Dinesh Shah, Philip Corrado, Oliver Wieben (Mentor)
63	Relationship Satisfaction Trajectories of Couples That Have Child with ASD	Kim Drastal, Sigan Hartley (Mentor)
66	Cell Cycle and Apoptotic Pathway Gene Regulation in Glioblastoma Multiforme (GBM) and GBM Derived Stem Cells: Implicating Pentraxin 3 Upregulation	Ian Sutton, Uma Wesley (Mentor)

PS#	TITLE	Presenters and Mentors
69	Understanding Vehicle and Bicycle Interactions Using Naturalistic Observations	Carlina Sii, Boris Claros (Mentor)
72	Identifying Structure in the Antlia Cluster using Spectral Clustering	William Korbitz, Eric Wilcots (Mentor)
75	Reduced Mitochondrial Fusion and Huntingtin Levels Contribute to Impaired Dendritic Maturation and Behavioral Deficits in Fmr1-mutant Mice	Tomer Korabelnikov, Xinyu Zhao (Mentor)
78	Effects of Bilingualism on Episodic Memory in Females and Males	Autumn Reppe, Margarita Kaushanskaya (Mentor)
81	The Genetic Basis of <i>tuberculosis</i> biofilms using Genome-Wide Association Study	Tongzhen Xie, Caitlin Pepperell (Mentor)
84	Structural Comparison of Palatal Bones of <i>Crocodylus johnstoni</i> with New <i>Phytosaur</i> from the Popo Agie Fm (Wyoming, USA)	Nadiyah Tengku Mahmood, Dave Lovelace (Mentor)
87	Inducing Knock-Down of Insecticide-Resistant Genes in the Colorado Potato Beetle	Maria Golovkina, Michael Crossley (Mentor)
90	Increased Survivability of Tree Seedlings through Recruitment of Microbial Communities	Kevin Cortes, Richard Lankau (Mentor)
93	Wire Fed T91 Characterization	Grant Rupkalvis, Adrien Couet (Mentor)
96	Heat Treatment of Alloy 709	Matthew Weinstein, Uzziel Torres, Adrien Couet (Mentor)
99	Union Rides: Harnessing the Shared Value of Commute Travel	Agalia Ardyasa, Carey McAndrews (Mentor)
102	Microwave Imaging for Skin Cancer using Near-Field Antenna Arrays	Yuchen Gu, Daniel van der Weide (Mentor)
105	Monoallelic Expression of GFAP in Human Astrocytes	Brandi Kreger, Linghai Kong (Mentor)
108	Map1b Overexpression Leads to Dendritic Complexity Deficits in Primary Hippocampal Neurons	Samantha Baker, Michael Stockton (Mentor)
111	Characterization of Alloy 600 after Corrosion in Molten Chloride Salt	Jake Quincey, Adrien Couet (Mentor)
114	Chloride Transporter Expression in Developing Retinal Bipolar Neurons	Julie Wallin, Mrinalini Hoon (Mentor)
117	The Role of Visual Comparison in Understanding Fraction Magnitudes	Valerie Buroker, Percival Matthews (Mentor)
120	Pulsatile Secretion of GnRH Peptide from GnRH Neurons Derived from Human Pluripotent Stem Cells	Benjamin Fordyce, Ei Terasawa Grilley (Mentor)
123	How was your Visit?: Parents' Perceptions about Asthma Care in the Urgent Care	Jack Stamer, Caroline Paul (Mentor)
126	Bending and Wrapping of α *PR Promotor DNA on <i>coli</i> RNAP Detected by Single Molecule Fluorescence Microscopy	Stephen Halada, M. Thomas Record Jr. (Mentor)
129	Assessment of Ethovision XT for Automated Animal Behavioral Quantification.	Keegan Schoeller, Xinyu Zhao (Mentor)
132	Quantifying Lipid Production of Oleaginous Yeasts	Rachel Schneider, Chris Hittinger (Mentor)
135	Health Habits among Parent-Child Dyads in Pediatric Fitness Clinic	Alex Abts, Cassandra Vanderwall (Mentor)
138	Say Ya to da Nort, Eh? Dialect Perception in Two Border Towns	Rebecca Risner, Joseph Salmons (Mentor)
141	Transportation Energy, Emissions, and Satellite Data	Emma Nelson, Tracey Holloway (Mentor)
144	Mechanism Study of PME1 Regulating PP2A Function	Mohammed Jaffri, Yitong Li (Mentor)
147	Effects of Ketogenic Diets on Blood Sodium Levels in Patients with Epilepsy	Tanushree Adya, Elizabeth Felton (Mentor)

PS#	TITLE	Presenters and Mentors
150	Development of Human and Age-Specific In Vitro Model for Studying Axon Growth	Elizabeth Thompson, Darcie Moore (Mentor)
153	Aboriginal Women and Shellwork Production in New South Wales, Australia	Madeline Rowe, Jonathan Kenoyer (Mentor)
156	The Influence of Timing of Menopause on Cerebrovascular Reactivity	Katherine Senese, Jill Barnes (Mentor)
159	Dual Sequencing Approaches for Rapid Haplotyping and Novel Major Histocompatibility Complex Class Allele Identification in Domestic Dogs	Sarah Bennett, Matt Reynolds (Mentor)
162	pH Alteration of Circumneutral Aerobic Pyrite Oxidizing Communities	Margaret Klein, Eric Roden (Mentor)
165	Machine Learning Software for Materials Science (MAST-ML Package)	Alexander Do, Dane Morgan (Mentor)
168	Utilizing Endothelial Cell Vascular Networks in Vitro to Optimize the Transplantation of Stem Cell-Derived Pancreatic Beta Cells	Vansh Jain, Sara Dutton Sackett (Mentor)
171	The Effects of Homozygosity of <i>cep41</i> on Fertility in Male Zebrafish	Jacky Lor, Cara Moravec (Mentor)
174	Isolation of Monoclonal Antibodies from Single-Cell Sorted Antigen Specific B Cells Binding Rhesus Macaque MHC Class Molecules	Tighe Christopher, Matthew Reynolds (Mentor)
177	Computational Design and Demonstration of Voltage Control of Magnetic Skyrmions	Dongxia Wu, Varun Kumar Sudhakaran, Jiamian Hu (Mentor)
180	Eventually, Have to Breathe: An Examination of the Practice of Hip-Hop Dance and the Traumatized Black Body	Breanna Taylor, Mary Patterson (Mentor)
183	Determining the Activity of Tryptophan-Free DnaK to Utilize in FRET Analysis	Natalie Feider, Silvia Cavagnero (Mentor)
188	Partner2Lose	Cynthia Villatoro, Corrine Voils (Mentor)
189	Mother Infant Interactions in Primates Exposed to Zika	Aubre Poole, Kathryn Bach, Karla Ausderau (Mentor)
192	Schneider Neonatal Assessment for Primate Prenatally Exposed to Zika	Natalie Dulaney, Karla Ausderau (Mentor)
195	Open Complex Stability Regulates Transcription Initiation by <i>coli</i> RNA Polymerase from the Ribosomal Promoter	Guanyu Liao, M. Thomas Record, Jr., Kate Henderson (Mentor)
198	Targeting Action of the Herbicide 2,4-D on Fathead Minnow Cortisol Levels during Stress Response	Evan Routhier, William Karasov (Mentor)
201	Global Cerebral Blood Flow in Healthy Older Adults with Low- and High-Sodium Diets	Makayla Tuomi, Jill Barnes (Mentor)
204	The Significance of Objects, Icons, and Symbols in Mathematics Learning	Miaoya Zhong, John McGinty (Mentor)
207	Modeling Optimal Spindle Positioning Using Fluorescently-Tagged EB3 and CDK1 Probes	Matthew Swenson, Zac Swider (Mentor)
210	<i>Toxoplasmosis gondii</i>	Jonathan Le, Xinyu Zhao (Mentor)
213	Going Beyond Degrees Brix: Maturity Markers for Cold Climate Interspecific Hybrid Red Wine Grapes	Andi Nelson, Amaya Atucha (Mentor)
216	Unreliable Auditory Feedback Leads to Decreased Sensitivity to Auditory Errors	Taijing Chen, Ben Parrell (Mentor)
219	Heart Rate Variability in Adults with Family History of Alzheimer's Disease	Mark Saari, Jill Barnes (Mentor)

Continued on next page

Posters *continued*

PS#	TITLE	Presenters and Mentors
222	The Association Between Having Chlamydia Infection and Depression among Adults in the United States, National Health and Examination Survey 2009–16	Morgan White, Susan Zahner (Mentor)
225	Stearoyl-CoA Desaturase 1 Deficiency Promotes Nonalcoholic Steatohepatitis (NASH) Independent of Hepatic Steatosis	Yar Xin Phang, Sarah Lewis (Mentor)
228	Cloning Canine DLA-88 into pCEP4	Morgan Smith, Matt Reynolds (Mentor)
231	Investigating Thermosensory Behavior in Filarial Parasites	Katie Kudrna, Mostafa Zamanian (Mentor)
234	Bumblebees (<i>Bombus impatiens</i>) Foraging Behavior on Alfalfa (<i>Medicago sativa</i>)	Maya Bernstein, Fabiana Fragoso (Mentor)
237	Pharmacological Manipulation of Prostaglandin Signaling Impairs Nf1-dependent Habituation Learning	Natalie Schmidt, Marc Wolman (Mentor)
240	Expression, Purification, and Crystallization of Chitin-binding protein (CbpD)	Brita Ostermeier, Katrina Forest (Mentor)
243	A Study of the Protein-Protein Interactions between Pi1M and Pi1B Using the Photocrosslinking Amino Acid pBpa	Megan Doty, Katiria Gonzalez Rivera (Mentor)
246	How Different Ethnicities Learn	Jaskaran Bakshi, John McGinty (Mentor)
249	The Effects of Collaboration on Engineering Students, Å test scores in WisCEL	Edan Tee, Sally Wu (Mentor)
252	Next-Generation Sequencing of Hepatitis Virus—Global Hepatitis Outbreak and Surveillance Technology	Coleton King, Alana Sterkel (Mentor)
255	Impact of Available Legal Resources on Outcomes for Wisconsin Opioid Users	Rita Simpson, Rebecca Miller (Mentor)
258	High Ionization Quasar-driven Outflows in z~1 Post-starburst Galaxy	Cameren Swiggum, Christy Tremonti (Mentor)
261	Stayin' Alive: The Effect of Different Carbon Sources on Growth in <i>Pseudonocardia</i>	Lexis Wedell, Soleil Young (Mentor)
264	Coping Styles of Low-income Community Adults with Severe Mental Illness	Jennifer Grissim, Linda Oakley (Mentor)
267	Increased Number of Antibiotic Producing in Soil Invaded by Jumping Worms (<i>Amyntas agrestis</i> and <i>Amyntas tokiensis</i>)	Charlene Ngandu, Brooke Herschleb, Briana Dibenedetto, Josh Pultorak (Mentor)
270	Sex Differences in Senescence-Related Gene Expression in Rat Model of Bronchopulmonary Dysplasia	Sarah Wanek, Marlowe Eldridge (Mentor)
273	Greenhouse Gas Emissions of our Peer Institutions: The Good, The Bad, and The Ugly	Benjamin Zacher, Cathy Middlecamp (Mentor)
276	Quantification of Images	Catherine Yan, Joseph Szulczewski (Mentor)
279	Genetic Variants and Bladder Cancer Risk in Dogs	Brandon Incrocci, Ros Luethcke, Lauren Trepanier (Mentor)
282	Carbon Dioxide Capture	Guy Lohoua, Greeshma Gadikota (Mentor)
285	Midwestern Indigenous Populations and Their Relationship to Food: An Analysis on the Impacts of Generational Trauma	Tarah Stangler, Jennifer Gaddis (Mentor)
288	Greek Identity and Otherness in the Colonial Setting of Archaic and Classical Sicily	Megan Bernards, William Aylward (Mentor)
291	Examining the Impact of Flow States on Surgeon Performance	Brianna Statz, Hee Soo Jung (Mentor)
294	Investigating Chemistry Background and Learning Strategies	Lauren Nave, Sally Wu (Mentor)

PS#	TITLE	Presenters and Mentors
297	Modeling Connections about Future Careers: The Impact of Professional Development Events	Caroline Lamke, Amanda Siebert-Evenstone (Mentor)
300	Altering Amino Acid Recognition by NRPSs to Develop Designer Drugs	Sophie Eldred, Michael Thomas (Mentor)

Project Display

Session 1: 9–10:15 a.m.

VARSIITY HALL

Title	Presenters and Mentors
Levitating Steel Sphere for Attitude Control	John Compas, Eric Severson (Mentor)

Session 2: 10:30–11:45 a.m.

VARSIITY HALL

Title	Presenters and Mentors
Virtual Reality with Construction Sites	HunterMorlock, Zach Cui, Hannah Blum (Mentor)
Aizome: An Exploration of Japanese Stitch Resist and Indigo Dyeing	Sophia Downs, Mary Hark (Mentor)
Investigating the Possible Benefits of Concrete Fading in the Context of Grounded and Embodied Cognition	Aylin Dedeoglu, John McGinty (Mentor)
Intergenerational Trauma: Incarcerated Mothers' Early Experiences of Childhood Victimization	Selesteel Warzewick, Julie Poehlmann-Tynan (Mentor)
Truthfulness of Shaken Baby Syndrome (SBS) Confessions	Natalie Hameister, Keith Findley (Mentor)

Session 3: 12–1:15 p.m.

VARSIITY HALL

Title	Presenters and Mentors
Water Vest	Henry West, Jacob Cohn, Isabel Reams, Nicole Froelich, Molly Snow, Lesley Sager (Mentor)
Fear of Dots Task	Jacob Massonet, Brendon Nacewicz (Mentor)
Computational Design and Demonstration of Voltage Control of Magnetic Skyrmion	Varun Sudhakaran, Jiamian Hu (Mentor)
Mandated Concussion Education for Wisconsin High School Athletes and Their Parents: Self-Reported Completion and Factors That Affect It	Anneliese Gall, Traci Snedden (Mentor)

2019 Student Presenters

Last Name, First	Format	Time	Room	Poster#	Last Name, First	Format	Time	Room	Poster#	Last Name, First	Format	Time	Room	Poster#
Abts, Alex	PS	III	VH	135	Call, Cory James	PS	I	VH	133	Erens, Jacqueline	T	I	IN-B	
Adya, Tanushree	PS	III	VH	147	Camarda, Diane	PS	II	VH	110	Eull, Gabrielle	PS	I	VH	124
Akbari, Madeline	T	III	AG-A		Cao, Jiongyi	T	I	TR		Evans, Alicia	PS	I	VH	37
Ali, Adeela	PS	II	VH	218	Cao, Jocelyn	T	I	NW-A		Evensen, Claire	T	I	AL	
Alleman, Elizabeth	PS	II	VH	23	Cao, Miao	T	I	LM-B		Fahmy, Lauren	PS	I	VH	259
Allen, Darion	T	II	NW-A		Carlson, Tess	PS	II	VH	290	Fairach, Selma	T	I	IN-B	
Alsbury, Rachel	T	I	NW-B		Carrington, Justin	T	II	LM-A		Fathima, Sana	PS	I	VH	136
Alvarez, Briana	PS	I	VH	286	Carroll, Brooke	PS	II	VH	206	Feider, Natalie	PS	III	VH	183
Anderegg, Genevieve	T	II	NW-A		Casey, Alison	PS	II	VH	50	Fernandez, Isabel	PS	II	VH	131
Anderson, Kory	PS	II	VH	167	Catania, Abigail	T	II	IN-B		Flaherty, Regan	PS	II	VH	233
Anderson, Thomas	PS	I	VH	1	Cayenne, Nia	T	III	NW-B		Fordyce, Benjamin	PS	III	VH	120
Aneja, Siddharth	T	II	NW-A		Cech, Ike	AT	II	MT		Freel, Colman	PS	I	VH	295
Ankenbauer, Emerson	PS	I	VH	214	Charan, Maya	PS	III	VH	15	Fuller, Max	T	III	LM-A	
Ardyasa, Agalia	PS	III	VH	99	Chen, Eric	PS	II	VH	140	Gall, Anneliese	PR	III	VH	
Arengo, Joana	T	II	NW-B		Chen, Judy	PS	III	VH	30	Gan, Yixian	PS	II	VH	260
Arneson, Laura	T	I	LM-B		Chen, Taijing	PS	III	VH	216	Gao, Lynette	T	III	NW-A	
Arora, Harleen	PS	II	VH	107	Cheyne, Madeline	PS	III	VH	33	Garcia-Vidal, Diana	T	III	NW-A	
Asher, Andie	PS	I	VH	196	Chotlos, Matthew	PS	II	VH	38	Gasparri, Marisa	PS	II	VH	212
Attewell, Madeline	PS	I	VH	187	Christianson, Sam	PS	II	VH	137	Gaus, Quintin	PS	II	VH	239
Axelrod, Emma	PS	II	VH	230	Christopher, Tighe	PS	III	VH	174	Gaus Hinojosa, Gabriella	T	I	SW	
Ayalasamayajula, Kavya	PS	II	VH	59	Church, Ethan	T	II	LM-A		Geboy, Elizabeth	PS	II	VH	173
Babiarz, Christopher	T	II	LM-A		Church, Ethan	T	II	TR		Gecewicz, Grace	T	I	SW	
Baker, Samantha	PS	III	VH	108	Cimoch, Cole	T	I	IN-A		Geroux, Rachel	T	III	TR	
Bakshi, Jaskaran	PS	III	VH	246	Clemente, Paula Bianca Yvette	PS	I	VH	40	Geunes, Eric	T	III	LM-B	
Barrett, Vic	AT	II	MT		Cochinwala, Zoha	T	III	LM-A		Golovkina, Maria	PS	III	VH	87
Bartelt, Jacob	PS	I	VH	100	Compas, John	PR	I	VH		Gordon, Hannah	T	I	SW	
Bartley, Michael	PS	II	VH	188	Converse, Ellen	PS	II	VH	104	Gowda, Madhu	T	I	NW-A	
Bartuch, Megan	PS	I	VH	268	Corona, Francisa Ana	PS	II	VH	257	Green, Chloe	T	I	IN-A	
Baumbach, Chloe	PS	II	VH	269	Cortes, Kevin	PS	III	VH	90	Griest, Carter	T	III	IN-B	
Beaulieu, Jacqueline	T	II	NW-B		Cuskey, Stephanie	PS	II	VH	170	Griffin, Queila	T	II	IN-B	
Benchimol, Henry	PS	II	VH	275	Dandan, Matthew	PS	I	VH	115	Grissim, Jennifer	PS	III	VH	264
Bennett, Brandilyn	PS	II	VH	245	Dawning, Brandon	T	II	LM-A		Groblewski, Emma	PS	II	VH	242
Bennett, Sarah	PS	III	VH	159	Day, Patrick	T	III	NW-A		Groubert, Brent	PS	II	VH	182
Beric, Anya	T	III	NW-A		Daykin, Emily	PS	I	VH	241	Gu, Yuchen	PS	III	VH	102
Bernards, Megan	PS	III	VH	288	Dedeoglu, Aylin	PR	II	VH		Gungurthi, Sai	PS	I	VH	112
Bernstein, Maya	PS	III	VH	234	Delap, Gwyneth	PS	II	VH	44	Gygi, Danielle	PS	II	VH	158
Bindl, Matilyn	PS	I	VH	34	Denamur, Brenna	T	III	LM-A		Hafeez, Hibah	PS	II	VH	251
Blazel, Madeleine	T	I	NW-B		Derenne, Nathan	T	I	LM-B		Halada, Stephen	PS	III	VH	126
Boadu, Joshua	T	I	NW-A		Deville, Karinton	F	III	MT		Hameister, Natalie	PR	III	VH	
Boecker, Brianna	PS	I	VH	28	Dhyani, Archana	PS	III	VH	60	Hanna, Barbara	T	I	NW-B	
Bondeson, Jordan	PS	I	VH	127	Do, Alexander	PS	III	VH	165	Hansen, Zoe	T	III	AL	
Bosch, Nathan	PS	III	VH	45	Dominguez, Mayra	PS	II	VH	86	Hanson, Caroline	T	III	IN-B	
Bradley, Taylor	PS	II	VH	95	Dong, Katy	PS	I	VH	73	Hart, James	T	I	SW	
Branham, Lauryn	PS	II	VH	2	Doty, Megan	PS	III	VH	243	Haug, Megan	T	II	NW-B	
Bravo, Joel	PS	I	VH	271	Downs, Sophia	PR	II	VH		Havlicek, Benjamin	PS	III	VH	36
Bricco, Tiffany	PS	II	VH	83	Drastal, Kim	PS	III	VH	63	He, Arden	T	II	AL	
Brown, Ryan	PS	I	VH	148	Driessen, Kort	PS	III	VH	12	Heinrich, Andrew	T	I	NW-A	
Browne, Chantel	T	I	NW-B		Drow, Travis	T	I	NW-B		Her, Maihlee	PS	II	VH	296
Bunn, Laura	T	II	IN-B		Dulaney, Natalie	PS	III	VH	192	Herring, Shelby	T	II	LM-B	
Burkart, Alanna	PS	II	VH	92	Durbha, Saketram	T	III	LM-A		Hill, Paige	PS	I	VH	82
Buroker, Valerie	PS	III	VH	117	Early, Stephen	T	I	AG-A		Hinardi, Victor	PS	II	VH	164
Bushman, Maggie	PS	II	VH	41	Ebert, Karissa	PS	I	VH	154	Hoang, Johnson	T	III	AG-A	
Butler, Maureen	PS	I	VH	46	Eisch, Leeah	PS	II	VH	89	Hobbins, Kevin	T	III	IN-B	
Byrnes, Kyle	PS	II	VH	155	Eldred, Sophie	PS	III	VH	300	Hobday, Amy	T	II	AL	
Cai, Ruoyi	PS	I	VH	61	Elifritz, Melady	T	I	SW		Hotvedt, Jacob	T	III	IN-A	
Cai, Ruoyi	PS	III	VH	51	Erbe, Jon	PS	I	VH	220	Hua, Nguyen	T	III	LM-B	
										Hunt, Katrina	PS	I	VH	19

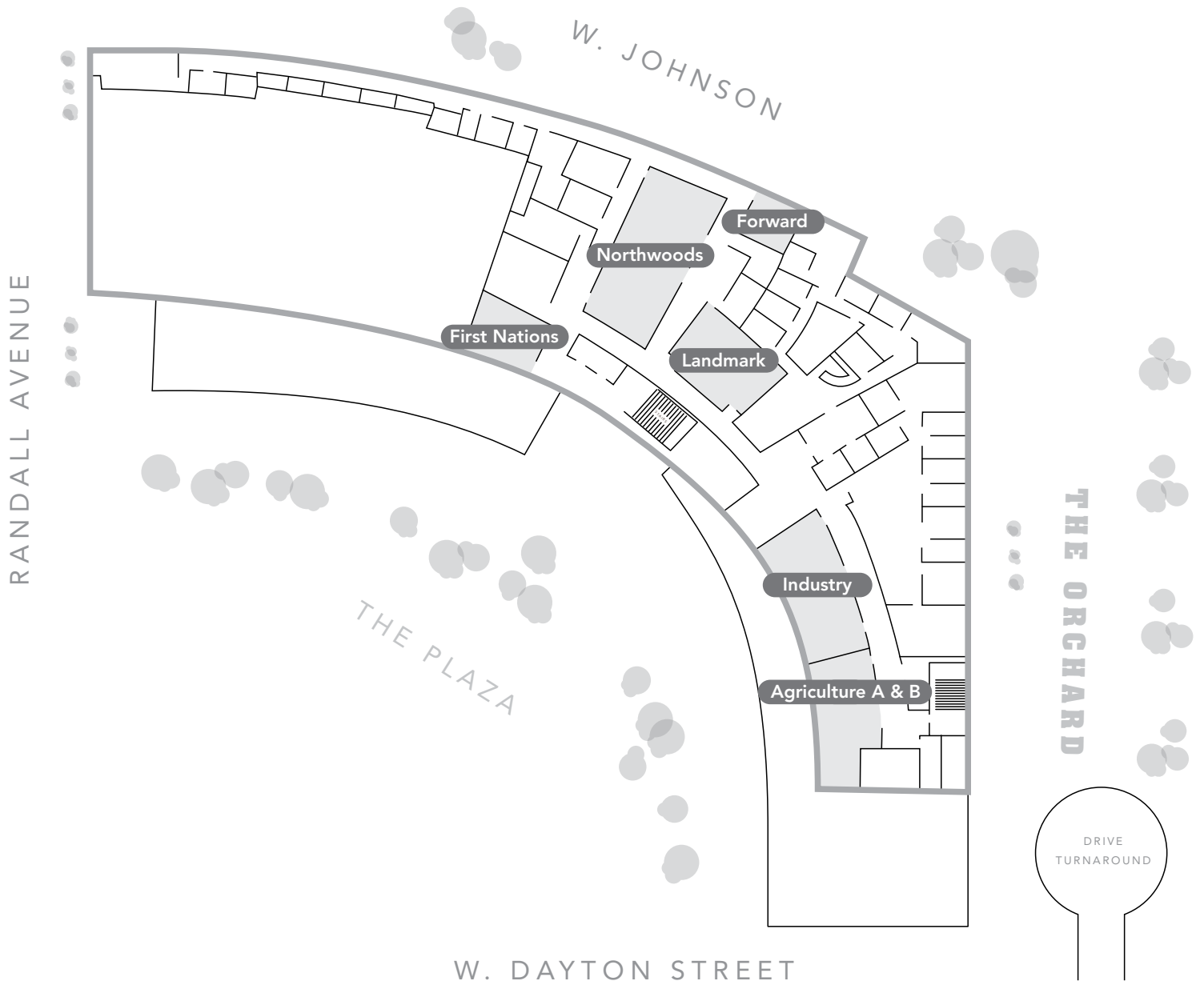
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Ike, Tiffany	AT	II	MT		Lamke, Caroline	PS	III	VH	297	Morlock, Hunter	PR	II	VH	
Incrocci, Brandon	PS	III	VH	279	Larson, Lisa	T	III	LM-B		Morrow, Elizabeth	PS	I	VH	22
Irwin, Ashley	PS	I	VH	163	Laufman, Lauren	T	I	TR		Moua, Pahder	PS	I	VH	70
Jaber, Dema	PS	II	VH	194	Le, Jonathan	PS	III	VH	210	Murphy, Liam	PS	I	VH	160
Jackson, Clara	PS	I	VH	292	Ledin, Daniel	T	II	LM-B		Nagle, Alliot	PS	I	VH	244
Jacobson, Natalie	PS	I	VH	55	Lee, Chloe	PS	II	VH	209	Najeeb, Yaseen	PS	I	VH	274
Jaeger, Samuel	PS	II	VH	284	Lee, Danny	PS	I	VH	208	Nave, Lauren	PS	III	VH	294
Jaffri, Mohammed	PS	III	VH	144	Lentz, Morgan	PS	I	VH	85	Nelson, Andi	PS	III	VH	213
Jahnke, Marshal	PS	II	VH	149	Lettenberger, Samantha	PS	III	VH	39	Nelson, Emma	PS	III	VH	141
Jain, Asha	PS	II	VH	35	Li, Haoran	T	I	TR		Nelson, Nicole	T	II	SW	
Jain, Vansh	PS	III	VH	168	Li, Kangbo	T	I	LM-B		Newman, Rena	T	III	AG-A	
Jang, Dk	T	II	IN-A		Li, Yuchen	T	I	IN-A		Ngandu, Charlene	PS	III	VH	267
Janz, Monica	PS	III	VH	48	Lian, Zheming	PS	II	VH	134	Nguyen, Thanh Phuong	PS	II	VH	299
Jaquish, Abigail	T	III	IN-A		Liao, Guanyu	PS	III	VH	195	Nikolai, Brandon	PS	I	VH	283
Jatoi, Murt	T	III	NW-B		Lien, Max	T	II	AG-A		Norwood, Ian	T	III	LM-A	
Johnson, Alexander Kur	T	II	NW-A		Lier, Hannah	T	II	TR		Noughani, Nikki	T	II	AG-A	
Johnson, Isaac	T	III	LM-B		Lin, Xiaoxuan	T	I	AL		O'Neill, Jessica	T	III	NW-B	
Jones, Nate	T	III	NW-B		Lindhart, Madeline	PS	II	VH	14	Olson, Connor	PS	I	VH	7
Jorgensen, Lauren	PS	II	VH	122	Lingg, A.J.	T	III	NW-B		Olson, Jacob	T	III	IN-A	
Kabakov, Sabrina	T	III	NW-B		Lipaz, Jessica	PS	II	VH	254	Osinga, Calvin	T	III	IN-A	
Kancherla, Yochana	PS	III	VH	27	Lipscomb, Tashiana	T	II	TR		Ostermeier, Brita	PS	III	VH	240
Kang, Grace	PS	II	VH	98	Liu, Eowyn	T	II	LM-B		Pahapill, Natalie	PS	III	VH	42
Kardatzke, Christopher	PS	I	VH	265	Liu, Tz-Ruei	PS	II	VH	62	Pan, Andi	T	I	IN-B	
Kardatzke, James	PS	I	VH	79	Lohoua, Guy	PS	III	VH	282	Pan, Stephen	PS	II	VH	20
Kaufmann-Schwartz, Auna	PS	II	VH	200	Lor, Jacky	PS	III	VH	171	Pandey, Aastha	PS	II	VH	263
Kaur, Simran	PS	II	VH	287	Loyo, Christian	T	II	AL		Patel, Radhika	T	III	NW-B	
Kelly, Adam	T	I	LM-A		Lu, Mary	PS	II	VH	281	Paulsen, Isabelle	PS	I	VH	106
Kempen, Ryan	PS	I	VH	97	Lurie, Savi	T	II	LM-B		Paz-Cuervo, Italo	PS	I	VH	253
Kentala, Jacob	PS	I	VH	235	Ma, Yiqun	T	III	SW		Pen, June	PS	II	VH	176
Keval, Aliyah	PS	I	VH	280	Maccaux, Mckenzie	T	I	TR		Perlin, Sona	T	II	IN-B	
Kiah, Jasmine	PF	III	MT		Madruaga, Angelo	T	I	NW-A		Perron, Nicholas	PS	II	VH	224
Kieckhefer, Andrew	PS	I	VH	190	Magnuson, Mary	PS	I	VH	109	Phang, Yar Xin	PS	III	VH	225
Kieren, Madeline	PS	I	VH	250	Mahendran, Yogesh Balaje	PS	II	VH	197	Plummer, Erin	PS	I	VH	151
Kim, Yeon Jung	PS	I	VH	181	Mai, Don	PS	I	VH	25	Poellinger, Emily	T	I	IN-A	
King, Coleton T.	PS	III	VH	252	Maloney, Susan	T	III	WI		Pongcharoenyong, Thana	PS	I	VH	58
Kinscherf, Noah	PS	II	VH	5	Marks, Caitlin	PS	I	VH	199	Poole, Aubre	PS	III	VH	189
Kish, Rebecca	PS	III	VH	9	Mashl, Alexis	PS	I	VH	76	Pottinger, Nya	PS	I	VH	118
Klar, Anna	PS	III	VH	21	Massonet, Jacob	PR	III	VH		Prado, Nikki	T	II	TR	
Klau, James	T	II	AG-A		Mataczynski, Maggie	PS	I	VH	130	Prazich, Jack	PS	II	VH	227
Klein, Margaret	PS	III	VH	162	Matoska, Thomas	PS	II	VH	101	Price, Emilie	PS	II	VH	74
Klink, Tyler	T	III	LM-B		Matusinec, Erin	PS	I	VH	91	Punathil, Ritika	T	II	SW	
Klinzing, Sydney	T	II	NW-A		Maxfield, Nicholas	T	III	IN-B		Quincey, Jake	PS	III	VH	111
Kluender, Chad	T	I	TR		McCune, Grace	PS	I	VH	13	Quiriconi, Drew	T	III	WI	
Knackert, Jessica	T	II	LM-B		Mcpheron, Mari	PS	II	VH	236	Rabas, Mackenzie	PS	II	VH	278
Knott, Emily	PS	II	VH	8	Meltzer, Eve	T	I	NW-A		Rainiero, Hanna	PS	I	VH	64
Kolman, Katherine	PS	I	VH	67	Men, Yusen	T	III	AL		Ray, Toni	PS	I	VH	31
Korabelnikov, Tomer	PS	III	VH	75	Merriman, Brett	T	III	SW		Reed, Tayfield	PS	III	VH	18
Koranda, Nicholas	T	II	NW-B		Meurer, Alyssa	T	III	AG-A		Regenbaum, Amy	PS	II	VH	68
Korbitz, William	PS	III	VH	72	Michiels, Michal	PS	II	VH	152	Rehani, Peter	T	I	IN-A	
Koziol, Benjamin	AT	II	MT		Miller, Hailey	PS	II	VH	146	Ren, Wangping	PS	II	VH	125
Krahn, Taylor	PS	II	VH	65	Miller, Margot	PS	I	VH	175	Reppe, Autumn	PS	III	VH	78
Krause, Jalyn	T	II	NW-B		Miller, Samantha	T	II	NW-A		Riak, Narik	T	II	TR	
Kreger, Brandi	PS	III	VH	105	Mitry, Christopher	PS	II	VH	179	Richards, Carley	T	II	NW-B	
Kroiss, Kasey	PS	II	VH	17	Mitry, Christopher	T	III	NW-A		Rink, Stephanie	T	I	IN-B	
Kudrna, Katie	PS	III	VH	231	Mok, Kent	PS	II	VH	128	Risgaard, Ryan	PS	I	VH	166
Kurt, Elif	PS	I	VH	223	Monti, Isabel	PS	I	VH	157	Risner, Rebecca	PS	III	VH	138
										Rivera, Sam	T	II	SW	

Last Name, First	Format	Time	Room	Poster#	Last Name, First	Format	Time	Room	Poster#	Last Name, First	Format	Time	Room	Poster#
Robling, Jessica	PF	III	MT		Sutton, Ian	PS	III	VH	66	West, Henry	PR	III	VH	
Rock, Jacob	PS	II	VH	221	Swackhamer, Maeve	T	I	LM-A		Wetherbee, Layne	T	I	NW-B	
Rogers, Melanie	T	III	SW		Swenson, Matthew	PS	III	VH	207	Whelan, Elizabeth	PS	I	VH	298
Rojas, Charles	T	III	SW		Swiggum, Cameren	PS	III	VH	258	White, Morgan	PS	III	VH	222
Roman, Alexander	PS	I	VH	121	Szalkowski, Maria	T	I	AL		Willging, Molly	T	III	TR	
Romantz, Alexander	T	III	SW		Szerenyi, Isabelle	T	III	NW-A		Williams, Malik	PS	I	VH	262
Rosinski, Jenna	PS	I	VH	142	Tabatabai, Sara	PS	I	VH	193	Wilson, Imani	PS	II	VH	161
Routhier, Evan	PS	III	VH	198	Tan, Marvin	T	III	TR		Winston, Janae	T	II	SW	
Rowe, Madeline	PS	III	VH	153	Tan, Rui Qiong	PS	II	VH	203	Wolff, Alex	PS	I	VH	88
Rupkalvis, Grant	PS	III	VH	93	Tao, Madankui	PS	I	VH	10	Wolter, Tyler	PS	II	VH	116
Ryan, Molly	T	II	IN-B		Taylor, Breanna	PS	III	VH	180	Worzalla, Skylyn	T	II	IN-A	
Saari, Mark	PS	III	VH	219	Teague, Alexander	T	II	AG-A		Wu, Dongxia	PS	III	VH	177
Sachen, Michael	AT	II	MT		Tee, Eda	PS	III	VH	249	Xie, Tongzhen	PS	III	VH	81
Sacotte, Steve	PS	I	VH	229	Tengku Mahmood, Nadiah	PS	III	VH	84	Xiong, Mai Chia	T	III	AL	
Scharenbrock, Amanda	PS	II	VH	266	Thayyil, Kevin	T	II	NW-B		Xu, Ke	T	I	AL	
Schimke, Megan	PF	II	MT		Thiry, Rebecca	PS	I	VH	178	Xue, Diane	T	I	LM-A	
Schinkowitch, Theresa	PS	II	VH	191	Thompson, Elizabeth	PS	III	VH	150	Yan, Catherine	PS	III	VH	276
Schmidt, Natalie	PS	III	VH	237	Thornton, Jessica	PS	I	VH	172	Yan, Donghui	T	II	LM-A	
Schmidt, Sophia	T	III	WI		Tigges-Green, Isabelle	PS	I	VH	205	Yang, Yichen	PS	I	VH	94
Schneider, Rachel	PS	III	VH	132	Tippins, Katharine	PS	I	VH	256	Yoder, Delano	PS	III	VH	3
Schnell, Jack	PS	III	VH	57	Toberna, Caroline	T	III	AL		Yohnk, Hannah	T	III	IN-A	
Schoeller, Keegan	PS	III	VH	129	Tonelli, Tommaso	PS	II	VH	32	Younan, Kristen	PS	II	VH	185
Schoff, Lindsay	PS	II	VH	293	Tong, Yi	PS	II	VH	80	Younan, Laura	T	III	NW-A	
Schutz, Jordan	PS	I	VH	217	Trussoni, Isaac	T	III	WI		Zacher, Benjamin	PS	III	VH	273
Senese, Katherine	PS	III	VH	156	Tung, Sheyenne	T	I	NW-B		Zangl, Luke	PS	I	VH	145
Senthilkumar, Gopika	PS	I	VH	16	Tuomi, Makayla	PS	III	VH	201	Zaug, Samantha	T	III	TR	
Shaik, Tahseen	T	I	LM-B		Twombly, Teagan	T	I	AG-A		Zeid, Samantha	T	II	AG-A	
Shea, Briana	PS	II	VH	113	Urban, Charlotte	T	II	NW-B		Zemelko, Lily	PS	II	VH	248
Shen, Wenqi	T	I	AG-A		Van Bastelaer, Sebastian	T	II	AL		Zhan, Zhihong	PS	I	VH	52
Sheng, Kehan (Sky)	T	II	AL		Vandenlangenberg, Maria	PS	I	VH	289	Zhang, Amanda	PS	II	VH	71
Shortreed, Cecilia	PS	III	VH	6	Vandervere, Kyle	PS	I	VH	184	Zhang, Yipei	T	II	IN-A	
Siamof, Cerise	PS	I	VH	103	Velazquez, Francisco	F	III	MT		Zhao, Linda	PS	III	VH	54
Sii, Carlina	PS	III	VH	69	Venkatesh, Abhay	T	II	NW-A		Zhao, Lucy	PS	I	VH	43
Silber, Lauren	T	III	AG-A		Villatoro, Cynthia	PS	III	VH	186	Zhao, Zhiyun	T	II	SW	
Silverthorne, Kate	T	III	TR		Vincent, Samuel	PS	I	VH	247	Zheng, Jenny	T	II	NW-A	
Simon, Christian	T	II	NW-B		Virta, Johanna	PS	III	VH	24	Zheng, Judy	T	I	AL	
Simovic, Andrew	T	III	NW-A		Visintainer, Samantha	T	III	NW-B		Zhong, Miaoya	PS	III	VH	204
Simovic, Andrew	T	III	WI		Vodyanyk, Masha	T	I	LM-A		Zhou, Lulu	PS	II	VH	53
Simpson, Rita	PS	III	VH	255	Volcensek, Jacob	T	I	LM-A		Zhou, Weipeng	PS	I	VH	4
Sina, Rachel	T	I	IN-B		Vonderwell, Jordan	T	III	NW-B		Zimmerman, Alyson	PS	II	VH	119
Singh, Luquant	PS	I	VH	238	Voss, Danielle	PS	I	VH	139					
Sisel, Haley	T	II	IN-A		Vulpitta, Christina	PS	II	VH	26					
Sivapatham, Athill	T	I	AG-A		Waier, Kara	PS	II	VH	11					
Slaughter, Paul	PS	II	VH	29	Wallin, Julie	PS	III	VH	114					
Smith, Morgan	PS	III	VH	228	Wanasek, Devon	T	III	NW-A						
Song, Ariana	PS	I	VH	232	Wanek, Sarah	PS	III	VH	270					
Spiegelberg, Bailey	PS	I	VH	169	Wang, James	PS	II	VH	77					
Squires, Ashley	T	II	IN-A		Wang Wang, David	T	III	AL						
Stamer, Jack	PS	III	VH	123	Warzewick, Selesteel	PR	II	VH						
Stangler, Tarah	PS	III	VH	285	Way, Zachary	PS	II	VH	215					
Statz, Brianna	PS	III	VH	291	Weathersby, Coty	T	I	AG-A						
Steidl, Olivia	PS	II	VH	47	Weber, Ellen	PS	II	VH	143					
Steinike, Logan	T	II	NW-A		Wedell, Lexis	PS	III	VH	261					
Stoltenburg, Abbey	PS	I	VH	211	Weglarek, Lily	PS	I	VH	49					
Stoneman, Hayley	PS	I	VH	202	Wei, Zeyu	PS	I	VH	226					
Sudhakaran, Varun	PR	III	VH		Weinstein, Matthew	PS	III	VH	96					
Suscha, Andrew	T	III	IN-B		Weiss, Emily	PS	II	VH	56					

Union South Level 2



Union South Level 3



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Union South—Varsity Hall

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Steven M. Cramer, Vice Provost for Teaching and Learning

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