### Symposium for Student Research, Scholarship and Creative Achievement

**Thursday, April 12, 2018**

**SCHEDULE AT A GLANCE**

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### POSTER PRESENTATIONS - RESEARCH

12:30-2:00 PM  
Robert M. Smith Student Center Ballroom

<table>
<thead>
<tr>
<th>Art</th>
<th>Chemistry, cont.</th>
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| Anatomical Rendering: The Human Physique  
Presenter: Rachel Peterson  
Faculty Sponsors: Ms. Heather Hertel and Dr. Susan Rehorek | New Synthesis of N-3 Modified L-Neplanocin Analogues  
Presenters: Megan Stout and Jacquelyn Stubenraugh  
Faculty Sponsor: Dr. Qi Chen |
| Biology | Thermodynamic Impacts of Incorporating Dialkylated Amino Acids into a Beta-Sheet Peptide  
Presenter: Allison Weber  
Faculty Sponsor: Dr. George Lengyel |
| Utilizing Live Cell Imaging in Drosophila melanogaster Salivary Glands to Determine if Resveratrol Treatment Activates Heat Shock Factor DNA Binding  
Presenter: Annette Choi  
Faculty Sponsor: Dr. Martin Buckley |  |
| Comparative Study of Mammalian Orbital Secretions of the Harderian Gland  
Presenter: Lindsey Jendza  
Faculty Sponsors: Dr. Susan Rehorek and Dr. Timothy Smith |  |
| Examining if Expression of a Mutant Form of Triose Phosphate Isomerase Results in HSF Activation Using Live Cell Imaging  
Presenters: Kaitlyn McNamara and Katie Skolnick  
Faculty Sponsors: Dr. Stacy Hrizo and Dr. Martin Buckley |  |
| Effects of Imidacloprid on Development and Immunity of Xenopus laevis  
Presenter: Victoria Pasquale  
Faculty Sponsor: Dr. Paul Falso |  |
| Examining the Impact of Multiple Stressors on Hsp70 gene Transcription in Drosophila melanogaster salivary gland cells  
Presenter: Brianna Skiles  
Faculty Sponsor: Dr. Martin Buckley |  |
| Analysis of role of Melatonin in Tissue Regeneration in Drosophila melanogaster  
Presenter: Mengqi Wang  
Faculty Sponsor: Dr. Martin Buckley |  |

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### Chemistry

- **Synthesis and Magnetic Characterization of Ni$$^{12}$$ Metallacrown-4**  
  Presenter: Samantha Cornelius  
  Faculty Sponsor: Dr. Thaddeus Boron III

- **Synthesis and Structural Characterization of Er$$^{12}$$ and Gd$$^{12}$$ Metallacrown-4 Compounds**  
  Presenter: Taylor Ellis  
  Faculty Sponsor: Dr. Thaddeus Boron III

- **Dialkylation and Hydrolysis of Ni-schiff Base Complex**  
  Presenters: McKayla Miller and Gabrielle Kizer  
  Faculty Sponsor: Dr. George Lengyel

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### Communication

- **Employee Relations for Target Corporation**  
  Presenter: Mallory Manz  
  Faculty Sponsor: Dr. Katrina Quinn

- **Building Identity Through Service**  
  Presenter: Katherine Steele  
  Faculty Sponsor: Ms. Laura Villers

### Community-Engaged Learning

- **A Comparative Perspective of Juvenile Justice in Germany and the United States**  
  Presenter: Emily Thompson  
  Faculty Sponsor: Dr. Sarah Kuehn

### Elementary Education/Early Childhood

- **Interrater Reliability Study Using Student Teacher Evaluations**  
  Presenters: Jordan Goodrick  
  Faculty Sponsor: Dr. James Preston

### Geography, Geology and the Environment

- **Geocaching and the Environment: Who, where, and how people interact with their environment through geocaching**  
  Presenter: Jessica Jablonski  
  Faculty Sponsor: Dr. Stentor Danielson

- **Art and Science Pedagogy: Learning Through Multiple Disciplines**  
  Presenter: Celia LaPorta  
  Faculty Sponsors: Dr. Patrick Burkhardt and Ms. Katherine Mickle

- **Wildfire Risk Zone Mapping of Sonoma County, California Using Geographic Information Systems and Remote Sensing Techniques**  
  Presenter: Robert Parquette  
  Faculty Sponsor: Dr. Jialing Wang
Library

The Gems of SRU Special Collections
Presenter: Barbara McIntosh
Faculty Sponsor: Ms. Judith Silva

Mathematics and Statistics

Pre-Processing and Partial Least Squares Analysis of fMRI
Presenters: Rebecca Himes, Kaila DeChristofaro and Jessica Lefler
Faculty Sponsor: Dr. Dil Singhabahu

Parks, Conservation, and Recreational Therapy

Discovering One Health from Ridges to Reefs: The Evaluation of Undergraduate Student Experience and Lessons Learned During an Interdisciplinary Trip to Belize
Presenters: Clare Schreiner, Stefanie Blair and Leah Deitt
Faculty Sponsors: Dr. Rebecca Thomas and Dr. Deborah Hutchins

Comparative Effectiveness of Therapeutic Riding and HeartMath on Stress for Adolescents with Autism Spectrum Disorders
Presenters: Kristen Laird, Emily Jones, Allison Kronyak and Jessica Dietrich
Faculty Sponsors: Dr. Betsy Kemeny, Dr. Deborah Hutchins, and Mrs. Courtney Gramlich

School of Physical Therapy

The Influence of Kinesiology Tape on Breathing Mechanics in College-Aged Individuals: A Pilot Study
Presenters: McKenzie Sweigart and Whitney Wester
Faculty Sponsors: Dr. Kelly Lindenberg and Dr. Nancy Shipe

Political Science

Examining Child Poverty in the United States
Presenter: Lindsey Newton
Faculty Sponsor: Mrs. Cheryl Kerchis

Mexican and Central American Immigration
Presenter: Kacey Statler
Faculty Sponsor: Mrs. Cheryl Kerchis

Psychology

Project Development: The Effects of Modified Sudarshan Kriya Yogic (SKY) Breathing on Positive and Negative Emotions of Undergraduate Students
Presenters: Maria Darling
Faculty Sponsor: Dr. Jennifer Willford

Psychology, cont.

Associations between Sex-Segregation and Gender-Typed Traits in the LGBTQ Community
Presenters: Kasey McComb and Kourtney Kotvas
Faculty Sponsor: Dr. Emily Keener and Dr. Clare Mehta

Developing a Laboratory Protocol for Pre-Processing EEG Data
Presenter: Carly Riedmann
Faculty Sponsor: Dr. Jennifer Willford

Relationships Matter: The Role of Gender and Sexual Orientation in Agentic Conflict Management Strategies
Presenters: Shawna Skoczynski, Megan Kausmeyer, and Zachary Carpenter
Faculty Sponsor: Dr. Emily Keener

Integrating Process Metaphysics and Developmental Systems Theory: Implications for Understandings, Explanations and Research Designs in the Developmental Sciences
Presenter: Spencer Upton
Faculty Sponsor: Dr. Elizabeth Boerger

Public Health and Social Work

Health Effects of Formaldehyde among Students in the laboratory oratory
Presenter: Hebist Asfaw
Faculty Sponsor: Dr. Alexander Ufelle

The Fibrotic Potential of Nanoclay in Mice
Presenter: Molly Schreiner
Faculty Sponsor: Dr. Alexander Ufelle

Secondary Education

Augmented Reality: Changing the Typical Classroom
Presenter: Megan Moser
Faculty Sponsor: Dr. Jason Hilton

Special Education

Pre-service Teachers’ Perceptions of Full Inclusion After a Service Learning Partnership with the Watson Institute
Presenter: Madeline McCleary
Faculty Sponsor: Dr. Jeremy Lynch
**Computer Science**

*Jet Mapping Agent*
Presenter: Zachariah Miller  
Faculty Sponsor: Dr. Sam Thangiah

**Exercise and Rehabilitative Sciences**

*Effects of Cryotherapy on Ankle Swelling*
Presenters: Kaylee Belohlavek and Heather Cooper  
Faculty Sponsor: Dr. Kimberly Keeley

*The Effects of Balance Exercises on Athletes with Chronic Ankle Instability*
Presenter: Angela Vickers  
Faculty Sponsor: Dr. Kimberly Keeley

*Comparison of Immobilization or Functional Treatments for Ankle Sprains*
Presenters: Sean Cook and Leroy Cooper  
Faculty Sponsor: Dr. Kimberly Keeley

*The Effects of Playing Surface on Lower Extremity Injury Rate*
Presenters: McKenna Dugan and Alexandra Lint  
Faculty Sponsor: Dr. Kimberly Keeley

*Muscle Strengthening Protocols for Athletes Who have Undergone Anterior Cruciate Ligament Reconstruction*
Presenters: Sean Glover and Lindsey Hulbert  
Faculty Sponsor: Dr. Kimberly Keeley

*The Effect of Hyperbaric Oxygen Therapy on Traumatic Brain Injuries and Reducing Post Concussion Symptoms*
Presenters: Christine Kovalchick and Matt Zittel  
Faculty Sponsor: Dr. Kimberly Keeley

*Diagnostic Ultrasound: Is It Worth It?*
Presenters: Daria Lewandowski and Katelyn Lieu  
Faculty Sponsor: Dr. Kimberly Keeley

*Operative Versus Non-Operative Management for Rotator Cuff Tears*
Presenters: Jana Ponder and Cara Maciag  
Faculty Sponsor: Dr. Kimberly Keeley

*Do you have an ACL tear? – Lachman vs Anterior Drawer Test*
Presenters: Benjamin Roberts and Koki Kawaguchi  
Faculty Sponsor: Dr. Kimberly Keeley

*Hip Strengthening on Patellofemoral Pain*
Presenters: Alec Uttech and Angelia Vendetti  
Faculty Sponsor: Dr. Kimberly Keeley

**Physics and Engineering**

*A Peculiar Astral Beauty: Planetary Nebula*
Presenters: Wayne Bloom  
Faculty Sponsor: Dr. Krishna Mukherjee

**Physics and Engineering, cont.**

*Sagittarius A*
Presenter: Alina Glath  
Faculty Sponsor: Dr. Krishna Mukherjee

*Gravitational Waves*
Presenters: Alyssa Jedry, Micah Shivley  
Faculty Sponsor: Dr. Krishna Mukherjee

*Importance of Quasars*
Presenter: Gabrielle Kizer  
Faculty Sponsor: Dr. Krishna Mukherjee

*Discovering Exoplanets*
Presenter: Taylor Marshall  
Faculty Sponsor: Dr. Kimberly Keeley

*James Webb Space Telescope*
Presenter: Erik Warmbein  
Faculty Sponsor: Dr. Kimberly Keeley

*Neutrino Observation*
Presenter: Luke Wenger  
Faculty Sponsor: Dr. Krishna Mukherjee

*Achieving Ultra-High Vacuum*
Presenter: Gavin Woodard  
Faculty Sponsor: Dr. Kimberly Keeley

*Stellar Nurseries*
Presenter: Corrina Yobp  
Faculty Sponsor: Dr. Krishna Mukherjee

*Energy of Pulsars*
Presenter: Chase Zikmund  
Faculty Sponsor: Dr. Krishna Mukherjee

**Psychology**

*The association between weight, sex, perceived weight and attractiveness, and mood swings in young adults*
Presenter: Emily Breitenbach  
Faculty Sponsor: Dr. Jennifer Willford

**School of Business**

*Artificial Intelligence: The Looming Threat of a Jobless Economy*
Presenters: Jeffrey Manes  
Faculty Sponsor: Dr. David Valentine

*Effects of Internet Globalization on an International Scale*
Presenter: Hannah Owen  
Faculty Sponsor: Dr. David Valentine
School of Business, cont.

*Categorizing Cybercrime*
Presenter: Ejai Rock
Faculty Sponsor: Dr. David Valentine

*Cybercrime*
Presenter: Tannor Williams
Faculty Sponsor: Dr. David Valentine