President’s Message
by David C. Hodge,
President and Professor of Geography

Welcome to the 2015 Miami University Undergraduate Research Forum. In its 21st year, the Forum is the premier event celebrating independent inquiry by undergraduate students at Miami University. This program is your guide to the more than 300 research projects being presented by 575 students at this year’s event.

It’s true that results matter – even results that disappoint. And you’ll see and hear lots of results today. Posters will summarize data collected and speakers will discuss analyses made and conclusions drawn. But as you immerse yourself in the research presented here, keep in mind that results aren’t the only thing that matters.

In fact, if you talk with these young researchers (and we do encourage you to talk with them) you’ll find many who are as enthusiastic about the process they went through as they are about the results they achieved.

While these students may or may not realize that engaging in this type of active learning is likely to make them stronger critical thinkers and better problem solvers, their faculty mentors certainly do. That’s why our faculty work as hard to model an inquisitive spirit as they do to teach methods and demonstrate techniques.

And the culture of inquiry-based learning at Miami University extends way beyond the Undergraduate Research Forum. More than 2000 Miami undergraduates – nearly four times the number of presenters at today’s event – work with professors on funded research each year. That’s certainly one reason Miami has earned a national reputation for excellence in undergraduate education.

I offer my congratulations to the 21st cohort of Miami University Undergraduate Research Forum presenters and my thanks to the students, faculty, and staff who give us this chance to showcase and celebrate the research, scholarship, and creativity of Miami undergraduates each year.

David C. Hodge, Ph.D.
President
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shriver Center Map and Sponsors</td>
<td>2</td>
</tr>
<tr>
<td>Undergraduate Research Forum Schedule of Events</td>
<td>3</td>
</tr>
<tr>
<td>Oral Presentation Schedule</td>
<td>4</td>
</tr>
<tr>
<td>Poster Presentation Schedule Session A</td>
<td>8</td>
</tr>
<tr>
<td>Poster Presentation Schedule Session B</td>
<td>16</td>
</tr>
<tr>
<td>Poster Presentation Schedule Session C</td>
<td>24</td>
</tr>
<tr>
<td>Miami Undergraduate Research: Recognizing Our Mentors</td>
<td>32</td>
</tr>
<tr>
<td>Miami Undergraduate Research Opportunities</td>
<td>35</td>
</tr>
<tr>
<td>College of Arts and Science Dean’s Scholars Program</td>
<td>36</td>
</tr>
<tr>
<td>Doctoral-Undergraduate Opportunities for Scholarship (DUOS)</td>
<td>36</td>
</tr>
<tr>
<td>Honors and Scholars Program Senior Projects</td>
<td>36</td>
</tr>
<tr>
<td>Hughes Medical Institute Summer Research Internships</td>
<td>36</td>
</tr>
<tr>
<td>Maher Zouhary Undergraduate Research Awards</td>
<td>37</td>
</tr>
<tr>
<td>First Year Research Experience (FYRE)</td>
<td>37</td>
</tr>
<tr>
<td>Scholastic Enhancement Program - Undergraduate Research Option (URO)</td>
<td>37</td>
</tr>
<tr>
<td>Undergraduate Research Award Program</td>
<td>38</td>
</tr>
<tr>
<td>Undergraduate Summer Scholars Program</td>
<td>38</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>39</td>
</tr>
<tr>
<td>Presenters Index Undergraduate Research Forum</td>
<td>40</td>
</tr>
<tr>
<td>Council on Undergraduate Research</td>
<td>Inside Back Cover</td>
</tr>
</tbody>
</table>
Shriver Center Floor Plans

Third Floor

1 Benjamin Harrison Room
2 Anna Symmes Harrison Room
3 Caroline Scott Harrison Room
4 Whitelaw Reid Room
5 R. T. Bystrom Room

Second Floor

1 Business Office
2 General Office
3 Guest Services Desk
4 Box Office

Multi-purpose & Meeting Rooms

Bookstore

Study Lounge

1809 Room

1809

Business Office
529-4031
Office Hours: 8:00-5:00 M-F

Graduate School and Office for the Advancement of Research and Scholarship
Office of Research for Undergraduates
Provost and President

Undergraduate Research Forum 2015 Sponsors
Schedule of Events
APRIL 15, 2015

Oral Presentations – Morning Sessions I, II, III
Session I  9:00 – 9:45 a.m.  Shriver Center
Session II  10:00 – 10:45 a.m.  Shriver Center
Session III  11:00 – 11:45 a.m.  Shriver Center

Luncheon
Heritage Room 11:45 a.m. to 1:15 p.m.

UR FORUM LUNCHEON SPEAKERS

12:00 p.m.
Introduction – James T. Oris, Associate Provost and Dean of the Graduate School
Welcome – David C. Hodge, President
Remarks – Phyllis A. Callahan, Provost and Executive Vice President

Oral Presentations – Afternoon Sessions, IV, V, VI
Session IV  1:30 – 2:15 p.m.  Shriver Center
Session V  2:30 – 3:15 p.m.  Shriver Center
Session VI  3:30 – 4:15 p.m.  Shriver Center

Poster Sessions (Shriver Multipurpose Rooms)
Over 500 student presenters share the results of their research

Session A  10:00 – 11:30 a.m.
Session B  1:30 – 2:45 p.m.
Session C  3:00 – 4:30 p.m.
Oral Presentation Schedule
(See presenter index on pages 40 – 54)

SESSION I: 9:00 – 9:45 A.M.

**Benjamin Harrison**
SESSION MODERATOR: Evan W. Chapman

Jane P. Behnke, Journalism and Political Science Major
**ADVISOR(S):** Marsha R. Robinson, Department of History
*Capitalism, Social Class and Journalism in the 1920’s and 1930s US*

Christina N. Koutroubas, Spanish Major
**ADVISOR(S):** Shelley Bromberg, Department of Spanish and Portuguese
*Discovering Identity Through Translation*

**Bystrom Reid Room**
SESSION MODERATOR: Johnnie L. Jackson

Amanda R. Lawson, History and Latin American, Latino/a, and Caribbean Studies Major
**ADVISOR(S):** Helen D. Sheumaker, American Studies Program and Department of History
Elena J. Albarran, American Studies Program and Department of History
*Perfect Partnership: the Disney Studio and the United States Government in World War II*

Tanner J. Moore, History Major
**ADVISOR(S):** Johanna B. Moyer, Department of History
*Tolling The Death Knell: A Historical and Theological Analysis of the Transformation of the English Church during the Black Death, 1348-1351*

Madison M. Sabatelli, Interior Design Major
**ADVISOR(S):** Ben M. Jacks, Department of Architecture and Interior Design
*Writing to Design*

**Caroline Scott Room**
SESSION MODERATOR: Kevin A. Lower

Lauren L. Augustini, American Studies Major
**ADVISOR(S):** Kimberly Hamlin, American Studies Program
*Rape Culture at Miami University*

Victoria R. DellaDonna, Anthropology Major
**ADVISOR(S):** Cameron M. Hay-Rollins, Department of Anthropology
*To Go or Not to Go: Medical Decision Making Among Emerging Adults*
Oral Presentation Schedule

(See presenter index on pages 40 – 54)

SESSION II: 10:00 – 10:45 A.M.

Benjamin Harrison
SESSION MODERATOR: Rachel M. McNealis

Catherine I. Mazanek, American Studies Major
ADVISOR(S): Peggy Shaffer, American Studies Program
Thomas O. Crist, Institute for the Environment & Sustainability
Frankenfoods: Conceptualizing the Anti-GMO Debate in the Anthropocene

Cassondra N. Willoughby, History Major
ADVISOR(S): Yihong Pan, Department of History
Terry Park, Department of German, Russian, Asian & Middle Eastern Languages and Cultures
Foreigners in the East: The Impact of American Missionaries in Turn of the Century Korea

Rebecca C. Nall, Marketing and Psychology Major
ADVISOR(S): Allen R. McConnell, Department of Psychology
Janice E. Taylor, Department of Marketing
Hayley M. Skulborstad, Department of Psychology
Social Rejection and Heuristics within Advertising

Bystrom Reid Room
SESSION MODERATOR: Kelsey L. Snyder

Daniel L. Bashore, Psychology Major
ADVISOR(S): Carrie E. Hall, Department of Psychology
Taylor R. Tuscherer, Department of Psychology
Behavioral Mimicry and Face Processing

Tyler J. Gibson, Mechanical Engineering Major
ADVISOR(S): Jeong-Hoi Koo, Department of Mechanical and Manufacturing Engineering
Characterization of Shape-Memory Gels

Sara A. Schindler, Linguistics Major
ADVISOR(S): John M. Jeep, Department of German, Russian, Asian & Middle Eastern Languages and Cultures
Vincent J. Palozzi, Department of English
Tumblr Linguistics 5ever

SESSION III: 11:00 – 11:45 A.M.

Benjamin Harrison
SESSION MODERATOR: Audrey M. Weil

Blake C. Woodward, Anthropology and Political Science Major
ADVISOR(S): James S. Bielo, Department of Anthropology
Sustainability: The Slow Food Movement in Cincinnati, Ohio

Shelley C. Randall, Psychology Major
ADVISOR(S): Jonathan Kunstman, Department of Psychology
Christina Fitzpatrick, Department of Psychology
Power and Attributional Ambiguity

Bystrom Reid Room
SESSION MODERATOR: Sirithorn Siriwan

Neal B. Naveen, Bioengineering Major
ADVISOR(S): Agustin Luz Madrigal, Department of Biology
Katia Del Rio-Tsonis, Department of Biology
Analysis of DNA Methylation During Chick Retinal Regeneration

Yuqiao Tao, Mechanical Engineering Major
ADVISOR(S): Jeong-Hoi Koo, Department of Mechanical and Manufacturing Engineering
Simulation of Flow in the Blood Vessel

Blake C. Woodward, Anthropology and Political Science Major
ADVISOR(S): James S. Bielo, Department of Anthropology
Sustainability: The Slow Food Movement in Cincinnati, Ohio

Shelley C. Randall, Psychology Major
ADVISOR(S): Jonathan Kunstman, Department of Psychology
Christina Fitzpatrick, Department of Psychology
Power and Attributional Ambiguity
SESSION IV: 1:30 – 2:15 P.M.

**Benjamin Harrison**
SESSION MODERATOR: Sonseeahray Ross

Jeffrey A. Brock, Physics Major
**ADVISOR(S):** Mahmud U. Khan, Department of Physics
*Design and Implementation of an AC Susceptometer for the Measurement of Bulk Samples from T=77K-400K*

Zachary J. McKinney, Bioengineering Major
**ADVISOR(S):** Katia Del Rio-Tsonis, Department of Biology
Erika Grajales-Esquivel, Department of Biology
*The Role of Complement Factors, C3/C3aR, During Eye Morphogenesis and Retina Differentiation*

William S. Meriwether, Music Performance Major
**ADVISOR(S):** Tammy L. Kernodle, Department of Music
*“Black” Metal: The Importance of African Americans As Influencers and Developers of Heavy Metal Music*

**Caroline Scott Room**
SESSION MODERATOR: Genevi Schindehutte

David J. Mulligan, Accountancy Major
Stephen E. Spaeth, Finance and Business Analytics Major
**ADVISOR(S):** Megan M. Gerhardt, Department of Management
*Implicit Bias in Career Selection*

Taryn N. Neubecker, Marketing and Interactive Media Studies Major
Thomas C. Sowers, Finance Major
**ADVISOR(S):** Megan M. Gerhardt, Department of Management
*Stereotyping in the Greek Community*

**Bystrom Reid Room**
SESSION MODERATOR: John A. Chabot

Steven T. Darnell, History and German Major
**ADVISOR(S):** Andrew R.L. Cayton, Department of History
*Johann Ewald and America: A Study on the Changing Perceptions in European Military Affairs as Influenced by the Mid-Atlantic World and the American Revolution*

Alexander J. Filice, History Major
**ADVISOR(S):** Andrew R.L. Cayton, Department of History
*Gouverneur Morris and the Construction of the American Presidency*

Olivia W. Harrison, American Studies Major
**ADVISOR(S):** Peggy Shaffer, American Studies Program
*The Home Party Plan: Selling Containment to Women*
SESSION V: 2:30 – 3:15 P.M.

Benjamin Harrison
SESSION MODERATOR: Genevi Schindehutte

David P. Jacob, Electrical Engineering and Mechanical Engineering Major
ADVISOR(S): Jeong-Hoi Koo, Department of Mechanical and Manufacturing Engineering
Applications of “Smart” Fluids for Refreshable Braille Displays: Prototyping and Expansion

Jordan S. Martin, Biology and Psychology Major
ADVISOR(S): Scott A. Suarez, Department of Anthropology
Individual Differences in the Affiliative, Play, and Activity Behaviors of Captive Bonobos (Pan paniscus)

Anita L. Schaefer, Microbiology and Environmental Earth Science Major
ADVISOR(S): Thomas O. Crist, Institute for the Environment & Sustainability
Valerie Peters, Department of Biology
Kaitlin U. Campbell, Department of Biology
Michael J. Minnick, Department of Biology
Temporal Shifts in Emergence Patterns of Lady Beetles Imposed by Climate Change

Bystrom Reid Room
SESSION MODERATOR: Joshua R. Horowitz

Jessica E. Doty, Geography Major
ADVISOR(S): Stanley W. Toops, Department of Geography
Kimberly E. Medley, Department of Geography
The Land of the Yokai: A Portrait of Japanese Nationalism through Demons, Folklore, and Popular Media

Matthew R. Lopiccolo, Psychology Major
ADVISOR(S): Amy Summerville, Department of Psychology
Joshua P. Buchanan, Department of Psychology
Social Expressions of Regret: Detecting Sincerity

Jessica D. Parsons, Political Science Major
ADVISOR(S): Kristen M. Budd, Department of Sociology and Gerontology
Public Perception of Police Use of Force

SESSION VI: 3:30 – 4:15 P.M.

Bystrom-Reid Room
SESSION MODERATOR: Cassandra L. Koehn

Jimmy Free, Geology Major
ADVISOR(S): Brian S. Currie, Department of Geology and Environmental Earth Sciences
Relationships between Pre-existing Structure, Regional Stress Orientation, and Seismicity Induced by Wastewater Injection, Northern Appalachian Basin, USA

Jeremy D. Looper, Nutrition, Chinese Education and PreMedical Studies Major
ADVISOR(S): Krishnendu Ghosh, Department of Computer & Information Technology
Beth E. Miller, Department of Kinesiology and Health
Medicinal Media: Persuading Nutrition

Benjamin Harrison
SESSION MODERATOR: John Chabot

Christopher M. Haught, Finance, Business and Economics Major
Harrison E. Fox, Business and Economics Major
ADVISOR(S): Megan M. Gerhardt, Department of Management
Employer vs. Student Expectations for Job Qualifications

Justin D. Woods, Microbiology Major
ADVISOR(S): Katia Del Rio-Tsonis, Department of Biology
Nancy Echeverri, Department of Biology
NAC Induces Retina Regeneration through the Expansion of Progenitor/stem Cells Located in the Ciliary Margin
A01 Ashley N. Jenk, Nursing Major
Tara A. Schuber, Nursing Major
Tiffany A. Rhoadsmith, Nursing Major
Trent N. Sackenheim, Nursing Major
ADVISOR(S): Jennifer L. Rode, Department of Nursing
The Effects of Supplemental Oxygen on Nausea and Vomiting in the PACU

A02 Samantha S. Bettinger, Psychology and Health Promotion Major
ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
Does Having More Drinking Experience Help You in Estimating Your Level of Intoxication?

A03 Allison L. Bunger, Speech Pathology and Audiology Major
ADVISOR(S): Kathleen Hutchinson Marron, Department of Speech Pathology and Audiology
Lindsey N. Mallot, Department of Speech Pathology and Audiology
Gender Factors that Affect Health and Hearing Acuity Among Personal Listening Device Users and Non-Users

A04 Samuel L. James, Zoology Major
ADVISOR(S): Yoshinori Tomoyasu, Department of Biology
Ferran B. Castells, Department of Biology
Courtney Clark-Hachtel, Department of Biology
The Functional Analysis of Meteorin in the Red Flour Beetle, Tribolium castaneum

A05 Tyler A. Smith, Zoology Major
ADVISOR(S): Paul F. James, Department of Biology
Solvent-free Polymer/ Bioceramic Scaffolds for Bone Tissue Engineering: Fabrication, Analysis, and Cell Growth

A06 Emily E. Iwaszkiewicz, Nursing Major
Lainey A. Woodruff, Nursing Major
ADVISOR(S): Jennifer L. Rode, Department of Nursing
MMR Vaccines and Autism: Is there a Relationship?

A07 Elizabeth A. Fricke, Psychology Major
ADVISOR(S): Jennifer J. Quinn, Department of Psychology
Promoting Fear Memory Reconsolidation with a Surprising Retrieval Event

A08 Devin G. Bruney, Zoology Major
Rachel E. Flake, Biological Physics Major
ADVISOR(S): Michael L. Robinson, Department of Biology
Blake R. Chaffee, Department of Biology
PTEN inhibits FGFR-mediated Survival in the Developing Ocular Lens without Inhibiting FGFR-mediated Lens Fiber Cell Differentiation

A09 Eric D. Cioffi, Russian, Eastern European, and Eurasian Studies and Major
ADVISOR(S): Ted C. Holland, International Studies Program
From the Caucasus Emirate to the Islamic State: Chechens and International Terrorism

A10 Mallory Y. Chen, Marketing Major
Mackenzie L. Morgan, Marketing Major
Sarah R. Greathouse, Marketing and Management Information Systems Major
ADVISOR(S): Devon S. DelVecchio, Department of Marketing
Wine Behavior in Millennials

A11 Yan Zhang, General Engineering Major
ADVISOR(S): Nirmala Naresh, Department of Mathematics
Mathematics Beyond the Classroom Walls

A12 Matthew P. Meeks, Zoology Major
ADVISOR(S): Cameron M. Hay-Rollins, Department of Anthropology
Unpacking Global Health Research: Lessons from Clinics, Cattle, and Community

A13 Claudia N. Worley, Chemistry Major
Trent W. Kuehn, Chemistry Major
ADVISOR(S): David L. Tierney, Department of Chemistry and Biochemistry
Christopher D. James, Department of Chemistry and Biochemistry
Spectroscopic Studies of Zinc Hydrolase Model Compounds

A14 Kate O. Franz, Psychology and Kinesiology
ADVISOR(S): Elise M. Clerkin, Department of Psychology
Laurel D. Sarfan, Department of Psychology
The Mediating Role of Emotion Regulation in the Relationship between Social Anxiety Symptoms and Memory Accuracy
SESSION A: 10:00 – 11:30 A.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 – 54)

A15 Mariel A. Gerry, Psychology Major
McKenna R. Sklut, Psychology Major
Anthony T. Houston, Psychology Major
**ADVISOR(S):** Amy Summerville, Department of Psychology
Ryan J. Walker, Department of Psychology
For Better or Worse: The Role of Counterfactual Potency in Relief and Regret

A16 Kathryn L. Gray, Biology Major
**ADVISOR(S):** Ann L. Rypstra, Department of Biology
Lacey D. Campbell, Department of Biology
Competition of Male Cellar Spiders in the Web of a Female

A17 Bradley A. Hurst, Mechanical Engineering Major
**ADVISOR(S):** Burcins Bayram, Department of Physics
Spectroscopy of Hydrogen Isotopes

A18 Allison M. Weaver, Nursing Major
Angelica B. Shepherd, Nursing Major
Lyneshia N. Smith, Nursing Major
Viviane U. Azah, Nursing Major
**ADVISOR(S):** Jennifer L. Rode, Department of Nursing
Does Method of Delivery Affect Childhood Obesity?

A19 Catherine M. Gallagher, Nutrition Major
Lauren A. Jackson, Nutrition Major
**ADVISOR(S):** Sockju Kwon, Department of Kinesiology and Health
Moisture Content of Lean Ground Beef Meatballs

A20 Chelsea L. Abshire, Microbiology Major
**ADVISOR(S):** Eileen Bridge, Department of Microbiology
Gabrielle M. Lopez, Department of Microbiology
Studying the Host Cell DNA Damage Response: Cascade during Adenovirus Infection

A21 Shannon S. Burke, Geology Major
Austen T. Rubenstein, Geology Major
**ADVISOR(S):** Brian S. Currie, Department of Geology and Environmental Earth Sciences
Sequence Stratigraphy of Upper Jurassic Stump and Sundance Formations in Wyoming, Utah, and Colorado

A22 Samuel A. Farina, Psychology Major
Chrissy E. Graham, Marketing and Psychology Major
**ADVISOR(S):** Amanda Diekman, Department of Psychology
Aimee L. Belanger, Department of Psychology
Communal and “Nerdy” Stereotypes in Computer Science

A23 Christina M. Xidas, Speech Pathology and Audiology Major
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health
A Systematic Review of the 21st Birthday and Alcohol Consumption Literature

A24 Adrienne C. Grogan, Nutrition Major
Emma C. Craig, Nutrition Major
**ADVISOR(S):** Sockju Kwon, Department of Kinesiology and Health
The Effect of Whey Protein on Pudding

A25 Lauren E. DeLong, Early Childhood Education Major
Zoe N. Klang, Early Childhood Education Major
Sara V. Straily, Early Childhood Education Major
**ADVISOR(S):** Lena Lee, Department of Teacher Education
Supporting Preschool Children from Low-Income Backgrounds with iPad Technology

A26 Omar S. Sanyurah, Biochemistry Major
Lindsay E. Moritz, Biochemistry and Zoology Major
**ADVISOR(S):** Michael W. Crowder, Department of Chemistry and Biochemistry
Mahesh K. Aitha, Department of Chemistry and Biochemistry
Novel Compound Inhibits a Variety of Enzymes Responsible for Antibiotic Resistance

A27 Melanie I. Dow, Health Promotion Major
**ADVISOR(S):** Valerie A. Ubbes, Department of Kinesiology and Health
Comparisons of Health Habits Between Europe and the United States
SESSION A: 10:00 – 11:30 A.M.

Poster Presentation Listing by Poster Number
(See presenter index on pages 40 – 54)

A28 Amberly D. Larkin, Nursing Major
   Abby B. Shalloe, Nursing Major
   Brooke E. Rhodus, Nursing Major
   Danielle E. Fedders, Nursing Major
   ADVISOR(S): Jennifer L. Rode, Department of Nursing
   Pain Management

A29 Shelby L. Oda, Psychology Major
   ADVISOR(S): Aaron M. Luebbe, Department of Psychology
   Kathryn J. Rulon, Department of Psychology
   Does Birth Order Matter? A Study on the Relationship
   of Birth Order, Psychological Control, and Depression

A30 Christina A. Lepak, Psychology Major
   ADVISOR(S): Jennifer J. Quinn, Department of Psychology
   Barbara B. Oswald, Department of Psychology
   Daniel E. Kochli, Department of Psychology
   Jamie L. Pierson, Department of Psychology
   The Effects of Early Life Stress on Sucrose and Alcohol
   Consumption in Adulthood and Adolescence

A31 David H. Scott, Geology Major
   Billy Alfred Avalon, Urban and Regional Planning and
   Sustainability Major
   ADVISOR(S): Jonathan Levy, Department of Geology
   and Environmental Earth Science
   “Correlating Hydraulic Conductivity Values to Geologic
   Well Log Descriptions of Licking County, Ohio” Scott,
   Avalon, and Levy

A32 Julie A. DiNuoscio, Psychology Major
   ADVISOR(S): Vaishali V. Raval, Department of Psychology
   Bethany L. McCord, Department of Psychology
   Parental Socialization on Coping with Pain

A33 Katie G. Gates, Nursing Major
   Debbie L. Rogers, Nursing Major
   Evan D. Ernsting, Nursing Major
   ADVISOR(S): Jennifer L. Rode, Department of Nursing
   Fecal Transplants Versus Standard Antibiotics in
   Treatment of Clostridium difficile

A34 Jillian N. Elfers, Anthropology Major
   ADVISOR(S): Cameron M. Hay-Rollins, Department
   of Anthropology
   The Evolution of Informed Consent

A35 Kevin D. Harkey, Accountancy Major
   ADVISOR(S): Nirmala Naresh, Department of Mathematics
   Corporate Social Responsibility in the Oxford Area:
   How Global Corporations are Impacting Oxford, OH

A36 Felicity A. Sedmak, Accountancy Major
   ADVISOR(S): Terri F. Barr, Department of Marketing
   Foreign Powers Conducting Business in Southeast Asia

A37 Brittany J. Anderson, Anthropology Major
   ADVISOR(S): Cameron M. Hay-Rollins, Department
   of Anthropology
   Why Are Vaccines Scheduled?

A38 Mary A. Geibel, Biochemistry Major
   ADVISOR(S): Ann E. Hagerman, Department of Chemistry
   and Biochemistry
   Effects of Metal Ions on Proanthocyanidin-Protein
   Interactions Related to Food-derived Influences Within
   the Mouth

A39 Carly A. Williford, Nursing Major
   Erika M. Andler, Nursing Major
   Emma C. Tilow, Nursing Major
   Lauren E. Ruggles, Nursing Major
   ADVISOR(S): Jennifer L. Rode, Department of Nursing
   Nurses’ Perceptions of Pharmaceutical Pain Relief on
   Postoperative Patient Reported Pain

A40 Fallyn C. Dionisopoulos, Nursing Major
   Megan R. Barrett, Nursing Major
   Anna E. Glassshagel, Nursing Major
   Ann L. Pardee, Nursing Major
   ADVISOR(S): Jennifer L. Rode, Department of Nursing
   Do Terminally Ill Patients Who Are in a Home-hospice
   Setting Experience Better Pain Management than
   those Terminally Ill Patients Who are in Non-hospice
   Acute Care Settings?

A41 Eric M. Radke, Environmental Earth Science Major
   Christina N. Tenison, Environmental Earth Science and
   Music Major
   ADVISOR(S): Jason A. Rech, Department of Geology and
   Environmental Earth Science
   Terry W. Workman, Department of Geology and
   Environmental Earth Sciences
   Environmental Impact of Mills on Streams: a Case
   Study from Four Mile Creek, OH
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Presenter(s)</th>
<th>Advisor(s)</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>A42</td>
<td>Sanchit R. Arvind, Mathematics and Statistics Major</td>
<td>Nirmala Naresh, Department of Mathematics</td>
<td>A Survey of the Eating Habits of Miami Freshman</td>
<td></td>
</tr>
<tr>
<td>A43</td>
<td>Sheridan M. Jonas, Nutrition Major</td>
<td>Meghan M. Chokreff, Nutrition Major</td>
<td>Sockju Kwon, Department of Kinesiology and Health</td>
<td>Buttermilk Substitutes in Pancake Recipe</td>
</tr>
<tr>
<td>A44</td>
<td>Robert C. Gibler, Psychology Major</td>
<td>Elizabeth J. Kiel, Department of Psychology</td>
<td>Paternal and Maternal Anxiety and Parenting Behavior in Relation to Child Anxiety</td>
<td></td>
</tr>
<tr>
<td>A45</td>
<td>Samuel J. Smiley, Geology and Chemistry Major</td>
<td>John Rakovan, Department of Geology and Environmental Earth Science</td>
<td>Apatite Color Change</td>
<td></td>
</tr>
<tr>
<td>A46</td>
<td>Brant D. Center, Chemistry Major</td>
<td>Katia Del Rio-Tsonis, Department of Biology</td>
<td>SHH Transcription Factors Gli-1 and Gli-3R: Modulators of Retina Regeneration</td>
<td></td>
</tr>
<tr>
<td>A47</td>
<td>Savana E. Rosalez, Biology Major</td>
<td>Michael L. Robinson, Department of Biology</td>
<td>Studying Differentiation in vitro; The Establishment of Len Epithelial Lens Explants from Multiple Species</td>
<td></td>
</tr>
<tr>
<td>A48</td>
<td>Sydnee S. Walder, Marketing Major</td>
<td>Megan M. Gerhardt, Department of Management</td>
<td>Academic versus Extracurricular Skills Used in the Workplace</td>
<td></td>
</tr>
<tr>
<td>A49</td>
<td>Aaron N. Crookes, Bioengineering Major</td>
<td>Jon P. Scaffidi, Department of Chemistry and Biochemistry</td>
<td>Green Photochemical Synthesis of Plasmonically Tunable, SERS Active Silver Nanoshells on Y2O3</td>
<td></td>
</tr>
<tr>
<td>A50</td>
<td>Graham B. Bowling, Interdisciplinary Business Management Major</td>
<td>Brett R. Smith, Department of Entrepreneurship</td>
<td>Defining and Scaling Social Entrepreneurial Ventures</td>
<td></td>
</tr>
<tr>
<td>A51</td>
<td>Natosha McCoy, Nursing Major</td>
<td>Jennifer L. Rode, Department of Nursing</td>
<td>Respiratory Complications of Non-medically Indicated Induction of Labor</td>
<td></td>
</tr>
<tr>
<td>A52</td>
<td>Jake R. Cottingim, Kinesiology Major</td>
<td>Rose Marie Ward, Department of Kinesiology and Health</td>
<td>Academic Consequences and Alcohol Consumption Among College Students</td>
<td></td>
</tr>
<tr>
<td>A53</td>
<td>Deron L. Clark, Biology Major</td>
<td>David Russell, Department of Biology</td>
<td>Are Migrant and Residential Bird Species Equally Impacted by Construction Disturbance?</td>
<td></td>
</tr>
<tr>
<td>A54</td>
<td>Colleen M. Cox, Finance and Supply Chain and Operations Management Major</td>
<td>Megan M. Gerhardt, Department of Management</td>
<td>Academic Entitlement and Proactivity</td>
<td></td>
</tr>
<tr>
<td>A55</td>
<td>Mary Kate Findley, Zoology Major</td>
<td>Linda F. Marchant, Department of Anthropology</td>
<td>Hair Plucking and Grooming Behaviors in Captive Bonobos (Pan paniscus)</td>
<td></td>
</tr>
<tr>
<td>A56</td>
<td>Rebecka J. Sepela, Biochemistry Major</td>
<td>Ann E. Hagerman, Department of Chemistry and Biochemistry</td>
<td>Decreasing Ruminant Methane Production through 3-Deoxyproanthocyanidin-rich Forages</td>
<td></td>
</tr>
</tbody>
</table>
SESSION A: 10:00 – 11:30 A.M.

*Poster Presentation Listing by Poster Number*

(See presenter index on pages 40 – 54)

---

**A57**  
**James K. Flurer**, Middle Childhood Education and Biology Major  
**ADVISOR(S):** Jennifer M. Blue, Department of Physics  
*Effects of Outside Stimuli on Cognitive Processing*

---

**A58**  
**Mitch A. McDaniel**, Psychology Major  
**ADVISOR(S):** Christopher R. Wolfe, Department of Psychology  
Audrey M. Weil, Department of Psychology  
*Auditory Stimulation and Reading Comprehension: An Investigation of Likability and Presence of Lyrics in Music*

---

**A59**  
**Matthew R. Deer**, Zoology Major  
**ADVISOR(S):** Lori G. Isaacson, Department of Biology  
*Tongue Surrounding and Rat in the Response to Peripheral Axon Injury*

---

**A60**  
**Megan Catherine Finn**, Nutrition Major  
**Tara B. Grey**, Nutrition Major  
**ADVISOR(S):** Sockju Kwon, Department of Kinesiology and Health  
*Effects of Butter on Quality and Texture in Traditional Pound Cake*

---

**A61**  
**Rosemary A. Mignery**, Nursing Major  
**Cody D. Plapp**, Nursing Major  
**Maggie M. Gardner**, Nursing Major  
**Veronica V. Castillo**, Nursing Major  
**ADVISOR(S):** Jennifer L. Rode, Department of Nursing  
*Does Hospital Nurse Communication with Patients Have a Stronger Impact on Patient Satisfaction than Physician Communication in the Emergency Room?*

---

**A62**  
**Leah N. Stetzel**, Biology Major  
**Neal Naveen**, Bioengineering Major  
**ADVISOR(S):** Katia Del Rio-Tsonis, Department of Biology  
Agustin Luz Madrigal, Department of Biology  
*Analysis of DNA Methylation During the Reprogramming of Retinal Pigmented Epithelium During Chick Retina Regeneration*

---

**A63**  
**Jennifer A. Kelleher**, Marketing and Pre-Professional Study Major  
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health  
*Gender Differences in Motives and Timing of Drunkorexia*

---

**A64**  
**Amanda M. McDonald**, Zoology Major  
**ADVISOR(S):** Thomas O. Crist, Institute for the Environment & Sustainability  
Michael B. Mahon, Department of Biology  
Kaitlin U. Campbell, Department of Biology  
*Does Invasive Amur Honeysuckle and Overabundant White-tailed Deer Disrupt an Ant-plant Seed Dispersal Mutualism?*

---

**A65**  
**Claire P. Frank**, Marketing Major  
**ADVISOR(S):** Sanjay Puligadda, Department of Marketing  
*Stop Creeping Me Out! - A Look into Highly Targeted Online Advertising*

---

**A66**  
**Bryan VonDerVellen**, Biology Major  
**Sibel E. Sarac**, Biology Major  
**ADVISOR(S):** Vrinda Kalia, Department of Psychology  
Joshua P. Buchanan, Department of Psychology  
*Changing Minds: Examining the Impact of Biculturalism on Counter Factual Thinking*

---

**A67**  
**Stephanie Berk**, Kinesiology Major  
**ADVISOR(S):** Valerie A. Ubbes, Department of Kinesiology and Health  
*International Health Literacy Needs of Adults in Canada and Germany*

---

**A68**  
**Julia D. Kerr**, Chemistry and Mathematics Major  
**Alexandra L. Swartz**, Chemical Engineering Major  
**Erinn M. Woods**, Chemical Engineering Major  
**ADVISOR(S):** Richard L. Bretz, Department of Chemistry and Biochemistry  
*Reducing Anion Concentrations in Surface Waters Using Native, Non-invasive Plants*

---

**A69**  
**Shealynn M. Hendry**, History and Classics Major  
**ADVISOR(S):** Mary Cayton, Department of History  
*A Spartan Confederacy: Classical Discourse in Southern Intellectual Life, 1780-1865*

---

**A70**  
**Samantha L. Kershner**, Psychology Major  
**Joseph R. Frame**, Zoology and Psychology Major  
**ADVISOR(S):** Jennifer J. Quinn, Department of Psychology  
*The Effects of Early Life Stress on Conditioned Cue Preference and Conditioned Place Preference*
A71 Emma K. Barnes, Zoology Major  
**ADVISOR(S):** Maria J. Gonzalez, Department of Biology  
Amber M. Rock, Department of Biology  
*Evaluating the Impacts of Food Quality on Bluegill Growth Rate during Early Ontogeny*

A72 Amanda M. Meiering, Strategic Communications Major  
**ADVISOR(S):** Helaine Alessio, Department of Kinesiology and Health  
*If You Paint It, Will They Come?*

A73 Alyssa C. Scheer, Supply Chain and Operations Management Major  
Daniel S. O’Brien, Finance and East Asian Languages and Culture Major  
**ADVISOR(S):** Jeffrey W. Merhout, Department of Information Systems and Analytics  
*The Risks and Rewards of Selling IT-based Products in the Chinese Market*

A74 Melissa A. Tarr, Nursing Major  
Tracy L. Owens, Nursing Major  
Alicia P. Dudley, Nursing Major  
**ADVISOR(S):** Jennifer L. Rode, Department of Nursing  
*Does the Timing of Extubation After Cardiac Surgery Increase the Morbidity?*

A75 Mary E. Lloyd, Psychology Major  
Caroline M. Kilbane, Psychology and Environmental Earth Science Major  
Amie M. Butcher, Psychology Major  
**ADVISOR(S):** Jonathan Kunstman, Department of Psychology  
Jason C. Deska, Department of Psychology  
*Abstract Language Reinforces Social Hierarchies*

A76 Jack E. Gruber, Zoology Major  
Caroline A. Kennedy, Biology Major  
**ADVISOR(S):** Susan M. Hoffman, Department of Biology  
Jeremy S. Papuga, Department of Biology  
Joseph M. Baumgartner, Department of Biology  
*The Effects of Habitat Type and Competition on the Genetic Diversity of Peromyscus leucopus in Michigan’s Lower Peninsula*

A77 Maura Prince, Nursing Major  
Samantha R. Feathers, Nursing Major  
Fidele Koumanimben, Nursing Major  
**ADVISOR(S):** Jennifer L. Rode, Department of Nursing  
*Early Mobility in Post-op ICU Open-heart Surgery Patients*

A78 Rachel N. Frame, Supply Chain and Operations Management Major  
Sydney L. Powell, Information Systems and East Asian Languages & Culture Major  
**ADVISOR(S):** Jeffrey W. Merhout, Department of Information Systems and Analytics  
*Understanding the Lack of Women in IT/IS*

A79 Jacqueline R. Vance, Middle Childhood Education Major  
Alexis A. Albro, Computer Engineering Major  
Rachel E. Anderson, Bioengineering Major  
Michael A. Armstrong, Mechanical Engineering Major  
Nathanael A. Bell-Pactat, Physics Major  
Matthew B. Berkovitz, University Studies Major  
Bradley B. Bognar, Computer Engineering Major  
Kali B. Boyd, Mechanical Engineering Major  
Andrew C. Bracey, Mechanical Engineering Major  
Parker N. Brown, Chemical Engineering Major  
Christopher A. Burke, Mechanical Engineering Major  
Rachel L. Cabosky, General Engineering Major  
Samuel A. Camiener, Mechanical Engineering Major  
Megan M. Campbell, Computer Science Major  
Andrew M. Cannata, Kinesiology Major  
Raquel R. Carrera, Psychology Major  
Mwoyo Z. Chinoda, Engineering Management Major  
Joe S. Conjeti, Bioengineering Major  
Nicholas W. Cruz, Mechanical Engineering Major  
Stephanie M. Domijan, Mechanical Engineering Major  
Lexie A. Eagleson, Computer Science Major  
Joseph J. Engelhardt, Mechanical Engineering Major  
Ramon R. Ferreira da Silva, University Studies Major  
Murilo M. Ferreira Lopes, University Studies Major  
Kevin S. Fisher, Mechanical and Manufacturing Engineering Major  
Mary R. Fioren, Computer and Electrical Engineering Major  
Matthew R. Gardner, Computer Science Major  
Sam J. George, Biochemistry Major
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Authors</th>
<th>Advisors</th>
<th>Advisor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A80</td>
<td>Investigation of Nano-particles in PDMS Membranes to Separate Ethanol and Water in a Pervaporation Process</td>
<td>Andrew M. Tillstrom, Chemical Engineering Major, Joshua J. Knight, Chemical Engineering Major, Teng Ren, Chemical Engineering Major, Mfundisi K. Kitchen, Chemical Engineering Major</td>
<td>Catherine Almquist, Department of Chemical, Paper and Biomedical Engineering</td>
<td>Bob Setlock, College of Engineering and Computing, Jacqueline R. Vance, Middle Childhood Education Major, Creativity Focused Learning - Project High Flight</td>
</tr>
</tbody>
</table>
SESSION A: 10:00 – 11:30 A.M.
Poster Presentation Listing by Poster Number
(See presenter index on pages 40 – 54)

A81  Lauren A. Colliver, Geology Major
     Delaney A. Lee, Geology and Art Major
     ADVISOR(S): Brian S. Currie, Department of Geology and Environmental Earth Sciences
     Sequence Stratigraphy of the Upper Devonian Ohio Shale, Northern Appalachian Basin

A82  Hana M. Reinhart, Sociology Major
     ADVISOR(S): Rodney D. Coates, Department of Sociology, Social Justice and Gerontology
     Construction of Race, Gender, and Class in the United States

A83  Kimberly R. Parent, Kinesiology and Nutrition Major
     ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
     Yik Yak: A Study of Alcohol References and Anonymous Social Media

A84  Nikhitha Kakarala, Psychology Major
     Tasse M. Hammond, Biology and Psychology Major
     Erica L. Leone, Psychology and Philosophy Major
     Sabrina M. Cox, Integrative Studies Major
     Erin E. Spidel, Integrative Studies Major
     Timothy A. Ovia, Psychology Major
     ADVISOR(S): Vaishali V. Raval, Department of Psychology
     Mental Health Training in India: A Professional’s Perspective

A85  Haley N. Adkins, Special Education Major
     Anna E. Hill, Special Education Major
     Melissa W. Scheuering, Special Education Major
     Katilin F. Terlop, Special Education Major
     ADVISOR(S): Sarah J. Watt, Department of Educational Psychology
     Examining the Impact of Small Group Learning to Promote Inclusive Math Education

A86  Jana M. Cable, Microbiology Major
     Martha L. Carter, Microbiology Major
     Elsa C. Clenny, Microbiology Major
     Justin T. Crookes, Biology Major
     Rachana Gollapudi, Biology Major
     Sarah K. Hiner, Medical Laboratory Science Major
     Pierce N. Kurek, Microbiology Major
     Clara R. Lawson, Microbiology Major
     Geneva H. Mommsen, Zoology Major
     Svitlana A. Podolyan, Biology Major
     Leah N. Stetzel, Microbiology Major
     Julie M. Donna, Microbiology Major
     ADVISOR(S): Iddo Friedberg, Department of Microbiology
     Gary R. Janssen, Department of Microbiology
     Mitchell F. Balish, Department of Microbiology
     Ryann M. Brzoska, Department of Microbiology
     Gabrielle M. Lopez, Department of Microbiology
     David C. Ream, Department of Microbiology
     Dmpstr Diving: It’s Just a Phage

A87  Samantha Edmonds, Creative Writing Major
     ADVISOR(S): Joseph Bates, Department of English
     Humanity 2.0: Exploring the Human and Posthuman through Dystopian Narrative
B01 William Patrick Boyle, Physics Major
ADVISOR(S): Jennifer M. Blue, Department of Physics
Investigation of Attitudes in Introductory Physics Students

B02 Scarlett M. Shader, Kinesiology and Health
Promotion Major
ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
Drunkorexia and Grade Point Average among College Students

B03 Noah K. Jaiteh, Nursing Major
Ashley A. Eckman, Nursing Major
Anne M. Blanton, Nursing Major
Casaundra Short, Nursing Major
ADVISOR(S): Joan Fopma-Loy, Department of Nursing
Medication Adherence in Psychiatric-Mental Health Nursing

B04 Steven C. Schlitzer, Chemistry Major
ADVISOR(S): Benjamin W. Gung, Department of Chemistry and Biochemistry
Study of the Affinity for Organic Anions by Three Hydrogen Bonding Donors (Urea, Thiourea, and Squaramide): A Computational Investigation

B05 Taryn P. Berry, Nutrition Major
Morgan Elizabeth Deihs, Nutrition Major
ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
The Acceptance of Avocado as a Fat Substitute in a Chocolate Muffin

B06 Kimberly F. Johnson, Special Education Major
ADVISOR(S): Sarah J. Watt, Department of Educational Psychology
Comparing the Math Reasoning among Adolescent Learners

B07 Kelsey L. McCrum, Finance Major
Mohinee Mukherjee, Finance Major
ADVISOR(S): Megan M. Gerhardt, Department of Management
Motivation Behind Selecting College Major

B08 Madeline A. LaPolla, Psychology Major
ADVISOR(S): Kurt Hugenberg, Department of Psychology
Paige Lloyd, Department of Psychology
What is in a Face? Eye Tracking and Face Processing

B09 Emily K. Laska, Psychology and Nutrition Major
ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
Academic Consequences of Drinking

B10 Kelsey L. Biller, Kinesiology Major
ADVISOR(S): William P. Berg, Department of Kinesiology and Health
The Effect of Load Uncertainty in Therapeutic Exercise on Functional Performance and Muscle Activation

B11 Mark P. Loh, Biochemistry Major
ADVISOR(S): Jonathan Levy, Department of Geology and Environmental Earth Science
Nohelia Rojas-Miesse, Department of Spanish and Portuguese
Julie A. Szucs, Department of Spanish and Portuguese
Parasitosis: The Disease of the Rural in Grenada, Nicaragua

B12 Ryan T. Ley, Computer Engineering Major
ADVISOR(S): Andrew S. Paluch, Department of Chemical, Paper and Biomedical Engineering
Calculating the Fugacity of Pure, Low Volatile Liquids via Molecular Simulation with Application to Acetanilide, Acetaminophen, and Phenacetin

B13 Rebeca Garcia De Jesus, Chemistry Major
Anthony M. Young, Biological and Physics Major
ADVISOR(S): Karthik Vishwanath, Department of Physics
Laser Speckle Contrast Imaging

B14 Robert W. Laing, Zoology and Political Science Major
Daniel C. Nemeth, Zoology Major
Abby O. Begezda, Biology Major
ADVISOR(S): Susan M. Hoffman, Department of Biology
Jeremy S. Papuga, Department of Biology
Joseph M. Baumgartner, Department of Biology
Examining the Genetic Consequence of Habitat Fragmentation in the Northern Michigan White-footed Mouse (Peromyscus leucopus noveboracensis)
### B15 Joanna A. Orzel, Chemistry and Spanish Major  
**ADVISOR(S):** Stacey Lowery Bretz, Department of Chemistry and Biochemistry  
Kelli R. Galloway, Department of Chemistry and Biochemistry  
*Analyzing Faculty Goals for Undergraduate Chemistry Laboratory*

### B16 Erich J. Goebel, Microbiology Major  
**ADVISOR(S):** Natosha Finley, Department of Microbiology  
*Characterizing the Bordetella pertussis adenylate cyclase Toxin and Calmodulin Complex through NMR Studies*

### B17 Madeline J. McDonough, Health Promotion Major  
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health  
*Prevalence of Drunkorexia Across Year in School*

### B18 Stephanie M. Fukui, Zoology Major  
**ADVISOR(S):** Dawn M. Blitz, Department of Biology  
*Localization and Characterization of CabTRP Ia-containing Neuroendocrine Cells*

### B19 Brittany R. Winkler, Nursing Major  
Cassandra Perkins, Nursing Major  
Olalekan Ogundoyin, Nursing Major  
**ADVISOR(S):** Joan Fopma-Loy, Department of Nursing  
*Do School Based Programs Reduce Obesity in Children?*

### B20 Samantha A. Everly, American Studies Major  
**ADVISOR(S):** Sheila L. Croucher, American Studies Program  
*“Something” Afloat: Preserving Culture In A Global World*

### B21 Erich Y. Groezienger, Kinesiology Major  
**ADVISOR(S):** Ron Cox, Department of Kinesiology and Health  
*Effects of a Short HIIT Protocol on Indices of Aerobic Training*

### B22 Seth L. Filbrun, Chemistry Major  
**ADVISOR(S):** Jon P. Scaffidi, Department of Chemistry and Biochemistry  
*Wet Synthesis and Characterization of Plasmonically Tunable Solid State SERS Substrates*

### B23 Abraham G. Moller, Chemistry and Microbiology Major  
**ADVISOR(S):** Chun Liang, Department of Biology  
Sreeskanadarajan Sutharzan, Department of Biology  
*Palindrome Enrichment of CRISPRs in Metagenomic Data Sets*

### B24 Emily M. Hofner, Biology Major  
Michael D. Mulder, Psychology Major  
Timothy A. Ovia, Psychology Major  
**ADVISOR(S):** Kurt Hugenberg, Department of Psychology  
Paige Lloyd, Department of Psychology  
*Utilizing Cognitive Bias Modification Training to Reduce Interracial Anxiety*

### B25 Laura M. Fitzgerald, Journalism and English: Creative Writing Major  
**ADVISOR(S):** Jacqueline Johnson, Western Program  
*Perspectives on Freedom Summer*

### B26 Tyler S. Maschino, Electrical Engineering Major  
**ADVISOR(S):** Karthik Vishwanath, Department of Physics  
*Karhik Vishwanath, Department of Physics  
*Measuring Temporal Responses of Digital Signals with MHz Sampling Rates on a Bitscope and Raspberry Pi*

### B27 John F. Manganaro, Chemistry Major  
**ADVISOR(S):** Benjamin W. Gung, Department of Chemistry and Biochemistry  
Michael R. Holmes, Department of Chemistry and Biochemistry  
*Synthesis of Chiral Ligands for Enantioselective Gold (I) Catalysts*

### B28 Haley J. Schubert, Finance and Supply Chain and Operations Management Major  
Nicole E. Peters, Supply Chain and Operations Management and Information Systems Major  
**ADVISOR(S):** Megan M. Gerhardt, Department of Management  
*You Can’t Sit With Us: A Study of Collective Identities within the Farmer School of Business*

### B29 Hannah E. Matgouranis, Psychology Major  
**ADVISOR(S):** Amanda Diekman, Department of Psychology  
Mia Steinberg, Department of Psychology  
*The Stigma of Seeking Help: Perceptions of Seeking Counseling on a College Campus*
SESSION B: 1:30 – 2:45 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 – 54)

B30  Gina M. Cerbie, Biology Major
     ADVISOR(S): David J. Berg, Department of Biology
                        Ashley D. Walters, Department of Biology
     Hotspots of Unionid Biodiversity in East Texas

B31  Charlie T. Chen, East Asian Languages & Culture Major
     ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
     Smashed: A Study on College Student Alcohol Consumption and Driving after Drinking

B32  Georgia B. Fuerst, Computer Engineering Major
     Bryce N. Redeker, Chemical Engineering Major
     ADVISOR(S): Andrew S. Paluch, Department of Chemical, Paper and Biomedical Engineering
     Predicting the Equilibrium Solubility of Non-Electrolyte Compounds via Molecular Simulation

B33  Lana M. Amer, Bioengineering Major
     ADVISOR(S): Paul K. Urayama, Department of Physics
     Detecting Changes in Cellular NADH Conformation During Metabolic Transitions Affecting Fermentation versus Aerobic Pathways in Yeast

B34  Camarin J. Gilman, Nutrition Major
     Ani A. Manukian, Nutrition Major
     ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
     Broccoli Cheddar Soup: Effects of Mild Versus Sharp Cheese on Consistency and Perceived Saltiness

B35  Kathryn E. Magoon, Zoology Major
     Cara P. Murphy, Biology and Pre-Professional Study Major
     ADVISOR(S): Kathleen A. Killian, Department of Biology
     Examining the Role of Septate Junctions within the Adult Neurogenic Stem Cell Niche of the Cricket, Acheta domesticus

B36  Jeffrey J. Bierly, Biology Major
     ADVISOR(S): Katia Del Rio-Tsonis, Department of Biology
                        Erika Grajales-Esquivel, Department of Biology
                        Agustin Luz Madrigal, Department of Biology
     Complement Component C3a/C3aR Constitute Novel Regulators for Chick Eye Morphogenesis

B37  Mariah J. Guthrie, Nutrition Major
     Claire M. Millonig, Nutrition Major
     ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
     Quality and Acceptability of Veggie Burger Texture Manipulation

B38  Lauren M. West, Nursing Major
     Morgan L. Strauss, Nursing Major
     ADVISOR(S): Joan Fopma-Loy, Department of Nursing
     Effectiveness of Medical Staff Eating with Patients with Eating Disorders

B39  Rhea E. Johnson, Microbiology and Kinesiology Major
     ADVISOR(S): Annette Bollmann, Department of Microbiology
                        Christopher Sedlacek, Department of Microbiology
     Do Ammonia-Oxidizers Select For Nitrite-Oxidizing Bacteria?

B40  Corey C. Emerson, Microbiology Major
     ADVISOR(S): Natosha Finley, Department of Microbiology
     How Calmodulin Mutations Affect the Activation of the adenylate cyclase Toxin, CyaA

B41  Benjamin G. Sandlin, Chemistry Major
     ADVISOR(S): Ellen J. Yezierski, Department of Chemistry and Biochemistry
                        Jordan T. Harshman, Department of Chemistry and Biochemistry
     Preliminary Data Regarding Organic Chemistry Molecular Nomenclature

B42  Jeffrey S. McCain, Chemical Engineering Major
     ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
     An Analysis of Drunkorexia

B43  Kelli L. Peterman, Psychology Major
     ADVISOR(S): Elise M. Clerkin, Department of Psychology
                        Aaron M. Luebbe, Department of Psychology
                        Marie Parsons, Department of Psychology
     Mindfulness Facets as Moderators of the Relationship Between Social Anxiety Schemas and Behavioral and Desired Avoidance
B45  **Anne E. Morgan**, Environmental Earth Science and Sustainability Major
ADVISOR(S): Michael J. Vanni, Department of Biology
Lesley B. Knoll, Department of Biology
**Quantifying Pelagic Phosphorus Recycling in Natural and Human-made Water Bodies Across a Productivity Gradient**

B46  **Mollie A. Gallagher**, Nutrition Major
Caroline L. Mooney, Nutrition Major
**Tenderization of Meat Using Various Types of Oil**

B47  **Danny E. Sparks**, Nursing Major
Jamie L. Cornett, Nursing Major
Lindsey M. Street, Nursing Major
Michelle L. Baughn, Nursing Major
ADVISOR(S): Joan Fopma-Loy, Department of Nursing
**Interventions for Hallucination Management**

B48  **John-Kelly Dougherty**, Microbiology Major
ADVISOR(S): Paul J. Schaeffer, Department of Biology
**Physiological Diversity of Anolis Lizards across the Greater Antilles Islands**

B49  **Sydney M. Alvarez**, Sociology Major
ADVISOR(S): Glenn W. Muschert, Department of Sociology and Gerontology
**The Effect of Television on Juvenile Delinquency**

B50  **Christina N. Tenison**, Environmental Earth Science and Music Major
ADVISOR(S): Jason A. Rech, Department of Geology and Environmental Earth Sciences
**The Impact of Mills on Sediment Storage along Indian Creek on the Ohio/Indiana Border**

B51  **Kaleb L. Campbell**, Physics Major
ADVISOR(S): Samir Bali, Department of Physics
Richard A. Jackson, Department of Physics
**Electromagnetically Induced Transparency Experiments for the Advanced Undergraduate Laboratory: Suppression of Polarization Impurity and Stray Magnetic Fields**

B52  **Lauryn S. Palgut**, Nutrition and Kinesiology Major
Elizabeth R. Leen, Nutrition Major
Lauren T. Farmer, Nutrition Major
ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
**Reducing Cholesterol Content in Brownies Using Egg Substitutes**

B53  **Abigail E. Brown**, Biology Major
ADVISOR(S): Janet L. Marshall, Department of Chemistry and Biochemistry
**Organic Chemistry Lab Development: Enantiomeric Resolution using Amino Acids**

B54  **Rami Najib M. Mahyub**, Physics Major
ADVISOR(S): Samir Bali, Department of Physics
**Transport Properties of Cold Atoms in Optical Lattices**

B55  **Jillian M. O'Neil**, Kinesiology and Nutrition Major
Jessica H. Pitzer, Nutrition Major
ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
**Experimenting the Nutrient Density and Quality of Cornbread with Alterations of Key Ingredient Components**

B56  **Lauren M. Benton**, Anthropology Major
ADVISOR(S): James S. Bielo, Department of Anthropology
**Ethnographies of Moroccan Women**

B57  **Travis L. Rice**, Nursing Major
Jennifer C. Rought, Nursing Major
Kameron C. Maupin, Nursing Major
Sumandeep K. Khehra, Nursing Major
ADVISOR(S): Joan Fopma-Loy, Department of Nursing
**Young Children Do Distraction Techniques during Chronic Conditions like Sickle Cell Disease Result in Less Pain When Compared to No Intervention?**

B59  **Lydia M. Dysart**, Nutrition Major
Kelly A. May, Nutrition Major
ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
**Oil Substitutes in Salad Dressing**
SESSION B: 1:30 – 2:45 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 – 54)

B60 Andrea K. Lee, International Studies Major
ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
Alcohol vs Hookup

B61 Dylan C. Palo, Biological Physics Major
ADVISOR(S): Paul K. Urayama, Department of Physics
Bioanalytical Discrimination of Protein-bound NADH Conformations using Spectral Phasor Analysis of NADH Fluorescence

B62 Makensee J. Hartman, Nursing Major
McKenzie R. Bandy, Nursing Major
Kelli S. Wilson, Nursing Major
Caroline F. Johnson, Nursing
ADVISOR(S): Joan Fopma-Loy, Department of Nursing
Non-pharmacological Approaches to Treat Attention Disorders in Children

B63 Kaitlyn M. Click, Nutrition Major
Jessica G. Anderson, Nutrition and Kinesiology Major
ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
The Effect of Plum Sugar as a Sugar Substitute in Oatmeal Raisin Cookies

B64 William D. Gwinn, Speech Pathology and Audiology Major
ADVISOR(S): Kate de Medeiros, Department of Sociology and Gerontology
Jennifer M. Kinney, Department of Sociology and Gerontology
Poetry and People with Dementia: A Pilot Study

B65 Elizabeth A. Cochran, Biology and Sociology Major
Kit K. Carney, Biology Major
ADVISOR(S): Kathleen A. Killian, Department of Biology
Mollie R. Sorrell, Department of Biology
Using RNAi to Examine the Role of the Immune System in Regulating Cricket Agnostic Behavior

B66 Avnika P. Bali, Biochemistry and Biological Physics Major
ADVISOR(S): Gary A. Lorigan, Department of Chemistry and Biochemistry
Rongfu Zhang, Department of Chemistry and Biochemistry
Probing the Secondary Structure of Membrane Proteins Using Electron Spin Echo Envelope Modulation Spectroscopy

B67 Noelia L. Polanco, Psychology Major
ADVISOR(S): Elizabeth J. Kiel, Department of Psychology
Alexandra C. Hummel, Department of Psychology
The Effect of Child Care on Parental Emotion Socialization

B68 Zachariah D. Alley, Zoology Major
ADVISOR(S): Michael J. Vanni, Department of Biology
Kelsea N. Downs, Department of Biology
Ontogenetic Changes in Nutrient Excretion: Interspecific and Intraspecific Comparisons in Walleye (Sander vitreus) and Saugeye (Sander Canadensis x Sander vitreus)

B69 Elizabeth D. Gross, Biochemistry Major
ADVISOR(S): Stacey Lowery Bretz, Department of Chemistry and Biochemistry
Kelli R. Galloway, Department of Chemistry and Biochemistry
Characterizing Inquiry in the Undergraduate Chemistry Laboratory

B70 Victoria K. Xidas, Speech Pathology and Audiology Major
ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
The Examination of Personality Traits in Relation to Alcohol Consumption Among College Students

B71 Daniel L. Bashore, Psychology Major
Jamie L. Bourne, Psychology and Spanish Major
Ashantia B. Collins, Psychology Major
ADVISOR(S): Amy Summerville, Department of Psychology
Ryan J. Walker, Department of Psychology
It's the Target that Counts: Counterfactual Thinking and Behavioral Intentions About Others’ Negative Events
B72  Rebecca A. Coats, Nutrition Major
    Rachel L. Krivoshey, Nutrition Major
    ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
    The Perfect Balance: The Effect of Different Oil Concentrations in Muffins

B73  Katie L. Duffy, Speech Pathology and Audiology and Major
    Victoria K. Xidas, Speech Pathology and Audiology and Major
    ADVISOR(S): Susan Baker Brehm, Department of Speech Pathology and Audiology
    Cara B. Werner, Department of Speech Pathology and Audiology
    Examination of Trends Across Trials in Maximum Vocal Performance Tasks

B74  Amelia M. Fleitz, Zoology and Environmental Earth Science Major
    ADVISOR(S): Maria J. Gonzalez, Department of Biology
    Amber M. Rock, Department of Biology
    Impact of Light and Nutrients and Fish Predation on Benthic Invertebrate Communities

B75  Jason R. Weiss, Psychology Major
    ADVISOR(S): Kurt Hugenberg, Department of Psychology
    Paige Lloyd, Department of Psychology
    The Effects of Different Mindsets on Confirmation Bias: Priming versus Natural Behavior

B76  Mark M. Hahn, Microbiology Major
    ADVISOR(S): Rachael Morgan-Kiss, Department of Microbiology
    Amber G. Teufel, Department of Microbiology
    Characterization of Growth and Effects of Nutrient Amendment in Isochrysis sp.

B77  Steven T. Marshall, Geology Major
    ADVISOR(S): Tammie Gerke, Department of Geology and Environmental Earth Science
    It’s Always Sunny in Wickliffe, KY: Pigment Analysis of Mississipian-Aged Sun Circle Feature

B78  Michael T. Sewell, Chemical Engineering Major
    Colin P. Ferriter, Chemical Engineering and Economics Major
    Neil D. Perrin, Chemical Engineering Major
    Bryce N. Redeker, Chemical Engineering Major
    Georgia B. Fuerst, Chemical Engineering Major
    Michael O. Donnelly, Chemical Engineering Major
    ADVISOR(S): Catherine Almquist, Department of Chemical, Paper and Biomedical Engineering
    Andrew S. Paluch, Department of Chemical, Paper and Biomedical Engineering
    Effects of Temperature, Pressure, Humidity, Branching, and Pore Size on Adsorption Capacity of Zeolites’

B79  Jacqueline R. Vance, Middle Childhood Education Major
    Alexis A. Albro, Computer Engineering Major
    Rachel E. Anderson, Bioengineering Major
    Michael A. Armstrong, Mechanical Engineering Major
    Nathanael A. Bell-Pactat, Physics Major
    Matthew B. Berkovitz, University Studies Major
    Bradley B. Bognar, Computer Engineering Major
    Kali B. Boyd, Mechanical Engineering Major
    Andrew C. Bracey, Mechanical Engineering Major
    Parker N. Brown, Chemical Engineering Major
    Christopher A. Burke, Mechanical Engineering Major
    Rachel L. Cabosky, General Engineering Major
    Samuel A. Camiener, Mechanical Engineering Major
    Megan M. Campbell, Computer Science Major
    Andrew M. Cannata, Kinesiology Major
    Raquel R. Carrera, Psychology Major
    Mwoyo Z. Chinoda, Engineering Management Major
    Joe S. Conjeriti, Bioengineering Major
    Nicholas W. Cruz, Mechanical Engineering Major
    Stephanie M. Domijan, Mechanical Engineering Major
    Lexie A. Eagleson, Computer Science Major
    Joseph J. Engelhardt, Mechanical Engineering Major
    Ramon R. Ferreira da Silva, University Studies Major
    Murilo M. Ferreira Lopes, University Studies Major
    Kevin S. Fisher, Mechanical and Manufacturing Engineering Major
    Nicole B. Fisher, Business Economics and Engineering Management Major
    Mary R. Floren, Computer and Electrical Engineering Major
    Matthew R. Gardner, Computer Science Major
    Sam J. George, Biochemistry Major
SESSION B: 1:30 – 2:45 P.M.

Poster Presentation Listing by Poster Number
(See presenter index on pages 40 – 54)

Kaitlyn M. Gliha, Mechanical Engineering Major
Jim D. Gorjup, Chemical Engineering Major
Kelsey E. Groff, General Engineering Major
Scott S. Gscheidle, Mechanical Engineering Major
Burke B. Haldeman, Mechanical Engineering Major
Summer B. Hashlamoun, Software Engineering Major
Chloe E. Hazen, Chemical Engineering Major
Justin M. Helbling, Finance Major
Andrew N. Hernandez, Biology and Premedical Studies Major
Ryan M. Hesker, Mechanical Engineering Major
Ali A. Hosseinarb, Computer Engineering Major
Nathaniel W. Howes, University Studies Major
Nicolette G. Hoyer, Political Science Major
Sam A. Hudson, Chemical Engineering Major
Lashawn M. Huey, Mechanical Engineering Major
Emily E. Hughes, Software Engineering Major
Bradley A. Hurst, Mechanical Engineering Major
Mark W. Hutchinson, Computer Engineering Major
Austin M.A. Jenkins, Computer Engineering Major
Anna L. Johnson, Mechanical Engineering Major
Shaniel A. Katariwala, Mechanical Engineering Major
Andrew M. Kirkham, Marketing Major
Brett C. Kloc, Chemical Engineering Major
Pravali P. Kothakota, University Studies Major
Emma N. Kunimoto, Mechanical Engineering Major
Emory J. Landreville, Computer Engineering Major
Austin J. Lowder, Electrical Engineering Major
Evan J. Lynch, Electrical Engineering Major

Morgan R. Markins, University Studies Major
Wellerson M. Melo Mota, University Studies Major
Daniel L. Morgan, Mechanical Engineering Major
Wendy Y. Nguyen, Marketing and Bioengineering Major
Kevin K. Noriega, Mechanical Engineering Major
Ruth A. Payne, Engineering Management Major
Daniel C. Pfeil, University Studies Applied Science Major
Aryelle L. Player, Engineering Management Major
Kaitlin K. Radivojевич, Marketing Major
Anthony M. Roberto, Mechanical Engineering Major
Colin M. Roblin, Mechanical Engineering Major
Tyler A. Rus, General Engineering Major
Kyle W. Russ, Mechanical Engineering Major
Karan K. Sachdeva, Mechanical Engineering Major
Harleen K. Sarkaria, University Studies Major
Christian P. Schafer, Mechanical Engineering Major
Matt J.S. Serio, Mechanical Engineering Major
Thomas J. Shanley, Economics Major
Kyle W. Siegrist, Mechanical Engineering Major
Lindsay N. Silver, Mechanical Engineering Major
Christopher E. C. Smitherman II, Mechanical Engineering Major
Alexis D. Sondej, Strategic Communication Major
Chad A. Sonkin, Sport Leadership and Management Major
Mikayla N. Sprague, Mechanical Engineering Major
Alex L. Staron, Physics Major
William A. Talkington, Mechanical Engineering Major
Nathan G. Tawney, Mechanical Engineering Major
Aleandre P. Tessier, Electrical Engineering Major
Coleton M. Towles, Biochemistry and Premedical Studies Major
Stephanie C. Wade, Electrical Engineering Major
Alex T. Waldherr, Microbiology and Premedical Studies Major

Ryan M. Haas, Chemical Engineering Major
Nicholas C. Collins, Bioengineering Major
Jason M. Sauer, Bioengineering Major
Emily A. Krull, Bioengineering Major
Zachary J. McKinney, Bioengineering Major
Neal B. Naveen, Bioengineering Major

ADVISOR(S): Bob Setlock, College of Engineering and Computing

Optimal Design of 3D Porous Scaffolds Using Thermally Induced Phase Separation for Bone Tissue Regeneration
SESSION B: 1:30 – 2:45 P.M.

*Poster Presentation Listing by Poster Number*

(See presenter index on pages 40 - 54)

---

**B81**  Seth A. Boda, Anthropology Major  
**ADVISOR(S):** Jeb J. Card, Department of Anthropology  
*Using Archaeological Material in a Classroom Setting*

---

**B82**  JaShawn A. Combs, Anthropology Major  
**ADVISOR(S):** Jeb J. Card, Department of Anthropology, Perry L. Gnivecki, Department of Anthropology  
*Archaeological Uses and Applications of Photogrammetry*

---

**B83**  Ali Mallett, Anthropology Major  
Claire E. Meyer, Anthropology Major  
**ADVISOR(S):** Mark A. Peterson, Department of Anthropology  
*Analysis of Visual Material*

---

**B84**  Sarah E. Loomis, Anthropology and English: Literature Major  
Alex T. Boyer, Anthropology Major  
**ADVISOR(S):** Jeb J. Card, Department of Anthropology  
*3D Laser Scanning and Experimentation with South American Roller Stamps*

---

**B86**  Jana M. Cable, Microbiology Major  
Martha L. Carter, Microbiology Major  
Elsa C. Clenny, Microbiology Major  
Justin T. Crookes, Biology Major  
Rachana Gollapudi, Biology Major  
Sarah K. Hiner, Medical Laboratory Science Major  
Pierce N. Kurek, Microbiology Major  
Ciara R. Lawson, Microbiology Major  
Geneva H. Mommsen, Zoology Major  
Svitlana A. Podolyan, Biology Major  
Leah N. Stetzel, Microbiology Major  
Julie M. Donna, Microbiology Major  
**ADVISOR(S):** Iddo Friedberg, Department of Microbiology  
Gary R. Janssen, Department of Microbiology  
Mitchell F. Balish, Department of Microbiology  
Ryann M. Brzoska, Department of Microbiology  
Gabrielle M. Lopez, Department of Microbiology  
David C. Ream, Department of Microbiology  
*Dmpstr Diving: It’s Just a Phage*

---

**B87**  Daniel J. Moses, Marketing Major  
**ADVISOR(S):** Janice E. Taylor, Department of Marketing  
*Are Consumers the New Advertisers?*
C01  Susan K. Findley, Zoology and Anthropology Major
      Julia E. Behrend, Biology and Spanish Major
      ADVISOR(S): Susan M. Hoffman, Department of Biology
                    Joseph M. Baumgartner, Department of Biology
      Morphological Diversity in the Scapula of Peromyscus leucopus: a Case Study in Phenotypic Plasticity

C02  Joia M. Mitchell-Holman, Psychology Major
      ADVISOR(S): Jonathan Kunstman, Department of Psychology
                    Taylor R. Tuscherer, Department of Psychology
      Minority Members Suspicion of White Counterparts Motives

C03  Benjamin D. Blankartz, Physics Major
      ADVISOR(S): Stephen G. Alexander, Department of Physics
      Modeling Dwarf Spherical Galaxies using Dark Matter and MOND

C04  Isaiah E. Stewart, Environmental Earth Science Major
      ADVISOR(S): Rose Marie Ward, Department of Kinesiology and Health
      Length of Drinking Episodes and Amount of Alcohol Consumption

C05  Robert L. Doughty, Mathematics and Statistics and Mathematics Education Major
      Eli S. Thompson, Mathematics and Statistics Major
      ADVISOR(S): Anna R. Ghazaryan, Department of Mathematics
      Analysis of the Dynamics of the Transmission of Malaria

C06  Caren S. Kay, Urban and Regional Planning Major
      ADVISOR(S): Amelie Y. Davis, Department of Geography
      Paving More than Pathways

C07  Brianna M. Higgins, Nutrition and Kinesiology Major
      Jessica E. Baker, Nutrition Major
      ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
      Alternative Brownie Batters

C08  Tian Feng, Microbiology and Biochemistry Major
      ADVISOR(S): Donald J. Ferguson, Department of Microbiology
                    Dinesh Hariraju, Department of Microbiology
      Isolation and Characterization of Freshwater Methylo trophic Methanogens

C09  Rob Chapman, Speech Pathology and Audiology Major
      ADVISOR(S): Michael Bailey-Van Kuren, Department of Mechanical and Manufacturing Engineering
                    Donna R. Scarborough, Department of Speech Pathology & Audiology
      Analyzing Heart Rate Changes from a Hand Pressure Device for Altering the Gag Reflex

C10  Kathlyn M. Lee, Nutrition Major
      Erica M. Carneglia, Nutrition Major
      Madison D. Mercker, Nutrition Major
      ADVISOR(S): Sockju Kwon, Department of Kinesiology and Health
      Organic Peanut Butter vs. Processed Peanut Butter

C11  Sebastian M. Englert, Accountancy and Information Systems Major
      ADVISOR(S): Stephen E. Wright, Department of Statistics
      Blackjack: Exploring Hitting and Betting Strategies through Simulation

C12  Arthur A. Oliva, Microbiology Major
      ADVISOR(S): Paul K. Urayama, Department of Physics
                    Jeff Maltas, Department of Physics
      Shooting Lasers at Yeast: Using a Time-Gated Auto fluorescence Method to Quantify Biochemical Changes in Mitochondria

C13  Tori L. Seto, Chemistry Major
      ADVISOR(S): Benjamin W. Gung, Department of Chemistry and Biochemistry
      Study of the Substituent Effects on the Anti-oxidant Potential of Anthocyanidins

C14  Eileen T. Rintsch, Zoology and Environmental Earth Science Major
      ADVISOR(S): David Russell, Department of Biology
      Weather Dependence of Swainson’s & Grey-Cheeked Thrushes during Migration
C15  Rachel E. Mattox, Anthropology Major  
**ADVISOR(S):** Leighton C. Peterson, Department of Anthropology  
*Eating Your Words: A Discourse Centered Approach to Local and Organic Foodways*

C16  Megan C. Rigot, Kinesiology Major  
**ADVISOR(S):** Valerie A. Ubbes, Department of Kinesiology and Health  
*Parent Mediation and Interactions Between Oral Health and Nutrition Choices for Children*

C17  Kelli L. Peterman, Psychology Major  
**ADVISOR(S):** Kurt Hugenberg, Department of Psychology  
Elise M. Clerkin, Department of Psychology  
Paige Lloyd, Department of Psychology  
Marie Parsons, Department of Psychology  
*Social Anxiety and Lie Detection*

C18  Mary E. Parato, Business Economics Major  
**ADVISOR(S):** Gerald D. Granderson, Department of Economics  
*The Economics of the Pharmaceutical Industry*

C19  Kathleen R. Queenan, Biology and Spanish Major  
**ADVISOR(S):** Yoshinori Tomoyasu, Department of Biology  
Courtney Clark-Hachtel, Department of Biology  
*The Role of Knirps Family Genes in Beetle Wing Development*

C20  Madeline R. DiFilippo, Accountancy and Political Science Major  
Kayla N. Lawson, Supply Chain and Operations Management Major  
Matthew C. Rieger, Interdisciplinary Business Management and Marketing Major  
**ADVISOR(S):** Megan M. Gerhardt, Department of Management  
*Student Definitions of Success in Relation to Major and Gender*

C21  Gabriella M. Uli, Anthropology Major  
**ADVISOR(S):** Cameron M. Hay-Rollins, Department of Anthropology  
*Why Are Martial & Sport Metaphors Used in the Discourse on Physician-patient Relationships?*

C22  Megan M. Dunagan, Biochemistry Major  
**ADVISOR(S):** Gary A. Lorigan, Department of Chemistry and Biochemistry  
*Analyzing the Viability of Various Native Membrane Mimics for Membrane Proteins Using Site Directed Spin Labeling epr*

C23  Jeremy R. Phifer, Chemical Engineering Major  
**ADVISOR(S):** Andrew S. Paluch, Department of Chemical, Paper and Biomedical Engineering  
*Katharine E. Blodgett, Health Promotion Major  
Kimberly J. Solomon, Chemical Engineering Major  
Kayla L. Young, Chemical Engineering Major  
**ADVISOR(S):** Andrew S. Paluch, Department of Chemical, Paper and Biomedical Engineering  
*Predicting the Solubility of Nonelectrolyte Solids*

C24  Zach A. Troyer, Microbiology Major  
**ADVISOR(S):** Annette Bollmann, Department of Microbiology  
Ryann M. Brzoska, Department of Microbiology  
*The Effect of pH on the Growth Rate of Uranium-Tolerant Bacteria in Consortia*

C25  Abby M. Gilligan, Kinesiology and Nutrition Major  
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health  
*Incidence of Alcohol-Induced Amnesia and Drinking Behaviors Over Time*

C26  Kayla T. Orta, International Studies and Individualized Studies Major  
**ADVISOR(S):** Hays R. Cummins, Western Program  
Kevin C. Armitage, Western Program  
Xiuwu R. Liu, Western Program  
*Identity Creation Through Language: Linguistic Self-Perspectives of Second Language Learners*

C27  Lamuel D. Bean, Bioengineering Major  
Darren Wong, Biology Major  
**ADVISOR(S):** Joyce J. Fernandes, Department of Biology  
*Myogenesis In Drosophila*
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Presenter(s)</th>
<th>Major(s)</th>
<th>Advisor(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>C29</td>
<td>Abraham G. Moller</td>
<td>Chemistry and Microbiology Major</td>
<td>Michael W. Crowder, Department of Chemistry and Biochemistry, Mahesh K. Aitha, Department of Chemistry and Biochemistry</td>
<td>Understanding Antibiotic Resistance Through Spectroscopy: Probing NDM-1 Active Site Loop Dynamics With DEER</td>
</tr>
<tr>
<td>C30</td>
<td>Haley E. Donovan</td>
<td>Journalism and Individualized Studies Major</td>
<td>Glenn W. Muschert, Department of Sociology and Gerontology</td>
<td>Police-Generated Testimony and Juvenile Delinquency</td>
</tr>
<tr>
<td>C31</td>
<td>Marisa N. Murray</td>
<td>Psychology Major</td>
<td>Amy Summerville, Department of Psychology, Joshua P. Buchanan, Department of Psychology</td>
<td>The Impact of Self-Affirmation on the Experience of Regret</td>
</tr>
<tr>
<td>C32</td>
<td>Olivia M. Richter</td>
<td>Biology Major</td>
<td>Maria J. Gonzalez, Department of Biology</td>
<td>Interannual Variation in Larval Fish Abundance in an Ohio Reservoir</td>
</tr>
<tr>
<td>C33</td>
<td>Justin D. Skaggs</td>
<td>Geology Major</td>
<td>Jason A. Rech, Department of Geology and Environmental Earth Sciences, Terry W. Workman, Department of Geology and Environmental Earth Sciences</td>
<td>Quaternary Geology of the Whitewater River, Indiana</td>
</tr>
<tr>
<td>C34</td>
<td>Sarah L. Welton</td>
<td>Kinesiology Major</td>
<td>Cameron M. Hay-Rollins, Department of Anthropology</td>
<td>Explaining the Vaccination Trends: The Obligation to Become Vaccinated</td>
</tr>
<tr>
<td>C35</td>
<td>Matthew D. Mignery</td>
<td>Biochemistry and Pre-Professional Study Major</td>
<td>Richard C. Page, Department of Chemistry and Biochemistry, Mitchell A. Moseng, Department of Chemistry and Biochemistry</td>
<td>Mortalin Caught in Action: Structures of the Nucleotide Binding Domain in the apo, ADP-bound and AMP+PPi-bound States</td>
</tr>
<tr>
<td>C36</td>
<td>Danielle S. Oliver</td>
<td>Mechanical Engineering Major</td>
<td>Kumar V. Singh, Department of Mechanical and Manufacturing Engineering</td>
<td>Control Optimization of Structures Supported with Smart Viscoelastic Polymeric Materials</td>
</tr>
<tr>
<td>C37</td>
<td>Ethan G. Miller</td>
<td>Chemistry Major</td>
<td>Hong Wang, Department of Chemistry and Biochemistry</td>
<td>Synthesis and β-Substitution of Porphyrin as a Photosensitive Dye in Dye-Sensitized Solar Cells</td>
</tr>
<tr>
<td>C38</td>
<td>Joshua M. Ubbes</td>
<td>Kinesiology Major</td>
<td>Valerie A. Ubbes, Department of Kinesiology and Health</td>
<td>Pediatric Oral Health: A Comparative Study of the United States and the Developing Nation of Fiji</td>
</tr>
<tr>
<td>C39</td>
<td>Katherine F. Thomas</td>
<td>Health Promotion Major</td>
<td>Sherrill L. Sellers, Department of Family Studies and Social Work</td>
<td>Love and Honor: Club Sports Enhance the Miami Experience</td>
</tr>
<tr>
<td>C40</td>
<td>Marjorie K. Wimbish Sopher</td>
<td>History and Religion (Comparative) Major</td>
<td>Erik N. Jensen, Department of History, Liz Wilson, Department of Comparative Religion</td>
<td>The Role of Vedic Myths in the Construction of Queer Identities in Modern India</td>
</tr>
<tr>
<td>C41</td>
<td>Christina M. Stone</td>
<td>Psychology Major</td>
<td>Rose Marie Ward, Department of Kinesiology and Health</td>
<td>Examining the Interaction Between Personality and Drinking Motives in Predicting Drinking Problems of College Students</td>
</tr>
</tbody>
</table>
C42  Shengyi Yan, University Studies Major  
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health  
*Exploring Underage and Above-age Alcohol Consumption*

C43  Alan W. Hu, Zoology Major  
**ADVISOR(S):** Yoshinori Tomoyasu, Department of Biology  
David Linz, Department of Biology  
*The Dorsal Shield: a Quantitative Functional Analysis of the Beetle Specific Wings in Tribolium castaneum*

C44  Monica A. Scicolone, Psychology Major  
**ADVISOR(S):** Pirita See, Department of Psychology  
Paige Lloyd, Department of Psychology  
*Effect of Target Socioeconomic Status on Perceived Trustworthiness*

C45  Chiho Sugimoto, Biochemistry Major  
**ADVISOR(S):** Jennifer J. Quinn, Department of Psychology  
*The Effects of Inhibiting Microglial Activation on Pavlovian Conditioning on Rats*

C46  Sanjay V. Nevrekar, Engineering Physics Major  
**ADVISOR(S):** Jeong-Hoi Koo, Department of Mechanical and Manufacturing Engineering  
*Activation of Affordable Artificial Muscle Fibers*

C47  Denise E. Buenger, Kinesiology Major  
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health  
*The Influence of Excess Drinking on Health Behaviors Such as Sleep and Physical Activity according to the Transtheoretical Model*

C48  Mackenzie B. Howard, Psychology Major  
**ADVISOR(S):** Leonard J. Smart, Department of Psychology  
Henry Cook IV, Department of Psychology  
*Influence of Exploratory Behavior on Tele-Navigation*

C50  Amanda M. Smith, Comparative Religion Major  
**ADVISOR(S):** John-Charles Duffy, Department of Comparative Religion  
*Religion and Empire of the United States*

C51  Seth A. Boda, Anthropology Major  
**ADVISOR(S):** James S. Bielo, Department of Anthropology  
*Reproduction of Religious Practices and Values in the Town of Memuro Japan*

C52  Manisha P. Reddy, Political Science Major  
**ADVISOR(S):** Cameron M. Hay-Rollins, Department of Anthropology  
*Grace Hill Centers: The Struggles of a Healthcare Clinic to Offer Care in an Impoverished Urban Environment Despite a For-Profit Status*

C53  Dana L. Manson, Psychology Major  
Brianne L. Safer, Psychology Major  
**ADVISOR(S):** Amanda Diekman, Department of Psychology  
Aimee L. Belanger, Department of Psychology  
Melissa A. Fuesting, Department of Psychology  
*Communal Goal Process in STEM*

C54  Kenneth Peter York, Biochemistry Major  
**ADVISOR(S):** Michael L. Robinson, Department of Biology  
Thanh V. Hoang, Department of Biology  
*Presentation of Pax6 Cre Phenotype on Rosa Background Compared with LeCre*

C55  Alyssa T. Skijus, Health Promotion Major  
Anna G. Lamb, Kinesiology Major  
Brittany C. Brown, Kinesiology Major  
**ADVISOR(S):** Sockju Kwon, Department of Kinesiology and Health  
*Body Image Perception Among Miami University Students*

C56  Preston K. Ross, Physics Major  
**ADVISOR(S):** Samir Bali, Department of Physics  
Ethan R. Clements, Department of Physics  
Shan Zhong, Department of Physics  
*Building an Atom Cooling Laboratory*

C57  Renate Gyenge, Zoology Major  
Michael L. Thomas, Psychology and Pre-Professional Study Major  
**ADVISOR(S):** Tracy L. Haynes, Department of Biology  
*Pi3K Induces Retinal Regeneration*
C58  Hillary S. Swift, Health Promotion Major  
**ADVISOR(S):** Valerie A. Ubbes, Department of Kinesiology and Health  
School-University-Community Partnerships for Gardening: Teaching the Value of Fresh Foods for Child Health

C59  Briana E. Vamosi, Chemistry and Pre-Professional Study Major  
**ADVISOR(S):** Burcin S. Bayram, Department of Physics  
Two Photon Excitation of the Diatomic Molecule Iodine

C60  Taylor R. Myers, International Studies and Environmental Earth Science Major  
**ADVISOR(S):** Jonathan Levy, Department of Geology and Environmental Earth Science  
Infrastructure and Policy Deficiencies in New and Developing Countries

C61  Dorothy Amofa, Biology Major  
**ADVISOR(S):** Brian Keane, Department of Biology  
Remolding of Heart Valve Extracellular Matrix under Hypoxia

C62  Catherine E. Puleo, Chemical Engineering Major  
Tyler P. Hammerle, Chemical Engineering Major  
Kimberly J. Solomon, Chemical Engineering Major  
Elizabeth M. Kinkopf, Bioengineering Major  
**ADVISOR(S):** Catherine Almquist, Department of Chemical, Paper and Biomedical Engineering  
Vincent Hand, Institute for the Environment and Sustainability  
Design and Implementation of a Stormwater Management System at Carstar in Oxford Ohio

C63  Michael H. Grentzer, Geology and Biology Major  
**ADVISOR(S):** Ellen Currano, Department of Geology and Environmental Earth Sciences  
Microtaxonomic Guide to Fossil Cuticle

C64  Emily L. Morris, Statistics Major  
**ADVISOR(S):** Thomas J. Fisher, Department of Statistics  
Modeling and Detecting Changes in Water Quality of a Midwest Watershed

C65  Rachel E. Stock, Psychology Major  
Shannon T. Palmer, Psychology and Social Work Major  
Yuhe Gao, Psychology Major  
**ADVISOR(S):** Pirita See, Department of Psychology  
Paige Lloyd, Department of Psychology  
Makeup in the Workforce

C66  Lydia M. Linton, Health Promotion Major  
**ADVISOR(S):** Valerie A. Ubbes, Department of Kinesiology and Health  
Cultivating Fruit & Vegetable Gardening for Public Health: Service Providers & Distribution Networks in the Oxford Community

C67  Nathan D. Fister, Zoology Major  
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health  
Alcohol and Fighting

C68  Cameron Lynn McGlone, Biochemistry Major  
**ADVISOR(S):** Richard C. Page, Department of Chemistry and Biochemistry  
Rebecca M. Falatach, Department of Chemical, Paper, and Biomedical Engineering  
Protein gRAFTing: a RAFT Polymerization Strategy for Grafting-to and Grafting-from Proteins

C69  Dana M. Nocera, Kinesiology Major  
**ADVISOR(S):** Rose Marie Ward, Department of Kinesiology and Health  
The Relationship between Blacking Out and Gulping Drinks for Female College Students

C70  Blake J. Raser, Biology and Microbiology Major  
**ADVISOR(S):** Michael L. Robinson, Department of Biology  
Designing an In Vitro Assay for Transdifferentiation of Neural Retina to RPE in Mouse ES Cells

C71  Allison Z. Peguero, Biochemistry Major  
**ADVISOR(S):** Jennifer J. Quinn, Department of Psychology  
Does Dysregulated Basal Corticosterone Secretion Explain the Enhancement in Fear Conditioning Following Early Life Stress?
C72  Kaitlyn E. Gilfert, Speech Pathology and Audiology Major
ADVISOR(S): Amber D. Franklin, Department of Speech Pathology and Audiology
Kara Oksanen, Department of Speech Pathology and Audiology
Accented Vowels Rated by Naive and Aware Listeners

C73  Benjamin P. Meacham, Microbiology Major
ADVISOR(S): Mitchell F. Balish, Department of Microbiology
Nicole Marotta, Department of Microbiology
Rachel Pritchard, Department of Microbiology
Purification and Preliminary Characterization of Mycoplasma pneumoniae Soj, a Putative Chromosome Segregation Protein

C74  Charlie Liu, Mathematics Major
ADVISOR(S): Anna Ghazaryan, Department of Mathematics
Stephen P. Colegate, Department of Statistics
Mathematical Models for the Dynamics of Drug Use

C75  Alexis M. Monti, Kinesiology Major
ADVISOR(S): Dawn M. Blitz, Department of Biology
Improving Long-distance Anatomical Tracing of Sensory Neurons in the Crab, Cancer borealis

C76  Curtis A. Mazzaferri, Biology Major
ADVISOR(S): Paul A. Harding, Department of Biology
Detection of Genetically Modified Organisms through Polymerase Chain Reactions: Surveying Trends in Papaya Carica

C77  Cassandra E. Worner, Microbiology Major
Ellen E. Hancock, Speech Pathology and Audiology Major
ADVISOR(S): Kathleen A. Killian, Department of Biology
Heather M. Charles, Department of Biology
Effect of Cold Shock on Insect Immune Function and Behavior

C78  Connor S. Morris, Supply Chain and Operations Management Major
Calyn E. Russo, Finance Major
ADVISOR(S): Megan M. Gerhardt, Department of Management
The Effectiveness of Online Classes

C79  Jacqueline R. Vance, Middle Childhood Education Major
Alexis A. Albro, Computer Engineering Major
Rachel E. Anderson, Bioengineering Major
Michael A. Armstrong, Mechanical Engineering Major
Nathanael A. Bell-Pactat, Physics Major
Matthew B. Berkozvit, University Studies Major
Bradley B. Bogner, Computer Engineering Major
Kali B. Boyd, Mechanical Engineering Major
Andrew C. Bracey, Mechanical Engineering Major
Parker N. Brown, Chemical Engineering Major
Christopher A. Burke, Mechanical Engineering Major
Rachel L. Cabosky, General Engineering Major
Samuel A. Camiener, Mechanical Engineering Major
Megan M. Campbell, Computer Science Major
Andrew M. Cannata, Kinesiology Major
Raquel R. Carrera, Psychology Major
Mwoyo Z. Chinoda, Engineering Management Major
Joe S. Conjeriti, Bioengineering Major
Nicholas W. Cruz, Mechanical Engineering Major
Stephanie M. Domijan, Mechanical Engineering Major
Lexie A. Eagleson, Computer Science Major
Joseph J. Engelhardt, Mechanical Engineering Major
Ramon R. Ferreira da Silva, University Studies Major
Murilo M. Ferreira Lopes, University Studies Major
Kevin S. Fisher, Mechanical and Manufacturing Engineering Major
Nicole B. Fisher, Business Economics and Engineering Management Major
Mary R. Floren, Computer and Electrical Engineering Major
Matthew R. Gardner, Computer Science Major
Sam J. George, Biochemistry Major
Kaitlyn M. Gilha, Mechanical Engineering Major
Jim D. Gorjup, Chemical Engineering Major
Kelsey E. Groll, General Engineering Major
Scott S. Gscheidle, Mechanical Engineering Major
Burke B. Halderman, Mechanical Engineering Major
Summer B. Hashamoun, Software Engineering Major
Chloe E. Hazen, Chemical Engineering Major
Justin M. Helbling, Finance Major
Andrew N. Hernandez, Biology and Premedical Studies Major
Ryan M. Hesker, Mechanical Engineering Major
Ali A. Hosseinarab, Computer Engineering Major
Nathaniel W. Howes, University Studies Major
Nicole G. Hoyer, Political Science Major
Sam A. Hudson, Chemical Engineering Major
Lashawn M. Huey, Mechanical Engineering Major
Emily E. Hughes, Software Engineering Major
Bradley A. Hurst, Mechanical Engineering Major
Mark W. Hutchinson, Computer Engineering Major
Austin M.A. Jenkins, Computer Engineering Major
Anna L. Johnson, Mechanical Engineering Major
Shaniel A. Katariwala, Mechanical Engineering Major
Andrew M. Kirkham, Marketing Major
Brett C. Kloc, Chemical Engineering Major
Pravali P. Kothakota, University Studies Major
Emma N. Kunimoto, Mechanical Engineering Major
Emory J. Landreville, Computer Engineering Major
Austin J. Lowder, Electrical Engineering Major
Evan J. Lynch, Electrical Engineering Major
Morgan R. Markins, University Studies Major
Wellerson M. Melo Mota, University Studies Major
Daniel L. Morgan, Mechanical Engineering Major
Wendy Y. Nguyen, Marketing and Bioengineering Major
Kevin K. Noriega, Mechanical Engineering Major
Ruth A. Payne, Engineering Management Major
Daniel C. Pfeil, University Studies Applied Science Major
Aryelle L. Player, Engineering Management Major
Kaitlin K. Radiyovevich, Marketing Major
Anthony M. Roberto, Mechanical Engineering Major
Colin M. Roblin, Mechanical Engineering Major
Tyler A. Rus, General Engineering Major
Kyle W. Russ, Mechanical Engineering Major
Karan K. Sachdeva, Mechanical Engineering Major
Harleen K. Sarkaria, University Studies Major
Christian P. Schafer, Mechanical Engineering Major
Matt J.S. Serio, Mechanical Engineering Major
Thomas J. Shanley, Economics Major
Kyle W. Siegrist, Mechanical Engineering Major
Lindsay N. Silver, Mechanical Engineering Major
Christopher E. C. Smitherman II, Mechanical Engineering Major
Alexis D. Sondej, Strategic Communication Major
Chad A. Sonkin, Sport Leadership and Management Major
Mikayla N. Sprague, Mechanical Engineering Major
Alex L. Staron, Physics Major
William A. Talkington, Mechanical Engineering Major
Nathan G. Tawney, Mechanical Engineering Major
Ale andre P. Tessier, Electrical Engineering Major
Coleton M. Towles, Biochemistry and Premedical Studies Major
Stephanie C. Wade, Electrical Engineering Major
Alex T. Waldherr, Microbiology and Premedical Studies Major
Yue Y. You, Engineering Management and Manufacturing Engineering Major
Sara M. Zanfardino, Biochemistry Major
Malachi C. Zeitner, Zoology and Premedical Studies Major

ADVISOR(S): Bob Setlock, College of Engineering and Computing
Jacqueline R. Vance, Middle Childhood Education Major
Creativity Focused Learning - Project High Flight

C80 Kelsey M. Godfroy, Biology Major
Faye L. Kennedy, Biology Major
ADVISOR(S): Kenneth J. Oswald, Department of Biology
Gene Surfing in Western Corn Rootworm (Diabrotica virgifera virgifera)

C81 Emily J. Meyers, Biology and Medical Laboratory Science Major
Pauline A. Shih, Medical Laboratory Science and Biology Major
Stefanie L. Day, Microbiology Major
Nicholas E. Greene, Medical Laboratory Science Major
ADVISOR(S): Marcia R. Lee, Department of Microbiology
Investigational Effects of Environment on Growth and Infective Potential of Pseudogymnoascus destructans
C82  Rebecka J. Mock, Anthropology and Classics Major
Daniel T. McClurkin, English Literature and Anthropology Major
ADVISOR(S): Jeb J. Card, Department of Anthropology
Provenience, Preservation, and Analysis of Special Collections Artifacts

C83  Rebecca Wesseh, Psychology Major
Avicia N. Rodgers, Psychology Major
Aimee E. Miley, Psychology and Family Studies Major
Nora R. McVey, Family Studies Major
Trung-Nguyen Nguyen, Political Science Major
ADVISOR(S): Katherine A. Kuvalanka, Department of Family Studies and Social Work
Molly K. Gardner, Department of Family Studies and Social Work
Interacting with Schools: Experiences of Parents with Transgender and Gender-Creative Children

C84  Ethan E. DeVillez, Biology Major
Wyatt S. Dixon, Zoology Major
Steven B. Lemp, Biology Major
Elizabeth M. Lovinggood, Urban and Regional Planning and Sustainability Major
ADVISOR(S): Kenneth J. Oswald, Department of Biology
Thomas E. Peterson, Department of Biology
Ecological Niche Model for Tonguetied Minnow (Exoglossum laurae) of the Great Miami River

C85  Mary M. Martin, Social Work Major
Antoinette R. Lentz, Family Studies and Sociology Major
Kaylie L. Kawamura, Family Studies Major
Lindsay C. Clark, Zoology Major
Sarah K. Rich, Biology Major
Rachael A. Herriman, Biology Major
Briana L. Deer, Zoology Major
ADVISOR(S): Elise Radina, Department of Family Studies and Social Work
Family Quality of Life in the Context of Childhood Cancer Survivors Diagnosis and Treatment: Perspective on Childhood Survivors

C86  Jana M. Cable, Microbiology Major
Martha L. Carter, Microbiology Major
Elsa C. Clenny, Microbiology Major
Justin T. Crookes, Biology Major
Rachana Gollapudi, Biology Major
Sarah K. Hiner, Medical Laboratory Science Major
Pierce N. Kurek, Microbiology Major
Ciara R. Lawson, Microbiology Major
Geneva H. Mommsen, Zoology Major
Svitlana A. Podolyan, Biology Major
Leah N. Stetzel, Microbiology Major
Julie M. Donna, Microbiology Major
ADVISOR(S): Iddo Friedberg, Department of Microbiology
Gary R. Janssen, Department of Microbiology
Mitchell F. Balish, Department of Microbiology
Ryann M. Brzoska, Department of Microbiology
Gabrielle M. Lopez, Department of Microbiology
David C. Ream, Department of Microbiology
Dmpstr Diving: It’s Just a Phage

C87  Brandon C. Lewis, Zoology and Biochemistry Major
Kenna N. Koehler, Biochemistry Major
ADVISOR(S): Paul J. Schaeffer, Department of Biology
Cardiac Hypertrophy in the Mouse Heart
RECOGNITION:

Miami Mentors Engaging Students in Research

By Martha E. Weber

Undergraduate Research Coordinator Office for the Advancement of Research and Scholarship

In his September 6, 2012 Annual Address President Hodge expressed his core vision for Miami to “Provide the best undergraduate experience in the nation, enhanced by superior, select graduate programs. This vision recognizes that everything that happens at Miami affects what our students experience and how they succeed.”

For over two decades, the opportunity for Miami students to engage in mentored research has provided experiences that affect student success. Miami’s Annual Undergraduate Research Forum began as a university-wide fete of student accomplishments through commitment to faculty-mentored research. Today and throughout the year, we hope you will take a few moments to recognize the truly amazing contributions from our dedicated faculty and staff who consistently include students in these crucial research partnerships that explore the process of learning. The mentors we recognize in this publication represent a small portion of faculty and staff providing research experiences inside and outside the classroom.

Today’s festivity displays the strong commitment of Miami faculty to provide hands-on interactions with students in the role of teacher-mentor. This emphasis on personal attention from faculty and graduate students draws incoming students to examine the possibility of how to get started in research and invites upper class students to continue research involvement throughout their academic career. Guided by the vision of President Hodge’s Student as Scholar framework (2008), Miami students are encouraged to seek research experiences to pique their intellectual curiosity. Through this process students begin to recognize this high impact educational experience provides an intellectual space to examine the process required to become a scholar.

Today’s academic setting displays student scholarly achievements and provides an opportunity to enjoy hearing our students articulate the meaning of these hands-on research experiences. Our student presenters represent a wide range from first year researchers through seniors who are in various stages of developing their identity as a student scholar. During your visit to the oral and poster sessions we invite you to chat with them about their unique experiences. As you may expect many of the students will tell you how these experiences fosters their critical thinking skills and challenged them to build communication and leadership skills. Dig a little deeper and you will hear these student researchers admiration for the mentors who challenge them to transform to “student as learner” and to aspire to the goal of “student as scholar”.


RESEARCH MENTORS

2015 Undergraduate Research Forum

American Studies Program
Sheila Croucher
Kimberly Hamlin
Peggy Shaffer
Helen Sheumaker

Anthropology
James S. Bielo
Jeb J. Card
Perry L. Gnivecki
Cameron Hay-Rollins
Linda F. Marchant
Leighton C. Peterson
Mark Peterson
Scott A. Suarez

Architecture and Interior Design
Ben Jacks

Biology
Karla Barbosa
Joseph M. Baumgartner
David J. Berg
Dawn M. Blitz
Kaitlin U. Campbell
Lacey D. Campbell
Ferran B. Castells
Blake R. Chaffee
Heather M. Charles
Courtney Clark-Hachtel
Thomas O. Crist
Katia Del Rio-Tsonis
Kelsea N. Downs
Erika Grajales-Esquível
Nancy Echeverri
Joyce J. Fernandes
Maria J. Gonzalez
Paul G. Harding
Tracy Haynes
Thinh V. Hoang
Susan M. Hoffman
Lori G. Isaacson
Paul F. James
Brian Keane
Kathleen A. Killian
Lesley B. Knoll
Chun Liang
David M. Linz
Agustin Luz-Madrigal
Michael B. Mahon
Michael J. Minnick
Kenneth Owsald
Jeremy S. Papuga
Valerie Peters
Thomas E. Peterson
Michael L. Robinson
Amber M. Rock
David Russell
Ann L. Rypsra
Paul J. Schaeffer
Mollie R. Sorrell
Sreeksandarajan Sutharzan
Yoshinori Tomoyasu
Michael J. Vanni
Ashley D. Walters

Chemical, Paper and Biomedical Engineering
Catherine Almquist
Rebecca M. Falatach
Andrew S. Paluch
Amy M. Yousefi

Chemistry and Biochemistry
Mahesh K. Aitha
Richard L. Bretz
Stacey Lowery Bretz
Michael W. Crowder
Kelli R. Galloway
Benjamin W. Gung
Ann E. Hagerman
Jordan T. Hashman
Michael R. Holmes
Christopher D. James
Gary W. Lorian
Janet L. Marshall
Mitchell A. Moseng
Richard C. Page
Jon P. Scaffidi
David Tierney
Hong Wang
Ellen Yezierski
Hongfu Zhang

College of Engineering and Computing
Bob Setlock

Comparative Religion
John-Charles Duffy
Liz Wilson

Computer and Information Technology
Krishnendu Ghosh

Economics
Gerald D. Granderson

Educational Psychology
Sarah J. Watt

English
Joseph Bates

Entrepreneurship
Brett R. Smith

Family Studies and Social Work
Molly K. Gardner
Elise Radina
Katherine Kuvalanka
Sherrill Sellers

Geography
Amelie Y. Davis
Kimberly Medley
Stanley W. Toops

Geology and Environmental Earth Science
Ellen D. Currano
Brian S. Currie
Tammie Gerke
Jonathon Levy
Jason Rech
Terry W. Workman

German, Russian, Asian & Middle Eastern Languages and Cultures
John Jeep
Terry Park

History
Elena Albarran
Andrew Cayton
Erik Jensen
Johanna Moyer
Marsha Robinson
Yihong Pan
RESEARCH MENTORS

2015 Undergraduate Research Forum

Information Systems and Analytics
Jeffrey W. Merhout
Rachael Morgan-Kiss
Nicole Marotta
Rachel Pritchard
David C. Ream
Christopher Sedlacek
Amber G. Teufel

Institute for the Environment and Sustainability
Thomas O. Crist

International Studies Program
Ted C. Holland
Tammy Kernodle

Kinesiology and Health
Helanie Alessio
William P. Berg
Ron Cox
Sockju Kwon
Beth Miller
Valerie Ubbes
Rose Marie Ward

Management
Megan M. Gerhardt

Marketing
Terri F. Barr
Devon S. DelVecchio
Sanjay Puligadda
Janice E. Taylor

Mathematics
Anna Ghazaryan
Nirmala Naresh

Mechanical and Manufacturing Engineering
Michael Bailey-Van Kuren
Jeong-Hoi Koo
Kumar V. Singh

Microbiology
Mitchell F. Balish
Annette Bollmann
Eileen Bridge
Ryan M. Brzoska
Donald J. Ferguson
Natasha Finley
Iddo Friedberg
Dinesh Hariraju
Gary R. Janssen
Marcia R. Lee
Gabrielle M. Lopez

Music
Tammy Kernodle

Nursing
Joan Fopma-Loy
Jennifer L. Rode

Physics
Stephen G. Alexander
Samir Bali
Burcin Bayram
Jennifer Blue
Ethan R. Clements
Richard A. Jackson
Mahmud U. Khan
Jeffrey Maltas
Paul K. Urayama
Karthik Vishwanath

Psychology
Aimee L. Belanger
Joshua P. Buchanan
Henry Cook IV
Elise M. Clerkin
Amanda Diekman
Christina Fitzpatrick
Melissa A. Fuesting
Carrie E. Hall
Alexandra C. Hummel
Kurt Hugenberg
Vrinda Kalia
Elizabeth Kiel Luebbe
Bethany L. McCord
Jamie L. Pierson
Daniel E. Kochi
Jonathan Kuntsman
Aaron Luebbe
Paige Lloyd
Allen R. McConnell
Barbara B. Oswald
Marie Parsons

Sociology and Gerontology
Kristen M. Budd
Rodney D. Coates
Kate de Medeiros
Jennifer M. Kinney
Glenn W. Muschert

Spanish and Portuguese
Shelley Bromberg Jarrett
Julie A. Szucs

Speech Pathology and Audiology
Susan Baker Brehm
Amber D. Franklin
Lindsey N. Mallon
Kathleen Hutchinson Marron
Kara Oksanen
Donna R. Scarborough
Cara B. Werner

Statistics
Stephen P. Colegate
Thomas J. Fisher
Stewart Wright

Teacher Education
Lena Lee

Western Program
Hays R. Cummins
Kevin C. Armitage
Jacqueline Johnson
Xiuwu R. Liu
The Office of the Provost and funds from individual gifts and grants to various departments across Miami University support Miami students’ exploration of research.

**Office of Research for Undergraduates Established fall 2014**

In fall 2014 Miami celebrated the opening of the new Office of Research for Undergraduates (ORU) in King Library. Joseph Johnson, Naus Family Faculty Scholar and Professor of psychology, leads the newly formed office as it begins marketing research programs and helping coordinate research activity by undergraduates.

The ORU encourages new students and current students to embrace a desire to engage in research. We are proud to champion the vision, marketing, and coordination of research by undergraduates at Miami with research-active faculty and staff. The ORU focuses on increasing and diversifying participation in research and creative efforts, increasing the overall quality of undergraduate research at Miami, and introducing new programs and initiatives to further develop the research skills of undergraduates.

**ORU Student Services**

- Assisting with the identification of appropriate funding opportunities for student-led research
- Offering clear routes to research opportunities for our undergraduates, both at Miami as well as across the nation (e.g. summer programs, internships)
- Consulting with individuals and student teams to assist in the design, development, and execution of research projects
- Working with other offices to develop training opportunities, such as proposal-writing workshops with the Howe Writing Center

**ORU Director’s Mission**

- Develop a strategic plan and objectives for sustaining strong research efforts, increasing activity in underutilized fields and disciplines, and improving the overall quality of research involving undergraduates
- Identify curricular needs to promote research by undergraduates and generate cost-effective ways to address those needs
- Identify and secure funding for research by undergraduates and research-related professional development for faculty, graduate students, and staff
- Promote and publicize the achievements of undergraduate research efforts to the Miami community, prospective students and family members, alumni, professional organizations, funding agencies, and others.

Divisional and Departmental web sites also offer information on research in specific departments with research active faculty. Information on university-wide programs is available at: [www.MiamiOH.edu/oru](http://www.MiamiOH.edu/oru)
Undergraduate Research Opportunities

College of Arts and Science Dean’s Scholars Program

Undergraduates who have exhibited excellence in the classroom and the ability to take on the extra challenges of research and scholarly work may be invited to participate in a Dean’s Scholar Program within their division. Individual departments develop their own criteria for selecting scholars, but those selected must have conceived and proposed a project that is endorsed by a faculty mentor. During the senior year, Dean’s Scholars conduct independent study with a departmental mentor. The scholar and the mentor each receive a professional expense stipend. Students conduct the study under the individual department’s independent study or departmental honors course numbers, thereby earning academic credit for the project. Dean’s Scholars projects culminate in significant work of scholarship aimed towards national/international publication/performance/dissemination. For more information, contact the chair of your College of Arts and Science department.

Doctoral-Undergraduate Opportunities for Scholarship (DUOS)

Miami’s DUOS program heightens the synergy between our graduate and undergraduate programs. Sponsored by The Graduate School and the Office of Advancement of Research and Scholarship, in partnership with Miami’s Preparing Future Faculty initiative, DUOS enables Miami undergraduates to do research or other creative activities guided by a talented graduate student mentor. Either graduates or undergraduates may initiate applications, but the undergraduate student is to have intellectual ownership of the project. Publication of research results is expected, and funds are awarded to the undergraduate and doctoral student for use in the research project. Any Miami University undergraduate student and any post-master’s doctoral student in good standing may apply to participate.

Honors and Scholars Program

Miami’s Honors and Scholars Program supports and provides opportunities for academically motivated students who want a highly challenging and intellectually enriched learning environment. The program emphasizes student discussion, intellectual exchange, reflection, and other active learning. Honors and Scholars students have frequent contact with faculty; many complete research or other projects working closely with a faculty mentor. Other opportunities available to Honors and Scholars students include study abroad, funding for research and travel, internships, and social and cultural activities. The Honors and Scholars community is comprised of students from all divisions and majors at the University. For more information on Honors and Scholars, www.honors.MiamiOH.edu/

Hughes Medical Institute Summer Research Internships

Named for the original sponsoring foundation, the Hughes Summer internships are available for undergraduates interested in the biomedical sciences. Approximately 15 internships per year for Miami University students are supported with funds from the College of Arts and Science. Students in this program work with Miami faculty from the departments of botany, chemistry, microbiology or zoology. The internship is 10 weeks and carries a participant stipend and provides twelve semester hours of credit will be earned and tuition costs (but not general fees) are waived.
**Maher Zouhary Undergraduate Research Awards**

The Maher Undergraduate Research Awards are given every year to a student majoring in either political science and/or zoology. The program was established in 1980 with a gift from alumna Kathleen Maher Zouhary. Students who wish to apply for this award must submit through the Undergraduate Research Award Program sponsored by the Undergraduate Research Committee of the University Senate.

**Miami University First Year Research Experience (FYRE)**

Miami’s Office of Research for Undergraduates sponsors the First Year Research Experience (FYRE) Program. Over 350 Miami students have participated in the program since 2009.

We thank the Office of the President and Provost for providing start up funding and continued support for this research rich experience. Our heart-felt appreciation to those who developed this program to address the President’s 5-year strategic goals for advancing the academic success of students and raising the level of scholarly accomplishments. In addition, the FYRE program thanks faculty mentors from a wide variety of disciplines who volunteer to work with these first year students. The FYRE mentors embrace Miami’s focus on student-centered learning.

The program aims to impact achievement and retention of students through involvement in research and inquiry at the very start of their college experience. The program engages students in meaningful relationships with Miami faculty, graduate students and their peers outside of the traditional classroom setting.

FYRE course instructors guide the student in hopes of pairing the student with a faculty mentor who will engage the student in some aspect of the faculty research during both semesters. The student may earn one hour of independent study credit each semester for devoting 4-6 hours per week to the faculty project.

Joining the program requires a two-semester commitment from the student who must agree to: enroll in the 1-credit seminar each semester and dedicate 4-6 hours per week to a faculty-mentored research project. Using the discovery and inquiry-based learning approach, the seminar is designed to push students beyond their desire to gain information from external authorities. Seminar topical coverage includes library research techniques; research ethics and human subjects; organizational strategies for college researchers; literature reviews, research annotations and abstracts; leadership and communication skills; quantitative and qualitative research techniques; statistical software; research careers and professional development; learning plans, personal mission statements and goal setting; proposal writing and poster development and presentation.

**Scholastic Enhancement Program - Undergraduate Research Option**

FRYE/URO (Undergraduate Research Option) is a living, learning research community open to first-year students who are part of the Scholastic Enhancement (SEP) program. It is a small community of students who live together in a common first-year residence hall. Each student is paired with a faculty sponsor who engages the student in some aspect of his/her research. The mission of the undergraduate research option is to improve the achievement and retention of SEP students in a residential setting through research partnerships with faculty during their first year at Miami University.
Undergraduate Research Award Program

Open to students from all disciplines, the Undergraduate Research Award Program exists to encourage small-scale independent research projects by Miami undergraduate students. The goal of the program is to foster discovery and creativity while providing students an opportunity to work through the process of applying for grant funding. To enhance the learning experience of preparing these small grant applications, the steps and processes involved have been purposely designed to mimic those generally required when submitting standard grant applications to federal, state and/or private foundations. The Undergraduate Research Committee of the University Senate reviews proposals and distributes funds from Provost’s Office as small grants. Approximately 100 projects are supported yearly with awards up to $1,000. The aim and result of projects supported by the program may be modest as long as the work can reasonably be interpreted as research or a creative endeavor. Although projects must be initiated and developed by student applicant(s), a faculty member must also sponsor each. Program information is available at: www.MiamiOH.edu/oru

Undergraduate Summer Scholars Program

Miami’s nationally-recognized program offers a premier undergraduate research experience. The USS initiative heightens the intellectual challenge of the learning environment at Miami University by supporting students in research or other creative activities during the summer under the supervision of faculty. Funds from the Provost’s Office make 100 awards available per year. Each award includes a stipend for the student, a student allowance for supplies and services, 6 credit hours with academic fees waived, plus a faculty mentor allowance. Open to students from all disciplines, the focus of this 9-week summer program is the individual student/faculty mentor relationship. Applications by individual student/faculty pairs form the basis for subsequent allocation of USS positions to departments. Although coordinated by the Office of Research for Undergraduates (ORU), departments are primarily responsible for selecting particular student/faculty projects, approving those projects for academic credit, and evaluating the student experiences. For more information go to: www.MiamiOH.edu/oru
Acknowledgements

Undergraduate Research Forum Planning Committee Members:

Graduate School and Office for Advancement of Research and Scholarship and Office of Research for Undergraduates

James T. Oris, Joseph G. Johnson, Martha E. Weber, Valerie O. Robinson

The UR Forum planning committee comes together each year to invite the community to celebrate the research, scholarship and creative activities of our students. We appreciate the yearlong efforts and support of all of the mentors, departments, programs, and divisions who engage with students to foster creativity and research.

The committee would also like to express our sincere appreciation to Valerie Robinson (Graduate School), and the many faculty, graduate students and staff members whose continued commitment to serve as moderators for the oral presentation format fosters undergraduate research and inquiry. The UR Forum planning committee commends the exemplary efforts of Martha E. Weber, Undergraduate Research Coordinator in the Office of Research for Undergraduates for the many hours of work to manage the details of this signature event.

Our special thanks to the dedicated staff members and students who contribute so much to this event:
• Technical Staff Supporting the Oral Presentations: Guy Moore, Larry Downes
• Staff members: Lou Ann Haines, Vanessa Gordon, Jennifer Sutton, and Valerie Robinson
• Miami’s Trucking and Physical Facilities staff members delivering the poster boards
• Shriver Center Staff members: Neila Hanges and Jim Baker, Dennis Brown and their crew.
• Project High Flight Team for their assistance with the poster session set up.

Undergraduate research at Miami is funded in part by the following contributors:

Arnold and Mabel Beckman Foundation
Clark Crannell Research Award Fund
Edward Kezur Scholarships
Garden Club of Ohio
Gary W. Barrett Research Award Fund
Goldie Nott Student Research Fund
James E. Bever/David M. Scotford Laboratory Research Fund
J. Beldon Dennison Scholar Room Fund
Joseph F. Hogan Research Scholar Fund
Kettering Fund
Madeleine and George Shetler Diabetes Research Award Fund
Marjorie C. Britton Fund
Miami Honors Program Student Initiative Fund
Miami Provost Office
Nancy Anderson Brown Honors Program Fund
Susan Roberson Wilson Fund
William Borchers Fund
William and Caroline Stevenson Research Scholar Fund
William Turrell Herbarium Fund
The Cleveland Foundation
The E.F. and Fern F. Patten Student Research Fund
The Gund Foundation
The Ohio Board of Regents

To support undergraduate research at Miami, please contact:
Miami University, Director of Development • 725 East Chestnut • Oxford, OH 45056
Phone: (513) 529-1230 • Fax: (513) 529-1466 • Email: MUDevelopment@MiamiOH.edu
As a courtesy to the oral presenters, please enter the sessions during the 15-minute break and stay for entire oral session that begins on the hour.

<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
<th>Break Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Session I</td>
<td>9:00 – 9:45 a.m.</td>
<td>9:45 a.m.</td>
</tr>
<tr>
<td>Oral Session II</td>
<td>10:00 – 10:45 a.m.</td>
<td>10:45 a.m.</td>
</tr>
<tr>
<td>Oral Session III</td>
<td>11:00 – 11:45 a.m.</td>
<td></td>
</tr>
<tr>
<td>Oral Session IV</td>
<td>1:30 – 2:15 p.m.</td>
<td>2:15 p.m.</td>
</tr>
<tr>
<td>Oral Session V</td>
<td>2:30 – 3:15 p.m.</td>
<td>3:15 p.m.</td>
</tr>
<tr>
<td>Oral Session VI</td>
<td>3:30 – 4:15 p.m.</td>
<td></td>
</tr>
</tbody>
</table>

Poster presenters will be with their poster during their assigned time.

**Session A** (10:00 – 11:30 a.m.)  **Session B** (1:30 – 2:45 p.m.)  or  **Session C** (3:00 – 4:30 p.m.)

Poster* = primary presenter

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Type</th>
<th>Poster Session</th>
<th>Poster Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abshire</td>
<td>Chelsea</td>
<td>Poster*</td>
<td>A</td>
<td>20</td>
</tr>
<tr>
<td>Adkins</td>
<td>Haley</td>
<td>Poster*</td>
<td>A</td>
<td>85</td>
</tr>
<tr>
<td>Albro</td>
<td>Alexis</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Alley</td>
<td>Zachariah</td>
<td>Poster*</td>
<td>B</td>
<td>68</td>
</tr>
<tr>
<td>Alvarez</td>
<td>Sydney</td>
<td>Poster*</td>
<td>B</td>
<td>49</td>
</tr>
<tr>
<td>Amer</td>
<td>Lana</td>
<td>Poster*</td>
<td>B</td>
<td>33</td>
</tr>
<tr>
<td>Amofa</td>
<td>Dorothy</td>
<td>Poster*</td>
<td>C</td>
<td>61</td>
</tr>
<tr>
<td>Anderson</td>
<td>Brittany</td>
<td>Poster*</td>
<td>A</td>
<td>37</td>
</tr>
<tr>
<td>Anderson</td>
<td>Rachel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Anderson</td>
<td>Jessica</td>
<td>Poster</td>
<td>B</td>
<td>63</td>
</tr>
<tr>
<td>Andler</td>
<td>Erika</td>
<td>Poster</td>
<td>A</td>
<td>39</td>
</tr>
<tr>
<td>Armstrong</td>
<td>Michael</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Arvind</td>
<td>Sanchit</td>
<td>Poster*</td>
<td>A</td>
<td>42</td>
</tr>
<tr>
<td>Augustini</td>
<td>Lauren</td>
<td>Oral</td>
<td>Session I</td>
<td></td>
</tr>
<tr>
<td>Azah</td>
<td>Viviane</td>
<td>Poster</td>
<td>A</td>
<td>18</td>
</tr>
<tr>
<td>Baker</td>
<td>Jessica</td>
<td>Poster</td>
<td>C</td>
<td>07</td>
</tr>
<tr>
<td>Bali</td>
<td>Avnika</td>
<td>Poster*</td>
<td>B</td>
<td>66</td>
</tr>
<tr>
<td>Bandy</td>
<td>McKenzie</td>
<td>Poster</td>
<td>B</td>
<td>62</td>
</tr>
<tr>
<td>Barnes</td>
<td>Emma</td>
<td>Poster*</td>
<td>A</td>
<td>71</td>
</tr>
<tr>
<td>Barrett</td>
<td>Megan</td>
<td>Poster</td>
<td>A</td>
<td>40</td>
</tr>
<tr>
<td>Bashore</td>
<td>Daniel</td>
<td>Poster*</td>
<td>B</td>
<td>71</td>
</tr>
<tr>
<td>Bashore</td>
<td>Daniel</td>
<td>Oral</td>
<td>Session II</td>
<td></td>
</tr>
<tr>
<td>Baughn</td>
<td>Michelle</td>
<td>Poster</td>
<td>B</td>
<td>47</td>
</tr>
<tr>
<td>Bean</td>
<td>Lamuel</td>
<td>Poster*</td>
<td>C</td>
<td>28</td>
</tr>
<tr>
<td>Begezda</td>
<td>Abby</td>
<td>Poster</td>
<td>B</td>
<td>14</td>
</tr>
<tr>
<td>Behnke</td>
<td>Jane</td>
<td>Oral</td>
<td>Session I</td>
<td></td>
</tr>
<tr>
<td>Behrend</td>
<td>Julia</td>
<td>Poster</td>
<td>C</td>
<td>01</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Bell-Pactat</td>
<td>Nathanael</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Benton</td>
<td>Lauren</td>
<td>Poster*</td>
<td>B</td>
<td>57</td>
</tr>
<tr>
<td>Berk</td>
<td>Stephanie</td>
<td>Poster*</td>
<td>A</td>
<td>67</td>
</tr>
<tr>
<td>Berkovitz</td>
<td>Matthew</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Berry</td>
<td>Taryn</td>
<td>Poster*</td>
<td>B</td>
<td>05</td>
</tr>
<tr>
<td>Bettinger</td>
<td>Samantha</td>
<td>Poster*</td>
<td>A</td>
<td>02</td>
</tr>
<tr>
<td>Bierly</td>
<td>Jeffrey</td>
<td>Poster*</td>
<td>B</td>
<td>36</td>
</tr>
<tr>
<td>Biller</td>
<td>Kelsey</td>
<td>Poster*</td>
<td>B</td>
<td>10</td>
</tr>
<tr>
<td>Blankartz</td>
<td>Benjamin</td>
<td>Poster*</td>
<td>C</td>
<td>03</td>
</tr>
<tr>
<td>Blanton</td>
<td>Anne</td>
<td>Poster</td>
<td>B</td>
<td>03</td>
</tr>
<tr>
<td>Blodgett</td>
<td>Katharine</td>
<td>Poster*</td>
<td>C</td>
<td>24</td>
</tr>
<tr>
<td>Boda</td>
<td>Seth</td>
<td>Poster*</td>
<td>B</td>
<td>81</td>
</tr>
<tr>
<td>Boda</td>
<td>Seth</td>
<td>Poster*</td>
<td>C</td>
<td>51</td>
</tr>
<tr>
<td>Bognar</td>
<td>Bradley</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Bourne</td>
<td>Jamie</td>
<td>Poster</td>
<td>B</td>
<td>71</td>
</tr>
<tr>
<td>Bowling</td>
<td>Graham</td>
<td>Poster*</td>
<td>A</td>
<td>50</td>
</tr>
<tr>
<td>Boyd</td>
<td>Kali</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Boyer</td>
<td>Alex</td>
<td>Poster</td>
<td>B</td>
<td>84</td>
</tr>
<tr>
<td>Boyle</td>
<td>William</td>
<td>Poster*</td>
<td>B</td>
<td>01</td>
</tr>
<tr>
<td>Bracey</td>
<td>Andrew</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Brock</td>
<td>Jeffrey</td>
<td>Oral</td>
<td>Session IV</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Brown</td>
<td>Abigail</td>
<td>Poster*</td>
<td>B</td>
<td>53</td>
</tr>
<tr>
<td>Brown</td>
<td>Brittany</td>
<td>Poster</td>
<td>C</td>
<td>55</td>
</tr>
<tr>
<td>Brown</td>
<td>Parker</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Bruney</td>
<td>Devin</td>
<td>Poster*</td>
<td>A</td>
<td>08</td>
</tr>
<tr>
<td>Buenger</td>
<td>Denise</td>
<td>Poster*</td>
<td>C</td>
<td>47</td>
</tr>
<tr>
<td>Bunger</td>
<td>Allison</td>
<td>Poster*</td>
<td>A</td>
<td>03</td>
</tr>
<tr>
<td>Burke</td>
<td>Christopher</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Burke</td>
<td>Shannon</td>
<td>Poster*</td>
<td>A</td>
<td>21</td>
</tr>
<tr>
<td>Butcher</td>
<td>Amie</td>
<td>Poster</td>
<td>A</td>
<td>75</td>
</tr>
<tr>
<td>Cable</td>
<td>Jana</td>
<td>Poster*</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Cabosky</td>
<td>Rachel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Cain</td>
<td>Morgan</td>
<td>Poster</td>
<td>A</td>
<td>51</td>
</tr>
<tr>
<td>Camiener</td>
<td>Samuel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Campbell</td>
<td>Kaleb</td>
<td>Poster*</td>
<td>B</td>
<td>51</td>
</tr>
<tr>
<td>Campbell</td>
<td>Megan</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Cannata</td>
<td>Andrew</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Carnegie</td>
<td>Erica</td>
<td>Poster</td>
<td>C</td>
<td>10</td>
</tr>
<tr>
<td>Carney</td>
<td>Kit</td>
<td>Poster</td>
<td>B</td>
<td>65</td>
</tr>
<tr>
<td>Carrera</td>
<td>Raquel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------</td>
<td>-------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Carter</td>
<td>Martha</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Castillo</td>
<td>Veronica</td>
<td>Poster</td>
<td>A</td>
<td>61</td>
</tr>
<tr>
<td>Center</td>
<td>Brant</td>
<td>Poster*</td>
<td>A</td>
<td>46</td>
</tr>
<tr>
<td>Cerbie</td>
<td>Gina</td>
<td>Poster*</td>
<td>B</td>
<td>30</td>
</tr>
<tr>
<td>Chapman</td>
<td>Rob</td>
<td>Poster*</td>
<td>C</td>
<td>09</td>
</tr>
<tr>
<td>Chen</td>
<td>Charlie</td>
<td>Poster*</td>
<td>B</td>
<td>31</td>
</tr>
<tr>
<td>Chen</td>
<td>Mallory</td>
<td>Poster*</td>
<td>A</td>
<td>10</td>
</tr>
<tr>
<td>Chinoda</td>
<td>Mwoyo</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Chokreff</td>
<td>Meghan</td>
<td>Poster</td>
<td>A</td>
<td>43</td>
</tr>
<tr>
<td>Cioffi</td>
<td>Eric</td>
<td>Poster*</td>
<td>A</td>
<td>09</td>
</tr>
<tr>
<td>Clark</td>
<td>Deron</td>
<td>Poster*</td>
<td>A</td>
<td>53</td>
</tr>
<tr>
<td>Clark</td>
<td>Lindsay</td>
<td>Poster</td>
<td>C</td>
<td>85</td>
</tr>
<tr>
<td>Clenny</td>
<td>Elsa</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Click</td>
<td>Kaitlyn</td>
<td>Poster*</td>
<td>B</td>
<td>63</td>
</tr>
<tr>
<td>Coats</td>
<td>Rebecca</td>
<td>Poster*</td>
<td>B</td>
<td>72</td>
</tr>
<tr>
<td>Cochran</td>
<td>Elizabeth</td>
<td>Poster*</td>
<td>B</td>
<td>65</td>
</tr>
<tr>
<td>Collins</td>
<td>Ashantia</td>
<td>Poster</td>
<td>B</td>
<td>71</td>
</tr>
<tr>
<td>Collins</td>
<td>Nicholas</td>
<td>Poster</td>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>Coliver</td>
<td>Lauren</td>
<td>Poster*</td>
<td>A</td>
<td>81</td>
</tr>
<tr>
<td>Combs</td>
<td>JaShawn</td>
<td>Poster*</td>
<td>B</td>
<td>82</td>
</tr>
<tr>
<td>Conjerti</td>
<td>Joe</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Cornett</td>
<td>Jamie</td>
<td>Poster</td>
<td>B</td>
<td>47</td>
</tr>
<tr>
<td>Cottingim</td>
<td>Jake</td>
<td>Poster*</td>
<td>A</td>
<td>52</td>
</tr>
<tr>
<td>Cox</td>
<td>Colleen</td>
<td>Poster*</td>
<td>A</td>
<td>54</td>
</tr>
<tr>
<td>Cox</td>
<td>Sabrina</td>
<td>Poster</td>
<td>A</td>
<td>84</td>
</tr>
<tr>
<td>Craig</td>
<td>Emma</td>
<td>Poster</td>
<td>A</td>
<td>24</td>
</tr>
<tr>
<td>Crookes</td>
<td>Aaron</td>
<td>Poster*</td>
<td>A</td>
<td>49</td>
</tr>
<tr>
<td>Crookes</td>
<td>Justin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Cruz</td>
<td>Nicholas</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Darnell</td>
<td>Steven</td>
<td>Oral</td>
<td>Session IV</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Day</td>
<td>Stefanie</td>
<td>Poster</td>
<td>C</td>
<td>81</td>
</tr>
<tr>
<td>Deer</td>
<td>Brianna</td>
<td>Poster</td>
<td>C</td>
<td>85</td>
</tr>
<tr>
<td>Deer</td>
<td>Matthew</td>
<td>Poster*</td>
<td>A</td>
<td>59</td>
</tr>
<tr>
<td>Deihns</td>
<td>Morgan</td>
<td>Poster</td>
<td>B</td>
<td>05</td>
</tr>
<tr>
<td>Della Donna</td>
<td>Victoria</td>
<td>Oral</td>
<td>Session I</td>
<td>Caroline Scott</td>
</tr>
<tr>
<td>DeLong</td>
<td>Lauren</td>
<td>Poster*</td>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>DeVillez</td>
<td>Ethan</td>
<td>Poster*</td>
<td>C</td>
<td>84</td>
</tr>
<tr>
<td>DiFilippo</td>
<td>Madeline</td>
<td>Poster*</td>
<td>C</td>
<td>20</td>
</tr>
<tr>
<td>DiNuoscio</td>
<td>Julie</td>
<td>Poster*</td>
<td>A</td>
<td>32</td>
</tr>
<tr>
<td>Dionisopoulos</td>
<td>Fallyn</td>
<td>Poster*</td>
<td>A</td>
<td>40</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>---------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Dixon</td>
<td>Wyatt</td>
<td>Poster</td>
<td>C</td>
<td>84</td>
</tr>
<tr>
<td>Domijan</td>
<td>Stephanie</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Donna</td>
<td>Julie</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Donnelly</td>
<td>Michael</td>
<td>Poster</td>
<td>B</td>
<td>78</td>
</tr>
<tr>
<td>Donovan</td>
<td>Haley</td>
<td>Poster*</td>
<td>C</td>
<td>30</td>
</tr>
<tr>
<td>Doty</td>
<td>Jessica</td>
<td>Oral</td>
<td>Session V</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Dougherty</td>
<td>John-Kelly</td>
<td>Poster*</td>
<td>B</td>
<td>48</td>
</tr>
<tr>
<td>Doughty</td>
<td>Robert</td>
<td>Poster*</td>
<td>C</td>
<td>05</td>
</tr>
<tr>
<td>Dow</td>
<td>Melanie</td>
<td>Poster*</td>
<td>A</td>
<td>27</td>
</tr>
<tr>
<td>Dudley</td>
<td>Alicia</td>
<td>Poster</td>
<td>A</td>
<td>74</td>
</tr>
<tr>
<td>Duffy</td>
<td>Katie</td>
<td>Poster*</td>
<td>B</td>
<td>73</td>
</tr>
<tr>
<td>Dunagan</td>
<td>Megan</td>
<td>Poster*</td>
<td>C</td>
<td>22</td>
</tr>
<tr>
<td>Dysart</td>
<td>Lydia</td>
<td>Poster*</td>
<td>B</td>
<td>59</td>
</tr>
<tr>
<td>Eagleson</td>
<td>Lexie</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Eckman</td>
<td>Ashley</td>
<td>Poster</td>
<td>B</td>
<td>03</td>
</tr>
<tr>
<td>Edmonds</td>
<td>Samantha</td>
<td>Poster*</td>
<td>A</td>
<td>87</td>
</tr>
<tr>
<td>Elfers</td>
<td>Jillian</td>
<td>Poster*</td>
<td>A</td>
<td>34</td>
</tr>
<tr>
<td>Emerson</td>
<td>Corey</td>
<td>Poster*</td>
<td>B</td>
<td>40</td>
</tr>
<tr>
<td>Engelhardt</td>
<td>Joseph</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Englert</td>
<td>Sebastian</td>
<td>Poster*</td>
<td>C</td>
<td>11</td>
</tr>
<tr>
<td>Ernsting</td>
<td>Evan</td>
<td>Poster</td>
<td>A</td>
<td>33</td>
</tr>
<tr>
<td>Everly</td>
<td>Samantha</td>
<td>Poster*</td>
<td>B</td>
<td>20</td>
</tr>
<tr>
<td>Farina</td>
<td>Samuel</td>
<td>Poster*</td>
<td>A</td>
<td>22</td>
</tr>
<tr>
<td>Farmer</td>
<td>Lauren</td>
<td>Poster</td>
<td>B</td>
<td>52</td>
</tr>
<tr>
<td>Feathers</td>
<td>Samantha</td>
<td>Poster</td>
<td>A</td>
<td>77</td>
</tr>
<tr>
<td>Fedders</td>
<td>Danielle</td>
<td>Poster</td>
<td>A</td>
<td>28</td>
</tr>
<tr>
<td>Feng</td>
<td>Tian</td>
<td>Poster*</td>
<td>C</td>
<td>08</td>
</tr>
<tr>
<td>Ferreira da Silva</td>
<td>Ramon</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Ferreira Lopes</td>
<td>Murilo</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Ferriter</td>
<td>Colin</td>
<td>Poster</td>
<td>B</td>
<td>78</td>
</tr>
<tr>
<td>Filbrun</td>
<td>Seth</td>
<td>Poster*</td>
<td>B</td>
<td>22</td>
</tr>
<tr>
<td>Filice</td>
<td>Alexander</td>
<td>Oral</td>
<td>Session IV</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Findley</td>
<td>Mary Kate</td>
<td>Poster*</td>
<td>A</td>
<td>55</td>
</tr>
<tr>
<td>Findley</td>
<td>Susan</td>
<td>Poster*</td>
<td>C</td>
<td>01</td>
</tr>
<tr>
<td>Finn</td>
<td>Megan</td>
<td>Poster*</td>
<td>A</td>
<td>60</td>
</tr>
<tr>
<td>Fisher</td>
<td>Kevin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Fisher</td>
<td>Nicole</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Fister</td>
<td>Nathan</td>
<td>Poster*</td>
<td>C</td>
<td>67</td>
</tr>
<tr>
<td>Fitzgerald</td>
<td>Laura</td>
<td>Poster*</td>
<td>B</td>
<td>25</td>
</tr>
<tr>
<td>Flake</td>
<td>Rachel</td>
<td>Poster</td>
<td>A</td>
<td>08</td>
</tr>
</tbody>
</table>
## PRESENTERS INDEX

*By Student Last Name*

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Type</th>
<th>Poster Session</th>
<th>Poster Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleitz</td>
<td>Amelia</td>
<td>Poster*</td>
<td>B</td>
<td>74</td>
</tr>
<tr>
<td>Floren</td>
<td>Mary</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Flurer</td>
<td>James</td>
<td>Poster*</td>
<td>A</td>
<td>57</td>
</tr>
<tr>
<td>Fox</td>
<td>Harrison</td>
<td>Oral</td>
<td>Session VI</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Frame</td>
<td>Joseph</td>
<td>Poster</td>
<td>A</td>
<td>70</td>
</tr>
<tr>
<td>Frame</td>
<td>Rachel</td>
<td>Poster*</td>
<td>A</td>
<td>78</td>
</tr>
<tr>
<td>Frank</td>
<td>Claire</td>
<td>Poster*</td>
<td>A</td>
<td>65</td>
</tr>
<tr>
<td>Franz</td>
<td>Kate</td>
<td>Poster*</td>
<td>A</td>
<td>14</td>
</tr>
<tr>
<td>Free</td>
<td>Jimmy</td>
<td>Oral</td>
<td>Session VI</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Fricke</td>
<td>Elizabeth</td>
<td>Poster*</td>
<td>A</td>
<td>07</td>
</tr>
<tr>
<td>Fuerst</td>
<td>Georgia</td>
<td>Poster*</td>
<td>B</td>
<td>32</td>
</tr>
<tr>
<td>Feurst</td>
<td>Georgia</td>
<td>Poster</td>
<td>B</td>
<td>78</td>
</tr>
<tr>
<td>Fuku</td>
<td>Stephanie</td>
<td>Poster*</td>
<td>B</td>
<td>18</td>
</tr>
<tr>
<td>Gallagher</td>
<td>Casey</td>
<td>Poster</td>
<td>A</td>
<td>49</td>
</tr>
<tr>
<td>Gallagher</td>
<td>Catherine</td>
<td>Poster*</td>
<td>A</td>
<td>19</td>
</tr>
<tr>
<td>Gallagher</td>
<td>Mollie</td>
<td>Poster*</td>
<td>B</td>
<td>46</td>
</tr>
<tr>
<td>Gao</td>
<td>Yuhe</td>
<td>Poster</td>
<td>C</td>
<td>65</td>
</tr>
<tr>
<td>Garcia De Jesus</td>
<td>Rebeca</td>
<td>Poster*</td>
<td>B</td>
<td>13</td>
</tr>
<tr>
<td>Gardner</td>
<td>Maggie</td>
<td>Poster</td>
<td>A</td>
<td>61</td>
</tr>
<tr>
<td>Gardner</td>
<td>Matthew</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Gates</td>
<td>Katie</td>
<td>Poster*</td>
<td>A</td>
<td>33</td>
</tr>
<tr>
<td>Geibel</td>
<td>Mary</td>
<td>Poster*</td>
<td>A</td>
<td>38</td>
</tr>
<tr>
<td>George</td>
<td>Sam</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Gerry</td>
<td>Mariel</td>
<td>Poster*</td>
<td>A</td>
<td>15</td>
</tr>
<tr>
<td>Gibler</td>
<td>Robert</td>
<td>Poster*</td>
<td>A</td>
<td>44</td>
</tr>
<tr>
<td>Gibson</td>
<td>Tyler</td>
<td>Oral</td>
<td>Session II</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Gilfert</td>
<td>Kaitlyn</td>
<td>Poster*</td>
<td>C</td>
<td>72</td>
</tr>
<tr>
<td>Gilligan</td>
<td>Abby</td>
<td>Poster*</td>
<td>C</td>
<td>26</td>
</tr>
<tr>
<td>Gilman</td>
<td>Camarin</td>
<td>Poster*</td>
<td>B</td>
<td>34</td>
</tr>
<tr>
<td>Glasshagel</td>
<td>Anna</td>
<td>Poster</td>
<td>A</td>
<td>40</td>
</tr>
<tr>
<td>Gliha</td>
<td>Kaitlyn</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Godfroy</td>
<td>Kelsey</td>
<td>Poster*</td>
<td>C</td>
<td>80</td>
</tr>
<tr>
<td>Goebel</td>
<td>Erich</td>
<td>Poster*</td>
<td>B</td>
<td>16</td>
</tr>
<tr>
<td>Gollapudi</td>
<td>Rachana</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Gorjup</td>
<td>Jim</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Graham</td>
<td>Chrissy</td>
<td>Poster</td>
<td>A</td>
<td>22</td>
</tr>
<tr>
<td>Gray</td>
<td>Kathryn</td>
<td>Poster*</td>
<td>A</td>
<td>16</td>
</tr>
<tr>
<td>Greathouse</td>
<td>Sarah</td>
<td>Poster</td>
<td>A</td>
<td>10</td>
</tr>
<tr>
<td>Greene</td>
<td>Nicholas</td>
<td>Poster</td>
<td>C</td>
<td>81</td>
</tr>
<tr>
<td>Grentzer</td>
<td>Michael</td>
<td>Poster*</td>
<td>C</td>
<td>63</td>
</tr>
</tbody>
</table>
## PRESENTERS INDEX

### By Student Last Name

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Type</th>
<th>Poster Session</th>
<th>Poster Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey</td>
<td>Tara</td>
<td>Poster</td>
<td>A</td>
<td>60</td>
</tr>
<tr>
<td>Groezinger</td>
<td>Erich</td>
<td>Poster*</td>
<td>B</td>
<td>21</td>
</tr>
<tr>
<td>Grogan</td>
<td>Adrienne</td>
<td>Poster*</td>
<td>A</td>
<td>24</td>
</tr>
<tr>
<td>Groll</td>
<td>Kelsey</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Gross</td>
<td>Elizabeth</td>
<td>Poster*</td>
<td>B</td>
<td>69</td>
</tr>
<tr>
<td>Gruber</td>
<td>Jack</td>
<td>Poster*</td>
<td>A</td>
<td>76</td>
</tr>
<tr>
<td>Gscheidle</td>
<td>Scott</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Guthrie</td>
<td>Mariah</td>
<td>Poster*</td>
<td>B</td>
<td>37</td>
</tr>
<tr>
<td>Gwinn</td>
<td>William</td>
<td>Poster*</td>
<td>B</td>
<td>64</td>
</tr>
<tr>
<td>Gyenge</td>
<td>Renate</td>
<td>Poster*</td>
<td>C</td>
<td>57</td>
</tr>
<tr>
<td>Haas</td>
<td>Ryan</td>
<td>Poster*</td>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>Hahn</td>
<td>Mark</td>
<td>Poster*</td>
<td>B</td>
<td>76</td>
</tr>
<tr>
<td>Halderman</td>
<td>Burke</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Hammerle</td>
<td>Tyler</td>
<td>Poster</td>
<td>C</td>
<td>62</td>
</tr>
<tr>
<td>Hammond</td>
<td>Tasse</td>
<td>Poster</td>
<td>A</td>
<td>84</td>
</tr>
<tr>
<td>Hancock</td>
<td>Ellen</td>
<td>Poster</td>
<td>C</td>
<td>77</td>
</tr>
<tr>
<td>Harkey</td>
<td>Kevin</td>
<td>Poster*</td>
<td>A</td>
<td>35</td>
</tr>
<tr>
<td>Harrison</td>
<td>Olivia</td>
<td>Oral</td>
<td>Session IV</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Hartman</td>
<td>Makensee</td>
<td>Poster*</td>
<td>B</td>
<td>62</td>
</tr>
<tr>
<td>Hashlamoun</td>
<td>Summer</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Haught</td>
<td>Christopher</td>
<td>Oral</td>
<td>Session VI</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Hazen</td>
<td>Chloe</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Helbling</td>
<td>Justin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Hendry</td>
<td>Shealynn</td>
<td>Poster*</td>
<td>A</td>
<td>69</td>
</tr>
<tr>
<td>Hernandez</td>
<td>Andrew</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Herriman</td>
<td>Rachael</td>
<td>Poster</td>
<td>C</td>
<td>85</td>
</tr>
<tr>
<td>Hesker</td>
<td>Ryan</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Higgins</td>
<td>Brianna</td>
<td>Poster*</td>
<td>C</td>
<td>07</td>
</tr>
<tr>
<td>Hill</td>
<td>Anna</td>
<td>Poster</td>
<td>A</td>
<td>85</td>
</tr>
<tr>
<td>Hiner</td>
<td>Sarah</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Hofner</td>
<td>Emily</td>
<td>Poster*</td>
<td>B</td>
<td>24</td>
</tr>
<tr>
<td>Hosseinarab</td>
<td>Ali</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Houston</td>
<td>Anthony</td>
<td>Poster</td>
<td>A</td>
<td>15</td>
</tr>
<tr>
<td>Howard</td>
<td>Mackenzie</td>
<td>Poster*</td>
<td>C</td>
<td>48</td>
</tr>
<tr>
<td>Howes</td>
<td>Nathaniel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Hoyer</td>
<td>Nicole</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Hu</td>
<td>Alan</td>
<td>Poster*</td>
<td>C</td>
<td>43</td>
</tr>
<tr>
<td>Hudson</td>
<td>Sam</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Huey</td>
<td>Lashawn</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Hughes</td>
<td>Emily</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Hurst</td>
<td>Bradley</td>
<td>Poster*</td>
<td>A</td>
<td>17</td>
</tr>
<tr>
<td>Hurst</td>
<td>Bradley</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Hutchinson</td>
<td>Mark</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Iwaszkiewicz</td>
<td>Emily</td>
<td>Poster*</td>
<td>A</td>
<td>06</td>
</tr>
<tr>
<td>Jackson</td>
<td>Lauren</td>
<td>Poster</td>
<td>A</td>
<td>19</td>
</tr>
<tr>
<td>Jacob</td>
<td>David</td>
<td>Oral</td>
<td>Session V</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Jaikeh</td>
<td>Noah</td>
<td>Poster*</td>
<td>B</td>
<td>03</td>
</tr>
<tr>
<td>James</td>
<td>Samuel</td>
<td>Poster*</td>
<td>A</td>
<td>04</td>
</tr>
<tr>
<td>Jenk</td>
<td>Ashley</td>
<td>Poster*</td>
<td>A</td>
<td>01</td>
</tr>
<tr>
<td>Jenkins</td>
<td>Austin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Johnson</td>
<td>Anna</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Johnson</td>
<td>Caroline</td>
<td>Poster</td>
<td>B</td>
<td>62</td>
</tr>
<tr>
<td>Johnson</td>
<td>Kimberly</td>
<td>Poster*</td>
<td>B</td>
<td>06</td>
</tr>
<tr>
<td>Johnson</td>
<td>Rhea</td>
<td>Poster*</td>
<td>B</td>
<td>39</td>
</tr>
<tr>
<td>Jonas</td>
<td>Sheridan</td>
<td>Poster*</td>
<td>A</td>
<td>43</td>
</tr>
<tr>
<td>Judd</td>
<td>Tara</td>
<td>Poster</td>
<td>A</td>
<td>51</td>
</tr>
<tr>
<td>Kakarala</td>
<td>Nikhitha</td>
<td>Poster*</td>
<td>A</td>
<td>84</td>
</tr>
<tr>
<td>Katariwala</td>
<td>Shaniel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Kawamura</td>
<td>Kaylie</td>
<td>Poster</td>
<td>C</td>
<td>85</td>
</tr>
<tr>
<td>Kay</td>
<td>Caren</td>
<td>Poster*</td>
<td>C</td>
<td>06</td>
</tr>
<tr>
<td>Kelleher</td>
<td>Jennifer</td>
<td>Poster*</td>
<td>A</td>
<td>63</td>
</tr>
<tr>
<td>Kennedy</td>
<td>Caroline</td>
<td>Poster</td>
<td>A</td>
<td>76</td>
</tr>
<tr>
<td>Kennedy</td>
<td>Faye</td>
<td>Poster</td>
<td>C</td>
<td>80</td>
</tr>
<tr>
<td>Kerr</td>
<td>Julia</td>
<td>Poster*</td>
<td>A</td>
<td>68</td>
</tr>
<tr>
<td>Kershner</td>
<td>Samantha</td>
<td>Poster*</td>
<td>A</td>
<td>70</td>
</tr>
<tr>
<td>Khehra</td>
<td>Sumandeep</td>
<td>Poster</td>
<td>B</td>
<td>58</td>
</tr>
<tr>
<td>Kilbane</td>
<td>Caroline</td>
<td>Poster</td>
<td>A</td>
<td>75</td>
</tr>
<tr>
<td>Kinkopf</td>
<td>Elizabeth</td>
<td>Poster</td>
<td>C</td>
<td>62</td>
</tr>
<tr>
<td>Kirkham</td>
<td>Andrew</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Kitchen</td>
<td>Mfundisi</td>
<td>Poster</td>
<td>A</td>
<td>80</td>
</tr>
<tr>
<td>Klang</td>
<td>Zoe</td>
<td>Poster</td>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>Kloc</td>
<td>Brett</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Knight</td>
<td>Joshua</td>
<td>Poster</td>
<td>A</td>
<td>80</td>
</tr>
<tr>
<td>Kothakota</td>
<td>Pravali</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Koumanimben</td>
<td>Fidele</td>
<td>Poster</td>
<td>A</td>
<td>77</td>
</tr>
<tr>
<td>Koutroubas</td>
<td>Christina</td>
<td>Oral</td>
<td>Session I</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Krivoshey</td>
<td>Rachel</td>
<td>Poster</td>
<td>B</td>
<td>72</td>
</tr>
<tr>
<td>Krull</td>
<td>Emily</td>
<td>Poster</td>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>Kuehn</td>
<td>Trent</td>
<td>Poster</td>
<td>A</td>
<td>13</td>
</tr>
<tr>
<td>Kunimoto</td>
<td>Emma</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>----------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Kurek</td>
<td>Pierce</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Laing</td>
<td>Robert</td>
<td>Poster*</td>
<td>B</td>
<td>14</td>
</tr>
<tr>
<td>Lamb</td>
<td>Anna</td>
<td>Poster</td>
<td>C</td>
<td>55</td>
</tr>
<tr>
<td>Landreville</td>
<td>Emory</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>LaPolla</td>
<td>Madeline</td>
<td>Poster*</td>
<td>B</td>
<td>08</td>
</tr>
<tr>
<td>Larkin</td>
<td>Amberly</td>
<td>Poster*</td>
<td>A</td>
<td>28</td>
</tr>
<tr>
<td>Laska</td>
<td>Emily</td>
<td>Poster*</td>
<td>B</td>
<td>09</td>
</tr>
<tr>
<td>Lawson</td>
<td>Amanda</td>
<td>Oral</td>
<td>Session I</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Lawson</td>
<td>Ciara</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Lawson</td>
<td>Kayla</td>
<td>Poster</td>
<td>C</td>
<td>20</td>
</tr>
<tr>
<td>Lee</td>
<td>Andrea</td>
<td>Poster*</td>
<td>B</td>
<td>60</td>
</tr>
<tr>
<td>Lee</td>
<td>Delaney</td>
<td>Poster</td>
<td>A</td>
<td>81</td>
</tr>
<tr>
<td>Lee</td>
<td>Kathlyn</td>
<td>Poster*</td>
<td>C</td>
<td>10</td>
</tr>
<tr>
<td>Leen</td>
<td>Elizabeth</td>
<td>Poster</td>
<td>B</td>
<td>52</td>
</tr>
<tr>
<td>Lemp</td>
<td>Steven</td>
<td>Poster</td>
<td>C</td>
<td>84</td>
</tr>
<tr>
<td>Lentz</td>
<td>Antoinette</td>
<td>Poster</td>
<td>C</td>
<td>85</td>
</tr>
<tr>
<td>Leone</td>
<td>Erica</td>
<td>Poster</td>
<td>A</td>
<td>84</td>
</tr>
<tr>
<td>Lepak</td>
<td>Christina</td>
<td>Poster*</td>
<td>A</td>
<td>30</td>
</tr>
<tr>
<td>Ley</td>
<td>Ryan</td>
<td>Poster*</td>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>Lindner</td>
<td>Haleigh</td>
<td>Poster</td>
<td>C</td>
<td>31</td>
</tr>
<tr>
<td>Linton</td>
<td>Lydia</td>
<td>Poster*</td>
<td>C</td>
<td>66</td>
</tr>
<tr>
<td>Liu</td>
<td>Charlie</td>
<td>Poster*</td>
<td>C</td>
<td>74</td>
</tr>
<tr>
<td>Lloyd</td>
<td>Mary</td>
<td>Poster*</td>
<td>A</td>
<td>75</td>
</tr>
<tr>
<td>Loh</td>
<td>Mark</td>
<td>Poster*</td>
<td>B</td>
<td>11</td>
</tr>
<tr>
<td>Loomis</td>
<td>Sarah</td>
<td>Poster*</td>
<td>B</td>
<td>84</td>
</tr>
<tr>
<td>Looper</td>
<td>Jeremy</td>
<td>Oral</td>
<td>Session VI</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Lopiccolo</td>
<td>Matthew</td>
<td>Oral</td>
<td>Session V</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Lovinggood</td>
<td>Elizabeth</td>
<td>Poster</td>
<td>C</td>
<td>84</td>
</tr>
<tr>
<td>Lowder</td>
<td>Austin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Lynch</td>
<td>Evan</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Magoan</td>
<td>Kathryn</td>
<td>Poster*</td>
<td>B</td>
<td>35</td>
</tr>
<tr>
<td>Mahyub</td>
<td>Rami Najib</td>
<td>Poster*</td>
<td>B</td>
<td>54</td>
</tr>
<tr>
<td>Mallett</td>
<td>Ali</td>
<td>Poster*</td>
<td>B</td>
<td>83</td>
</tr>
<tr>
<td>Manganaro</td>
<td>John</td>
<td>Poster*</td>
<td>B</td>
<td>27</td>
</tr>
<tr>
<td>Manson</td>
<td>Dana</td>
<td>Poster*</td>
<td>C</td>
<td>53</td>
</tr>
<tr>
<td>Manukian</td>
<td>Ani</td>
<td>Poster</td>
<td>B</td>
<td>34</td>
</tr>
<tr>
<td>Marshall</td>
<td>Steven</td>
<td>Poster</td>
<td>B</td>
<td>77</td>
</tr>
<tr>
<td>Markins</td>
<td>Morgan</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Martin</td>
<td>Jordan</td>
<td>Oral</td>
<td>Session V</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Martin</td>
<td>Mary</td>
<td>Poster*</td>
<td>C</td>
<td>85</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>----------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Maschino</td>
<td>Tyler</td>
<td>Poster*</td>
<td>B</td>
<td>26</td>
</tr>
<tr>
<td>Matgouranis</td>
<td>Hannah</td>
<td>Poster*</td>
<td>B</td>
<td>29</td>
</tr>
<tr>
<td>Mattox</td>
<td>Rachel</td>
<td>Poster*</td>
<td>C</td>
<td>15</td>
</tr>
<tr>
<td>Maupin</td>
<td>Kameron</td>
<td>Poster</td>
<td>B</td>
<td>58</td>
</tr>
<tr>
<td>May</td>
<td>Kelly</td>
<td>Poster</td>
<td>B</td>
<td>59</td>
</tr>
<tr>
<td>Mazanek</td>
<td>Catherine</td>
<td>Oral</td>
<td>Session II</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Mazzaferr</td>
<td>Curtis</td>
<td>Poster*</td>
<td>C</td>
<td>76</td>
</tr>
<tr>
<td>McCain</td>
<td>Jeffrey</td>
<td>Poster*</td>
<td>B</td>
<td>42</td>
</tr>
<tr>
<td>McClurkin</td>
<td>Daniel</td>
<td>Poster</td>
<td>C</td>
<td>82</td>
</tr>
<tr>
<td>McCoy</td>
<td>Natosha</td>
<td>Poster*</td>
<td>A</td>
<td>51</td>
</tr>
<tr>
<td>McCrum</td>
<td>Kelsey</td>
<td>Poster*</td>
<td>B</td>
<td>07</td>
</tr>
<tr>
<td>McDaniel</td>
<td>Mitch</td>
<td>Poster*</td>
<td>A</td>
<td>58</td>
</tr>
<tr>
<td>McDermott</td>
<td>John</td>
<td>Poster</td>
<td>A</td>
<td>48</td>
</tr>
<tr>
<td>McDonald</td>
<td>Amanda</td>
<td>Poster*</td>
<td>A</td>
<td>64</td>
</tr>
<tr>
<td>McDonough</td>
<td>Madeline</td>
<td>Poster*</td>
<td>B</td>
<td>17</td>
</tr>
<tr>
<td>McGlone</td>
<td>Cameron</td>
<td>Poster*</td>
<td>C</td>
<td>68</td>
</tr>
<tr>
<td>McKinney</td>
<td>Zachary</td>
<td>Poster</td>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>McKinney</td>
<td>Zachary</td>
<td>Oral</td>
<td>Session IV</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>McVey</td>
<td>Nora</td>
<td>Poster</td>
<td>C</td>
<td>83</td>
</tr>
<tr>
<td>Meacham</td>
<td>Benjamin</td>
<td>Poster*</td>
<td>C</td>
<td>73</td>
</tr>
<tr>
<td>Meeks</td>
<td>Matthew</td>
<td>Poster*</td>
<td>A</td>
<td>12</td>
</tr>
<tr>
<td>Meiering</td>
<td>Amanda</td>
<td>Poster*</td>
<td>A</td>
<td>72</td>
</tr>
<tr>
<td>Melo Mota</td>
<td>Wellerson</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Mercer</td>
<td>Madison</td>
<td>Poster</td>
<td>C</td>
<td>10</td>
</tr>
<tr>
<td>Meriwether</td>
<td>William</td>
<td>Oral</td>
<td>Session IV</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Meyer</td>
<td>Claire</td>
<td>Poster</td>
<td>B</td>
<td>83</td>
</tr>
<tr>
<td>Meyers</td>
<td>Emily</td>
<td>Poster*</td>
<td>C</td>
<td>81</td>
</tr>
<tr>
<td>Mignery</td>
<td>Matthew</td>
<td>Poster*</td>
<td>C</td>
<td>35</td>
</tr>
<tr>
<td>Mignery</td>
<td>Rosemary</td>
<td>Poster*</td>
<td>A</td>
<td>61</td>
</tr>
<tr>
<td>Miley</td>
<td>Aimee</td>
<td>Poster</td>
<td>C</td>
<td>83</td>
</tr>
<tr>
<td>Miller</td>
<td>Ethan</td>
<td>Poster*</td>
<td>C</td>
<td>37</td>
</tr>
<tr>
<td>Milonig</td>
<td>Claire</td>
<td>Poster</td>
<td>B</td>
<td>37</td>
</tr>
<tr>
<td>Mitchell-Holman</td>
<td>Joia</td>
<td>Poster*</td>
<td>C</td>
<td>02</td>
</tr>
<tr>
<td>Mock</td>
<td>Rebecka</td>
<td>Poster*</td>
<td>C</td>
<td>82</td>
</tr>
<tr>
<td>Moller</td>
<td>Abraham</td>
<td>Poster*</td>
<td>B</td>
<td>23</td>
</tr>
<tr>
<td>Moller</td>
<td>Abraham</td>
<td>Poster*</td>
<td>C</td>
<td>29</td>
</tr>
<tr>
<td>Momsensen</td>
<td>Geneva</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Monti</td>
<td>Alexis</td>
<td>Poster*</td>
<td>C</td>
<td>75</td>
</tr>
<tr>
<td>Mooney</td>
<td>Caroline</td>
<td>Poster</td>
<td>B</td>
<td>46</td>
</tr>
<tr>
<td>Moore</td>
<td>Tanner</td>
<td>Oral</td>
<td>Session I</td>
<td>Bystrom-Reid</td>
</tr>
</tbody>
</table>
## PRESENTERS INDEX

### By Student Last Name

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Type</th>
<th>Poster Session</th>
<th>Poster Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan</td>
<td>Anne</td>
<td>Poster*</td>
<td>B</td>
<td>45</td>
</tr>
<tr>
<td>Morgan</td>
<td>Daniel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Morgan</td>
<td>Mackenzie</td>
<td>Poster</td>
<td>A</td>
<td>10</td>
</tr>
<tr>
<td>Moritz</td>
<td>Lindsay</td>
<td>Poster</td>
<td>A</td>
<td>26</td>
</tr>
<tr>
<td>Morris</td>
<td>Connor</td>
<td>Poster*</td>
<td>C</td>
<td>78</td>
</tr>
<tr>
<td>Morris</td>
<td>Emily</td>
<td>Poster*</td>
<td>C</td>
<td>64</td>
</tr>
<tr>
<td>Mukherjee</td>
<td>Mohinee</td>
<td>Poster</td>
<td>B</td>
<td>07</td>
</tr>
<tr>
<td>Mulder</td>
<td>Michael</td>
<td>Poster</td>
<td>B</td>
<td>24</td>
</tr>
<tr>
<td>Mulligan</td>
<td>David</td>
<td>Oral</td>
<td>Session IV</td>
<td>Caroline Scott</td>
</tr>
<tr>
<td>Murphy</td>
<td>Cara</td>
<td>Poster</td>
<td>B</td>
<td>35</td>
</tr>
<tr>
<td>Murray</td>
<td>Marisa</td>
<td>Poster*</td>
<td>C</td>
<td>31</td>
</tr>
<tr>
<td>Myers</td>
<td>Taylor</td>
<td>Poster*</td>
<td>C</td>
<td>60</td>
</tr>
<tr>
<td>Nall</td>
<td>Rebecca</td>
<td>Oral</td>
<td>Session II</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Naveen</td>
<td>Neal</td>
<td>Poster</td>
<td>A</td>
<td>62</td>
</tr>
<tr>
<td>Naveen</td>
<td>Neal</td>
<td>Poster</td>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>Nemeth</td>
<td>Daniel</td>
<td>Poster</td>
<td>B</td>
<td>14</td>
</tr>
<tr>
<td>Neubecker</td>
<td>Taryn</td>
<td>Oral</td>
<td>Session IV</td>
<td>Caroline Scott</td>
</tr>
<tr>
<td>Nevrekar</td>
<td>Sanjay</td>
<td>Poster*</td>
<td>C</td>
<td>46</td>
</tr>
<tr>
<td>Nguyen</td>
<td>Trung-Nguyen</td>
<td>Poster</td>
<td>C</td>
<td>83</td>
</tr>
<tr>
<td>Nguyen</td>
<td>Wendy</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Nocera</td>
<td>Dana</td>
<td>Poster*</td>
<td>C</td>
<td>69</td>
</tr>
<tr>
<td>Noriega</td>
<td>Kevin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>O’Bryan</td>
<td>Daniel</td>
<td>Poster</td>
<td>A</td>
<td>73</td>
</tr>
<tr>
<td>O'Neil</td>
<td>Jillian</td>
<td>Poster*</td>
<td>B</td>
<td>56</td>
</tr>
<tr>
<td>Oda</td>
<td>Shelby</td>
<td>Poster*</td>
<td>A</td>
<td>29</td>
</tr>
<tr>
<td>Ogundoyin</td>
<td>Olalekan</td>
<td>Poster</td>
<td>B</td>
<td>19</td>
</tr>
<tr>
<td>Oliva</td>
<td>Arthur</td>
<td>Poster*</td>
<td>C</td>
<td>12</td>
</tr>
<tr>
<td>Oliver</td>
<td>Danielle</td>
<td>Poster*</td>
<td>C</td>
<td>36</td>
</tr>
<tr>
<td>Orta</td>
<td>Kayla</td>
<td>Poster*</td>
<td>C</td>
<td>27</td>
</tr>
<tr>
<td>Orzel</td>
<td>Joanna</td>
<td>Poster*</td>
<td>B</td>
<td>15</td>
</tr>
<tr>
<td>Orzel</td>
<td>Joanna</td>
<td>Poster*</td>
<td>B</td>
<td>15</td>
</tr>
<tr>
<td>Ovia</td>
<td>Timothy</td>
<td>Poster</td>
<td>A</td>
<td>84</td>
</tr>
<tr>
<td>Ovia</td>
<td>Timothy</td>
<td>Poster</td>
<td>B</td>
<td>24</td>
</tr>
<tr>
<td>Owens</td>
<td>Tracy</td>
<td>Poster</td>
<td>A</td>
<td>74</td>
</tr>
<tr>
<td>Palgut</td>
<td>Lauryn</td>
<td>Poster*</td>
<td>B</td>
<td>52</td>
</tr>
<tr>
<td>Palmer</td>
<td>Shannon</td>
<td>Poster</td>
<td>C</td>
<td>65</td>
</tr>
<tr>
<td>Palo</td>
<td>Dylan</td>
<td>Poster*</td>
<td>B</td>
<td>61</td>
</tr>
<tr>
<td>Parato</td>
<td>Mary</td>
<td>Poster*</td>
<td>C</td>
<td>18</td>
</tr>
<tr>
<td>Pardee</td>
<td>Ann</td>
<td>Poster</td>
<td>A</td>
<td>40</td>
</tr>
<tr>
<td>Parent</td>
<td>Kimberly</td>
<td>Poster*</td>
<td>A</td>
<td>83</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>----------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Parsons</td>
<td>Jessica</td>
<td>Oral</td>
<td>Session V</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Payne</td>
<td>Ruth</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Peguero</td>
<td>Allison</td>
<td>Poster*</td>
<td>C</td>
<td>71</td>
</tr>
<tr>
<td>Perkins</td>
<td>Cassandra</td>
<td>Poster</td>
<td>B</td>
<td>19</td>
</tr>
<tr>
<td>Perrin</td>
<td>Neil</td>
<td>Poster</td>
<td>B</td>
<td>78</td>
</tr>
<tr>
<td>Peterman</td>
<td>Kelli</td>
<td>Poster*</td>
<td>B</td>
<td>43</td>
</tr>
<tr>
<td>Peterman</td>
<td>Kelli</td>
<td>Poster*</td>
<td>C</td>
<td>17</td>
</tr>
<tr>
<td>Peters</td>
<td>Nicole</td>
<td>Poster</td>
<td>B</td>
<td>28</td>
</tr>
<tr>
<td>Pfeil</td>
<td>Daniel</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Phifer</td>
<td>Jeremy</td>
<td>Poster*</td>
<td>C</td>
<td>23</td>
</tr>
<tr>
<td>Pitzer</td>
<td>Jessica</td>
<td>Poster</td>
<td>B</td>
<td>56</td>
</tr>
<tr>
<td>Plapp</td>
<td>Cody</td>
<td>Poster</td>
<td>A</td>
<td>61</td>
</tr>
<tr>
<td>Player</td>
<td>Aryelle</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Podolyn</td>
<td>Svitlana</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Polanco</td>
<td>Noelia</td>
<td>Poster*</td>
<td>B</td>
<td>67</td>
</tr>
<tr>
<td>Powell</td>
<td>Sydney</td>
<td>Poster</td>
<td>A</td>
<td>78</td>
</tr>
<tr>
<td>Prince</td>
<td>Maura</td>
<td>Poster*</td>
<td>A</td>
<td>77</td>
</tr>
<tr>
<td>Puleo</td>
<td>Catherine</td>
<td>Poster*</td>
<td>C</td>
<td>62</td>
</tr>
<tr>
<td>Queenan</td>
<td>Kathleen</td>
<td>Poster*</td>
<td>C</td>
<td>19</td>
</tr>
<tr>
<td>Radivoyevitch</td>
<td>Kaitlin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Radke</td>
<td>Eric</td>
<td>Poster*</td>
<td>A</td>
<td>41</td>
</tr>
<tr>
<td>Randall</td>
<td>Shelley</td>
<td>Oral</td>
<td>Session III</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Rasor</td>
<td>Blake</td>
<td>Poster*</td>
<td>C</td>
<td>70</td>
</tr>
<tr>
<td>Reddy</td>
<td>Manisha</td>
<td>Poster*</td>
<td>C</td>
<td>52</td>
</tr>
<tr>
<td>Redeker</td>
<td>Bryce</td>
<td>Poster</td>
<td>B</td>
<td>32</td>
</tr>
<tr>
<td>Redeker</td>
<td>Bryce</td>
<td>Poster</td>
<td>B</td>
<td>78</td>
</tr>
<tr>
<td>Reinhart</td>
<td>Hana</td>
<td>Poster*</td>
<td>A</td>
<td>82</td>
</tr>
<tr>
<td>Ren</td>
<td>Teng</td>
<td>Poster</td>
<td>A</td>
<td>80</td>
</tr>
<tr>
<td>Rhoadsmith</td>
<td>Tiffany</td>
<td>Poster</td>
<td>A</td>
<td>01</td>
</tr>
<tr>
<td>Rhodus</td>
<td>Brooke</td>
<td>Poster</td>
<td>A</td>
<td>28</td>
</tr>
<tr>
<td>Rice</td>
<td>Travis</td>
<td>Poster*</td>
<td>B</td>
<td>58</td>
</tr>
<tr>
<td>Rich</td>
<td>Sarah</td>
<td>Poster</td>
<td>C</td>
<td>85</td>
</tr>
<tr>
<td>Richter</td>
<td>Olivia</td>
<td>Poster*</td>
<td>C</td>
<td>32</td>
</tr>
<tr>
<td>Rieger</td>
<td>Matthew</td>
<td>Poster</td>
<td>C</td>
<td>20</td>
</tr>
<tr>
<td>Rigot</td>
<td>Megan</td>
<td>Poster*</td>
<td>C</td>
<td>16</td>
</tr>
<tr>
<td>Rintsch</td>
<td>Eileen</td>
<td>Poster*</td>
<td>C</td>
<td>14</td>
</tr>
<tr>
<td>Rivas</td>
<td>Hannah</td>
<td>Poster</td>
<td>C</td>
<td>31</td>
</tr>
<tr>
<td>Roberto</td>
<td>Anthony</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Robin</td>
<td>Colin</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Rodgers</td>
<td>Avicia</td>
<td>Poster</td>
<td>C</td>
<td>83</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>-------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Rogers</td>
<td>Debbie</td>
<td>Poster</td>
<td>A</td>
<td>33</td>
</tr>
<tr>
<td>Rosalez</td>
<td>Savana</td>
<td>Poster*</td>
<td>A</td>
<td>47</td>
</tr>
<tr>
<td>Ross</td>
<td>Preston</td>
<td>Poster*</td>
<td>C</td>
<td>56</td>
</tr>
<tr>
<td>Rought</td>
<td>Jennifer</td>
<td>Poster</td>
<td>B</td>
<td>58</td>
</tr>
<tr>
<td>Rubenstein</td>
<td>Austen</td>
<td>Poster</td>
<td>A</td>
<td>21</td>
</tr>
<tr>
<td>Ruggles</td>
<td>Lauren</td>
<td>Poster</td>
<td>A</td>
<td>39</td>
</tr>
<tr>
<td>Rus</td>
<td>Tyler</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Russ</td>
<td>Kyle</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Russo</td>
<td>Calyn</td>
<td>Poster</td>
<td>C</td>
<td>78</td>
</tr>
<tr>
<td>Sabatelli</td>
<td>Madison</td>
<td>Oral</td>
<td>Session I</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Sachdeva</td>
<td>Karan</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Sackenheim</td>
<td>Trent</td>
<td>Poster</td>
<td>A</td>
<td>01</td>
</tr>
<tr>
<td>Safer</td>
<td>Brianne</td>
<td>Poster</td>
<td>C</td>
<td>53</td>
</tr>
<tr>
<td>Sandlin</td>
<td>Benjamin</td>
<td>Poster*</td>
<td>B</td>
<td>41</td>
</tr>
<tr>
<td>Sanyurah</td>
<td>Omar</td>
<td>Poster*</td>
<td>A</td>
<td>26</td>
</tr>
<tr>
<td>Sarac</td>
<td>Sibel</td>
<td>Poster</td>
<td>A</td>
<td>66</td>
</tr>
<tr>
<td>Sarkaria</td>
<td>Harleen</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Sauer</td>
<td>Jason</td>
<td>Poster</td>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>Schaefer</td>
<td>Anita</td>
<td>Oral</td>
<td>Session V</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Schafer</td>
<td>Christian</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Scheer</td>
<td>Alyssa</td>
<td>Poster*</td>
<td>A</td>
<td>73</td>
</tr>
<tr>
<td>Scheuering</td>
<td>Melissa</td>
<td>Poster</td>
<td>A</td>
<td>85</td>
</tr>
<tr>
<td>Schindler</td>
<td>Sara</td>
<td>Oral</td>
<td>Session II</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Schlitzer</td>
<td>Steven</td>
<td>Poster*</td>
<td>B</td>
<td>04</td>
</tr>
<tr>
<td>Schuber</td>
<td>Tara</td>
<td>Poster</td>
<td>A</td>
<td>01</td>
</tr>
<tr>
<td>Schubert</td>
<td>Haley</td>
<td>Poster*</td>
<td>B</td>
<td>28</td>
</tr>
<tr>
<td>Scicolone</td>
<td>Monica</td>
<td>Poster*</td>
<td>C</td>
<td>44</td>
</tr>
<tr>
<td>Scott</td>
<td>David</td>
<td>Poster*</td>
<td>A</td>
<td>31</td>
</tr>
<tr>
<td>Sedmak</td>
<td>Felicity</td>
<td>Poster*</td>
<td>A</td>
<td>36</td>
</tr>
<tr>
<td>Sepela</td>
<td>Rebecka</td>
<td>Poster*</td>
<td>A</td>
<td>56</td>
</tr>
<tr>
<td>Serio</td>
<td>Matt</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Seto</td>
<td>Tori</td>
<td>Poster*</td>
<td>C</td>
<td>13</td>
</tr>
<tr>
<td>Sewell</td>
<td>Michael</td>
<td>Poster*</td>
<td>B</td>
<td>78</td>
</tr>
<tr>
<td>Shader</td>
<td>Scarlett</td>
<td>Poster*</td>
<td>B</td>
<td>02</td>
</tr>
<tr>
<td>Shalloe</td>
<td>Abby</td>
<td>Poster</td>
<td>A</td>
<td>28</td>
</tr>
<tr>
<td>Shanley</td>
<td>Thomas</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Shepherd</td>
<td>Angelica</td>
<td>Poster</td>
<td>A</td>
<td>18</td>
</tr>
<tr>
<td>Shih</td>
<td>Pauline</td>
<td>Poster</td>
<td>C</td>
<td>81</td>
</tr>
<tr>
<td>Short</td>
<td>Casaundra</td>
<td>Poster</td>
<td>B</td>
<td>03</td>
</tr>
<tr>
<td>Sidler</td>
<td>Elaine</td>
<td>Poster</td>
<td>A</td>
<td>47</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Siegrist</td>
<td>Kyle</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Silver</td>
<td>Lindsay</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Skaggs</td>
<td>Justin</td>
<td>Poster*</td>
<td>C</td>
<td>33</td>
</tr>
<tr>
<td>Skijus</td>
<td>Alyssa</td>
<td>Poster*</td>
<td>C</td>
<td>55</td>
</tr>
<tr>
<td>Sklut</td>
<td>McKenna</td>
<td>Poster</td>
<td>A</td>
<td>15</td>
</tr>
<tr>
<td>Smiley</td>
<td>Samuel</td>
<td>Poster*</td>
<td>A</td>
<td>45</td>
</tr>
<tr>
<td>Smith</td>
<td>Amanda</td>
<td>Poster*</td>
<td>C</td>
<td>50</td>
</tr>
<tr>
<td>Smith</td>
<td>Lyneshia</td>
<td>Poster</td>
<td>A</td>
<td>18</td>
</tr>
<tr>
<td>Smith</td>
<td>Tyler</td>
<td>Poster*</td>
<td>A</td>
<td>05</td>
</tr>
<tr>
<td>Smitherman</td>
<td>Christopher</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Solomon</td>
<td>Kimberly</td>
<td>Poster</td>
<td>C</td>
<td>23</td>
</tr>
<tr>
<td>Solomon</td>
<td>Kimberly</td>
<td>Poster</td>
<td>C</td>
<td>62</td>
</tr>
<tr>
<td>Sondej</td>
<td>Alexis</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Sonkin</td>
<td>Chad</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Sowers</td>
<td>Thomas</td>
<td>Oral</td>
<td>Session IV</td>
<td>Caroline Scott</td>
</tr>
<tr>
<td>Spaeth</td>
<td>Stephen</td>
<td>Oral</td>
<td>Session IV</td>
<td>Caroline Scott</td>
</tr>
<tr>
<td>Sparks</td>
<td>Danny</td>
<td>Poster*</td>
<td>B</td>
<td>47</td>
</tr>
<tr>
<td>Spidel</td>
<td>Errin</td>
<td>Poster</td>
<td>A</td>
<td>84</td>
</tr>
<tr>
<td>Sprague</td>
<td>Mikayla</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Staron</td>
<td>Alex</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Stetzel</td>
<td>Leah</td>
<td>Poster*</td>
<td>A</td>
<td>62</td>
</tr>
<tr>
<td>Stevens</td>
<td>Sydney</td>
<td>Poster</td>
<td>A</td>
<td>85</td>
</tr>
<tr>
<td>Stezel</td>
<td>Leah</td>
<td>Poster</td>
<td>A-B-C</td>
<td>86</td>
</tr>
<tr>
<td>Stewart</td>
<td>Isaiah</td>
<td>Poster*</td>
<td>C</td>
<td>04</td>
</tr>
<tr>
<td>Stock</td>
<td>Rachel</td>
<td>Poster*</td>
<td>C</td>
<td>65</td>
</tr>
<tr>
<td>Stone</td>
<td>Christina</td>
<td>Poster*</td>
<td>C</td>
<td>41</td>
</tr>
<tr>
<td>Straily</td>
<td>Sara</td>
<td>Poster</td>
<td>A</td>
<td>25</td>
</tr>
<tr>
<td>Strauss</td>
<td>Morgan</td>
<td>Poster</td>
<td>B</td>
<td>38</td>
</tr>
<tr>
<td>Street</td>
<td>Lindsey</td>
<td>Poster</td>
<td>B</td>
<td>47</td>
</tr>
<tr>
<td>Sugimoto</td>
<td>Chiho</td>
<td>Poster*</td>
<td>C</td>
<td>45</td>
</tr>
<tr>
<td>Swartz</td>
<td>Alexandra</td>
<td>Poster</td>
<td>A</td>
<td>68</td>
</tr>
<tr>
<td>Swift</td>
<td>Hillary</td>
<td>Poster*</td>
<td>C</td>
<td>58</td>
</tr>
<tr>
<td>Talkington</td>
<td>William</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Tao</td>
<td>Yuqiao</td>
<td>Oral</td>
<td>Session III</td>
<td>Bystrom-Reid</td>
</tr>
<tr>
<td>Tarr</td>
<td>Melissa</td>
<td>Poster*</td>
<td>A</td>
<td>74</td>
</tr>
<tr>
<td>Tawney</td>
<td>Nathan</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Tenison</td>
<td>Christina</td>
<td>Poster</td>
<td>A</td>
<td>41</td>
</tr>
<tr>
<td>Tenison</td>
<td>Christina</td>
<td>Poster*</td>
<td>B</td>
<td>50</td>
</tr>
<tr>
<td>Terlop</td>
<td>Katilin</td>
<td>Poster</td>
<td>A</td>
<td>85</td>
</tr>
<tr>
<td>Tessier</td>
<td>Alexandre</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
</tbody>
</table>
### PRESENTERS INDEX

**By Student Last Name**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Type</th>
<th>Poster Session</th>
<th>Poster Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas</td>
<td>Katherine</td>
<td>Poster*</td>
<td>C</td>
<td>39</td>
</tr>
<tr>
<td>Thomas</td>
<td>Michael</td>
<td>Poster</td>
<td>C</td>
<td>57</td>
</tr>
<tr>
<td>Thompson</td>
<td>Eli</td>
<td>Poster</td>
<td>C</td>
<td>05</td>
</tr>
<tr>
<td>Tillstrom</td>
<td>Andrew</td>
<td>Poster*</td>
<td>A</td>
<td>80</td>
</tr>
<tr>
<td>Tilow</td>
<td>Emma</td>
<td>Poster</td>
<td>A</td>
<td>39</td>
</tr>
<tr>
<td>Towles</td>
<td>Coleton</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Troyer</td>
<td>Zach</td>
<td>Poster*</td>
<td>C</td>
<td>25</td>
</tr>
<tr>
<td>Ubbes</td>
<td>Joshua</td>
<td>Poster*</td>
<td>C</td>
<td>38</td>
</tr>
<tr>
<td>Uli</td>
<td>Gabriella</td>
<td>Poster*</td>
<td>C</td>
<td>21</td>
</tr>
<tr>
<td>Vamosi</td>
<td>Briana</td>
<td>Poster*</td>
<td>C</td>
<td>59</td>
</tr>
<tr>
<td>Vance</td>
<td>Jacqueline</td>
<td>Poster*</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Vincely</td>
<td>Vinoin</td>
<td>Poster</td>
<td>A</td>
<td>47</td>
</tr>
<tr>
<td>VonDerVellen</td>
<td>Bryan</td>
<td>Poster*</td>
<td>A</td>
<td>66</td>
</tr>
<tr>
<td>Wade</td>
<td>Stephanie</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Wagenseller</td>
<td>Ainsley</td>
<td>Poster</td>
<td>A</td>
<td>51</td>
</tr>
<tr>
<td>Walder</td>
<td>Sydnee</td>
<td>Poster*</td>
<td>A</td>
<td>48</td>
</tr>
<tr>
<td>Waldherr</td>
<td>Alex</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Weaver</td>
<td>Allison</td>
<td>Poster*</td>
<td>A</td>
<td>18</td>
</tr>
<tr>
<td>Weiss</td>
<td>Jason</td>
<td>Poster*</td>
<td>B</td>
<td>75</td>
</tr>
<tr>
<td>Welton</td>
<td>Sarah</td>
<td>Poster*</td>
<td>C</td>
<td>34</td>
</tr>
<tr>
<td>Wesseh</td>
<td>Rebecca</td>
<td>Poster*</td>
<td>C</td>
<td>83</td>
</tr>
<tr>
<td>West</td>
<td>Lauren</td>
<td>Poster*</td>
<td>B</td>
<td>38</td>
</tr>
<tr>
<td>Williford</td>
<td>Carly</td>
<td>Poster*</td>
<td>A</td>
<td>39</td>
</tr>
<tr>
<td>Wilson</td>
<td>Kelli</td>
<td>Poster*</td>
<td>B</td>
<td>62</td>
</tr>
<tr>
<td>Willoughby</td>
<td>Cassondra</td>
<td>Oral</td>
<td>Session II</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Wimbish Sopher</td>
<td>Marjorie</td>
<td>Poster*</td>
<td>C</td>
<td>40</td>
</tr>
<tr>
<td>Winkler</td>
<td>Brittany</td>
<td>Poster*</td>
<td>B</td>
<td>19</td>
</tr>
<tr>
<td>Wong</td>
<td>Darren</td>
<td>Poster</td>
<td>C</td>
<td>28</td>
</tr>
<tr>
<td>Woodruff</td>
<td>Lainey</td>
<td>Poster</td>
<td>A</td>
<td>06</td>
</tr>
<tr>
<td>Woods</td>
<td>Erinn</td>
<td>Poster</td>
<td>A</td>
<td>68</td>
</tr>
<tr>
<td>Woods</td>
<td>Justin</td>
<td>Oral</td>
<td>Session VI</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Woodward</td>
<td>Blake</td>
<td>Oral</td>
<td>Session III</td>
<td>Benjamin Harrison</td>
</tr>
<tr>
<td>Worley</td>
<td>Claudia</td>
<td>Poster*</td>
<td>A</td>
<td>13</td>
</tr>
<tr>
<td>Worner</td>
<td>Cassandra</td>
<td>Poster*</td>
<td>C</td>
<td>77</td>
</tr>
<tr>
<td>Xidas</td>
<td>Christina</td>
<td>Poster*</td>
<td>A</td>
<td>23</td>
</tr>
<tr>
<td>Xidas</td>
<td>Victoria</td>
<td>Poster*</td>
<td>B</td>
<td>70</td>
</tr>
<tr>
<td>Xidas</td>
<td>Victoria</td>
<td>Poster</td>
<td>B</td>
<td>73</td>
</tr>
<tr>
<td>Yan</td>
<td>Shengyi</td>
<td>Poster*</td>
<td>C</td>
<td>42</td>
</tr>
<tr>
<td>York</td>
<td>Kenneth</td>
<td>Poster*</td>
<td>C</td>
<td>54</td>
</tr>
<tr>
<td>You</td>
<td>Yue</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Last Name</td>
<td>First Name</td>
<td>Type</td>
<td>Poster Session</td>
<td>Poster Number</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>-------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Young</td>
<td>Anthony</td>
<td>Poster</td>
<td>B</td>
<td>13</td>
</tr>
<tr>
<td>Young</td>
<td>Kayla</td>
<td>Poster</td>
<td>C</td>
<td>23</td>
</tr>
<tr>
<td>Zanfardino</td>
<td>Sara</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Zeitner</td>
<td>Malachi</td>
<td>Poster</td>
<td>A-B-C</td>
<td>79</td>
</tr>
<tr>
<td>Zhang</td>
<td>Yan</td>
<td>Poster*</td>
<td>A</td>
<td>11</td>
</tr>
</tbody>
</table>
What are the Benefits of Undergraduate Research?

- Enhances student learning through mentoring relationships with faculty
- Increases retention
- Develops critical thinking, creativity, problem solving and intellectual independence
- Develops an understanding of research methodology
- Promotes an innovation-oriented culture

The Council on Undergraduate Research (CUR) is a national non-profit educational organization that provides research opportunities for students and faculty. Representing over 900 colleges and universities, this organization provides publications and outreach activities to share strategies for establishing undergraduate research programs. CUR defines undergraduate research as an inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to a discipline.

The mission of CUR is to support and promote high-quality undergraduate student-faculty collaborative research and scholarship. The council achieves its vision through the efforts of members within varying disciplines including arts and humanities, biology, chemistry, geosciences, health sciences, mathematics and computer science, physics and astronomy, psychology, and social sciences.

As an enhanced institutional member of CUR, Miami University offers faculty members, administrators, students, and staff the opportunity to join the Council on Undergraduate Research at no additional cost. Benefits to members include opportunities to participate in research programs, a subscription to the research publication CUR Quarterly, and access to additional resources.

For more information, visit the CUR website at http://www.cur.org/