Student as Scholar

22ND ANNUAL UNDERGRADUATE RESEARCH FORUM







President's Message

by David C. Hodge,
President and Professor of Geography

Welcome to the 2016 Miami University Undergraduate Research Forum. In its 22nd 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 at this year's event.

At Miami University, we've designated 2015-2016 as the Year of Creativity and Innovation. But while we're making a point to highlight them this year, the fact is that creativity and innovation have been helping to define the Miami experience for decades.

I encourage you to learn more about our students' creativity and innovation by engaging with the young researchers presenting at today's event. They'll tell you that the process they went through to obtain their results is as valuable as the results themselves.

That's something that all of Miami's undergraduate researchers experience – not just the 400 presenting today, but also the more than 1600 others who have worked with professors on funded research this year.

I offer my congratulations to the 22nd cohort of Miami University Undergraduate Research Forum presenters and my many thanks to the students, faculty, and staff who give us this chance to showcase and celebrate the creativity and innovation of Miami undergraduates, not just in this Year of Creativity and Innovation, but year after year.

David C. Hodge, Ph.D.

President

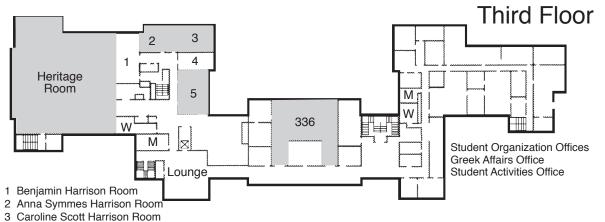
Contact Information

ORU
Office of Research
for Undergraduates
P: 513-529-2455
122 King Library
MiamiOH.edu/oru

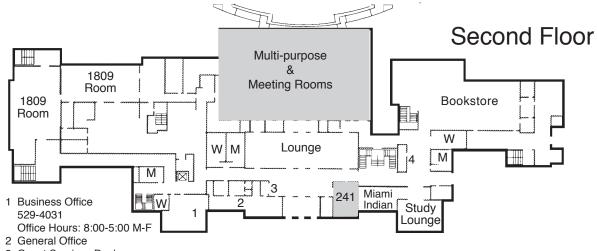
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Shriver Center Floor Plans



- 4 Whitelaw Reid Room
- 5 R. T. Bystrom Room



- 3 Guest Services Desk
- 4 Box Office

Undergraduate Research Forum 2016 Sponsors

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



MIAMI UNIVERSITY 22ND ANNUAL UNDERGRADUATE RESEARCH FORUM

Schedule of Events

APRIL 27, 2016

Oral Presentations - Morning Sessions I, II, III

Session I 9:00 - 9:45 a.m. Kreger Hall Classrooms 213 and 317

Session II 10:00 - 10:45 a.m. Kreger Hall Classrooms 213 and 317

Session III 11:00 - 11:45 a.m. Kreger Hall Classrooms 213 and 317

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. Kreger Hall Classrooms 213 and 317

Session V 2:30 - 3:15 p.m. Kreger Hall Classrooms 213 and 317

Session VI 3:30 - 4:15 p.m. Kreger Hall Classrooms 213 and 317

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.

Kreger Hall Room 213
SESSION MODERATOR: Jordan Neff-Estle

Kimberly Blake, Anthropology Major

ADVISOR(S): James Hanges, Department of

Comparative Religion

John-Charles Duffy, Department of Comparative Religion

Sharing Sacred Memory: Materiality and Story in

Constructing Mormon Public Education

Cecilia Simon, History and American Studies Major **ADVISOR(S)**: Kimberly Hamlin, American Studies Program *Social Movements on Television: The Intersection of Second Wave Feminism and The Mary Tyler Moore Show*

Spencer Reynolds, Finance and Economics Major **ADVISOR(S)**: Megan Gerhardt, Department of Management and Leadership *Negotiating with Chinese Businesses*

Kreger Hall Room 317 SESSION MODERATOR: Jennifer Heston

Jeremy Phifer, Chemical and Paper Engineering Major
ADVISOR(S): Andrew Paluch, Department of Chemical, Paper
and Biomedical Engineering
Predicting the Phase Behavior of Nonelectrolyte Solids in
Organic Solvents Using Electronic Structure Calculations and
Thermodynamic Modeling

Jeffrey Bierly, Biology and Premedical Studies Major **ADVISOR(S)**: Katia Del Rio-Tsonis, Department of Biology *Complement Component C3aR Constitutes a Novel Regulator for Chick Eye Morphogenesis*

Leah Stetzel, Biology Major **ADVISOR(S)**: Katia Del Rio-Tsonis, Department of Biology

Agustin Luz-Madrigal, Biology *Epigenetic Regulation of RPE Reprogramming During Retina Regeneration*

SESSION II: 10:00 - 10:45 A.M.

Kreger Hall Room 213
SESSION MODERATOR: Kelley Franks

Jordan Martin, Biology and Psychology Major **ADVISOR(S)**: Ginger Wickline, Department of Psychology *Facial Cues of Personality in the Bonobo (Pan paniscus)*

Sarah Loomis, Anthropology and English: Literature Major **ADVISOR(S)**: Jeb Card, Department of Anthropology Online Museums Explore New Technologies: A Survey of Online 3D Model Exhibitions for Anthropological Education

Eric Evans, History Major

ADVISOR(S): Sheldon Anderson, Department of History
The Cuban Changeup: The Evolving Role of Sport in the
Cuban Revolution from the Soviet Era to the "Special Period"

Kreger Hall Room 317 SESSION MODERATOR: Laurel Himmel

Christine Ostrosky, International Studies and Political Science Major

ADVISOR(S): Mark Peterson, International Studies Program Ted Holland, International Studies Program Women's Access to Education in the Middle East: Case Studies on Egypt, Saudi Arabia, and Syria

Joe Neidhart, English Literature Major

ADVISOR(s): Kathleen Johnson, Department of English

Make 'Em Laugh: How & Why We Use Comedy

Amanda Torchio, Psychology Major

ADVISOR(S): Cricket Meehan, Department of Psychology

Alex Intorcio, Department of Psychology

Perceptions of College Pregnancy Based on Gender

Oral Presentation Schedule

(See presenter index on pages 40 - 54)

SESSION III: 11:00 - 11:45 A.M.

Kreger Hall Room 213 SESSION MODERATOR: Nicholas Hansford

Allison Stoll, Strategic Communication Major
ADVISOR(S): Hongmei Li, Department of Media Journalism
and Film

Evolution of Barbie: Children's Toy to a Reflection Of Our Society

Taylor Douglas, Media and Culture Major **ADVISOR(S)**: Hongmei Li, Department of Media Journalism and Film

What The Chuck?: How Converse Evolved Into an American Pop Culture Icon

Sam Gerst, Latin American, Latino/a, and Caribbean Studies and History Major

ADVISOR(S): José Amador, Latin American Studies Program The Congress for Cultural Freedom and its Operations in Brazil

Kreger Hall Room 317 SESSION MODERATOR: Kelley Franks

Daniel McClurkin, English: Literature and Anthropology Major

ADVISOR(S): James Bielo, Department of Anthropology "Are You a Catholic Bahá'í or a Protestant Bahá'í?":

Articulations of Faith in Post-Troubles Belfast

Bergan Koch, Anthropology Major **ADVISOR(S)**: James Bielo, Department of Anthropology *Out of Oxford: Local Musicians and Musical Performance*

Eleanor Callinan, American Studies and Psychology Major **ADVISOR(S)**: Sandra Garner, Department of History *Out of Healthy Bodies and "Well-Being" in the Media*

Oral Presentation Schedule

(See presenter index on pages 40 - 54)

SESSION IV: 1:30 - 2:15 P.M.

Kreger Hall Room 213
SESSION MODERATOR: Jen Thach

Intermediate Schools

Eric (Max) Davis, Business Economics Major **ADVISOR(S)**: Brian Bergman, Institute for Entrepreneurial Leadership *Exploring Entrepreneurship Education Application in*

Monica Sciocolone, Psychology Major

ADVISOR(S): Kurt Hugenberg, Department of Psychology

The Influence of Perspective Taking on the Own-Age Bias in Facial Recognition

Evans Smalley, Psychology Major **ADVISOR(S)**: Kurt Hugenberg, Department of Psychology *Good Cop, Bad Cop: Participant Race Moderates Facial Representations of Police*

Kreger Hall Room 317
SESSION MODERATOR: Jade Taylor

Tory Mintz, Psychology Major **ADVISOR(s)**: Kristen Budd, Department of Sociology
And Gerontology

Sexual Violence in Same-Sex Relationships

Morgan Liddic, Gerontology Major

ADVISOR(S): Kristen Budd, Department of Sociology and
Gerontology

Sexual Abuse Against Older Adults

Amanda Horne, Sociology Major

ADVISOR(S): Kristen Budd, Department of Sociology

And Gerontology

Mediation Tactics for and Understanding Serious Situations

amongst Juveniles

Oral Presentation Schedule

(See presenter index on pages 40 - 54)

SESSION V: 2:30 - 3:15 P.M.

Kreger Hall Room 317
SESSION MODERATOR: Nicholas Hansford

John Brinton, Bioengineering Major

ADVISOR(S): Lalit Bali, Department of Physics

Samir Bali, Department of Physics

Refractive Index Sensor for Optical Sensing in Highly

Scattering Fluids with Temperature Control and Flow

Capability

Marcia Rudolph, Mechanical Engineering Major

ADVISOR(S): Jeong-Hoi Koo, Department of Mechanical and

Manufacturing Engineering

Characterization and Modeling of Artificial Skin with

Indentation Testing

Anthony Rapp, Physics and Music Major **ADVISOR(S)**: Samir Bali, Department of Physics

Measuring Vibrational Frequencies of a Cold Atom Lattice

using Pump-Probe Spectroscopy

Kreger Hall Room 213
SESSION MODERATOR: Brent Jones

Micayla Spiros, Anthropology Major **ADVISOR(S)**: Kristen Budd, Department of Sociology and Gerontology

Sexual Violence Against Intimate Partners

Tanner Moore, History and Comparative Religion Major ADVISOR(S): Wietse de Boer, Department of History Scott Kenworthy, Department of Comparative Religion A Detrimental Dialogue: An Analysis of Heresy in the Correspondence Between Thomas More and John Frith in Pre-Act of Supremacy England

Kelsey Straub, Psychology and Neuroscience Major **ADVISOR(S)**: Terri Messman-Moore, Department of Psychology

The Role of Shame and Internalized Homophobia in the Development of PTSD among Lesbian and Bisexual Women SESSION VI: 3:30 - 4:15 P.M.

Kreger Hall Room 317
SESSION MODERATOR: Clint Rodgers

Preston Ross, Physics Major

ADVISOR(S): Samir Bali, Department of Physics

A Proposal to Investigate Optical Lattices via Photon

Correlation Measurement

Hong Cai, Physics and Mathematics Major **ADVISOR(S)**: Samir Bali, Department of Physics *The Control of the Individual Atom in Lattice Beam*

Zachary Pollock, Physics Major **ADVISOR(S)**: Samir Bali, Department of Physics *Creating Arbitrary Optical Wavefronts Using a Spatial Light Modulator*

Kreger Hall Room 213
SESSION MODERATOR: Jennifer Thach

Mahaley Evans, History Major **ADVISOR(S)**: Erik Jensen, Department of History *The Discourse of Women's Experiences under Communism*

Eashwar Nagaraj, Economics Major **ADVISOR(S)**: Nirmala Naresh, Department of Mathematics *The Top 1% - A Statistical Study of Electoral Politics*

Caitlin McElligott, Anthropology and History Major **ADVISOR(S)**: John Schaefer, Department of Anthropology *Teaching Diverse Classrooms at an Ohio High School*

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A01 Stephanie Hess, Geography and International Studies Major

Advisor(s): Stanley Toops, Department of Geography Kimberly Medley, Department of Geography *Social Sustainability of Tourism for the Indigenous* Rapa Nui on Easter Island

A02 Samantha Bettinger, Psychology and Public Health Major

Advisor(s): Rose Marie Ward, Department of Kinesiology and Health

Substance Use, Social Capitol and Greek Affiliation

A03 Laura Asbury, Nutrition Major

Nichole Bahas, Nutrition Major

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

Replacing Sodium in Tomato Soup for Vinegar and the Differences in Likeability

A04 Halbert Lee, International Studies Major

Zeyu Huang, Economics Major

Sijie Pu, Accountancy Major

Advisor(s): Aimin Wang, Department of Educational Psychology

International Students Whether stay in US or Not after College Graduation

A05 Nathan Gander, Environmental Earth Science Major
Advisor(s): Mark Krekeler, Department of Geology &
Environmental Earth Science
Bulk Metal Pollution Investigation of a Restored Prairie

A06 Abigail Brown, Biology Major

Hamilton, Ohio

Advisor(s): Janet Marshall, Department of Chemistry and Biochemistry

Specific to the Miami University Hamilton Campus in

Organic Chemistry Lab Development: Enantiomeric Resolution using Alpha-Amino Acids A07 Jason Tran, Chemical and Paper Engineering Major

Haley Ferguson, Biochemistry Major **Richard Killeen**, Biochemistry Major

Quinn Kistenfeger, Biochemistry Major

Advisor(s): Ann Hagerman, Department of Chemistry

and Biochemistry

Interactions between Tea Polyphenols and Oral Health Care Products

A08 Corinne Gilardi, Nutrition and Public Health Major
Sarah Tombo. Nutrition Major

Advisor(s): Christina Minges, Department of Kinesiology and Health

Sockju Kwon, Department of Kinesiology and Health
The Effects of Different Tomatoes in Salsa

A09 Stephanie Fukui, Zoology Major

Advisor(s): Dawn Blitz, Department of Biology

Axonal Tracing and Characterization of CabTRP lacontaining Neuroendocrine Cells

A10 Justin Huling, Environmental Earth Science Major

Matthew Dietrich, Geology Major Taylor Osborne, Geology Major

Advisor(s): Mark Krekeler, Department of Geology &

Environmental Earth Science

Grain Characteristics Reveal Nature of Pollutants in Goldman Park, Middletown, Ohio: Probable Connections to an Adjacent Steel Factory

A11 Elaine Sidler, Biology Major

Kristen Nagy, Chemistry Major

Advisor(s): Michael Robinson, Department of Biology Stephanie Padula, Department of Biology Analyzing the Rescue of Survival by PTEN in FGFR Deficient Lenses

A12 Meghan Bruder, Public Health Major

Advisor(s): Valerie Ubbes, Department of Kinesiology and Health

Interventions for Neonatal Infant Health

A13 Robert Laing, Zoology and Political Science Major
 Abby Begezda, Biology and Premedical Studies Major
 Advisor(s): Susan Hoffman, Department of Biology
 Examining the Recolonization Patterns of the Northern
 Michigan White-footed Mouse following Logging

SESSION A: 10:00 - 11:30 A.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A14 Nathan Burns, Biochemistry Major
Nachiket Potineni, Microbiology Major
Advisor(s): Katia Del Rio-Tsonis, Department of
Biology
Zeyu Han, Department of Biology
Knockdown and Knockout of DNMT3a Affects Chick
Eye Morphogenesis

A15 David Jacob, Electrical Engineering Major
Alex Mazursky, Mechanical Engineering Major
Advisor(s): Jeong-Hoi Koo, Department of Mechanical
and Manufacturing Engineering
Development of Electrorheological Fluid in Haptic
Applications

A16 Addie Foran, Art and Architecture History Major Advisor(s): Murali Paranandi, Department of Architecture & Interior Design

Product Design: Ivory Toothbrush

A17 Lindsay Tyree, Kinesiology Major
Kelsey Owen, Kinesiology Major
Advisor(s): Kyle Timmerman, Department of
Kinesiology and Health

The Relationship of Physical Activity Level (selfreported and objectively observed) with Depression Satisfaction with Life, and Cognitive Function in Older Adults

A18 Ben Sandlin, Chemistry Major

Advisor(s): Ellen Yezierski, Department of Chemistry and Biochemistry

Identifying and Characterizing Pedagogical Cues in Organic Chemistry Texts: Analyzing R-S Excerpts Using an Imagistic Reasoning Framework

A19 Kayla Bergmann, Biology Major

Meghan Bowers, Microbiology and Premedical Studies Major

Clay Curts, Biology and Premedical Studies Major Advisor(s): Joyce Fernandes, Department of Biology Aswati Subramanian, Department of Biology Assessing the Developmental and Behavioral Outcomes of Genetic Manipulations in Glial Cells That Wrap Nerves **A20 Hunter Williams**, Media and Culture and Comparative Media Studies Major

Advisor(s): Hongmei Li, Department of Media, Journalism and Film

The Evolution of Easy, Breezy, Beautiful

A21 Erik Seroogy, Biology and Pre-Medical Studies Major Advisor(s): Richard Lee, Department Biology J.D. Gantz, Department of Biology Neurophysiological Assessment of Rapid Cold-hardening-induced Resistance to the Disruption of Resting Neuronal Membrane Potential

A22 Hannah Kempf, Spanish and Geology Major
Advisor(s): David Beard, Department of Spanish &
Portuguese
An Analysis of Consonant Pronunciation in Non-native
Spanish Speakers at Miami University

A23 Amariyah Yisrael, Mechanical Engineering Major
Advisor(s): Robert Karol, Department of Mechanical
and Manufacturing Engineering
Biolock Applications

A24 Haleigh Richards, Geology and Sustainability Major Advisor(s): Mark Krekeler, Department of Geology & Environmental Earth Science
An Investigation of Mineralogy and Metal Pollution From Parking Lot Sediment at Miami University
Hamilton: Implications for Stormwater Management

A25 Brandon Fogel, Management and Leadership and Political Science Major

Kelly Rains, Marketing Major

Meghan Shaughnessy, Accountancy Major **Advisor(s):** Megan Gerhardt, Department of

Management and Leadership

Miami Motivation: Extrinsic and Intrinsic, Eudaemonic and Hedonistic

A26 Pauline Shih, Biology and Medical Laboratory Science Major

Nicholas Greene, Medical Laboratory Science Major Sarah Powell, Medical Laboratory Science Major Advisor(s): Marcia Lee, Department of Microbiology Effects of Varying Carbon Dioxide Concentrations on Pseudogymnoascus destructans Growth

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A27 Brenna McElderry, Biology and Premedical Studies Major

Advisor(s): Paul James, Department of Biology Joe Powers, Department of Biology Inactivating the Mouse Na+/H+ Exchanger 5 Gene to Determine Its Role in Sperm Physiology

- A28 Jake Miller, Mechanical Engineering Major
 Ian Shelburne, Mechanical Engineering Major
 Paul Goetze, Mechanical Engineering Major
 Advisor(s): Jeong-Hoi Koo, Department of Mechanical
 and Manufacturing Engineering
 Generating Arterial Blood Flow Patterns Using a
 Pulsatile Simulator
- A29 Chelsea Clark, Art and Architecture History and Interior Design Major

 Elena Eichinger, Interior Design Major

 Advisor(s): Murali Paranandi, Department of Architecture & Interior Design

 Designing Worldwide

Davis McNichol. Accountancy Major

A30 Spencer Poore, Finance Major

- Matthew Estes, Finance Major
 Will Rogers, Finance Major
 Advisor(s): Megan Gerhardt, Department of
 Management and Leadership
 The Impact of College Life: How Substance Use and
 Sleep Habits Affect Academic Performance in Miami
 University Students
- A31 Brianna Minshall, Psychology and Neuroscience Major Advisor(s): Ellen Yezierski, Department of Chemistry and Biochemistry
 Sara Nielsen, Department of Chemistry and Biochemistry
 Characterizing Secondary Chemistry Instruction Using Teacher Questioning as a Framework for Analysis of Classroom Observations

A32 Nicole Saraniti, Individualized Studies Major
Jasmine Spencer, Individualized Studies Major
Lauren Fotta, Psychology Major
Sarah Laane, Psychology Major
Mackenzie Howard, Psychology Major
Cody Anderson, Psychology Major
Alex Feltz, Psychology Major
Thomas Educato, Psychology Major
Advisor(s): Jay Smart, Department of Psychology
Justin Hassebrock, Department of Psychology
The Effects of Gender Role Congruity on Coordination
Strategies and Partner Perception

- A33 Sanjay Nevrekar, Engineering Physics Major
 Daniel Thompson, Mechanical Engineering Major
 Advisor(s): Jeong-Hoi Koo, Department of Mechanical
 and Manufacturing Engineering
 Electrically-Activated Affordable Artificial Muscle
 Fibers
- A34 Rain Lab, Psychology Major
 Advisor(s): Jennifer Quinn, Department of Psychology
 Daniel Kochli, Department of Psychology
 NMDA Receptor Interaction in Memory
 Reconsolidation and Retrieval
- A35 Dana Nocera, Kinesiology Major
 Advisor(s): Rose Marie Ward, Department of
 Kinesiology and Health
 Exploring the Link between Blacking out and Sexual
 Assault via a Social Network Analysis
- A36 Nozomi Tanaka, Botany Major
 Jingxuan Li, Accountancy Major
 Advisor(s): Aimin Wang, Department of Educational
 Psychology
 Examining the Relationship between English
 Proficiency and Academic Performance
- A37 Scott Gscheidle, Mechanical Engineering and
 Manufacturing Engineering Major
 Advisor(s): James Moller, Department of Mechanical
 and Manufacturing Engineering
 Chemical Signature of Fractured Thermoset Surfaces

SESSION A: 10:00 - 11:30 A.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A38 Alex Danielson, Biochemistry and Music Performance Major

Peroxidase as a RAFT-Initiase

Josh Bornstein, Chemical and Paper Engineering Major Advisor(s): Dominik Konkolewicz, Department of Chemistry and Biochemistry Well-Defined Macromolecules Using Horseradish

- A39 Eric Shin, Mechanical Engineering Major
 Yuqiao Tao, Mechanical Engineering Major
 Advisor(s): Jeong-Hoi Koo, Department of Mechanical
 and Manufacturing Engineering
 Investigation of Blood Flow Patterns with
 Computational Artery Bifurcation Models
- **A40** Alexander Polinsky, Business Economics Major Advisor(s): Robert Leonard, Department of Information Systems and Analytics

 Event Study of Pharmaceutical Company Stock Prices
- A41 Brianne Moore, Biology and English: Creative
 Writing Major
 Advisor(s): Joyce Fernandes, Department of Biology

Connecting Scientific Research to Public Audiences: Role of the Writing Assignment in Content Courses

- A42 Stephen Schwab, Art and Architecture History Major Advisor(s): Murali Paranandi, Department of Architecture & Interior Design Videogames and Architecture Visualization
- A43 Brianne Safer, Psychology Major
 Maria Yamada-Killilea, Psychology Major
 Hayden Cook, Psychology Major
 Advisor(s): Amanda Diekman, Department of
 Psychology
 Aimee Belanger, Department of Psychology
 The Relationship between Communal Goals,
 Belonging, and Science Career Interest

A44 Kyle Weaver, Chemical and Paper Engineering and

Biochemistry Major

Advisor(s): Jeong-Hoi Koo, Department of Mechanical and Manufacturing Engineering

Application of Magneto-Rheological Fluids for Generating Pulse Profiles Recognized in Oriental Medicine

A45 Shane Haney, Accountancy Major
Catherine Riordan, Management and Leadership Major
Tarah Mason, Business Economics Major
Advisor(s): Megan Gerhardt, Department of
Management and Leadership
How We Choose Friends

- A46 Avicia Rodgers, Psychology Major
 Advisor(s): Aaron Luebbe, Department of Psychology
 Lauren Fussner, Department of Psychology
 Adolescent Depression, Social Functioning, and
 Sensitivity to Social Feedback
- **A47 Erika Zambarano**, Athletic Training and Kinesiology Major

 $\begin{tabular}{ll} \bf Advisor(s): Eric Brooks, Department of Kinesiology \\ and Health \end{tabular}$

Pitching Without an Ulnar Collateral Ligament of the Elbow in Division I Collegiate Baseball

A48 Samantha Bozada, Bioengineering Major
Sebastian Diaz-Rodriguez, Chemical and Paper
Engineering Major

Advisor(s): Andrew Paluch, Department of Chemical, Paper and Biomedical Engineering

Blind Predictions of Cyclohexane/Water Partition

Coefficients Using Electronic Structure Calculations and Thermodynamic Modeling

- Advisor(s): Katia Del Rio-Tsonis, Department of Biology
 Nancy Echeverri, Department of Biology
 N-acetyl Cysteine as an Inducer of Retinal Regeneration
- **A50 Katherine Rissmann**, Biochemistry and Premedical Studies Major

Advisor(s): David Beard, Department of Spanish & Portuguese

The Use of False Cognates in Second Language Learners of Spanish

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A51 Kelsey Owens, Kinesiology Major **Lindsay Tyree**, Kinesiology Major

Advisor(s): Kyle Timmerman, Department of

Kinesiology and Health

Thelma Horn, Department of Kinesiology and Health Does Self-efficacy or Physical Activity Level Lead to a Better Prediction of Depression, Satisfaction with Life, and Cognitive Function in Older Adults?

A52 Chloe Hazen, Chemical and Paper Engineering Major
Colten Cowell, Chemical and Paper Engineering Major
Anna Brandmeier, Chemical and Paper

Engineering Major **Zhongqi Cheng**, Chemical and Paper

Dan Fay, Bioengineering Major

Engineering Major

Steven Grzincic, Chemical and Paper Engineering Major

Cameron Hulse, Chemical and Paper Engineering Major

Advisor(s): Douglas Coffin, Department of Chemical, Paper and Biomedical Engineering Improving Strength Properties of Paper Utilizing Mycelia Fungus

- A53 Adam Reece, Mechanical Engineering Major
 Advisor(s): Jeong-Hoi Koo, Department of Mechanical
 and Manufacturing Engineering
 Characterization of Dynamic Responses of Bending
 Actuators Based on Magneto-Rheological Elastomer
- **A54 Max Leveridge**, Environmental Earth Science and Environmental Science Major

Advisor(s): Michael Brudzinski, Department of Geology & Environmental Earth Science Rob Skoumal, Department of Geology & Environmental Earth Science Seismicity Near Marietta, Ohio Potentially Induced by Deep Injection of Hydraulic Fracturing Wastewater A55 Tyler Arnett, Biochemistry Major
Avery Walke, Biochemistry Major
Advisor(s): Michael Kennedy, Department of
Chemistry and Biochemistry
Faizule Hassan, Department of Chemistry and
Biochemistry
Efficacy of a Conditionally Replicative Adenovirus
Harboring HMGA Binding Sites for Treatment of
Chemoresistant Pancreatic Cancer

A56 Lonnie Flett, Geology Major
Advisor(s): Mark Krekeler, Department of Geology &
Environmental Earth Science
Heather Barrett, Department of Geology &
Environmental Earth Science
Scanning Electron Microscopy Provides a Better
Understanding of Finely Disseminated Gold Ore

A57 Samantha Sloane, Chemistry Major
Advisor(s): Dominik Konkolewicz, Department of
Chemistry and Biochemistry
Analysis of Polymers Through Direct Detect
Spectroscopy

A58 Abigail Wilson, Biology Major
Advisor(s): Katia Del Rio-Tsonis, Department
of Biology
Karla Yadira Barbosa Sabanero, Department of Biology
Investigating the Targets of Gli-1 during Chick Retinal
Pigmented Epithelium Transdifferentiation

A59 Jack Latimer, Philosophy and Premedical Studies Major

Andrew Wakefield, Biology and Premedical Studies Major

Advisor(s): Dawn Blitz, Department of Biology Different Muscles Interpret Changes in Stimulus Timing Differently Despite Receiving the Same Input

A60 Libby Crook, Speech Pathology & Audiology and Spanish Major

Advisor(s): David Beard, Department of Spanish & Portuguese

Student Attitudes Towards Code-Switching at Miami University

SESSION A: 10:00 - 11:30 A.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A61 Kyle Fullenkamp, Art and Architecture History Major Advisor(s): Murali Paranandi, Department of Architecture & Interior Design Online Portfolio

A62 Jeffrey McCain, Chemical and Paper
Engineering Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Drunkorexia in Fraternities and Sororities

A63 Dillon de Medeiros, Physics Major
Advisor(s): Samir Bali, Department of Physics
Somaya Madkhaly, Department of Physics
Pump/Probe Angular Dependency of Zeeman
Electromagnetically Induced Transparency

A64 Michael Strickley, Biology and Premedical
Studies Major
Advisor(s): Richard Bretz, Department of Chemistry

and Biochemistry
The Use of Lobelia Cardinalis to Remove Nitrate and

Phosphate Pollution in Surface Water

A65 Ariel Shirley, Psychology Major

Tyler Schumacher, Psychology and Economics Major

Emily Blumenthal, Psychology Major

Grace Clements, Psychology Major **Emily Kaufman**, Psychology Major **Mary Lloyd**, Psychology Major

Evans Smalley, Psychology Major

Advisor(s): Jonathan Kunstman, Department of Psychology

Kurt Hugenberg, Department of Psychology

Steven Almaraz, Department of Psychology Jason Deska, Department of Psychology Hey Boss My Eyes Are Up Here: How Power and SOI Interact to Predict Attention to Bodies **A66 Elizabeth Posdal**, Psychology Major

Haley Smith, Marketing Major

McKenna Rudy, Psychology and Kinesiology Major

Haoran Chen, Psychology Major

Jaylene Wallick, Management and Leadership Major

Grant Hutchison, Marketing Major

Kala Allen, Psychology Major

Advisor(s): Jay Smart, Department of Psychology

Tony Drew, Department of Psychology

ABC Easy as...: Postural Characteristics of Confidence

A67 Salome Beyene, Nutrition and Premedical Studies Major

Anna McFarland, Nutrition and Public Health Major **Advisor(s):** Beth Miller, Department of Kinesiology and Health

A Brief Assessment of Nutrition Knowledge and Health Behaviors of Female College Volleyball Players

A68 Zachary Digby, Biochemistry and Premedical Studies Major

Advisor(s): Dominik Konkolewicz, Department of Chemistry and Biochemistry Borui Zhang, Department of Chemistry and Biochemistry

New Dynamic Materials using Reversible thiol-Michael Addition

A69 Sara Zanfardino, Biochemistry Major

Advisor(s): Karthik Vishwanath, Department of Physics

Diffuse Correlation Spectroscopy in Medicine: A Review on using Diffuse Correlation Spectroscopy to Monitor Relative Blood Flow and Determine the Effectiveness of Cancer Treatment

A70 Brendan Andres, Biochemistry Major
Advisor(s): Heather Vallier, Case Western
Medical School

Intervention Strategy: Hypovitaminosis D in an Orthopaedic Trauma Population

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A72 Kimberly Wright, Nutrition Major
 Morgan Supensky, Nutrition Major
 Advisor(s): Christina Minges, Department of
 Kinesiology and Health
 The Effects of Cinnamon as a Sugar Replacement in
 Cinnamon Rolls

A73 Anne Misey, Speech Pathology & Audiology and Gerontology Major

Advisor(s): Jane Newell, Department of Family Studies and Social Work

Visible and Invisible Health Factors in College Females

A74 Natalie Rohr, Nutrition Major
Gabe Kahan, Nutrition Major
Scott Burrows, Nutrition Major

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

Christina Minges, Department of Kinesiology and Health

Avocado As A Fat Substitute

A75 Symeon Stefan, Biology Major
Advisor(s): Paul Urayama, Department of Physics
Fluorescence-based Monitoring of Cellular NADH
Conformation During Metabolic Response Induced by
D-glucose and 2-deoxy-D-glucose

A76 Tiago Schaeffer, Physics and Music Major
 Abbey Hurley, Physics Major
 Jayson Rook, Physics and Computer Science Major
 James O'Connor, Biological Physics and
 Biochemistry Major

Amber Williams, Engineering Physics Major **Advisor(s):** Anna Ghazaryan, Department of Mathematics

Chaotic Water Wheel Physical Model and Simulation

- A77 Joshua Gabbard, Art and Architecture History Major David Burns, Art and Architecture History Major Advisor(s): Murali Paranandi, Department of Architecture and Interior Design Architecture & Landform: Prospective Synthesis in the Digital Age
- A78 William Margulis, Art and Architecture History Major Advisor(s): Murali Paranandi, Department of Architecture & Interior Design

 Visualization through Virtual Reality

A79 Kristen Devaney, Classical Humanities Major
Brittany Anderson, Anthropology Major
Claire Anderson, Graphic Design Major
Rachel Brand, Anthropology Major
Livvie Clark, Bioengineering and Premedical
Studies Major

Logan Klinsky, Psychology Major

Jessica Davidson, Psychology Major
Matthew Edwards, Anthropology Major
Jill Elfers, Anthropology Major
Michael Geering, Mass Communication Major
Meryl Haque, Individualized Studies Major
Rebecca Juno, Zoology Major

Kelley Mangerson, Anthropology and Premedical Studies Major

Kelly Marcus, Anthropology Major **Grace McKittrick**, Anthropology and Linguistics Major **Kylee Miller**, Anthropology Major

Bridget O'Dell, Individualized Studies Major **Peter Stenfanski**, Anthropology Major **Advisor(s):** Cameron Hay-Rollins, Department of

Anthropology
Key Concepts in Psychological Anthropology

A80 Conor Flavin, Bioengineering Major
Advisor(s): Azizeh-Mitra Yousefi, Department of
Chemical, Paper and Biomedical Engineering
Nicholas Uth, Department of Chemical, Paper and
Biomedical Engineering
Controlling the Architecture of PLLA/HFP Tissue
Engineered Scaffolds Using a 3D Bioplotter

A81 Sarah Chu, Speech Pathology & Audiology Major
Advisor(s): Amber Franklin, Department of Speech
Pathology and Audiology
Rob Chapman, Department of Speech Pathology
and Audiology
The Relationship Between Vowel Goodness Scores and
Functional Load

A82 Cassandra Sandvick, Chemistry Education Major
Linh-Thuy Vu, Chemistry Education Major
Advisor(s): Ellen Yezierski, Department of Chemistry
and Biochemistry
Sara Nielsen, Department of Chemistry and
Biochemistry
Exploring Teacher-Student Interactions in High School
Chemistry Classrooms Through Classroom Videos

SESSION A: 10:00 - 11:30 A.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

A83 Kala Allen, Psychology Major
Jaylene Wallick, Management and Leadership Major
Grant Hutchison, Marketing Major
Haoran Chen, Psychology Major
Haley Smith, Marketing Major
McKenna Rudy, Psychology and Kinesiology Major
Elizabeth Posdal, Psychology Major
Advisor(s): Jay Smart, Department of Psychology
Tony Drew, Department of Psychology
Faces and Motion: Facial Identification from Movement

A84 Kala Allen, Psychology Major
Lucas Wagner, Individualized Studies Major
Advisor(s): Denise Taliaferro Baszile, Department of
Educational Leadership
Chasity Dittmann, Department of Educational
Leadership
Mentoring As a Critical & Creative Process

A85 Samuel Farina, Psychology Major
Advisor(s): Amanda Diekman, Department of
Psychology
Melissa Fuesting, Department of Psychology
Aimee Belanger, Department of Psychology
Agentic and Communal Goals in Academic Group
Work

A86 Microbiology Bacteriophage Biology Class
Mary Owen, Microbiology Major
Andrew Schaff, Microbiology Major
Kayla Cartwright, Biology Major
Angel Chen, Biology Major
Jessica Clark, Microbiology Major

Bradley Davis, Microbiology Major
Paige Etchison, Microbiology Major
Shelby Frieszell, Microbiology Major
Jacquelyn Gross, Microbiology Major
Stephanie Smith, Microbiology Major
Elsa Clenny, Microbiology Major
Svitlana Podolyan, Microbiology Major

Stephanie Swedik, Microbiology Major
Advisor(s): Luis Actis, Department of Microbiology
Mitchell F. Balish, Department of Microbiology
Gabrielle Lopez, Department of Microbiology
Tzvia Springer, Department of Microbiology
From High Street to Bishop Woods: The "Lives" of Two
Phages

A87 Runyi Hu, Statistics Major

Advisor(s): Aimin Wang, Department of Educational Psychology

The Relationship for International Student between Academic Challenge and Social Performance

Adam Hoover, Supply Chain and Operations
 Management and Environmental Science Major
 Jessica Roberts, Zoology Major
 Advisor(s): Mark Krekeler, Department of Geology & Environmental Earth Science
 An Investigation of Reflective Spectra of Styrofoam

A89 Adam Hoover, Supply Chain and Operations
Management and Environmental Science Major
Jessica Roberts, Zoology Major
Advisor(s): Mark Krekeler, Department of Geology &
Environmental Earth Science
An Investigation of Reflective Spectra of Plastic

A90 Nicholas Henkel, Zoology Major
Advisor(s): Lori Isaacson, Department of Biology
Exploring the Changes in Cell-Cell Communication in
the Spinal Cord Following Peripheral Axon Injury

A91 McKenna Sklut, Psychology
 Madeline Burke, Psychology
 Anna Cavagnaro, Psychology
 Advisor(s): Amy Summerville, Department of Psychology
 Are You Contributing to Global Warming

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

Aimee Miley, Psychology and Family Studies Major
 Lillyanna Faimon, Physics Major
 Julia Snodgrass, Diplomacy and Global Politics Major

Claire Vargas, Speech Pathology & Audiology Major Avicia Rodgers, Psychology Major

Rebecca Wesseh, Psychology and Family Studies Major

Nguyen Nguyen, Finance and Accountancy Major **Kainon Funches**, Family Studies Major

Megan Stapleton, Biology and Premedical

Studies Major

Advisor(s): Katherine Kuvalanka, Department of Family Studies and Social Work

Molly Gardner, Department of Family Studies and Social Work

The Complexities of Family Acceptance for Transgender and Gender Nonconforming Youth

B02 Madeline McDonough, Public Health Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Prevalence of Drunkorexia Among Nutrition Majors

B03 Kara Lichtenberg, Nutrition Major
 Hannah Chouinard, Nutrition Major
 Kaegon Mollett, Kinesiology Major
 Advisor(s): Beth Miller, Department of Kinesiology
 and Health
 Garden to Table: A Pilot Home Gardening Program for
 Food Pantry Clients

B04 Morgan Cody, Psychology Major
Sibel Sarac, Psychology Major
Advisor(s): Vrinda Kalia, Department of Psychology
Robin Thomas, Department of Psychology
Mingliang Gong, Department of Psychology
Gritty or Flexible: Which Is a Better Predictor of
Academic Success?

Advisor(s): Valerie Ubbes, Department of Kinesiology and Health

Depression in College Students: Applying the Four P's

Depression in College Students: Applying the Four P's of Social Marketing to Health Communication Message Designs B06 Chen Shen, Accountancy and Finance Major

Liu Lu, Nutrition Major

Lijing Tian, Nutrition Major

Advisor(s): Aimin Wang, Department of Educational Psychology

The Kind of Skills that I Want to Acquire for Achieving My Goal

B07 Victoria Thompson, Nutrition and Premedical Studies Major

Advisor(s): Beth Miller, Department of Kinesiology and Health

Diet and Diabetes in the Solomon Islands

BO8 Allison McTighe, Nutrition Major

Lucy Lavine, Nutrition Major

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

Give Fat Free Frosting a Try

B09 Jannette Ladipo, Zoology and Women's, Gender, and Sexuality Studies Major

Advisor(s): Valerie Ubbes, Department of Kinesiology and Health

Morbidity and Mortality Concerns of Pregnant Women in the United States

B10 Eric Rubeo, English: Creative Writing and English: Literature Major

Advisor(s): Margaret Luongo, Department of English My Narrator and I: Blurring the Lines between Fiction and Creative Nonfiction

B11 Rachel Zerwick, Psychology Major
Cara Klinefelter, Psychology Major
Advisor(s): Jonathan Kunstman, Department
of Psychology
Christina Fitzpatrick, Department of Psychology
Conspicuous Consumption and Social Class Identity

B12 Andrea Lee, Latin American Studies and East Asian Languages and Cultures Major
Advisor(s): Rose Marie Ward, Department of Kinesiology and Health
Is it a Drunk Hookup or Something Else?

SESSION B: 1:30 - 2:45 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

B13 Matthew Koehler, Athletic Training Major
Advisor(s): Eric Brooks, Department of Kinesiology
and Health

Asymptomatic Cam Impingement in a Male Collegiate Basketball Player: A Case Report

B14 Hannah Chouinard, Nutrition MajorSalome Beyene, Nutrition and PremedicalStudies Major

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

Christina Minges, Department of Kinesiology and Health

Effects of Aquafaba as an Egg White Substitute on the Tenderness of Meringues

B15 Angelina Caradonna, Nutrition Major

Danielle Liska, Nutrition Major

Trackers

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

Recreating Traditional Alfredo Sauce by using Greek Yogurt

B16 Jennifer Kelleher, Marketing and Psychology Major Advisor(s): Rose Marie Ward, Department of Kinesiology and Health

Tracking Drinks and Diets: An Examination of the Co-Occurrence of Alcohol, Drunkorexia, and Fitness

B17 Kristin Hauck, Nutrition Major
Sam Ballard, Nutrition and Public Health Major
Advisor(s): Sockju Kwon, Department of Kinesiology
and Health

Christina Minges, Department of Kinesiology and Health

Effect of Gluten-Free Flour Substitution on Overall Brownie Quality

B18 Elizabeth Hines, Kinesiology Major
Mary Beth Herman, Public Health Major
Mary Tess Irvine, Public Health Major
Advisor(s): Thelma Horn, Department of Kinesiology
and Health
International Perspectives on the Field of

Occupational Therapy

B19 Hannah Golovin, Nutrition and Psychology Major Victoria Warren, Kinesiology and Nutrition Major Advisor(s): Sockju Kwon, Department of Kinesiology and Health

The Effects of Substituting Flaxseed for Fat in Muffins

B20 Brett VanCauwenbergh, Biochemistry Major
 Dan Kinstedt, Biochemistry Major
 Advisor(s): Michael Kennedy, Department of
 Chemistry and Biochemistry

Faizule Hassan, Department of Chemistry and Biochemistry

An Investigation of Antiobiotic Agents in Fungal Extracts Collected from the Oxford, Ohio Area Against Antibiotic Resistant Organisms

B21 Briana Vamosi, Chemistry and Premedical Studies Major

Counterion Association

Matthew Kelly, Biochemistry Major **Advisor(s)**: Burcin Bayram, Department of Physics *Molecular Spectroscopy of Diatomic Iodine*

B22 Cameron Jamshidi, Biochemistry Major
Advisor(s): David Tierney, Department of Chemistry
and Biochemistry
Amy Marts, Department of Chemistry and
Biochemistry
NMR Studies of the Dielectric Effect of Solvents on

B23 Andrew Sylvester, Geology Major
Advisor(s): Tammie Gerke, Department of Geology &
Environmental Earth Science
Physicochemical Characteristics of Rusticles, Iron
Corrosion Products, from Historic Shipwrecks in the
Gulf of Mexico

B24 Katherine Makaroff, Biochemistry Major
Advisor(s): Richard Page, Department of Chemistry
and Biochemistry
Biophysical and Biochemical Analyses of CellulasePolymer Bioconjugates for Biofuel Applications

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

Mary Farley, Biology and Premedical Studies Major
 Caroline Kennedy, Biology and Premedical
 Studies Major

Denae Garcia, Zoology and Premedical Studies Major **Jack Gruber,** Zoology Major

Advisor(s): Susan Hoffman, Department of Biology The Effects of Forest Type on Peromyscus leucopus in Michigan's Lower Peninsula

B26 Julianne Werts, Zoology and Environmental Science Major

Advisor(s): Ann Rypstra, Department of Biology Specialization in Hunting Behavior of Pardosa milvina

B27 Kory Neidich, Geology Major

Advisor(s): Mark Krekeler, Department of Geology & Environmental Earth Science *Gold Crystal Growth Complexity*

B28 Maressa Schulze, Chemical and Paper

Engineering Major

John Gammell, Chemical and Paper Engineering Major **Christopher Ipacs**, Bioengineering Major

Advisor(s): Lei Kerr, Department of Chemical, Paper and Biomedical Engineering

Jason Berberich, Department of Chemical, Paper and Biomedical Engineering

Polymers to Assist in the Delivery of Lidocaine

B29 Julia Behrend, Biology Major

Advisor(s): Susan Hoffman, Department of Biology Joseph Baumgartner, Department of Biology *Trends in Dental Structure in Peromyscus leucopus Populations*

B30 Shannon Barnes, Latin American Studies and Spanish Major

Advisor(s): Juan Carlos Albarran, Department of Latin American, Latino/a, and Caribbean Studies Program The Influences of American Imperialism and the African Diaspora on the Music of Panama **B31 Monica Komer**, International Studies and Journalism Major

Advisor(s): Mark Peterson, International Studies Program

The Liberated and Oppressed: U.S. News Representations of Female Political Participation in the Middle East

B32 Kate Lawrence, Public Health and Middle Childhood Education Major

Advisor(s): Valerie Ubbes, Department of Kinesiology and Health

Active Adults in the Workplace: Policies and Programming for Health Improvements

B33 Alexandra Nobis, Sociology and Social Work Major Advisor(s): Glenn Muschert, Department of Sociology and Gerontology

Why Women Relapse After Drug and Alcohol Rehabilitation

B34 Anna Agnew, Kinesiology Major

Advisor(s): Valerie Ubbes, Department of Kinesiology and Health

The Effects of Maternal Oral Health on Infant Prenatal and Postnatal Care

B35 Kaila Sansom, English: Linguistics and Spanish MajorAdvisor(s): David Beard, Department of Spanish &Portuguese

The Concurrency and Ambiguity of Ser and Estar in Non-Native Spanish Speakers

B36 Rachel Bonsky, Special Education Major

Advisor(s): Sarah Watt, Department of Education

Advisor(s): Sarah Watt, Department of Educational Psychology

The Effectiveness of Concept Learning to Increase Mathematical Vocabulary

B37 Sydney Hetman, Kinesiology Major

Advisor(s): Cecilia Shore, Department of Psychology Forming a Relationship with Elders through Service Learning: Achieving Student Learning Outcomes

SESSION B: 1:30 - 2:45 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

B38 John Spear, Chemistry and Interdisciplinary Business Management Major

Advisor(s): Stacey Lowery Bretz, Department of Chemistry and Biochemistry

Zahilyn Roche Allred, Department of Chemistry and Biochemistry

Timothy Abell, Department of Chemistry and Biochemistry

Analysis of General Chemistry Textbook Representations: Quantum Models of Atomic Structure

B39 Susanna Smith, Gerontology and Sociology Major Advisor(s): Kate de Medeiros, Department of Sociology and Gerontology Lost Voices of Ohio's Under-Represented Elder Population

B40 Domenica Blasucci, Nutrition Major

Advisor(s): Cameron Hay-Rollins, Department of Anthropology

Paul Flaspohler, Department of Psychology

Paving the Road to Equal Access to Education In

Tanzania: A Global Health Study

B41 Josephine Webb, International Studies and East Asian Languages and Cultures Major

Advisor(s): Rodney Coates, Black World Studies Program

Inner City School Canopies and the Effects of Comparative Education in the Classroom

B42 Shane Haney, Accountancy Major
Advisor(s): L. Allison Farmer, Department of
Information Systems and Analytics
What Makes an Effective, Efficient University in the
United States?

B43 Kris Horman, Psychology and Social Work Major Advisor(s): Rose Marie Ward, Department of Kinesiology and Health Are You Better Off Without Her? An Examination of College Students Alcohol Consumption Between

Genders

B44 Xingyu Zou, Interactive Media Studies Major

Yi Zhou, University Studies Major

Advisor(s): Aimin Wang, Department of Educational Psychology

The Reason that International Students Study Abroad Whether They Stay or Go Back Home

B45 Lauryn Palgut, Nutrition and Kinesiology Major Kortney Nyegard, Athletic Training and

Kinesiology Major

Spencer Willette, Kinesiology and Premedical Studies Major

Advisor(s): Beth Miller, Department of Kinesiology and Health

Evaluation of Community Based Social Marketing Campaign To Prevent Obesity

B46 Sara Krueger, Psychology and Premedical

Studies Major

Advisor(s): Aaron Luebbe, Department of Psychology Alex Nyquist, Department of Psychology Maternal versus Paternal Socialization of Child's Positive Affect

B47 Sam Ballard, Nutrition and Public Health Major

Kristin Hauck, Nutrition Major

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

Perceptions Of A Gluten-Free Diet Among Miami Students

B48 Jenniffer Hrovat, Speech Pathology & Audiology Major

Adam Shumate, Kinesiology Major

Tyler Crisp, Kinesiology Major

Advisor(s): Beth Miller, Department of Kinesiology and Health

Evaluation of I Am Moving, I Am Learning Obesity Prevention Program in Butler County Head Start

B49 Brooke Bryant, Nutrition Major

Andrea Rose, Nutrition Major

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

The Effect of Gluten on the Volume, Texture, and Weight of Bread

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

B50 Matthew Bender, Finance and Classical Languages Major

Alex Vielmetti, Finance Major **Joe Wavering**, Finance Major

Advisor(s): Megan Gerhardt, Department of Management

The Effects of Sleep Behavior on Academic Performance and Perceived Effort

B51 Kevin Rarden, Chemistry Education Major
Advisor(s): Stacey Lowery Bretz, Department of
Chemistry and Biochemistry
Zahilyn Roche Allred, Department of Chemistry and
Biochemistry

Tim Abell, Department of Chemistry and Biochemistry An Analysis of Representations Used to Introduce the Atomic Model in a General Chemistry Textbook

B52 Kara Smith, Biology Major

Synergistic Effects of BET Protein Inhibition and

Rapamycin Mitigate Compensatory Signaling in Triple

Negative Breast Cancer

B53 Benjamin Schmitz, Biochemistry Major
Advisor(s): Hong Wang, Department of Chemistry
and Biochemistry
Benzoporphyrins Bearing Pyridyl Linkers for DyeSensitized Solar Cells

B54 Caleb Jones, Chemistry Major

Advisor(s): Benjamin Gung, Department of Chemistry and Biochemistry

Ruoyu Ma, Department of Chemistry and Biochemistry Michael Holmes, Department of Chemistry and Biochemistry

Enantioselective Methoxycyclization Using Chiral Gold(I)-N-heterocyclic Carbene Catalysts

B55 Avery Walke, Chemistry Major

Tyler Arnett, Biochemistry Major

Advisor(s): Michael Kennedy, Department of Chemistry and Biochemistry

Faizule Hassan, Department of Chemistry and Biochemistry

Efficacy of a Conditionally Replicative Adenovirus Harboring HMGA Binding Sites for Treatment of Chemoresistant Pancreatic Cancer **B56 Nicholas Spurgus**, Biology Major

Chocolate Cupcake Quality

Advisor(s): Ellen Yezierski, Department of Chemistry and Biochemistry

Attributions of Change: Uncovering How Secondary Chemistry Teachers Respond to Long-Term, Intensive, Inquiry-Focused Professional Development

B57 Courtney Leggett, Nutrition Major
Kassi Simpson, Nutrition Major
Julie Richards, Nutrition and Kinesiology Major
Advisor(s): Christina Minges, Department of
Kinesiology and Health
Sockju Kwon, Department of Kinesiology and Health
An Evaluation of Egg and Egg Substitutes on

B58 Corinne Smith, Nutrition Major
Kristen Sweteritsch, Nutrition Major
Advisor(s): Sockju Kwon, Department of Kinesiology
and Health
Christina Minges, Department of Kinesiology
and Health
Protein Content of Ice Cream

General Caroline Roti, Kinesiology Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Differences in Pre-gaming Habits Between Greeks and
Non-Greeks

B60 Danielle Linowes, Early Childhood Education Major **Advisor(s)**: Thomas Misco, Department of

The Role of Schools in Washington, D.C. and Beijing in Producing High-Functioning Citizens of the Local Community

B61 Mason Tate, Chemistry Major

Teacher Education

Advisor(s): Susan Marine, Department of Chemistry and Biochemistry

Enantiomeric Separation of Mandelic Acid Using Chiral Column HPLC

SESSION B: 1:30 - 2:45 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

B62 Kellyn Czajkowski, Nutrition Major

Kaitlin Wiley, Nutrition Major

Advisor(s): Sockju Kwon, Department of Kinesiology and Health

Evaluation of Ultra-filtrated Lactose-Free Milk Compared to Standard

B63 Nick Vanderhoof, Kinesiology Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Examining the Relation Between Schedule Difficulty
and Alcohol-Induced Blackouts

B64 Maura Fawcett, Kinesiology Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Examining Drinking Motives in Study Abroad Students

Megan Beyer, Nutrition and Public Health Major
 Chelsie Fellman, Nutrition Major
 Madison Kelly, Nutrition Major
 Advisor(s): Sockju Kwon, Department of Kinesiology
 and Health

The Effects of Cooking Brown Rice with a Pressure Cooker Compared to a Stovetop Method

B66 Jingyi Sun, Media and Culture and Interactive Media Studies MajorAdvisor(s): Hongmei Li, Department of Media,

Journalism and Film

The Studie Of Starbucks

B67 Zachary LeCompte, Sport Leadership and Management Major

Advisor(s): Thelma Horn, Department of Kinesiology and Health

Examination of Relative Age Effect in Major League Baseball

B68 Olivia Callahan, Kinesiology Major
Advisor(s): Rose Marie Ward, Department of Kinesiology and Health
Personality and Alcohol

B69 Timothy Waugh, Athletic Training and Kinesiology Major

Advisor(s): Garrett Stoller, Department of Kinesiology and Health

Eric Brooks, Department of Kinesiology and Health Recurring Sacral Stress Fractures in a Male Distance Runner

B70 Matthew Dietrich, Environmental Earth Science and Geology Major

Taylor Osborne, Environmental Earth Science Major Advisor(s): Mark Krekeler, Department of Geology & Environmental Earth Science

Urban Pollution Investigations of Goldeman Park,

Middletown Ohio: Unexpected Metal Pollution

Heterogeneity Revealed in Bulk Chemistry

B71 Mark Brombacher, Biochemistry Major
Advisor(s): Michael Kennedy, Department of Chemistry
and Biochemistry
Tafadzwa Chihanga, Department of Chemistry and
Biochemistry

Detection of HMGA and SOX9 in an Orthotopic Model of Pancreatic Cancer

B72 Hannah Devens, Zoology and Botany Major
Advisor(s): Melany Fisk, Department of Biology
Shan Shan, Department of Biology
Nutrient Controls of Forest Productivity During
Ecosystem Recovery from Acid Deposition

B73 Mishali Mathur, Chemistry Major

Biochemistry

Advisor(s): Stacey Lowery Bretz, Department of Chemistry and Biochemistry
Zahilyn Roche Allred, Department of Chemistry and

Timothy Abell, Department of Chemistry and Biochemistry

Functional Analysis of Representations of Aqueous Solutions and Reactions in a General Chemistry Textbook

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

22

B74 Katelyn Scheive, Psychology and Integrated Social Studies Education Major

Advisor(s): Jennifer Quinn, Department of Psychology Brett East, Department of Psychology Contributions of the Medial and Lateral Entorhinal Cortex in the Acquisition through Expression of Fear Memory

- B75 Thomas Farnbacher, Microbiology Major
 Advisor(s): Li Zhou, Department of Psychology
 Event-Related Potentials as a Metric for Hemispheric
 Asymmetry of Working Memory
- **B76** Mitch McDaniel, Psychology and Premedical Studies Major

Mallory Dunn, Zoology and Premedical Studies Major **Mallory Myers**, Zoology and Premedical Studies Major **Victoria Diana**, Psychology Major

Advisor(s): Jennifer Quinn, Department of Psychology *Extinction as a Method for Weakening an Overtrained Memory*

- B77 Christina Tenison, Earth Science and Music Major
 Eric Radke, Earth Science Major
 Advisor(s): Jason Rech, Department of Geology &
 Environmental Earth Science
 Terry Workman, Department of Geology &
 Environmental Earth Science
 The Impact of Mill Dams on Streams in Southwestern
 Ohio
- Advisor(s): Melissa Rosenzweig, Department of Anthropology

 A Guide to Undergraduate Archaeological Field
 Schools: Benefits of Going and How to Get There

B78 Micayla Spiros, Anthropology Major

B79 Kristen Devaney, Classical Humanities Major
Brittany Anderson, Anthropology Major
Claire Anderson, Graphic Design Major
Rachel Brand, Anthropology Major
Livvie Clark, Bioengineering and Premedical
Studies Major

Jessica Davidson, Psychology Major

Matthew Edwards, Anthropology Major

Jill Elfers, Anthropology Major

Michael Geering, Mass Communication Major Meryl Haque, Individualized Studies Major

Logan Klinsky, Psychology Major

Rebecca Juno, Zoology Major

Kelley Mangerson, Anthropology and Premedical Studies Major

Kelly Marcus, Anthropology Major

Grace McKittrick, Anthropology and Linguistics Major

Kylee Miller, Anthropology Major

Bridget O'Dell, Individualized Studies Major

Peter Stenfanski, Anthropology Major

Advisor(s): Cameron Hay-Rollins, Department of Anthropology

Key Concepts in Psychological Anthropology

- B80 Vinoin Devpaul Vincely, Biological Physics Major
 Advisor(s): Karthik Vishwanath, Department of Physics
 On the Possibility of Extracting Heart Rate Using Color
 (RGB) Video Recorded on a Consumer Camera
- B81 Seth Boda, Anthropology Major
 Advisor(s): Leighton Peterson, Department of
 Anthropology
 The Negotiation of Community Across League of
 Legends Platforms
- **B82 Brandi McConahay**, Anthropology and Interactive Media Studies Major

Advisor(s): Neringa Klumbyte, Department of Anthropology

The Power of Humor: Politics, Religion, and Charlie Hebdo

SESSION B: 1:30 - 2:45 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

B83 Kelly Printy, Sociology Major

Advisor(s): Vrinda Kalia, Department of Psychology Melissa Fuesting, Department of Psychology *Reading Comprehension and Puzzles*

B84 Ashantia Collins, Psychology Haleigh Lindner, Psychology

Margaret Schaller, Psychology and Marketing

LeClaire Teets, Psychology

Advisor(s): Amy Summerville, Department of

Psychology

Culture and Fate: The influence on

Counterfactual Thinking

B85 Grace McKittrick, Anthropology and

English:Linguistics Major

Advisor(s): Leighton Peterson, Department of

Anthropology

Paranormal Narratives and Expression of Unexplainable Phenomena

B86 Microbiology Bacteriophage Biology Class

Mary Owen, Microbiology Major

Andrew Schaff, Microbiology Major

Kayla Cartwright, Biology Major

Angel Chen, Biology Major

Jessica Clark, Microbiology Major

Bradley Davis, Microbiology Major

Paige Etchison, Microbiology Major

Shelby Frieszell, Microbiology Major

Jacquelyn Gross, Microbiology Major

Stephanie Smith, Microbiology Major

Elsa Clenny, Microbiology Major

Svitlana Podolyan, Microbiology Major

Stephanie Swedik, Microbiology Major

Advisor(s): Luis Actis, Department of Microbiology Mitchell F. Balish, Department of Microbiology Gabrielle Lopez, Department of Microbiology

Tzvia Springer, Department of Microbiology

From High Street to Bishop Woods: The "Lives" of Two

Phages

Yijia Zhang, Media and Culture Major
 Xuchang Chen, Economics Major
 Jianda Wang, Art and Architecture History Major
 Advisor(s): Aimin Wang, Department of Educational
 Psychology

What Confucius Institute Can Bring for International Students and American Students?

- **B88** Krista Fazendin, Strategic Communication Major Advisor(s): Hongmei Li, Department of Media Journalism and Film

 The History of Chanel No. 5
- **B89 Christina Haffey**, Biology and Environmental Science Major

Advisor(s): David Gorchov, Department of Biology The Effects of Deer and an Invasive Shrub on Tree Seedlings

B90 Adam Darwiche, Biology and Microbiology Major Cody Dye, Life Science Education Major

Durga Samanthula, Microbiology Major

Renate Gyenge, Zoology and Premedical Studies Major

Advisor(s): Tracy Haynes, Department of Biology *Pi3K Induces Retinal Regeneration*

B91 Joanna Orzel, Chemistry and Spanish Major

Elizabeth Gross, Finance Major

Advisor(s): Stacey Lowery Bretz, Department of

Chemistry and Biochemistry

Kally Galloway Department of C

Kelly Galloway, Department of Chemistry and Biochemistry

A Comparison of Faculty and Student Expectations for Cognitive and Affective Learning in the Undergraduate Chemistry Laboratory

B92 Barbara Massaro, Finance Major

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Bryson Beaver, Finance Major

Advisor(s): Megan Gerhardt, Department of

Management and Leadership Conscientiousness and GPA

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

CO1 Maria Dellapina, Biology Major

Advisor(s): Michelle Boone, Department of Biology Tyler Hoskins, Department of Biology|*Presence of Atrazine Does Not Influence Reproductive Success in Blanchard's Cricket Frog (Acris blanchardi)*

CO2 Neena Patel, Microbiology and Premedical Studies Major

Rebecca Wyma, Microbiology Major
Advisor(s): Mitchell Balish, Department of
Microbiology
Steven Distelhorst, Department of
MicrobiologyMetabolic Control of Morphology
and Biofilm Structure in Mycoplasma iowae and
Mycoplasma penetrans

- CO3 Victoria Xidas, Speech Pathology & Audiology Major Christina Xidas, Speech Pathology & Audiology Major Advisor(s): Rose Marie Ward, Department of Kinesiology and Health

 Examining 21st Birthday's and Alcohol Consumption among College Students
- **CO4 Alexandra Swartz**, Chemical and Paper Engineering Major

Advisor(s): Richard Bretz, Department of Chemistry and Biochemistry

Wetland Plants: Surface Water's Natural Filter

- CO5 Blake Rasor, Biology and Microbiology Major
 Advisor(s): Michael Robinson, Department of Biology
 Developing an in vitro Assay for Transdifferentiation
 between Retinal Cell Types via CRISPR/Cas9-mediated
 Gene Editing in mESCs
- **C06 Madeline Zick**, Business Economics and Political Science Major

Sarah Ward, Finance and Marketing Major
Advisor(s): Megan Gerhardt, Department of
Management and Leadership
Correlations Between College Major and Political Views

CO7 Catherine Lok, Biology Major

Advisor(s): Cameron Hay-Rollins, Department of Anthropology Global Health Immersion: Gynecology in Amman, Jordan C08 Fangyi Qian, Bioengineering Major

Liulin Pu, Economics Major

Wenting Xie, Economics Major

Advisor(s): Aimin Wang, Department of Educational

Cultural Caref

Cultural Conflict between International Chinese Students and Domestic Students

CO9 Emily Neff, Bioengineering Major

Advisor(s): David Beard, Department of Spanish &

Portuguese

Lost in (Borrowed) Translation: The Progression of Calques in the Acquisition of Spanish Second Language Learners

C10 Jill O'Bryan, Economics and Sustainability Major
Marilyn Zubak, Marketing Major
Christopher Warren, Interdisciplinary Business
Management and Spanish Major
Advisor(s): Megan Gerhardt, Department of
Management and Leadership
Value Alignment of FSB Honors Program

- Stephanie Swedik, Microbiology Major Advisor(s): Eileen Bridge, Department of Microbiology Anand Prakash, Department of Microbiology Adenovirus Mediated Cell Cycle Arrest During Activation of the Cellular DNA Damage Response
- C12 Katie Duffy, Speech Pathology & Audiology Major
 Victoria Xidas, Speech Pathology & Audiology Major
 Advisor(s): Susan Brehm Baker, Department of
 Speech Pathology and Audiology
 Marisa Policicchio, Department of Speech Pathology
 and Audiology
 Video Modeling for Voice Therapy
- Ryan Hickey, Botany Major
 Bao Tram Hoang, Botany Major
 Esther Adu, Kinesiology Major
 Advisor(s): Richard Moore, Department of Biology
 Kel Arlinghaus, Department of Biology
 Patrick Garrett, Department of Biology
 Males Gone Wild! Does the Papaya Y Chromosome
 Influence Male Sex-ratios in Natural Populations?

SESSION C: 3:00 - 4:15 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

C14 Zachary Fields, Biology Major

Advisor(s): Michael Robinson, Department of Biology Stephanie Padula, Department of Biology Constructing a CRISPR/Cas9 Homology Directed Repair Template for the Creation of a New Cre Transgenic Mouse Line

C15 Alec Feeman. Finance Major

Advisor(s): Thomas Fisher, Department of Statistics *Investing Using Short Term Statistical Forecasting*

C16 John Germano, Psychology Major

Advisor(s): Kurt Hugenberg, Department of Psychology

Allen McConnell, Department of Psychology
E. Paige Lloyd, Department of Psychology
Deception Detection Biases in Cross-Race and Same-Race Targets

C17 Jameson Foran, Economics Major

Ryan Sonkin, Economics and Individualized Studies Major

Ryan Weidwald, Spanish and Information Systems Major

Evan Langer, Accountancy and Finance Major **Advisor(s):** Megan Gerhardt, Department of Management and Leadership

C18 Miranda Caudle, Chemical and Paper Engineering Major

Demographics of Motivation

Ryan Ley, Chemical and Paper Engineering Major
Advisor(s): Andrew Paluch, Department of Chemical,
Paper and Biomedical Engineering
Predicting the Phase Behavior of Solutes in Ionic
Liquids

C19 Zeyu Huang, Economics Major
Halbert Lee, International Studies Program Major
Sijie Pu, Business Technology Major

Advisor(s): Aimin Wang, Department of Educational Psychology

What Affects the International Students' Decision of Finding a Job or Internship in US?

C20 Cassandra Worner, Microbiology and Neuroscience Major

Advisor(s): Kathleen Killian, Department of Biology Kathryn Kohl, Department of Biology Heather Charles, Department of Biology Transgenerational Impact of an Environmental Cold Temperature Shock on Male Acheta domesticus Crickets

- **C21 Briana Deer**, Zoology and Premedical Studies Major **Advisor(s):** Glenn Muschert, Department of Sociology and Gerontology

 Health Profile of Fijian Villages
- C22 Olivia Lahey, Biology and Spanish Major
 Advisor(s): David Beard, Department of Spanish &
 Portuguese
 Lexical Selection in Second Language Learners of
 Spanish at Miami University
- C23 Cara Murphy, Biology and Premedical Studies Major Seamus Pugh, Zoology Major Advisor(s): Kathleen Killian, Department of Biology Mollie Sorrell, Department of Biology The Role of Septate and Adherens Junctions in Cell-to-

Cell Communication Within the Adult Neurogenic Stem

C24 Brant Center, Chemistry and Biochemistry Major
Advisor(s): Michael Kennedy, Department of
Chemistry and Biochemistry

William Joesten, Department of Chemistry and Biochemistry

Zonulin and T1D Progression in the Enteric Epithelium: Modulation of Cellular Spacing

C25 Allyson Klovekorn, Mathematics Education and Mathematics Major

Advisor(s): Todd Edwards, Department of Teacher Education

Better Engaging Statistics Students

C26 Tyler Thurtell, Physics Major

Advisor(s): James Clemens, Department of Physics Suppression of Collective Quantum Jumps of Rydberg Atoms Due to Collective Spontaneous Emission

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

C27 Julia Murphy, Speech Pathology & Audiology Major
Samantha Becker, Speech Pathology & Audiology
Major

Advisor(s): Donna Scarborough, Department of Speech Pathology and Audiology

Michael Bailey Van-Kuren, Department of Mechanical and Manufacturing Engineering

Kristen Siskovich, Department of Speech Pathology and Audiology

Kelli Linder, Department of Speech Pathology and Audiology

Biomechanical Measurement of Cup Drinking

C28 Stephanie Kuehn, Biology Major

Advisor(s): Richard Bretz, Department of Chemistry and Biochemistry

Mark Krekeler, Department of Geology &

Environmental Earth Science

Batch Experiments and Electron Microscopy Investigations of Europium Interactions with Cryptomelane as an Analog for Plutonium Remediation

- C29 Anjali Prior, Chemistry and Premedical Studies Major Advisor(s): Haifei Shi, Department of Biology Minqian Shen, Department of Biology Estrogen Inhibits Leptin-induced STAT3 Signal in HepG2 Cells
- Alexa Berry, Special Education Major
 Advisor(s): Sarah Watt, Department of Educational
 Psychology
 The Effects of TouchMath on Learners With Disabilities

C30 Melissa Scheuering, Special Education Major

C31 Le Chang, Mathematics and Statistics and Finance Major

Experimental Designs

Advisor(s): Byran Smucker, Department of Statistics Maria Weese, Department of Information Systems and Analytics Rebecca Ockuly, Department of Statistics Meta-analysis from Second-Order Model C32 Ali Mallett, Anthropology Major

Advisor(s): Leighton Peterson, Department of Anthropology

James Bielo, Department of Anthropology

Cheers with Beers: Constructing Authenticity in the

Microbrew World

- C33 Kevin Lash, Zoology and Environmental Science Major Advisor(s): Mike Vanni, Department of Biology
 Tanner Williamson, Department of Biology
 Spatial and Temporal Effects of Large Storm Events on a Eutrophic Temperate Reservoir
- C34 Cameron Williams, Biochemistry Major
 Advisor(s): Richard Page, Department of Chemistry
 and Biochemistry
 Structure-Guided Development of Antibiotics
 Targeting Metallo-Beta-Lactamases Using Protein
 X-Ray Crystallography
- C35 Jennifer Obrist, Interactive Media Studies Major
 Advisor(s): David Beard, Department of Spanish &
 Portuguese
 Use of English Vowels in Spanish by Non-native
 Spanish Speakers
- C36 Allie Unger, Biology Major
 Daniella Owusuwaah, Biology Major
 Anna Glanz, Microbiology Major
 Advisor(s): Kathleen Killian, Department of Biology
 Kathryn Kohl, Department of Biology
 Cold Shock Has Longterm Consequences on Agonistic
 Behavior of Male Acheta domesticus Crickets

C37

SESSION C: 3:00 - 4:15 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

C38 Rita Kou, Speech Pathology & Audiology Major
Hannah Neibler, Speech Pathology & Audiology Major
Olivia Wnek, Speech Pathology & Audiology Major
Advisor(s): Donna Scarborough, Department of
Speech Pathology and Audiology
Michael Bailey-Van Kuren, Department of Mechanical

and Manufacturing Engineering

Kelli Linder, Department of Speech Pathology and Audiology

Kristen Siskovich, Department of Speech Pathology and Audiology

Development of Training Cup with Varied Flow Rates: An Iterative Process

C39 Elise Leonard, Chemistry Major

Advisor(s): Neil Danielson, Department of Chemistry and Biochemistry

Ashley Richardson, Department of Chemistry and Biochemistry

A Pluronic Gel Phase for Electrophoresis of Peptides

C40 Emily Sharrett, English Literature and Political Science
Major

Advisor(s): Kathleen Johnson, Department of English Staging Race in Early Twentieth-Century Transnational Theatre

C41 Bridget Fleischer, University Studies and Spanish Major

Advisor(s): David Beard, Department of Spanish & Portuguese

False Cognates: A Study of the Relationship Between Their Use and Educational Level

- C42 Prasidh Arora, Computer Engineering
 Advisor(s): Krishnendu Ghosh, Department of
 Computer and Information Technology (MU Hamilton)
 The Gut Wrenching Truth: Correlating Autism and the
 GI Tract
- C43 Isaiah Stewart, Environmental Earth Science Major Advisor(s): Rose Marie Ward, Department of Kinesiology and Health

Happy, Sad, Drunk: Exploring the Relation Between Depression and Alcohol Consumption

C44 Jonathon Hogue, Geography Major
Advisor(s): John Maingi, Department of Geography
Kimberly Medley, Department of Geography
Predictive Modeling of Habitat Conditions for
American Beech in Ohio

C45 Olivia Richter, Biology and Environmental Science Maior

Advisor(s): Maria Gonzalez, Department of Biology Nick Barrett, Department of Biology Effects of Temperature Increase on Freshwater Benthic Invertebrate Communities

C46 Alex Reigle, Physics and Physical Science Education Major

Eli Shlonsky, Mathematics and Physics Major **Advisor(s):** Samir Bali, Department of Physics Ethan Clements, Department of Physics *Inexpensive Infrared Viewer*

- C47 Elizabeth Foster, Chemistry and Biology Major
 Erin Lensmeyer, Biochemistry Major
 Advisor(s): Dominik Konkolewicz, Department of
 Chemistry and Biochemistry
 Interpenetrating Polymer Networks Containing Both
 Fast and Slow Reversible Cross-linkers
- C48 Jill Elfers, Anthropology Major
 Advisor(s): Thomas Dutton, Department of Humanities
 and Creative Arts
 Closing the Gap: Care Coordination in Over-the-Rhine
- C49 Katherine Vaaler, Accountancy and Marketing Major
 Jordin Baldari, Accountancy Major
 Advisor(s): Megan Gerhardt, Department of
 Management and Leadership
 Diversity as an Incentive

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

C50 Alexander Waldherr, Microbiology and Premedical Studies Major

Sam George, Biochemistry and Premedical Studies Major

Malachi Zeitner, Zoology and Premedical Studies Major

Elaine Koberlein, Zoology and Premedical Studies Major

Advisor(s): Michael Crowder, Department of Chemistry and Biochemistry

Potential Solutions to Fix the Federal Funding Crisis

C51 Emily Laska, Psychology Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Academic Consequences of Drinking throughout
Academic Year

C52 Matthew Bezbatchenko, Zoology Major
Advisor(s): Maria Gonzalez, Department of Biology
Nick Barrett, Department of Biology
Interactive Effects of Elevated Temperature and Fish
Predation on Crustacean Zooplankton

C53 Jana Cable, Microbiology Major
Advisor(s): Natosha Finley, Department of
Microbiology
Christian Johns, Department of Biology
Myosin Binding Protein C Isoforms Exhibit Unique
Structural and Functional Properties

C54 Erin Fitch, Microbiology and Premedical Studies Major
Advisor(s): Eileen Bridge, Department of Microbiology
Gabrielle Lopez, Department of Microbiology
Optimization of the ChIP Method

C55 Megan Rux, International Studies Major
Advisor(s): David Beard, Department of Spanish &
Portuguese
What Is the Relationship Between Education Level
and Pronunciation Skills for English Speakers Learning
Spanish?

C56 Devan Chakroff, Early Childhood Education Major Sophia Del Valle, Early Childhood Education Major Advisor(s): Lena Lee, Department of Teacher Education

What Working with ELLs Taught Me

257 Allison Theberge, Biochemistry Major
Amy Trowbridge, Biology Major
Advisor(s): Richard Bretz, Department of Chemistry
and Biochemistry
The Isolation and Determination of Two Related
Compounds from the Leaf Gel of Aloe cameronii

C58 Jacob McFarland, Physics Major
Advisor(s): Burcin Bayram, Department of Physics
Tim Horton, Department of Physics
Lifetime Measurement of Molecular Sodium

C59 Cara Demyan, Psychology and Premedical
Studies Major
Advisor(s): Jennifer Quinn, Department of Psychology
The Effect of Maternal Separation on Alcohol
Conditioned Place Preference in Adolescent and
Adult Rats

C60 Lisa Tagariello, Kinesiology Major
Advisor(s): Kyle Timmerman, Department of
Kinesiology and Health
Associations Among Physical Activity Level and
Skeletal Muscle Endogenous Antioxidant Content in
Older Adults

Callie Carioti, Nutrition Major
Taylor Zbacnik, Nutrition Major
Advisor(s): Sockju Kwon, Department of Kinesiology
and Health
Christina Minges, Department of Kinesiology
and Health
The Properties and Sensory Differences Between

Organic and Conventional Food Products

SESSION C: 3:00 - 4:15 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

C62 Chong Kai Wong, Zoology Major

Justin Crookes, Psychology Major

Kole Sedlack, Biology and Premedical Studies Major **Arya Chalke**, Microbiology and Premedical

Studies Major

Ethan Saulnier, Biology and Premedical Studies Major **Advisor(s)**: Joyce Fernandes, Department of Biology Genetic Manipulation of Intercellular Signaling During Muscle Development in the Fruit Fly

C63 Justin Poth, Biochemistry and Premedical Studies Major

Advisor(s): Michael Robinson, Department of Biology Phuong Lam, Department of Biology Unlocking Our Inner Newt: Crispr Cas9 Mediated Trans-Differentiation of RPE to Neural Retina

C64 Lucy Chen, Accountancy Major
Jiawei Han, Statistics Major
Xinyu Wang, Psychology Major
Advisor(s): Aimin Wang, Department of
Educational Psychology
The Relationship between Food Preference of Chinese
Students and Their Hometown

C65 Ryan Thomas, Political Science and Strategic
Communication Major
Advisor(s): Hongmei Li, Department of Media
Journalism and Film
Analyzing Ralph Lauren Advertising

C66 Kenna Koehler, Biochemistry and Neuroscience Major Brandon Lewis, Zoology and English: Creative Writing Major

Advisor(s): Paul Schaeffer, Department of Biology Cardiac Hypertrophy in the Mouse Heart: Exercise and Cold Exposure

C67 Brittany Estridge, Botany Major

Advisor(s): Richard Bretz, Department of Chemistry
and Biochemistry

Germination of Native. Non-invasive Wetland Species

C68 Jacob Cottingim, Kinesiology Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Exploring the Relationship between Alcohol
Consumption and Quality of Life Among College
Students

C69 Bryan Von Der Vellen, Psychology and Premedical Studies Major

Sibel Sarac, Psychology Major

Advisor(s): Vrinda Kalia, Department of Psychology "No Ragrets": Examining Cultural Differences in Counterfactual Use

C70 McKenzie Crist, Zoology Major
Advisor(s): Haifei Shi, Department of Biology
Minqian Shen, Department of Biology
Effects of Female Sex Hormones in Regulation of
Glucose Homeostasis

C71 Baylee Smith, Kinesiology Major
Ariel Bruner, Kinesiology Major
Allie Bishop, Kinesiology Major
Advisor(s): Sockju Kwon, Department of Kinesiology
and Health
The Effect of Protein Type on Protein Shake
Characteristics

C72 Julia Behrend, Biology MajorAdvisor(s): Ann Rypstra, Department of BiologyEffects of Glyphosate on Juvenile Pardosa milvina

C73 Alicja Kitrys, Biology Major
Advisor(s): David Beard, Department of Spanish & Portuguese

The Prevalence of Irregular Conjugations as Regular in Spanish Second Language Learners at Miami University

C74 Charlie Chen, East Asian Languages and Cultures Major

Advisor(s): Rose Marie Ward, Department of Kinesiology and Health Exploring Socioeconomic Status, Non-Prescription

Exploring Socioeconomic Status, Non-Prescription Stimulant Abuse, and Alcohol Consumption among College Students

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

C75 Ning Gui, Finance Major

Siwei Hou, Finance Major

Advisor(s): Aimin Wang, Department of Educational Psychology

Factors Influence Degree of Chinese Students' Happiness

C76 Abigail Stall, Marketing Major

Mia Ritter, Information Systems Major

Caitlin Holzapfel, Finance Major

Advisor(s): Megan Gerhardt, Department of

Management and Leadership

Ethical Values Between Honors Students and Non-

Honors Students: A Comparison

C77 Gwendolyn Thomas, Biochemistry Major

Advisor(s): Carole Dabney-Smith, Department of

Chemistry and Biochemistry

Aman Habtemichael, Department of Chemistry and

Biochemistry

C. Paul New, Department of Biology

Topology of Chloroplast Twin Arginine Protein, Hcf106, by Site-Directed Spin Labeling and EPR Spectroscopy

C78 Kira Osowski, Psychology Major

and Executive Functioning

Advisor(s): Vrinda Kalia, Department of Psychology Mingliang Gong, Department of Psychology I Think I Can: Examining the Relations between Grit C79 Kristen Devaney, Classical Humanities Major

Brittany Anderson, Anthropology Major

Claire Anderson, Graphic Design Major

Rachel Brand, Anthropology Major

Livvie Clark, Bioengineering and Premedical

Studies Maior

Jessica Davidson, Psychology Major

Matthew Edwards, Anthropology Major

Jill Elfers, Anthropology Major

Michael Geering, Mass Communication Major

Meryl Haque, Individualized Studies Major

Rebecca Juno, Zoology Major

Logan Klinsky, Psychology Major

Kelley Mangerson, Anthropology and Premedical

Studies Major

Kelly Marcus, Anthropology Major

Grace McKittrick, Anthropology and Linguistics Major

Kylee Miller. Anthropology Major

Bridget O'Dell, Individualized Studies Major

Peter Stenfanski, Anthropology Major

 $\textbf{Advisor(s):} \ \mathsf{Cameron} \ \mathsf{Hay}\text{-}\mathsf{Rollins}, \ \mathsf{Department} \ \mathsf{of}$

Anthropology

Key Concepts in Psychological Anthropology

C80 Liza Torrence, Art Education Major

Advisor(s): Stephanie Baer, Department of Art

An Adventure for Inspiration: Rediscovering the

Creative Process Through the Grand Tour

C81 Abby Larson, Special Education Major

Rachel Bonsky, Special Education Major

Advisor(s): Katherine Mezher, Department of

Educational Psychology

Effectiveness and Perceptions of APA Writing

Workshops for Undergraduate Students

C82 Sarah Manning, International Studies and

Comparative Religion

Advisor(s): Nathan French, Department of

Comparative Religion

When God Was Irrelevant: Religion and Strategy in the

Iraq War

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C83 Kelly Marcus, Anthropology Major

Advisor(s): Cameron Hay-Rollins, Department of

Anthropology

Why Did the United States Deinstitutionalize Mental

Patients?

C84 Emily Tate, International Studies and

Journalism Major

Advisor(s): Carl Dahlman, International Studies

Program

Richard Campbell, Department of Media Journalism

and Film

Stories from South Africa: Students, Street Kids and

the Spaces in Between

C85 Grant Abbott, Environmental Earth Science Major

Adam Hoover, Supply Chain and Operations

Management Major

Rachel Edwards, Environmental Earth Science Major

Cody Oaks, Environmental Earth Science Major

Ean Wong, Environmental Earth Science Major

Kimberly Sprowles, Earth Science Education Major

Sikai Lin, Environmental Earth Science Major **Advisor(s):** Mark Krekeler, Department of Geology &

Environmental Earth Science

Trends In Under Ground Storage Tanks

C86 Microbiology Bacteriophage Biology Class

Mary Owen, Microbiology Major

Andrew Schaff, Microbiology Major

Kayla Cartwright, Biology Major

Angel Chen, Biology Major

Jessica Clark, Microbiology Major

Bradley Davis, Microbiology Major

Paige Etchison, Microbiology Major

Shelby Frieszell, Microbiology Major

Jacquelyn Gross, Microbiology Major Stephanie Smith, Microbiology Major

Elsa Clenny, Microbiology Major

Svitlana Podolyan, Microbiology Major

Stephanie Swedik, Microbiology Major

Advisor(s): Luis Actis, Department of Microbiology Mitchell F. Balish, Department of Microbiology

Gabrielle Lopez, Department of Microbiology

Tzvia Springer, Department of Microbiology
From High Street to Bishop Woods: The "Lives" of

Two Phages

C87 Emma Buck, Biology and German Major

SESSION C: 3:00 - 4:15 P.M.

Poster Presentation Listing by Poster Number

(See presenter index on pages 40 - 54)

Blake Rasor, Microbiology Major

Advisor(s): Michael Robinson, Department of Biology

Brad Wagner, Department of Biology

Demonstrating Proper Expression and Cleavage of Two

Fluorescent Proteins Linked by a P2A Peptide

C88 Joshua DeAmicis, Biochemistry Major

Advisor(s): Richard Bretz, Department of Chemistry and Biochemistry

Marcia Lee, Department of Microbiology

Adhesion Assay Testing with Aloe cameronii to

Discover the Extent of Anti-fungal Properties for Skin

Graph Protection Against Fungal Infection

C89 Gong Ping, Supply Chain & Operations Management and Maior

Shouzheng Li, Business and Major

Advisor(s): Aimin Wang, Department of Educational

Psychology

Students Who Have Higher GPA and Who Prefer to

Start Their Own Business after Graduation

C90 Jianlian Huang, International Studies

Val Voronin, International Studies **Zhouyi Shi**, *Economics Major*

Advisor(s): Aimin Wang, Department of Educational

Psychology

Family Educational Background and Income of

International and Domestic Students

C91 William Thompson, Bioengineering Major

Advisor(s): Michael Kennedy, Department of

Chemistry and Biochemistry
William Joesten, Department of Chemistry and

Biochemistry

Exploring the Microbial Population Mapping of Type 1 Diabetes

C92 Emily Roemhild, Psychology

Meredith Moser, Psychology

Anna Cavagnaro, Psychology

Advisor(s): Amy Summerville, Department of

Psychology

#Selfie: The Influence of Angle on Perceptions of

Power

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)², Miami students are encouraged to seek research experiences to pique their intellectual curiosity. Through this process students begin to recognize this high impact³ 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".

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RESEARCH MENTORS

2016 Undergraduate Research Forum

Anthropology

James S. Bielo Cameron Hay-Rollins Neringa Klumbyte Leighton C. Peterson Mellisa Rosenzweig

Architecture and Interior Design

Murali Paranadi

Art

Stephanie Baer

Biology

Kel Arlinghaus Nick Barrett

Joseph Baumgartner

Dawn Blitz Michelle Boone Heather Charles Katia Del Rio-Tsonis

Nancy Echeverri Joyce Fernandes

Melany Fisk Patrick Garrett Maria Gonzalez David Gorchov Zeyu Han

Tracy Haynes
Susan Hoffman
Tyler Hoskins
Lori Isaacson
Paul James
Christian Johns

Kathleen Killian Kathryn Kohl Phuong Lam Richard Moore C. Paul New Stephanie Padula Joe Powers

Michael Robinson Ann Rypstra Paul Schaeffer

Shan Shan Mingian Shen Haifei Shi Mollie Sorrell Aswati Subramanian

Brad Wagner Tanner Williamson

Mike Vanni

Karla Yadira Barbosa Sabanero

Black World Studies

Rodney Coates

Chemical, Paper and Biomedical Engineering

Jason Berberich
Douglas Coffin
Lei Kerr
Andrew Paluch
Nicholas Uth
Azizeh-Mitra Yousefi

Chemistry and Biochemistry

Timothy Abell
Zahilyn Roche Allred
Richard Bretz
Stacey Lowery Bretz
Tafadzwa Chihanga
Michael Crowder
Carole Dabney-Smith
Neil Danielson
Benjamin Gung
Aman Habtemichael

Ann Hagerman

Faizule Hassan
Michael Holmes
William Joesten
Michael Kennedy
Dominik Konkolewicz
Ruoyu Ma
Susan Marine
Janet Marshall
Amy Marts
Sara Nielsen
Richard Page

Ashley Richardson

33

David Tierney

Hong Wang

Ellen Yezierski Borui Zhang

Comparative Religion

Nathan French

Computer Science and Information Technology

Krishendu Ghosh

Educational Leadership

Chasity Dittman

Denise Taliaferro Baszile

Educational Psychology

Aimin Wang Sarah J. Watt

English

Kathleen Johnson Margaret Luongo

Family Studies and Social Work

Molly K. Gardner Katherine Kuvalanka Jane Newell

Geography

John Maingi Kimberly Medley Stanley W. Toops

Geology and Environmental Earth Science

Heather Barrett
Michael Brudzinski
Hailiang Dong
Tammie Gerke
Mark Krekeler
Jason Rech
Rob Skoumal
Shreya Srivastava
Terry Workman

Humanities and Creative Arts

Thomas Dutton

¹ Hodge, D.C. (2012) "Charting the Future: Creating the Miami 2020 Plan". President's Annual Address, Miami University, September 6, 2012. Paper presented at Annual Address at Miami University, Oxford, OH. Retrieved on March 01, 2013, from Miami University, Office of the President Web site: http://www.miami.muohio.edu/documents/about-miami/president/reports-speeches/Annual_Address_2012.pdf

² Hodge, D.C. (2008) "The Engaged University and Student Success". President's Annual Address, Miami University, September 3, 2008. Paper presented at Annual Address at Miami University, Oxford, OH. Retrieved on February 25, 2009, from Miami University, Office of the President Web site: http://www.miami.muohio.edu/president/reports_and_speeches/pdfs/Engaged_University_and_Student_Success.pdf

³ Kuh, G. D. (2008). High-impact educational practices. What They Are, Who Has Access to Them, and Why They Matter. Association.

RESEARCH MENTORS 2015 UNDERGRADUATE RESEARCH FORUM

Information Systems and Analytics

L. Allison Farmer Robert Leonard Maria Weese

International Studies Program

Carl Dahlman Mark Peterson

Kinesiology and Health

Thelma Horn
Sockju Kwon
Beth Miller
Christy Minges
Garrett Stoller
Kyle Timmerman
Valerie Ubbes
Rose Marie Ward

Latin American, Latino/a, and Caribbean Studies Program

Jose Albarran

Management and Leadership

Megan M. Gerhardt

Mathematics

Anna Ghazaryan

Mechanical and Manufacturing Engineering

Michael Bailey-Van Kuren Jeong-Hoi Koo

Robert Karol James Moller

Media, Journalism and Film

Richard Campbell Homgmei Li

Microbiology

Luis Actis Mitchell F. Balish Eileen Bridge Steven Distelhorst Natosha Finley Christian Johns Marcia R. Lee

Tzvia Springer

Marcia R. Lee Gabrielle M. Lopez Anand Prakash

Physics

Samir Bali Burcin Bayram James Clemens Ethan R. Clements Tim Horton Somaya Madkhaly Paul K. Urayama

Karthik Vishwanath

Psychology

Steven Almaraz Aimee L. Belanger Jason Deska Amanda Diekman Tony Drew Brett East

Christina Fitzpatrick Paul Flaspohler Melissa A. Fuesting

Lauren Fussner Mingliang Gong

Justin Hassebrock Kurt Hugenberg

Vrinda Kalia Jonathan Kuntsman

Paige Lloyd

Aaron Luebbe Allen R. McConnell

Alex Nyquist Jennifer J. Quinn Cecilia Shore Leonard Jay Smart

Robin Thomas

Li Zhou

Sociology and Gerontology

Kate de Medeiros Glenn W. Muschert

Spanish and Portuguese

David Beard

Speech Pathology and Audiology

Susan Baker Brehm Rob Chapman Amber D. Franklin Kelli Linder Marisa Policicchio

Donna Scarborough Kristen Siskovich

Statistics

Thomas J. Fisher Rebecca Ockuly Byran Smucker

Teacher Education

Todd Edwards Lena Lee Thomas Misco

MIAMI UNIVERSITY

Undergraduate Research Opportunities

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. It champions 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: http://www.MiamiOH.edu/oru

MIAMI UNIVERSITY

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 Majors at the University. For more information on Honors and Scholars, go to http://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 biology, chemistry or microbiology. 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.

MIAMI UNIVERSITY

Undergraduate Research Opportunities

Maher Zouhary Undergraduate Research Awards

The Maher Undergraduate Research Awards are given every year to a student majoring in political science. 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 Grants 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 400 Miami students have participated in the program since 2009. The program aims to impact student achievement and retention through involvement in research and inquiry at the very start of your college experience. The program engages students in meaningful relationships with Miami faculty, graduate students and your peers outside of the classroom.

The FYRE program provides students with authentic, hands-on research experiences in small teams led by research-active faculty during a two-semester course sequence UNV171 and UNV172. Student researchers review their topic, design a study, and complete necessary training during the fall semester; they implement the study, analyze data, and present the results in the spring. This experience prepares students early for subsequent research opportunities such as summer research positions across the nation and independent research supervised by Miami faculty

Joining the program requires a two-semester commitment from the student who must agree to:

- enroll in the 2-credit required seminar (UNV171 or UNV172) and
- dedicate 2-4 additional hours per week to a faculty-mentored team research project

FYRE Research Tracks are conducted by a combination of faculty, graduate assistants, and peer mentors. The faculty lead is responsible for developing the overall theme of the RT, providing project guidance, and leading the weekly seminar meeting. During these meetings, students are introduced to the general nature of the research enterprise as well as the basic concepts necessary to conduct research in the discipline of the RT. For example, students might learn the difference between an "independent variable" and a "dependent variable."

The graduate assistant is responsible for supervising the weekly project team meetings, where FYRE students work in teams to apply the basic concepts introduced in the seminar to their own research projects. For example, students might determine what the independent and dependent variables will be for their project, and how they will be measured. A peer mentor with extensive undergraduate research experience is assigned to each student team to assist in all aspects of project development. It is common for representatives from other university offices (e.g. University Libraries, Howe Writing Center) to contribute to instruction in UNV 171 and UNV 172. Additionally, there are several workshops, colloquia, and other professional development opportunities that are offered, some of which are exclusive to FYRE students.

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.

MIAMI UNIVERSITY

Undergraduate Research Opportunities

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 and 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.
- Alpha Phi Omega Zeta Delta Chapter for their assistance with the poster session set up.

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

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To support undergraduate research at Miami, please contact:

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Susan Roberson Wilson Fund

William and Caroline Stevenson

William Turrell Herbarium Fund

William Borchers Fund

Research Scholar Fund

PRESENTERS INDEX
BY STUDENT LAST NAME

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. Reminder: Please check event locations on day of the event.

Oral Session I 9:00 - 9:45 a.m. (Break 9:45 a.m.)

Oral Session II 10:00 - 10:45 a.m. (Break 10:45 a.m.)

Oral Session III 11:00 - 11:45 a.m.

Oral Session IV 1:30 - 2:15 p.m. (Break 2:15 p.m.)

Oral Session V 2:30 - 3:15 p.m. (Break 3:15 p.m.)

Oral Session VI 3:30 - 4:15 p.m.

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

C+I = Miami Ideas Creativity Innovation Recognition

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Abbott	Grant	Poster*	С	85	
Adu	Esther		С	13	
Agnew	Anna	Poster*	В	34	
Allen	Kala		А	66	
Allen	Kala	Poster*	А	83	
Allen	Kala	Poster*	А	84	C+I
Anderson	Brittany		ABC	79	
Anderson	Claire		ABC	79	
Anderson	Cody		А	32	
Andres	Brendan	Poster*	А	70	
Arnett	Tyler	Poster*	А	55	C+I
Arnett	Tyler		В	55	
Arora	Prasidh	Poster*	С	42	
Asbury	Laura	Poster*	А	03	
Bahas	Nichole	Poster*	А	03	
Baldari	Jordin		С	49	
Ballard	Sam		В	17	
Ballard	Sam	Poster*	В	47	
Barnes	Shannon	Poster*	В	30	
Beaver	Bryson		В	92	
Becker	Samantha		С	27	
Begezda	Abby		А	13	
Behrend	Julia	Poster*	В	29	C+I
Behrend	Julia	Poster*	С	72	C+I
Bender	Matthew	Poster*	В	50	C+I
Bergmann	Kayla	Poster*	А	19	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Berry	Alexa		С	30	
Bettinger	Samantha	Poster*	А	02	
Beyene	Salome	Poster*	А	67	
Beyene	Salome		В	14	
Beyer	Megan	Poster*	В	65	
Bezbatchenko	Matthew	Poster*	С	52	
Bierly	Jeffrey	Oral	Session I	Kreger Hall Room 317	
Bishop	Allie		С	71	
Blake	Kimberly	Oral	Session I	Kreger Hall Room 213	
Blasucci	Domenica	Poster*	В	40	
Blumenthal	Emily		А	65	
Boda	Seth	Poster*	В	81	
Bonsky	Rachel	Poster*	В	36	
Bonsky	Rachel		С	81	
Bornstein	Josh		А	38	
Bowers	Meghan		Α	19	
Bozada	Samantha	Poster*	А	48	C+I
Brand	Rachel		ABC	79	
Brandmeier	Anna		А	52	
Brinton	John	Oral	Session V	Kreger Hall Room 317	
Brombacher	Mark	Poster*	В	71	
Brown	Abigail	Poster*	А	06	
Bruder	Meghan	Poster*	А	12	
Bruner	Ariel		С	71	
Bryant	Brooke	Poster*	В	49	
Buck	Emma	Poster*	С	87	C+I
Burns	David		А	77	
Burns	Nathan	Poster*	Α	14	C+I
Burrows	Scott		А	74	
Cable	Jana	Poster*	С	53	
Cai	Hong	Oral	Session VI	Kreger Hall Room 317	
Callahan	Olivia	Poster*	В	68	
Callinan	Eleanor	Oral	Session III	Kreger Hall Room 317	
Caradonna	Angelina	Poster*	В	15	
Carioti	Callie	Poster*	С	61	C+I

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Cartwright	Kayla		ABC	86	
Caudle	Miranda	Poster*	С	18	C+I
Center	Brant	Poster*	С	24	C+I
Chakroff	Devan	Poster*	С	56	C+I
Chalke	Arya		С	62	
Chang	Le	Poster*	С	31	C+I
Chen	Angel		ABC	86	
Chen	Charlie	Poster*	С	74	
Chen	Haoran		А	66	
Chen	Haoran		А	83	
Chen	Lucy	Poster*	С	64	C+I
Chen	Xuchang		В	87	
Cheng	Zhongqi		А	52	
Chouinard	Hannah		В	03	
Chouinard	Hannah	Poster*	В	14	C+I
Chu	Sarah	Poster*	А	81	C+I
Clark	Chelsea	Poster*	Α	29	
Clark	Jessica		ABC	86	
Clark	Livvie		ABC	79	
Clements	Grace		А	65	
Clenny	Elsa		ABC	86	
Cody	Morgan	Poster*	В	04	
Cook	Hayden		А	43	
Cottingim	Jacob	Poster*	С	68	
Cowell	Colten		Α	52	
Crisp	Tyler		В	48	
Crist	McKenzie	Poster*	С	70	
Crook	Libby	Poster*	А	60	
Crookes	Justin		С	62	
Curts	Clay		Α	19	
Czajkowski	Kellyn	Poster*	В	62	
Danielson	Alex	Poster*	А	38	C+I
Darwiche	Adam	Poster*	В	90	
Davidson	Jessica		ABC	79	
Davis	Bradley		ABC	86	
Davis	Eric (Max)	Oral	Session IV	Kreger Hall Room 213	
de Medeiros	Dillon	Poster*	А	63	
DeAmicis	Joshua	Poster*	С	88	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Deer	Briana	Poster*	С	21	C+I
Del Valle	Sophia		С	56	
Dellapina	Maria	Poster*	С	01	C+I
Demyan	Cara	Poster*	С	59	
Devaney	Kristen	Poster*	ABC	79	
Devens	Hannah	Poster*	В	72	
Diana	Victoria		В	76	
Diaz-Rodriguez	Sebastian		А	48	
Dietrich	Matthew		А	10	
Dietrich	Matthew	Poster*	В	70	
Digby	Zachary	Poster*	А	68	C+I
Douglas	Taylor	Oral	Session III	Kreger Hall Room 213	
Duffy	Katie	Poster*	С	12	
Dunn	Mallory		В	76	
Dye	Cody		В	90	
Educato	Thomas		А	32	
Edwards	Matthew		ABC	79	
Edwards	Rachel		С	85	
Eichinger	Elena		А	29	
Elfers	Jill		ABC	79	
Elfers	Jill	Poster*	С	48	
Estes	Matthew		А	30	
Estridge	Brittany	Poster*	С	67	
Etchison	Paige		ABC	86	
Evans	Eric	Oral	Session II	Kreger Hall Room 213	
Evans	Mahaley	Oral	Session VI	Kreger Hall Room 213	
Faimon	Lillyanna		В	01	
Farina	Samuel	Poster*	А	85	
Farley	Mary	Poster*	В	25	
Farnbacher	Thomas	Poster*	В	75	
Fawcett	Maura	Poster*	В	64	
Fay	Dan		А	52	
Fazendin	Krista	Poster*	В	88	
Feeman	Alec	Poster*	С	15	
Fellman	Chelsie		В	65	
Feltz	Alex		А	32	
Ferguson	Haley		А	07	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Fields	Zachary	Poster*	С	14	
Fitch	Erin	Poster*	С	54	
Flavin	Conor	Poster*	А	80	
Fleischer	Bridget	Poster*	С	41	
Flett	Lonnie	Poster*	А	56	
Fogel	Brandon	Poster*	А	25	
Foran	Addie	Poster*	А	16	C+I
Foran	Jameson	Poster*	С	17	
Foster	Elizabeth	Poster*	С	47	
Frieszell	Shelby		ABC	86	
Fukui	Stephanie	Poster*	А	09	
Fullenkamp	Kyle	Poster*	А	61	C+I
Funches	Kainon		В	01	
Gabbard	Joshua	Poster*	А	77	C+I
Gammell	John		В	28	
Gander	Nathan	Poster*	А	05	
Garcia	Denae		В	25	
Geering	Michael		ABC	79	
George	Sam		С	50	
Germano	John	Poster*	С	16	C+I
Gerst	Sam	Oral	Session III	Kreger Hall Room 213	
Gilardi	Corinne	Poster*	А	08	
Glanz	Anna		С	36	
Goetze	Paul		А	28	
Golovin	Hannah	Poster*	В	19	
Greene	Nicholas		А	26	
Gross	Elizabeth	Poster*	В	91	
Gross	Jacquelyn		ABC	86	
Gruber	Jack		В	25	
Grzincic	Steven		А	52	
Gscheidle	Scott	Poster*	А	37	
Gui	Ning	Poster*	С	75	
Gyenge	Renate		В	90	
Haffey	Christina	Poster*	В	89	
Han	Jiawei		С	64	
Haney	Shane	Poster*	А	45	
Haney	Shane	Poster*	В	42	C+I
Haque	Meryl		ABC	79	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Hauck	Kristin	Poster*	В	17	
Hauck	Kristin		В	47	
Hayes	Emily	Poster*	С	37	
Hazen	Chloe	Poster*	А	52	C+I
Henkel	Nicholas	Poster*	А	90	
Herman	Mary Beth		В	18	
Hess	Stephanie	Poster*	А	01	
Hetman	Sydney	Poster*	В	37	
Hickey	Ryan		С	13	
Hines	Elizabeth	Poster*	В	18	C+I
Hoang	Bao Tram		С	13	
Hogue	Jonathon	Poster*	С	44	
Holzapfel	Caitlin		С	76	
Hoover	Adam	Poster*	А	88	
Hoover	Adam	Poster*	А	89	
Hoover	Adam		С	85	
Horman	Kris	Poster*	В	43	
Horne	Amanda	Oral	Session IV	Kreger Hall Room 317	
Hou	Siwei		С	75	
Howard	Mackenzie		А	32	
Hrovat	Jenniffer	Poster*	В	48	
Hu	Runyi	Poster*	А	87	
Huang	Jianlian	Poster*	С	90	
Huang	Zeyu		А	04	
Huang	Zeyu	Poster*	С	19	
Huling	Justin	Poster*	А	10	C+I
Hulse	Cameron		А	52	
Hummels	Emily	Poster*	В	84	
Hurley	Abbey		A	76	
Hutchison	Grant		А	66	
Hutchison	Grant		А	83	
linana			В	28	
Ipacs	Christopher				
Irvine	Christopher Mary Tess		В	18	
		Poster*			
Irvine	Mary Tess	Poster*	В	18	
Irvine Jacob	Mary Tess David		B A	18 15	
Irvine Jacob Jamshidi	Mary Tess David Cameron	Poster*	B A B	18 15 22	

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Last Name	First Name	Туре	Poster Session	Poster Number	CID
Kaufman	Emily		А	65	
Kelczewski	Kathrine	Poster*	В	05	
Kelleher	Jennifer	Poster*	В	16	
Kelly	Madison		В	65	
Kelly	Matthew		В	21	
Kempf	Hannah	Poster*	А	22	C+I
Kennedy	Caroline		В	25	
Kerr	Julia	Poster*	А	71	
Killeen	Richard		А	07	
Kinstedt	Dan		В	20	
Kistenfeger	Quinn		А	07	
Kitrys	Alicja	Poster*	С	73	
Klinefelter	Cara		В	11	
Klinsky	Logan		ABC	79	
Klovekorn	Allyson	Poster*	С	25	C+I
Koberlein	Elaine		С	50	
Koch	Bergan	Oral	Session III	Kreger Hall Room 317	
Koehler	Kenna	Poster*	С	66	
Koehler	Matthew	Poster*	В	13	
Komer	Monica	Poster*	В	31	
Kou	Rita	Poster*	С	38	C+I
Krueger	Sara	Poster*	В	46	
Kuehn	Stephanie	Poster*	С	28	
Laane	Sarah		А	32	
Lab	Rain	Poster*	А	34	
Ladipo	Jannette	Poster*	В	09	
Lahey	Olivia	Poster*	С	22	C+I
Laing	Robert	Poster*	А	13	
Landers	Joseph	Poster*	А	49	
Langer	Evan		С	17	
Larson	Abby	Poster*	С	81	
Lash	Kevin	Poster*	С	33	
Laska	Emily	Poster*	С	51	
Latimer	Jack	Poster*	А	59	C+I
Lavine	Lucy		В	08	
Lawrence	Kate	Poster*	В	32	
LeCompte	Zachary	Poster*	В	67	
Lee	Andrea	Poster*	В	12	
Lee	Halbert	Poster*	А	04	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Lee	Halbert		С	19	
Leeds	Blake	Poster*	С	13	
Leggett	Courtney	Poster*	В	57	
Lensmeyer	Erin		С	47	
Leonard	Elise	Poster*	С	39	
Leveridge	Max	Poster*	А	54	
Lewis	Brandon		С	66	
Ley	Ryan		С	18	
Li	Jingxuan		А	36	
Li	Shouzheng		С	89	
Lichtenberg	Kara	Poster*	В	03	C+I
Liddic	Morgan	Oral	Session IV	Kreger Hall Room 317	
Lin	Sikai		С	85	
Linowes	Danielle	Poster*	В	60	
Liska	Danielle		В	15	
Lloyd	Mary		А	65	
Lok	Catherine	Poster*	С	07	
Loomis	Sarah	Oral	Session II	Kreger Hall Room 213	
Lu	Liu		В	06	
Makaroff	Katherine	Poster*	В	24	
Mallett	Ali	Poster*	С	32	
Mangerson	Kelley		ABC	79	
Manning	Sarah	Poster*	С	82	
Marcus	Kelly		ABC	79	
Marcus	Kelly	Poster*	С	83	C+I
Margulis	William	Poster*	А	78	C+I
Martin	Jordan	Oral	Session II	Kreger Hall Room 213	
Mason	Tarah		А	45	
Massaro	Barbara	Poster*	В	92	
Mathur	Mishali	Poster*	В	73	
Mazursky	Alex		А	15	
McCain	Jeffrey	Poster*	А	62	
McClurkin	Daniel	Oral	Session III	Kreger Hall Room 317	
McConahay	Brandi	Poster*	В	82	
McDaniel	Mitch	Poster*	В	76	
McDonough	Madeline	Poster*	В	02	

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McElderry	Brenna	Poster*	А	27	
McElligott	Caitlin	Oral	Session VI	Kreger Hall Room 213	
McFarland	Anna		А	67	
McFarland	Jacob	Poster*	С	58	
McKittrick	Grace		ABC	79	
McKittrick	Grace	Poster*	В	85	
McNichol	Davis		А	30	
McTighe	Allison	Poster*	В	08	
Miley	Aimee	Poster*	В	01	
Miller	Jake	Poster*	А	28	
Miller	Kylee		ABC	79	
Minshall	Brianna	Poster*	А	31	C+I
Mintz	Tory	Oral	Session IV	Kreger Hall Room 317	
Misey	Anne	Poster*	А	73	
Mollett	Kaegon		В	03	
Moore	Brianne	Poster*	А	41	C+I
Moore	Tanner	Oral	Session V	Kreger Hall Room 213	
Murphy	Cara	Poster*	С	23	
Murphy	Julia	Poster*	С	27	C+I
Myers	Mallory		В	76	
Nagaraj	Eashwar	Oral	Session VI	Kreger Hall Room 213	
Nagy	Kristen		А	11	
Neff	Emily	Poster*	С	09	C+I
Neibler	Hannah		С	38	
Neidhard	Joe	Oral	Session II	Kreger Hall Room 317	
Neidich	Kory	Poster*	В	27	
Nevrekar	Sanjay	Poster*	А	33	C+I
Nguyen	Nguyen		В	01	
Nobis	Alexandra	Poster*	В	33	
Nocera	Dana	Poster*	А	35	
Nyegard	Kortney		В	45	
O'Bryan	Jill	Poster*	С	10	
O'Connor	James		А	76	
O'Dell	Bridget		ABC	79	
Oaks	Cody		С	85	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Obrist	Jennifer	Poster*	С	35	C+I
Orzel	Joanna	Poster*	В	91	
Osborne	Taylor		А	10	
Osborne	Taylor		В	70	
Osowski	Kira	Poster*	С	78	
Ostrosky	Christine	Oral	Session II	Kreger Hall Room 317	
Owen	Kelsey		А	17	
Owen	Mary	Poster*	ABC	86	
Owens	Kelsey	Poster*	А	51	
Owusuwaah	Daniella		С	36	
Palgut	Lauryn	Poster*	В	45	
Patel	Neena	Poster*	С	02	
Phifer	Jeremy	Oral	Session I	Kreger Hall Room 317	
Ping	Gong	Poster*	С	89	
Podolyan	Svitlana		ABC	86	
Polinsky	Alexander	Poster*	А	40	C+I
Pollock	Zachary	Oral	Session VI	Kreger Hall Room 317	
Poore	Spencer	Poster*	А	30	
Posdal	Elizabeth	Poster*	А	66	
Posdal	Elizabeth		А	83	
Poth	Justin	Poster*	С	63	
Potineni	Nachiket		А	14	
Powell	Sarah		А	26	
Printy	Kelly	Poster*	В	83	
Prior	Anjali	Poster*	С	29	
Pu	Liulin		С	08	
Pu	Sijie		А	04	
Pu	Sijie		С	19	
Pugh	Seamus		С	23	
Qian	Fangyi	Poster*	С	08	
Radke	Eric		В	77	
Rains	Kelly		А	25	
Rapp	Anthony	Oral	Session V	Kreger Hall Room 317	
Rarden	Kevin	Poster*	В	51	
Rasor	Blake	Poster*	С	05	C+I
Rasor	Blake		С	87	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Reece	Adam	Poster*	А	53	İ
Reigle	Alex	Poster*	С	46	C+I
Reynolds	Spencer	Oral	Session I	Kreger Hall Room 213	
Richards	Haleigh	Poster*	А	24	
Richards	Julie		В	57	
Richter	Olivia	Poster*	С	45	
Riordan	Catherine		А	45	
Rissmann	Katherine	Poster*	А	50	
Ritter	Mia		С	76	
Roberts	Jessica		А	88	
Roberts	Jessica		А	89	
Rodgers	Avicia	Poster*	А	46	
Rodgers	Avicia		В	01	
Rogers	Will		А	30	
Rohr	Natalie	Poster*	А	74	C+I
Rook	Jayson		А	76	
Rose	Andrea		В	49	
Ross	Preston	Oral	Session VI	Kreger Hall Room 317	
Roti	Caroline	Poster*	В	59	
Rubeo	Eric	Poster*	В	10	C+I
Rudolph	Marcia	Oral	Session V	Kreger Hall Room 317	
Rudy	McKenna		А	66	
Rudy	McKenna		А	83	
Rux	Megan	Poster*	С	55	
Safer	Brianne	Poster*	A	43	
Samanthula	Durga		В	90	
Sandlin	Ben	Poster*	А	18	C+I
Sandvick	Cassandra	Poster*	А	82	C+I
Sansom	Kaila	Poster*	В	35	
Sarac	Sibel		В	04	
Saraniti	Nicole	Poster*	A	32	
Schaeffer	Tiago	Poster*	А	76	
Schaff	Andrew		ABC	86	
Scheive	Katelyn	Poster*	В	74	
Scheuering	Melissa	Poster*	С	30	
Schmitz	Benjamin	Poster*	В	53	C+I
Schulze	Maressa	Poster*	В	28	

Last Name	First Name	Type	Poster Session	Poster Number	CID
Schumacher	Tyler		А	65	
Schwab	Stephen	Poster*	А	42	
Scicolone	Monica	Oral	Session IV	Kreger Hall Room 213	
Sedlack	Kole		С	62	
Seroogy	Erik	Poster*	А	21	
Sharrett	Emily	Poster*	С	40	
Shaughnessy	Meghan		A	25	
Shelburne	lan		А	28	
Shen	Chen	Poster*	В	06	
Shi	Zhouyl		С	90	
Shih	Pauline	Poster*	А	26	
Shin	Eric	Poster*	А	39	
Shirley	Ariel	Poster*	А	65	C+I
Shlonsky	Eli		С	46	
Shumate	Adam		В	48	
Sidler	Elaine	Poster*	А	11	C+I
Simon	Cecilia	Oral	Session I	Kreger Hall Room 213	
Simpson	Kassi		В	57	
Sloane	Samantha	Poster*	А	57	
Smalley	Evans	Oral	Session IV	Kreger Hall Room 213	
Smalley	Evans		А	65	
Smith	Baylee	Poster*	С	71	
Smith	Corinne	Poster*	В	58	
Smith	Haley		А	66	
Smith	Haley		А	83	
Smith	Kara	Poster*	В	52	
Smith	Steph		ABC	86	
Smith	Susanna	Poster*	В	39	C+I
Snodgrass	Julia		В	01	
Sonkin	Ryan		С	17	
Spear	John	Poster*	В	38	C+I
Spencer	Jasmine		А	32	
Spiros	Micayla	Oral	Session V	Kreger Hall Room 213	
Spiros	Micayla	Poster*	В	78	
Sprowles	Kimberly		С	85	
Spurgus	Nicholas	Poster*	В	56	C+I

PRESENTERS INDEX BY STUDENT LAST NAME

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Stall	Abigail	Poster*	С	76	
Stapleton	Megan		В	01	
Stefan	Symeon	Poster*	А	75	
Stefanski	Peter		ABC	79	
Stetzel	Leah	Oral	Session I	Kreger Hall Room 317	
Stewart	Isaiah	Poster*	С	43	
Stoll	Allison	Oral	Session III	Kreger Hall Room 213	
Straub	Kelsey	Oral	Session V	Kreger Hall Room 213	
Strickley	Michael	Poster*	А	64	
Sun	Jingyi	Poster*	В	66	C+I
Supensky	Morgan		А	72	
Swartz	Alexandra		А	71	
Swartz	Alexandra	Poster*	С	04	
Swedik	Stephanie		ABC	86	
Swedik	Stephanie	Poster*	С	11	
Sweteritsch	Kristen		В	58	
Sylvester	Andrew	Poster*	В	23	
Tagariello	Lisa	Poster*	С	60	
Tanaka	Nozomi	Poster*	А	36	
Tao	Yuqiao		А	39	
Tate	Emily	Poster*	С	84	C+I
Tate	Mason	Poster*	В	61	
Tenison	Christina	Poster*	В	77	C+I
Theberge	Allison	Poster*	С	57	
Thomas	Gwendolyn	Poster*	С	77	C+I
Thomas	Ryan	Poster*	С	65	C+I
Thompson	Billy	Poster*	С	91	
Thompson	Daniel		А	33	
Thompson	Victoria	Poster*	В	07	C+I
Thurtell	Tyler	Poster*	С	26	
Tian	Lijing		В	06	
Tombo	Sarah		А	08	
Torchio	Amanda	Oral	Session II	Kreger Hall Room 317	
Torrence	Liza	Poster*	С	80	C+I
Tran	Jason	Poster*	А	07	
Trowbridge	Amy		С	57	

Last Name	First Name	Туре	Poster Session	Poster Number	CID
Tyree	Lindsay	Poster*	А	17	
Tyree	Lindsay		А	51	
Unger	Allie	Poster*	С	36	
Vaaler	Katherine	Poster*	С	49	
Vamosi	Briana	Poster*	В	21	
VanCauwenbergh	Brett	Poster*	В	20	
Vanderhoof	Nick	Poster*	В	63	
Vargas	Claire		В	01	
Vielmetti	Alex		В	50	
Vincely	Vinoin Devpaul	Poster*	В	80	C+I
Von Der Vellen	Bryan	Poster*	С	69	
Voronin	Val		С	90	
Vu	Linh-Thuy		А	82	
Wagner	Lucas		А	84	
Wakefield	Andrew		А	59	
Waldherr	Alexander	Poster*	С	50	C+I
Walke	Avery		А	55	
Walke	Avery	Poster*	В	55	
Wallick	Jaylene		А	66	
Wallick	Jaylene		А	83	
Wang	Jianda		В	87	
Wang	Xinyu		С	64	
Ward	Sarah		С	06	
Warren	Christopher		С	10	
Warren	Victoria		В	19	
Waugh	Timothy	Poster*	В	69	C+I
Wavering	Joe		В	50	
Weaver	Kyle	Poster*	А	44	
Webb	Josephine	Poster*	В	41	C+I
Weidwald	Ryan		С	17	
Werts	Julianne	Poster*	В	26	
Wesseh	Rebecca		В	01	
Wiley	Kaitlin		В	62	
Willette	Spencer		В	45	
Williams	Amber		А	76	
Williams	Cameron	Poster*	С	34	
Williams	Hunter	Poster*	А	20	
Wilson	Abigail	Poster*	А	58	
Wnek	Olivia		С	38	

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Last Name	First Name	Туре	Poster Session	Poster Number	CID
Wong	Chong Kai	Poster*	С	62	
Wong	Ean		С	85	
Worner	Cassandra	Poster*	С	20	
Wright	Kimberly	Poster*	А	72	
Wyma	Rebecca		С	02	
Xidas	Christina		С	03	
Xidas	Victoria	Poster*	С	03	
Xidas	Victoria		С	12	
Xie	Wenting		С	08	
Yamada-Killilea	Maria		А	43	
Yisrael	Amariyah	Poster*	А	23	
Zambarano	Erika	Poster*	А	47	
Zanfardino	Sara	Poster*	А	69	
Zbacnik	Taylor		С	61	
Zeitner	Malachi		С	50	
Zerwick	Rachel	Poster*	В	11	
Zhang	Yijia	Poster*	В	87	C+I
Zhou	Yi		В	44	
Zick	Madeline	Poster*	С	06	
Zou	Xingyu	Poster*	В	44	
Zubak	Marilyn		С	10	

Notes



What are the Benefits of Undergraduate Research?

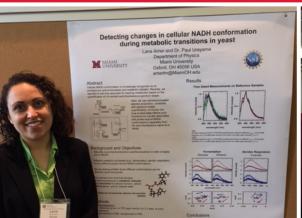
- Enhances student learning through mentoring relationships with faculty
- Increases retention
- Develops critical thinking, creativity, problem solving and intellectual independence
- Develops an understanding of research methodology
- Promotes an innovation-oriented culture

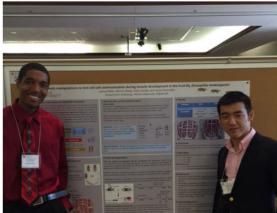
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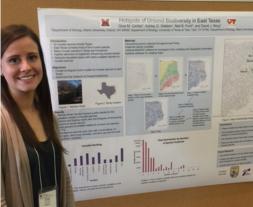
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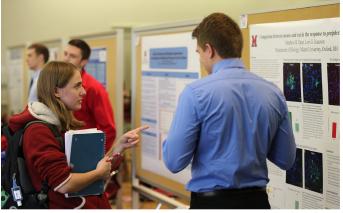
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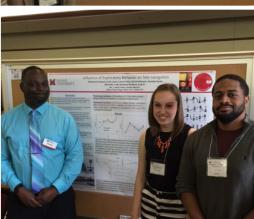












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