GREETINGS, and welcome to the 16th Annual Undergraduate Research Conference at Boise State. The participation of presenters and audience are equally critical to the success of this event, so I wish to convey my thanks to all attendees for their contribution to the cause.

Research and creative activity are essential to Boise State’s identity as a university, particularly as we have grown into a Carnegie-classified High Research Activity institution. When most folks think of university-level research, they probably imagine faculty members donning white lab coats or being hunched over thick, dusty books. In reality, research takes a multitude of forms at Boise State and – here’s the truly important part – students, both graduate and undergraduate, are a major component of the institution’s research engine.

We know that undergraduates who participate in research projects are more likely to persist in their program of study, achieve higher grades, graduate at higher rates, and enjoy higher levels of satisfaction, both during and after their college experience.

Why is this so? There are multiple factors that contribute to these outcomes, but key among them are a sense of community and belonging, and a sense of purpose. When students engage intensively in a structured process of inquiry or creation, they are part of something that is larger than themselves. Faculty mentorship and peer support are powerful amplifiers for the passion and goal-orientedness that students develop in doing this work.

I want to extend my gratitude and admiration to all of the students presenting at this year’s conference. Their dedication and personal discipline are clearly on display here, and their intellectual and creative products improve our understanding of the world and ourselves.

I also want to acknowledge the support that that faculty mentors and staff have provided to conference participants. It truly takes a community to achieve our ambitious shared goals.

Thank you for your participation and support.

TONY ROARK
Interim Provost and Vice President for Academic Affairs
WELCOME to Boise State University’s 16th Annual Undergraduate Research Conference. Undergraduates have long had a significant impact and prominence in research at our university. We continue to encourage that role, not only to drive our research forward but also to provide an enriching educational experience. This conference is a premier event that provides not only a learning experience for our students but an opportunity to recognize their innovative work.

I congratulate everyone selected to present their work. Undergraduate research is an integral part of our university’s mission of building knowledge for the greater good. I also thank our outstanding faculty sponsors who support these students, and make their educational experience one that is based around creative activity and discovery.

We continue to be fortunate in attracting top students who have the drive to excel. Boise State recognizes the importance of this creative activity in making our university a true research university of distinction. Our ongoing commitment to this endeavor will continue to distinguish our university and help our graduates make a difference in our world. Thank you for your support of this outstanding conference.

Best Regards,

HAROLD BLACKMAN
Interim Vice President for Research and Economic Development
**PLENARY Speaker**

**Emily Walton** is a Boise State University alumna (BA English, Linguistics Emphasis 2012) currently serving as the Regional Director of State Affairs at Everytown for Gun Safety, where she directs legislative strategy in 12 western states.

An Idaho native, Emily has a strong background in electoral campaigns, issue advocacy and civic engagement. She got her start in politics as a student when she was elected as Secretary of External Communications of ASBSU to lobby on behalf of Boise State University students, advocating for equitable funding in higher education at the Idaho State legislature and State Board of Education. In 2014, she was elected to the Board of Trustees at the College of Western Idaho and just finished her four-year term in 2018.

During her time at Boise State University, Emily served as a research assistant in the Mary Ellen Ryder Linguistics Lab, and presented her research twice at the Undergraduate Research Conference. In addition to her involvement in research and in ASBSU, Emily was a founding officer for the Linguistic Society of Boise State, served as chair of the Boise State University Student Media Board, and was the student speaker in the winter 2012 commencement ceremony.

Her recent accomplishments include racking up legislative wins in states such as Utah where she passed a bill keeping guns out of the hands of domestic abusers, and also in Alaska, Wyoming and Montana where she worked to keep guns out of schools and off of campuses. Most recently she directed campaigns to pass background checks on all gun sales in Nevada and New Mexico. She has also been awarded the Young Professional of the Year award from Boise Young Professionals (2014), Women of the Year award from the Idaho Business Review (2013) and Accomplished Under 40 award from Idaho Business Review (2015).

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**PLANNING Committee**

- **Michelle Armstrong**  
  Albertsons Library

- **Jocelyn Cullers**  
  Institute for STEM and Diversity Initiatives

- **Jillana Finnegan**  
  College of Innovation + Design

- **Donna Llewellyn (co-Chair)**  
  Institute for STEM and Diversity Initiatives

- **Laura King**  
  Criminal Justice, School of Public Service

- **Twylla Lane-Hall**  
  Institute for STEM and Diversity Initiatives

- **Sondra Miller**  
  Civil Engineering, College of Engineering

- **Karen Nicholas**  
  Management, College of Business and Economics

- **Michal Temkin Martínez (co-Chair)**  
  English, College of Arts and Sciences

- **Don L. Warner**  
  Chemistry and Biochemistry, College of Arts and Sciences

- **Bob Wood**  
  School of Allied Health, College of Health Sciences

- **Katherine Wright**  
  Literacy, Language, & Culture, College of Education
SCHEDULE

STUDENT UNION BUILDING (SUB)

MONDAY APRIL 15

8:30 a.m. - 12:30 p.m.
REGISTRATION TABLE IS OPEN
JORDAN BALLROOM LOBBY

8:30 a.m. - 9:45 a.m.
POSTER SET-UP
JORDAN BALLROOM

10:00 a.m.
SESSION A
Odd poster numbers present
JORDAN BALLROOM
First set of podium presenters
AH FONG, ALEXANDER, BOYINGTON, BRINK, HATCH B

11:00 a.m.
PLENARY PRESENTATION
Emily Walton
SIMPLOT BALLROOM
Refreshments

11:30 a.m.
SESSION B
Even poster numbers present
JORDAN BALLROOM
Second set of podium presenters
AH FONG, ALEXANDER, BOYINGTON, CATALDO, HATCH B

12:30 p.m.
PRIZE DRAWING
JORDAN BALLROOM
PODIUM Presentations

Ah Fong

Session A

10:00 a.m. Women and Poetry: American Realism
Chelsea Gerard
Faculty Sponsor: Dr. Tara Penry

10:10 a.m. The Symbolic Change in the Confederate Flag
Jacob Hatcher, Connor Jackson-Sevy
Faculty Sponsor: Dr. Tara Penry

10:20 a.m. City Mystery Novels and Urban Development in Nineteenth Century US and Europe
Spencer Lurcoook
Faculty Sponsor: Dr. Tara Penry

10:30 a.m. Romantic Revivals in Realism
David Schwartz
Faculty Sponsor: Dr. Tara Penry

10:40 a.m. The Dark Dark Wood
Eric (Ariel) Amador (McNair Scholar)
Faculty Sponsors: Dr. Dora Ramírez, Mitch Wieland

10:50 a.m. “The Burden of Liveness”: DACA Recipients and the Rhetoric of Resistance
Mitzi Ceballos (McNair Scholar)
Faculty Sponsor: Dr. Dora Ramírez

Session B

11:30 a.m. Establishing the Power of Truth in Creative Nonfiction
Cade Yongue (Honors)
Faculty Sponsor: Carrie Seymour

11:40 a.m. “No Problemo”: Mock Spanish and Language Hierarchies in the United States
Ben Geffon (Honors)
Faculty Sponsor: Dr. Gail Shuck

11:50 a.m. Go Native or Go Home: A Linguistic Analysis of Beliefs About Accents
Jesús Rivera Orozco
Faculty Sponsor: Dr. Gail Shuck

12:00 p.m. A Perception Study of Rioplatense Spanish
Cecelia Staggs (McNair Scholar)
Faculty Sponsor: Dr. Michal Temkin Martínez

12:10 p.m. From Great Ideas to Classroom Implementation: A Case Study on Barriers World Language Teachers Encounter with OER (VIP Course*)
Abby Cain
Faculty Sponsor: Dr. Kelly Arispe

*VIP = Vertically Integrated Project (see boisestate.edu/vip for more information)
PODIUM Presentations

Alexander

Session A

10:00 a.m. “This IS What You Want! This IS What You Signed Up for!”: How Agencies Responsibilize Resettling Refugees
Kelsey Wilber (McNair Scholar)
Faculty Sponsor: Dr. Virginia Husting

10:10 a.m. Over-the-Counter Culture: Appropriating the Arts to Vocationalize Higher Education
Alejandro Andonaegui
Faculty Sponsor: Dr. Arthur Scarritt

10:20 a.m. Poverty Delivered: How Rent-to-Own Businesses Make the Poor Poorer
Jeff Cates (McNair Scholar)
Faculty Sponsor: Dr. Arthur Scarritt

10:30 a.m. Naturalizing Inequality: How Neoliberal Higher Education Engineers Elitism
Michelle Fretwell (McNair Scholar), Jeff Cates (McNair Scholar)
Faculty Sponsor: Dr. Arthur Scarritt

10:40 a.m. Punishment Beyond Bars: Pursuing Higher Education with the Degree of Incarceration
Michelle Fretwell (McNair Scholar)
Faculty Sponsor: Dr. Arthur Scarritt

10:50 a.m. “Just Get It Done”: How Online Classes Are Contributing to the Expectation of Low-Quality Education
Jessica Gaston
Faculty Sponsor: Dr. Arthur Scarritt

Session B

11:30 a.m. The Fetish for Corporatization: How Students Adopt Darwinian Neoliberalism
Yasmine Goodman
Faculty Sponsor: Dr. Arthur Scarritt

11:40 a.m. Neoliberal Higher Education and Diversity
Allyssa Hernandez
Faculty Sponsor: Dr. Arthur Scarritt

11:50 a.m. Neoliberal Feminism and the Racialization of Higher Education
Ramona Hinrichs
Faculty Sponsor: Dr. Arthur Scarritt

12:00 p.m. Neoliberal Martyrdom at Boise State
Aaron Jacob Lampe
Faculty Sponsor: Dr. Arthur Scarritt
## Boyington

### Session A

**10:00 a.m.** Biobanking and Human DNA Sequencing, Informed Consent in Research Participation  
Nichole Jones  
Faculty Sponsor: Dr. Greg Hampikian

**10:10 a.m.** A Role for Inflammatory Cytokines in the Ovarian Cancer Metastatic Process  
Eli Bring Horvath (McNair Scholar), Catie Bautista (Honors)  
Faculty Sponsor: Dr. Cheryl L. Jorcyk

**10:20 a.m.** Better Estimates of Creep Rate Along the Hayward Fault, CA Through High-Resolution DEM’s and Insar  
Joel Johnson (Honors; McNair Scholar), Magali Barba (graduate student), Dr. Kristy Tiampo (CU Boulder)  
Faculty Sponsor: Dr. Jen Pierce

**10:30 a.m.** Examining Standard Environmental DNA Sample Extraction and Archival Methods  
Kelly A. Mazur (Honors), Matthew B. Laramie (U.S. Geological Society)  
Faculty Sponsor: Dr. David S. Pilliod

**10:40 a.m.** Using Cubic Splines to Evaluate Shear Wave Velocities of the 1886 Charleston Earthquake Region  
Nicole Clizzie  
Faculty Sponsor: Dr. Jodi Mead

**10:50 a.m.** Edge Preservation in Parameter Estimation Using Total Variation Regularization  
Jennifer Thibodeau  
Faculty Sponsor: Dr. Jodi Mead

### Session B

**11:30 a.m.** Development of the Campus and Career Resource Inventory  
Cierra Abellera (Honors; McNair Scholar)  
Faculty Sponsor: Dr. R. Eric Landrum

**11:40 a.m.** The Association Between Mental Health and Olfactory Function  
Eva Kanneberger  
Faculty Sponsor: Dr. April S. Masarik

**11:50 a.m.** Memory Malleability: Falsifying True Memories  
Raeli Prescott  
Faculty Sponsor: Dr. Brian W. Stone

**12:00 p.m.** Assessment Strategies and Pay for Performance: What Forms of Assessment Are Correlated With “Quality Teaching”?  
Julianne Mori (Honors), Claire Oberg (Honors), Lane Pitts  
Faculty Sponsor: Dr. A. J. Zenkert

**12:10 p.m.** Closing the Gap Between Modern Technology and the College Engineering Classroom  
David Pinkerton  
Faculty Sponsor: Dr. Krishna Pakala

**12:20 p.m.** Happy Hours Are a Godsend  
Samantha Schauer (Honors)  
Faculty Sponsor: Dr. Krishna Pakala
PODIUM Presentations

Brink
Session A

10:00 a.m. The Figure in Bronze
Madeline Fluharty
Faculty Sponsor: Lily Lee

10:10 a.m. Shell-Shock
Micah Andersen
Faculty Sponsor: Dr. Joanne Klein

10:20 a.m. Tension and Release: Tone Production on the Viola
Brooke Mickelson (Honors)
Faculty Sponsor: Dr. Linda Kline

10:30 a.m. Economic Dependence and Spousal Abuse in an Exit-Voice-Leave Framework
Haydn Bryan (Honors)
Faculty Sponsor: Dr. Kelly Chen

10:40 a.m. Environmental Quality & College Attainment: An Envirodevonomic Study
Kelsey Cooper
Faculty Sponsor: Dr. Kelly Chen

10:50 a.m. Crowdfunding Reimagined
Rohit Gangurde, Gitesh Musale (Honors)
Faculty Sponsor: Dr. Jared Egginton

Don’t forget to enter for the PRIZE DRAWING that will occur at 12:30 in the Jordan Ballroom.

Get your entry card at the registration table!
President’s Writing Awards

Cataldo

11:30 a.m. - 12:30 p.m.

President’s Writing Awards Committee:
Christi Nogle, Aidan Riordan-Buell, and David Scott

Co-Sponsors:
University Foundations, Department of English, and the Writing Center

Each reading will be approximately 7 minutes. Feel free to come and go within this session.

The 37th Annual President's Writing Awards commenced with the purpose of recognizing and rewarding outstanding student writing. The contest has awarded prizes for a diverse selection of student essays in a number of different categories.

Largely funded by the President's Office, and cosponsored by the English Department, Foundational Studies, and The Writing Center, the contest encourages involvement and submissions from departments across the curriculum. Categories are carefully chosen each year to include writings of various disciplines and genres.

Ultimately, the contest gives students a chance to highlight their hard work and talent, both in creative and research-based writing, demonstrated during their academic careers at Boise State University.

Korean Language Speech Contest

Hatch B

10:30 a.m. - 11:45 a.m.

Faculty Sponsor:
Yookyung Lee

KOREAN 102
ELEMENTARY KOREAN II

Danielle Ali (Honors)
Emily Baldwin (Honors)
Julianne Gee
Tailee Long
Eric Marquart
Ruth Mburu
Grace McGrorty (Honors)
Maryam Naser
Phuong Phan
Ashley Preston
Emily Sanchez
Sandra Siharath (Honors)

In the Korean Language Speech Contest, each participating student will compete their speech skillset with the assigned topic for two minutes. While speaking, students are not allowed to use any language other than Korean, and are highly encouraged to use the grammar patterns, expressions, and vocabulary learned in Korean 102. Students are evaluated on their pronunciation/fluency, vocabulary, grammars, creativity of contents, communicative strategies, and comprehension during the Q and A session.
POSTER Presentations

1 Educational Barriers and Resources for University Refugee-Background Students
Cierra Abeller (Honors; McNair Scholar), Shukuru Kamulete
Faculty Sponsor: Dr. April S. Masarik

2 Proportional Ventilatory Support: A Comparison of Proportional Assist Ventilation, Proportional Pressure Support and Proportional Pressure Ventilation
Morgan McEwan, Alex Sanders
Faculty Sponsors: Lonny Ashworth, Camile Stover

3 Concussion Knowledge and Reporting
Adriana Amador
Faculty Sponsor: Dr. Eric Martin

4 Mechanisms of Toxin Tolerance by Wild Mammalian Herbivores
Jennifer Miles Rhoades (McNair Scholar), Debbie Conner, Janae Wilson
Faculty Sponsor: Dr. Jen Forbey, Dr. John Vucetich (Michigan Technical University)

5 Cooperative Manipulation of Polygonal Objects with Nonholonomic Wheeled Mobile Robots
Nardos Ayele Ashenafi
Faculty Sponsor: Dr. Aykut C. Satici

6 Role of Autophagy in Osteogenic Differentiation of Mesenchymal Stem Cells Under Simulated Microgravity
Omid Mohammad Mousa, Elena Paz Muñoz (Honors), Hunter Underwood, Dr. Julia Oxford (faculty), Dr. Brad Morrison (faculty)
Faculty Sponsor: Dr. Shin Pu

7 Can Media Depictions Change Attitudes Toward People Who Are Blind and Visually Impaired?
Akioni Babauta (Honors)
Faculty Sponsor: Dr. Brian W. Stone

8 Purification of Acyl ACP1 for Pseudomonas aeruginosa RHL1 Quorum Signal Synthase
Elizabeth Mosqueda (McNair Scholar), Ashley Poppe, Dr. Shibani Basu (faculty)
Faculty Sponsor: Dr. Rajesh Nagarajan

9 Math Vocabulary and Achievement
Steven Barcenes
Faculty Sponsor: Dr. Gena Nelson

10 Implications of Grazing Usage Over Time and Space in the Thunder Basin National Grassland
Jessica Mueller
Faculty Sponsor: Dr. Vicken Hillis

11 Characterization of the Optically-Gated Transistor in Response to Light Pulse Shape and Wavelength
Randall Bassine
Faculty Sponsor: Dr. Kristy A. Campbell

12 Ni-Mn-Ga Single Crystal Casting
Ali Mustafa, Brent Johnston, Andrew Armstrong (graduate student)
Faculty Sponsor: Dr. Peter Müllner

13 The Relationship Between Cultural Involvement and Education Performance for Native American Students
Tanyka Begaye (McNair Scholar)
Faculty Sponsor: Dr. Alicia Garza

14 Examining the Role of an Active-Site Methionine in NADPH Utilization
Maddi Nilson (Honors)
Faculty Sponsor: Dr. Henry A. Charlier

15 Volumetric Wear Analysis of Meniscus Degeneration
Kate Benfield, Katie Hollar (graduate student)
Faculty Sponsor: Dr. Trevor Lujan

16 Synthesis of Boron Carbide Reinforced Aluminum Alloys Through Mechanical Stir Casting
Kaelle Novich (Honors), Samuel Pedersen (graduate student)
Faculty Sponsor: Dr. Brian J. Jaques

17 Optimization of Alnico’s Processing Route to Enhance Magnetic Properties
Omar Betancourt (McNair Scholar)
Faculty Sponsor: Dr. Mahmood Mamivand
**POSTER Presentations**

18 Establishing Presence in an Online Course Using Zoom Video Conferencing
Emily Oe (Honors), Dr. Ellen Schafer (faculty)
Faculty Sponsor: Andy Hyer

19 The Association Between Sex Ratio and Violence Against Women in New York State
Zoey Bevington
Faculty Sponsor: Dr. Kristin Snopkowski

20 The Interaction of Passion and Sport Type on Injury Among Collegiate Athletes
Allie Ostrander (Honors)
Faculty Sponsor: Dr. Eric Martin

21 E-Scooter Impact on Traffic Congestion
Peyton Blackwell, Kate Carter-Cram (Honors), Emily Pape (Honors)
Faculty Sponsor: Dr. Samia Islam

22 La Sagrada Familia, Barcelona, Spain
Mariah Owsley, Jenn McAtee, Christopher Goodale, Jack Bronken
Faculty Sponsor: Dr. Kirsten Davis

23 A Comprehensive Study of the X-Ray Pulsar Population in the Small Magellanic Cloud
Amanda Bohney
Faculty Sponsor: Dr. Daryl Macomb

24 Internet Attitudes and Behavior Survey
Chris Palasch
Faculty Sponsor: Dr. Brian W. Stone

25 The Impact of Job Insecurity on Psychological Distress
Holly Bossart
Faculty Sponsor: Dr. Kelly Chen

26 Stride Length but Not Body Borne Load Impacts Gait Stability
Luke Parker, Kayla Seymore
Faculty Sponsor: Dr. Tyler Brown

27 Ignoring the Dangers Behind the Wheel: Distracted Driving Among College-Aged Students
Charles Buffington (McNair Scholar)
Faculty Sponsor: Dr. Mary Pritchard

28 Sea-Floor Basalt Type Classification from Machine Learning
John Paustian, Emma McCully (graduate student), Dr. Dorsey Wanless (faculty)
Faculty Sponsor: Dr. Dylan Mikesell

29 Risk Premiums and Political Cycle Sentiment
Josiah Bynum
Faculty Sponsor: Dr. Kelly Chen

30 MTN Knockout Attenuates Vitamin Synthesis and Global Metabolism in *E. coli* O157:H7
Elena Paz Muñoz (Honors), Makenna Szolomayer, Meagan Boll, Dr. John Thurston (faculty)
Faculty Sponsor: Dr. Ken Cornell

31 Protocol-Adherence Behaviors of the American Kestrel Partnership’s Citizen Scientists Efforts (VIP course*)
Leticia Camacho, Leah Dunn (The Peregrine Fund)
Faculty Sponsors: Dr. Sarah Schulwitz, Dr. Christopher J.W. McClure (The Peregrine Fund)

32 An Analysis of Signal Stabilization Heat Treatments of High Temperature Irradiation Resistant Thermocouples
Beck Perrine, Scott Riley (graduate student), Dr. Richard Skifton (Idaho National Laboratory)
Faculty Sponsor: Dr. Brian J. Jaques

33 Investigating Child Abuse: Examining the Resources of Multidisciplinary Teams
Savannah Carter, Dr. Karen Godard (faculty)
Faculty Sponsor: Dr. Max Veltman

34 Assessment of Currently Available Suicide Screening Tools for Adolescents
Brynn Peters, Kelsey Morey, Jordan Purvis
Faculty Sponsor: Dr. Cara Gallegos

35 Cole-Lake Hazel Bridge Design
Kelli Chiles, Richie Chikonde, Brenda Barron, Kain Shaffer, Samantha Headley (Honors)
Faculty Sponsor: Dr. Mandar Khanal

36 LGBTQA+ Sex·U·Al Ha·Rass·Ment & Intercollegiate Speech & Debate Activities
Ron Price (Honors; McNair Scholar), Dr. Rulon Wood (faculty)
Faculty Sponsor: Dr. Christina L. Ivey
**POSTER Presentations**

**37 Median Frequency Shift of EMG During Prolonged Load Carriage**
Fred Christensen, Micah Drew, Samantha D’az  
Faculty Sponsor: Dr. Tyler Brown

**38 Estimating Anthropogenic Influences on Species Occupancy at La Selva Biological Station, Costa Rica**
Julie Ramirez, Dr. Amanda Wendt (Organization for Tropical Studies)  
Faculty Sponsor: Dr. Neil Carter

**40 Polypropylene-Fiber-Reinforced Silica Fume Concrete**
Hailey Reynolds, Anish Pathak  
Faculty Sponsor: Dr. Yang Lu

**41 Synthesis of Small Molecule Inhibitors for Metastatic Breast Cancer Pathways**
Thomas Conrad, Thaauer Muhammed, Joey Tuccinardi  
Faculty Sponsor: Dr. Don L. Warner

**42 Lander Street Water Renewal Facility**
Brett Robbins, Steve Huber, Taylor Hedrick, Uzair Siddiqui, Titus Owen  
Faculty Sponsor: Dr. Mandar Khanal

**43 Workout Wednesday**
Alexis Constantine  
Faculty Sponsor: Dr. Kelly Rossetto

**44 Carbon Fiber and Steel Fiber Concrete with Internal Curing**
Joe Roletto, Karl Davies (graduate student)  
Faculty Sponsor: Dr. Yang Lu

**45 Anadromous Fishing on the Snake River Plain as Seen Through the Archaeology of the Columbia Plateau**
Alberto Conti  
Faculty Sponsor: Dr. Pei-Lin Yu

**46 Realist Art and Music**
Kylie Ruble, Katherine Bowers, Alfredo Ocaranza, Marissa Streeter  
Faculty Sponsor: Dr. Tara Penry

**47 Printed Carbon Nanotube Sensors for Ammonia Gas Detection**
Jasmine Cox (McNair Scholar), Twinkle Pandhi (graduate student), Dr. David Estrada (faculty), Dr. Jessica Koehne (NASA)  
Faculty Sponsor: Dr. Harish Subbaraman

**48 Source and Evolution of “Popping Rocks” Magmas at Mid-Atlantic Ridge Near 14°N**
Courtney Rundhaug, Darin Schwartz (graduate student)  
Faculty Sponsor: Dr. Dorsey Wanless

**49 Jump Regression Analysis in R**
Ryan Cox  
Faculty Sponsor: Dr. Partha Sarathi Mukherjee

**50 Secondary Eclipse Variability of Kepler-76 B**
Wesley Sandidge (McNair Scholar), Steven Kreyche, Jennifer Briggs  
Faculty Sponsor: Dr. Brian Jackson

**51 The Effects of Load Frequency on the Tensile Fatigue Behaviour of Meniscus**
Katelyn Cudworth (Honors)  
Faculty Sponsor: Dr. Trevor Lujan

**52 Muir, Pinchot, and American Conservation**
Benjamin Sargis  
Faculty Sponsor: Dr. Tara Penry

**53 To Switch or Not to Switch: Does Code-Switching Reveal a Speaker’s Stance in Relation to Others?**
Anh Dang  
Faculty Sponsor: Dr. Gail Shuck

**54 Impact of Scooters on Related Public Transit Alternatives**
Christina Schaeffer, Austyn Hazen, Deborah Tuttle  
Faculty Sponsor: Dr. Samia Islam

**55 Determining the Efficacy of Small Molecule Inhibitors to Prevent a Signaling Cascade Involved in Cancer Cell Metastasis**
Christopher Dayton, Cody L. Wolf (graduate student)  
Faculty Sponsor: Dr. Cheryl L. Jorcyk

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<td>Danielle Siegel</td>
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<td>From Atoms to Nanomaterials: Controlling Atomic Behavior to Create Useful Nanostructures</td>
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<td>Jeremy Gibbs, Lexi Stolz, Marselle Mitchell</td>
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POSTER Presentations

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