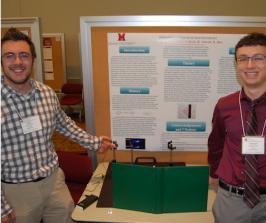
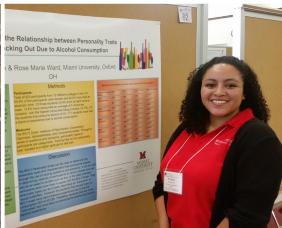
Student as Scholar

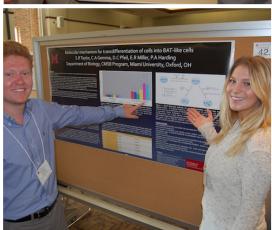
24TH ANNUAL UNDERGRADUATE RESEARCH FORUM























Message from the President and Dr. Crawford

To the Miami community,

Welcome to the 2018 Undergraduate Research Forum! The inquiry and creative activity that extends our classroom education into laboratories, field work and our surrounding community is an integral part of a Miami undergraduate experience. We join you in celebrating the more than 380 projects being presented today by more than 550 undergraduate researchers.

By analyzing data, designing studies to advance scholarship, and presenting results, Miami students are creating knowledge and showcasing the entrepreneurial spirit that will prepare them for success in today's global and technological world.

A special thanks to faculty mentors, true teacherscholars who help design the undergraduate experience that has differentiated Miami University for generations. Beyond the research presented in today's forum, more than 2,000 additional students worked with professors on funded research this year.

For 24 years, this Undergraduate Research Forum has celebrated independent inquiry by Miami students. We believe in the power of scholarly research to enhance the student experience and change the world. We join with all of you in congratulating all of the students and faculty included in today's event.

Gregory Planton Kenare Mrawford

Love and Honor,

Contact Information

ORU

Office of Research for Undergraduates

P: 513-529-2455

122 King Library

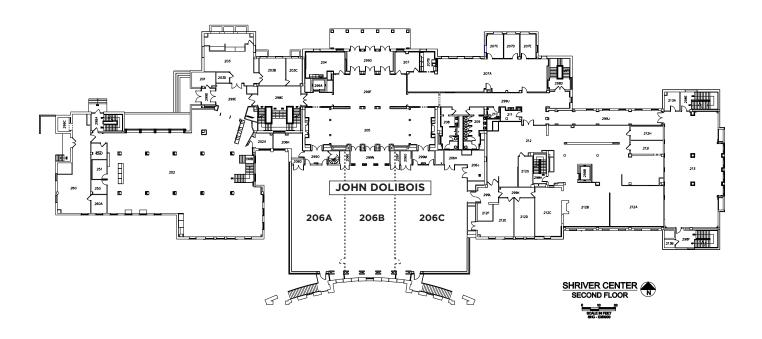
MiamiOH.edu/oru

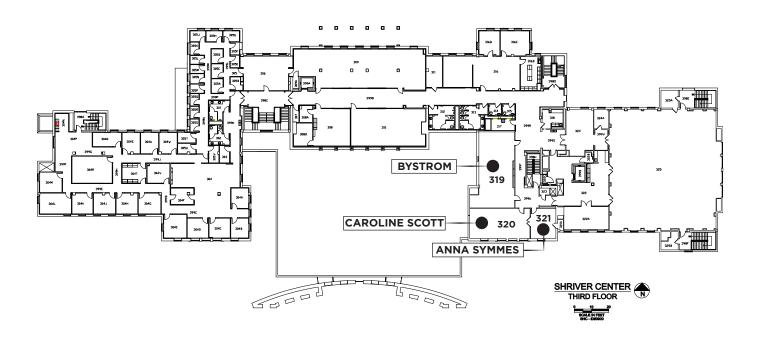
Greg and Renate Crawford

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Shriver Center Floor Plans





Undergraduate Research Forum 2018 Sponsors

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



MIAMI UNIVERSITY 24TH ANNUAL UNDERGRADUATE RESEARCH FORUM

Schedule of Events

APRIL 25, 2018

Oral Presentations - Morning Sessions I, II, III

Session No.	Session Duration	Room	Room	Room
Session I	9:00 a.m. to 9:45 a.m.	Anna Symmes	Caroline Scott	Bystrom
Session II	10:00 a.m. to 10:45 a.m.	Anna Symmes	Caroline Scott	Bystrom
Session III	11:00 a.m. to 11:45 a.m.	Anna Symmes	Caroline Scott	Bystrom

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 - Gregory P. Crawford, President

Remarks - Phyllis A. Callahan, Provost and Executive Vice President

LAURE award announcement - Lindsay Miller, Assistant Head of Advise & Instruct at the Libraries

Oral Presentations - Afternoon Sessions, IV, V, VI

Session No.	Session Duration	Room	Room	Room
Session IV	1:30 p.m. to 2:15 p.m.	Anna Symmes	Caroline Scott	Bystrom
Session V	2:30 p.m. to 3:15 p.m.	Anna Symmes	Caroline Scott	Bystrom
Session VI	3:30 p.m. to 4:15 p.m.	Anna Symmes	Caroline Scott	Bystrom

Poster Sessions (Shriver John Dolibois Rooms)

Over 550 student presenters share the results of their research

Interactive Poster Sessions

Session A 10:00 a.m. - 11:30 a.m.

Session B 1:30 p.m. - 2:45 p.m.

Session C 3:00 p.m. - 4:30 p.m.

(See also index on pages 47 - 61)

SESSION I: 9:00 - 9:45 A.M.

Bystrom

SESSION MODERATOR: Shannon Fasola

Lawrence Gardner Jr., Biology Major, Bioinformatics Minor ADVISOR(S): Chun Liang, Bioinformatics Laboratory Department of Biology Bioinformatics Visualized in Mixed Reality, New Educational Tools

Victor Pinto, Biology and Spanish Major

ADVISOR(S): Michael Robinson, Department of Biology

Phuong Lam, Department of Biology

Using Genetically-Modified Human Stem Cells to Visualize the Development of Specific Neural Retina Cell Types

Elaine Sidler, Biology and Neuroscience Major **ADVISOR(S):** Michael Robinson, Department of Biology Stephanie Padula, Department of Biology *Pten Deletion Rescues Fiber Cell Differentiation in FGFR-deficient Mouse Lens Explants*

Caroline Scott

SESSION MODERATOR: Erin Johnson

Benita Tseng, Biochemistry and Premedical Studies Major ADVISOR(S): Katia Del Rio-Tsonis, Department of Biology Erika Grajales-Esquivel, Department of Biology Re-patterning of Histone Modifications during RPE to Retina Reprogramming

Tiffany Campbell, Biology and Psychology Major ADVISOR(S): Jennifer Quinn, Department of Psychology The Effect of Extinction on the Destabilization of an Overtrained Fear Memory

Nicole Schapker, Anthropology and Chemistry Major ADVISOR(S): Clara Scarry, Department of Anthropology The Comparative Method in Anthropology: Using Phylogenetic Analyses to Interpret the Effects of Visual Acuity, Ecology, and Sociality on Primate Brain Size

Anna Symmes

SESSION MODERATOR: Dana Johnson

Sydney Chuen, International Studies and French Major ADVISOR(S): Tani Sebro, Department of Global & Intercultural Studies Europe or Bust: A Comparative Study on Human Smuggling in Nimruz, Afghanistan and Agadez, Niger

Inaara Ladha, International Studies and Comparative Religion Major

ADVISOR(S): Tani Sebro, Department of Global & Intercultural Studies

Investigating the Indian Diaspora: Parallels between the Asian Expulsion from Uganda in 1972 and Contemporary Fiji

Ryan Kiehl Price, International Studies and Political Science Major **ADVISOR(S):** Tani Sebro, Department of Global

& Intercultural Studies
From Algeria to France, The Colonial Migration Trail

(See presenter index on pages 47 - 61)

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

Bystrom

SESSION MODERATOR: Christina Fitzpatrick

Donald Blank, Mechanical Engineering Major **ADVISOR(S):** Hamed Samandari, Department of Mechanical and Manufacturing Engineering *Engineering Offering New Perspectives for Fluid Management in Hemodialysis Patients*

Nathaniel Anderson, Engineering Technology Major **ADVISOR(S):** Banafsheh Seyed-Aghazadeh, Department of Engineering Technology *A Study on Vortex-Induced Vibration of Flexible Cylinders*

Caroline Scott

SESSION MODERATOR: Thaiesha Wright

Katherine Melberg, Classical Humanities and Classical Languages Major **ADVISOR(S):** Deborah Lyons, Department of Classics *Gendered Language and Motherhood in the Oresteia*

Julian Johnson, Psychology Major Alcohol and Relationships

Katie Bobbitt, Kinesiology Major
Paige Silverberg, Public Health and Management &
Leadership Major
ADVISOR(S): Karly Geller, Department of Kinesiology
and Health
Bicycle Behaviors and Perceptions on Miami
University's Campus

Anna Symmes
SESSION MODERATOR: Erin Johnson

Natalie Odin, Marketing Major
Alexa Baldari, Marketing Major
Nick Kovesdi, Finance and Accounting Major
ADVISOR(S): Megan Gerhardt, Department of Management
The Effects of Professor Diversity on the Learning Experience

Astrid Cabello, Finance Major
Sean Mullee, Business Economics Major
Aleah Sexton, Finance Major
Advisor(s): Megan Gerhardt, Department of Management
Assessing Which Benefits Miami University Honors Students
Value the Most

Madison Sawyer, Marketing Major

Jane Marsh, Business Economics and Sustainability Major

ADVISOR(S): Megan Gerhardt, Department of Management

Impact of "Late Night Miami" Programming on

Undergraduate Alcohol Consumption

(See presenter index on pages 47 - 61)

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

Bystrom

SESSION MODERATOR: Steven Almaraz

Adam Eaton, Physics and Mathematics Major **ADVISOR(S):** Karthik Vishwanath, Department of Physics *Video Photoplethysmography: How to Get a Person's Heart-Rate from Video*

Marian Kelley Patterson, Chemistry Major ADVISOR(S): Karthik Vishwanath, Department of Physics Sara Zanfardino, Department of Physics Investigating Changes in Tissue Perfusion with Pressure via Diffuse Correlation Spectroscopy

Amber Williams, Engineering Physics and Mathematics Major

ADVISOR(S): Karthik Vishwanath, Department of Physics *Numerical Modeling of fNIRS for Brain Imaging*

Caroline Scott

SESSION MODERATOR: John Charles

Kristina Randall, Speech Pathology & Audiology Major **ADVISOR(S)**: Aaron Shield, Department of Speech Pathology and Audiology

**Language Development in a Rimodal Bilingual Child with

Language Development in a Bimodal Bilingual Child with Autism

Victoria Slabinski, Music and Social Justice Studies Major ADVISOR(S): Liz Wilson, Department of Comparative Religion Elizabeth Hoover, Department of Music "A Man Who Loved Me": Queer and Christian Understandings of Sufjan Stevens' Lyrics

Anne Symmes

SESSION MODERATOR: Shreya Srivastava

Katie Hinh, Anthropology and East Asian Languages and Cultures Major

ADVISOR(S): James Bielo, Department of Anthropology

Labor for Beauty: Migrant Identity in Midwestern Nail Salons

Madeline Shultz, Anthropology Major

ADVISOR(S): James Bielo, Department of Anthropology

Performing 'Aegyo': Language, Gender, and Power among

Young Adults in Korea

(See presenter index on pages 47 - 61)

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

Bystrom

SESSION MODERATOR: Gabrielle Lopez

Daniel Gonzalez, Political Science and Sustainability Major **ADVISOR(S):** Jacqueline Daugherty, Western Program Avoiding the Next Lead Crisis: A Tale of Two Cities and the Investment in Replacing an Entire City's Lead

Kefeng Jiang, Physics and Mathematics Major **ADVISOR(S):** Samir Bali, Department of Physics Ken DeRose, Department of Physics *Pump-Probe Angular Dependency of Dicke Narrowing in EIT Service Lines*

Sydney Harris, Biology and Spanish Major **ADVISOR(S):** Katia Del Rio-Tsonis, Department of Biology Tianlin Lu, Department of Biology *The Role of C3a in RPE Reprogramming*

Caroline Scott

SESSION MODERATOR: Sarah Lambert

Alissa Johnson, History and Political Science Major ADVISOR(S): Tammy Brown, Department of History Nuisances amongst Black Women's Social Reform: Victoria Earle Mathews and Jane Edna Turner

Evan Doran, English Creative Writing and English Professional Writing Major **ADVISOR(s)**: Margaret Luongo, Department of English The Town of Impossibilities

Stephanie Smith, Microbiology Major **ADVISOR(S):** Tereza Jezkova, Department of Biology *Phylogenetic Analyses of North American Band Wing Grasshoppers (Oedipodinae)*

Anna Symmes

SESSION MODERATOR: Dana Johnson

Vinoin Vincely, Biological Physics Major **ADVISOR(S):** Karthik Vishwanath, Department of Physics *Investigating the Accuracy of the IAD/IS System in Extracting Broadband Optical Properties from Uniform Optical Phantoms*

Rebeca Garcia De Jesus, Physics Major
ADVISOR(S): Karthik Vishwanath, Department of Physics
Vrinda Kalia, Department of Psychology
A Systematic Approach and Analysis of Multiple Motion
Artifact Techniques to Optimize NIRx Data Analysis
in Homer2

Brent Reichert, Mechanical Engineering Major **ADVISOR(S):** Karthik Vishwanath, Department of Physics

Development of a Smartphone-Based Spectrometer

for Determination of Optical Properties in Medical

Imaging Applications

(See presenter index on pages 47 - 61)

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

Bystrom

SESSION MODERATOR: Jacob Bruggeman

Mary Owen, Microbiology and Medical Laboratory Science Major

ADVISOR(S): Eileen Bridge, Department of Microbiology Gabrielle Lopez, Department of Microbiology Investigating the Adenoviral Downregulation of SIRT7 and Its Effect on Viral Replication

Audrey Lipps, Individualized Studies and Women's, Gender, and Sexuality Studies Major

ADVISOR(S): Jacqueline Daugherty, Western Program *Native Hawai'ian Participation in Agriculture*

Claire Vaughn, Anthropology Major **ADVISOR(S):** James Bielo, Department of Anthropology *Mopping Space and Place in Religious Tourism*

Caroline Scott

SESSION MODERATOR: Brenda Tyrrell

Jason Flint, Medical Laboratory Science and Biology Major ADVISOR(S): Katia Del Rio-Tsonis, Department of Biology Tracy Haynes, Department of Biology Tianlin Lu, Department of Biology Establishing the Axolotl as a Model Organism for the Study of Retinal Tissue Regeneration

Nachiket Potineni, Microbiology Major ADVISOR(S): Katia Del Rio-Tsonis, Department of Biology Zeyu Han, Department of Biology CRISPR-Cas9 Mediated DNMT3a Knockout Induces Embryonic Chick Eye Altered Morphogenesis

Sarah Kosse, Biology and Premedical Studies Major ADVISOR(S): Katia Del Rio-Tsonis, Department of Biology Jared Tangeman, Department of Biology Analysis of DNA Methylation during RPE to Retina Reprogramming

Anna Symmes

SESSION MODERATOR: Dan Prior

Angelina Klucznik, Social Justice Studies and Public Administration Major

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

Fugitives, Warrants, and Extradition: Gauging Public Perceptions

Weihao Lu, Linguistics Major

ADVISOR(S): Ryan Gunderson, Department of Sociology and Gerontology

Relationship between Grammar Teaching Method and Handedness

Adam Cloch, History Major

ADVISOR(S): Erik Jensen, Department of History

Analyzing State Department Policy in Regards to Jewish

Immigration from Germany, 1933-1941

(See presenter index on pages 47 - 61)

SESSION VI: 3:30 - 4:15 P.M.

Bystrom

SESSION MODERATOR: Preston Carter

George Gruenhagen, Bioengineering Major **Chris Meyer**, Bioengineering Major **ADVISOR(S):** Richard Moore, Department of Biology *Analysis of MITE Transposition and Amplification*

Carter McMaster, Biological Physics Major **ADVISOR(S):** Karthik Vishwanath, Department of Physics Jijun Chen, Department of Department of Physics *Time-resolved Diffuse Reflectance Spectroscopy*

Adam Eggert, Biological Physics Major **ADVISOR(S):** Karthik Vishwanath, Department of Physics *Diffuse Reflectance Spectroscopy of a Blanch Response in Healthy Tissue*

Caroline Scott

SESSION MODERATOR: Logan Smith

Pierce Kaufman, Finance Major

Cam Pirochta, Marketing and Finance Major Alex Kenkel, Accounting Major ADVISOR(S): Megan Gerhardt, Department of Management Measuring Correlation between Student Satisfaction, GPA, and Selected Personality Traits in College Students

Keara Sonntag, Accountancy and Spanish Major **Ann Nguyen**, Finance Major **Helen Zheng**, Accountancy and Business Analytics Major **Advisor(s)**: Megan Gerhardt, Department of Management *The Relationship between Major Choice and Nationality*

Rachel Wydra, History Major ADVISOR(S): Elena Jackson Albarrán, Department of History Ticas Take Charge: Women and Activism in Costa Rica, 1900-1949

Anna Symmes

SESSION MODERATOR: Masnoon Majeed

Taylor Hicks, Social Justice Studies Major

ADVISOR(S): Tani Sebro, Department of Global & Intercultural Studies Cuisine and Culture: An Inside Look into the Culture of Miami University Dining Staff

Courtney Madl, International Studies and Italian Studies Major

ADVISOR(S): Tani Sebro, Department of Anthropology

ACE-ing the Miami "Community": An Exploration through the

Chinese International Student Population at Miami University

Natalie Mullen, International Studies Major ADVISOR(S): Tani Sebro, Department of Global & Intercultural Studies Seeking Refuge through Art

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

(See presenter index on pages 47 - 61)

ALO1 Mitchell Singstock, Anthropology and

Neuroscience Major

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

of Anthropology

Transcriptional Analysis of Chronic Psoriatic Arthritis

ALO2 Danielle Heil, Anthropology and Linguistics Major

Advisor(s): Leighton Peterson, Department

of Anthropology

"A Hole on the Field": Performance, Wellness, and Pain in a Competitive Drum and Bugle Corps

ALO3 Benjamin Shaffer, Computer Engineering Major

Nicholas Wolford, Electrical Engineering and

Computer Engineering Major

Advisor(s): Mark Scott, Department of Electrical and

Computer Engineering

Isolated DC-DC Converter with Bidirectional Current for Interfacing the Voltage Busses of the Dragon Capsule and ISS

ALO4 Morgan Nguyen, Biology Major

Advisor(s): J. Scott Brown, Department of Sociology

and Gerontology

Cassandra Hua, Department of Sociology

and Gerontology

Na Sun, Western Program

The Relationship between Healthcare Infrastructure

and Diabetes Prevalence

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A01 Kathryn Kissner, Biology and Premedical Studies Major

Advisor(s): Michelle Boone, Department of Biology Jessica McQuigg, Department of Biology Examining the Interactive Effects of an Emerging Pathogen and Prey Refugia on Amphibian Feeding Behavior

A02 Olivia Wetsch, Biology and Environmental Science Major

Advisor(s): Michelle Boone, Department of Biology Tyler Hoskins, Department of Biology Parasite Infections and Co-infections in Midwestern Cricket Frogs (Acris blanchardi) and Their Relationship to Agricultural Land Use

A03 Samantha Gawrys, Biology and Spanish Major Benjamin Gilbert, Biology Major

> Advisor(s): Michael Robinson, Department of Biology Peipei Qi, Department of Biology Functional Studies of the Phosphorylation Sites in the Transactivation Domain of Pax6 during Eye Development

A04 Liam Deems, Biology and Environmental Science Major

Advisor(s): Michael Robinson, Department of Biology Lam Phuong, Department of Biology An In-vitro Approach to Promote Neural Retina Differentiation from Primary Mouse Retinal Pigmented Epithelium

A05 Cameron Gardner, Biology and Premedical Studies Major

Advisor(s): Paul James, Department of Biology Joe Powers, Department of Biology Developing a Method to Measure Na+/H+ Exchanger Activity Using pH-sensitive Green Fluorescent Protein (pHluorin2)

A06 Jessica Joyce, Biology Major
Advisor(s): Paul James, Department of Biology
Joe Powers, Department of Biology
Analyzing the Role of the NHE5 Protein in Sperm
Physiology and Male Fertility

A07 Grant VanNess, Biology Major

Advisor(s): Paul James, Department of Biology Joe Powers, Department of Biology Is (Sodium) Na+/Hydrogen (H+) Exchanger Isoform 11 Involved in Male Reproduction?

A08 Ashley Mickens, Environmental Earth Science and Sustainability Major

Advisor(s): Michael Vanni, Department of Biology Tanner Williamson, Department of Biology Changes in Phytoplanton Community Composition following Simulated Storm Events

A09 Thomas Radford, Biology and Life Science Education Major

Advisor(s): Michael Vanni, Department of Biology Tanner Williamson, Department of Biology Relating Carbon Dioxide and Methane Fluxes at a Hypereutrophic Reservoir

A10 Ross Rybakowicz, Biology Major
Advisor(s): Kathleen Killian, Department of Biology
Mollie Sorrell, Department of Biology
Examining the Role of Junctional Communication
within the Adult Neurogenic Stem Cell Niche of the
Cricket, Acheta domesticus

A11 Evelyn Gulla, Biology Major
Meeta Bhardwaj, Biology Major
Advisor(s): Haifei Shi, Department of Biology
Kristen Krolick, Department of Biology
Sex Differences in the Hypothalamic-pituitary-adrenal
(HPA) Axis and Metabolic Responses to Early Life
Stress in Rats

A12 Daniel Pfeil, Mechanical Engineering Major
Advisor(s): Paul Harding, Department of Biology
Sean Taylor, Department of Biology
HB-EGF and ADAM 12S Co-expression of Mouse
Fibroblasts Results in Increased Metabolic Activity

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A13 Ciara Childers, Geology and Environmental Earth Science Major

David Beka Binyam, Geology and Environmental Earth Science and Geographic Information Science Major

Sarah Emrick, Geology and Environmental Earth Science and Biology Major

Advisor(s): Claire McLeod, Department of Geology & Environmental Earth Science

Unraveling the Magmatic Processes beneath Arc Volcanoes: The Role of Amphibole and Feldspar

A14 Kyle Weaver, Chemical Engineering and Biochemistry Major

Adam Coon, Mechanical Engineering Major Advisor(s): Jeong-Hoi Koo, Department of Mechanical and Manufacturing Engineering Development of a Variable Stiffness Synthetic Skin Utilizing Magnetically Tunable Materials

A15 Elizabeth Angi-O'Brien, Geology Major
Advisor(s): Claire McLeod, Department of Geology &

Environmental Earth Science Maureen Haley, Department of Geology & Environmental Earth Science

Magma Mingling: Unravelling Granite Crystallization One Crystal at a Time

A16 Erin Graves, Geology and Environmental Science Major

Advisor(s): Carrie Tyler, Department of Geology & Environmental Earth Science

Characterizing Traces Produced by Biotic Interactions between Fossil Echinoids and Their Predators and Parasites Using Scanning Electron Microscopy

A17 Savannah Rice, Geology

Advisor(s): Brian Currie, Department of Geology & Environmental Earth Science
Patrick Cullen, Department of Geology & Environmental Earth Science
Creating an Initial Exploration Framework for the Berea Sandstone in the Appalachian Basin

A18 Brittany Estridge, Biology Major

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

Seed Germination of Non-invasive Wetland Species

A19 Ashleigh Kmentt, Biochemistry and Premedical Studies Major

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

Uncovering the Rotavirus Infection Pathway via P[19] VP8* Protein for a Better Vaccine

A20 Lauren Campbell, Microbiology Major

Martha Carter, Microbiology Major

Bridget Redmond, Microbiology Major

Lauren Eggleton, Microbiology Major

Coleton Towles, Biochemistry Major

Avan Colah, Biology and Premedical Studies Major **Advisor(s)**: Marcia Lee, Department of Microbiology Richard Bretz, Department of Chemistry and Biochemistry

Influence of Aloe arborescens on Morphogenesis of Candida albicans, a Common Opportunistic Burn Wound Infectious Agent

A21 Coleton Towles, Biochemistry and Premedical Studies Major

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

Marcia Lee, Department of Microbiology

The Separation and Determination of Anti-fungal

Compounds from Aloe Arborescens Leaf Gel

A22 Colleen Jaycox, Biochemistry and Premedical Studies Major

Susanna D'Silva, Biochemistry Major

Advisor(s): Gary Lorigan, Department of Chemistry and Biochemistry

Gunjan Dixit, Department of Chemistry and Biochemistry

Purification and Preliminary Characterization of Human KCNQ1 Ion Channel

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A23 Ben Harding, Biochemistry and Premedical Studies Major

Ryan Mesmer, Biochemistry Major

Advisor(s): Gary Lorigan, Department of Chemistry and Biochemistry

Gunjan Dixit, Department of Chemistry and Biochemistry

Study of the Structure and Topology of the Voltage Sensor Domain (Q1-VSD) of Human KCNQ1 Protein Using EPR Spectroscopy

A24 Warren Reynolds, Biochemistry and Premedical Studies Major

Advisor(s): Gary Lorigan, Department of Chemistry and Biochemistry

Heart Disease Prevention: Protein Structural Analysis of Human Potassium Channel KCNQ1 C-Terminus with EPR Spectroscopy

- A25 Daniel Cirkovic, Mathematics and Statistics Major
 Nicholas Spanier, Mathematics and Statistics Major
 Advisor(s): Tatjana Miljkovic, Department of Statistics
 A Spatial Modeling of Life and Annuity Premiums
 across the United States
- **A26 Benjamin Schweitzer**, Mathematics and Statistics Major

Advisor(s): Thomas Fisher, Department of Statistics An Analysis on the Accuracy of Weather Forecasts

- **A27** Jordan Schneider, Public Health Major Advisor(s): John Bailer, Department of Statistics Defining Poverty Indices and Examining Poverty in South America
- A28 Rachel Serafin, Biochemistry Major

Advisor(s): Gary Lorigan, Department of Chemistry and Biochemistry

Daniel Drew, Department of Chemistry and Biochemistry

Probing the Structure and Dynamics of the S21 Pinholin Protein Using Electron Paramagnetic Resonance Spectroscopy A29 Dillon Frank, Life Science Chemistry Education Major
 Nicholas Spurgus, Biology and Premedical
 Studies Major

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

Justin Pratt, Department of Chemistry and Biochemistry Chemistry and the Ethic of Caring: How Professional Development Can Shape Teachers' Attitudes and Beliefs about Students

- A30 Valeria Mokrenko, Computer Science Major
 Advisor(s): Valerie Cross, Department of Computer
 Science and Software Engineering
 The Comparison of Fuzzy Approximate Reasoning
 Methods
- A31 Grace Leonard, Media and Culture and Sport
 Leadership and Management Major
 Advisor(s): Hongmei Li, Department of Media
 Journalism and Film
 An Analysis of Dunkin' Donuts Advertising Over 6
- **A32** Nan Luo, Strategic Communication and Interactive Media Studies Major

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

Durex Advertising: How to Talk about Sex Without Talking about Sex

A33 Nicole LaBelle, Information Systems and Public Health Major

Kevin Myers, Finance and Accountancy Major **Mariana Galiga**, Finance Major

Advisor(s): Megan Gerhardt, Department of Management

Exploring the Correlation between Birth Order, Personality, and Perceived Success

A34 Melanie Fernandez, Bioengineering Major
Niya Cunningham, Black World Studies Major
Terrence Fully, University Studies Major
Advisor(s): Gwendolyn Etter-Lewis, Department of
Global & Intercultural Studies
Chasity Dittmann, Department of
Educational Leadership

Understanding Student Resilience: A Strength-Based Approach to College Success

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A35 Caroline Bastian, Art and Architecture History and Arts Management Major

Austin Hogans, Architecture Major

Davaughn Golden, Political Science Major

Bree Cole, Studio Art Major

Advisor(s): Brenda Dales, Department of

Teacher Education

Jason Shaiman, Department of Art

African-American Identity through Collage Illustration

A36 Kelsi Sievering, Comparative Religion and Political Science Major

Advisor(s): Nathan French, Department of

Comparative Religion

An Ideal Jihad? A Critical Reception of Anwar

Awlaqi's Battle of Hearts and Minds

A37 Sarah Kammer, Comparative Religion and Anthropology Major

Advisor(s): James Hanges, Department of

Comparative Religion

Why Delphi? Religious Authority at the Site of the

Oracle of Apollo

A38 Jack Henne, German and Economics Major
Advisor(s): Mila Ganeva, Department of German
Beyond the Marshall Plan: American Influences on
Postwar Cultures in East and West Germany

A39 Abigail Culpepper, French and Linquistics Major
Advisor(s): Larysa Bobrova, Department of English
Metaphors We Love By: A Cognitive Linguistic
Analysis of Conceptual Metaphors of Love in
Metropolitan French and American English

A40 Katherine Graham, Gerontology and Women's, Gender, and Sexuality Studies Major

Advisor(s): Kate de Medeiros, Department of Sociology and Gerontology

Living an Age-friendly Life: A Personal Guide

A41 Cassandra Woodford, Psychology and Premedical Studies Major

Advisor(s): Kate de Mederios, Department of

Sociology and Gerontology

Senjooti Roy, Department of Sociology

and Gerontology

Respect and Social Inclusion in Oxford

A42 Dana Johnson, Speech Pathology & Audiology and Gerontology Major

Advisor(s): Kate de Medeiros, Department of

Sociology and Gerontology

TimeSlips As a Tool for Community Engagement: A

Thematic Analysis of Facilitators' Experiences

A43 Christopher Schlegel, Geology Major

Jared Brum, Geology Major

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

Environmental Earth Science

A Remote Sensing Reflective Spectroscopy

Investigation of Jet Fuel-A: Progress in Monitoring Petroleum Spills and Searching for Downed Aircraft

A44 Olivia Young, Biology Major

Emily Ashner, Psychology Major

Callihan Clayton, Biology Major

Bradley Borosky, Biology Major

Advisor(s): Joyce Fernandes, Department of Biology

FYREflies: An Overview of BIO 103

A45 Michael Molchan, Finance Major

Advisor(s): Monica Adkins, Student Success Center

Diversity Children's E-Book

A46 Michael Smith, Media and Culture and Theatre Major

Advisor(s): Monica Adkins, Student Success Center

Children's Diversity EBook

A47 Austin Waterwall, Economics and Spanish Major

Advisor(s): Monica Adkins, Student Success Center

Undergraduate Research: Displaying Diversity through

Children's Literature

A48 Joy Whitman, Early Childhood Education Major

Advisor(s): Monica Adkins, Student Success Center

Diversity Children's Ebook

A49 Briana Ousley, Media and Culture and Interactive

Media Studies Major

Advisor(s): Monica Adkins, Student Success Center

Diversity E-Book

A50 Megan Freshkorn, Nutrition Major

Christina Gadomski, Nutrition Major

Advisor(s): Rebecca Galvin, Department of

Kinesiology and Health

Effect of Pureed Vegetables in Pasta Dough

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A51 Rebecca Bartram, Nutrition and Biology Major
 Aisha Fichtner, Nutrition Major
 Advisor(s): Rebecca Galvin, Department of
 Kinesiology and Health
 Fat Substitutes in Pancakes

A53 Caroline O'Connor, Nutrition and Kinesiology Major Tracey McCudden, Nutrition Major Advisor(s): Rebecca Galvin, Department of Kinesiology and Health

The Effects of Adding a Full Serving of Protein to a Single Serving of Coffee Creamer

Afexa Ross, Nutrition and Kinesiology Major
Arden McMath, Kinesiology and Nutrition Major
Advisor(s): Rebecca Galvin, Department of
Kinesiology and Health
Vegetable Cookies: The Effects of Various Vegetables
Added to Oat-Based Cookies

A55 Katharine Fan, Nutrition and Kinesiology Major
Grace Mignery, Nutrition Major
Advisor(s): Rebecca Galvin, Department of
Kinesiology and Health
The Effect of Texture and Flavor with Varied Protein
Sources in Baked Protein Bars

A56 Elizabeth Miehl, Nutrition and Public Health Major
Sarah Pennington, Nutrition Major
Advisor(s): Rebecca Galvin, Department of
Kinesiology and Health
The Effect of Fat in Macaroni and Cheese

A57 Megan Edison, Nutrition Major
Lauren Rosenston, Nutrition Major
Advisor(s): Rebecca Galvin, Department of
Kinesiology and Health
The Effects of Various Amounts of Protein Powder on
Dark Chocolate

A58 Kelsie Newton, Nutrition and Kinesiology Major
Advisor(s): Rebecca Galvin, Department of
Kinesiology and Health
The Effects of Lipid Variation on the Texture and Taste
of Nutella

A59 Staci Abbott, Nutrition Major
Jennifer White, Nutrition Major
Advisor(s): Rebecca Galvin, Department of
Kinesiology and Health
Lowering Carbohydrate Intake by Substituting
Cauliflower for Pasta in Mac n Cheese

A60 Rachel Mason, Nutrition Major
Emel Ozdemir, Nutrition Major
Advisor(s): Rebecca Galvin, Department of
Kinesiology and Health
Reducing Sugar in Chocolate

A61 Laura Dziubyk, Nutrition Major Katelyn Jensen, Nutrition and Public Health Major Advisor(s): Rebecca Galvin, Department of Kinesiology and Health Plant-Based and Refined Sugar-Free Ensure Replica

A62 Gillian Schultz, Nutrition and Public Health Major Madelynn Trummel, Nutrition Major Advisor(s): Rebecca Galvin, Department of Kinesiology and Health The Effects of Dehydration in Place of Freeze Drying on Transportable Backpacking Meals

A63 Rachel Silber, Public Health Major
Advisor(s): Mark Walsh, Department of Kinesiology
and Health
Paul Flaspohler, Department of Psychology
Nutritional Deficiencies in High-Altitude Nepalese
Villages: a Global Health Perspective

A64 Allie Frederick, Kinesiology Major
Taylor Frazee, Psychology Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
The Social Norms of Drinking and Blacking Out

A65 Jourdan Greenlee, Kinesiology and Nutrition Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Relationship Partner's Descriptive Drinking Norms: If I
Think They Drink, I Won't Date Them

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A66 Jeff McCain, Chemical Engineering Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Alcohol Consumption Differences between Marching
Band and Non-marching Band Participants

A67 Sarah Wyand, Nutrition and Premedical Studies Major Advisor(s): Rose Marie Ward, Department of Kinesiology and Health

How Greek Affiliation Plays a Role in

Emotional Intelligence

A68 Andrea Lee, Latin American, Latino/a, and Caribbean Studies and East Asian Languages and Cultures Major Advisor(s): Rose Marie Ward, Department of Kinesiology and Health Analyzing East Asian International Student Perceptions and Usage of Marijuana and Changes in Alcohol Consumption

A69 Hannah Caudill, Psychology and Public Health Major Clare Cartheuser, Public Health and Psychology Major

Grace Sonderman, Nutrition and Public Health Major **Advisor(s)**: Valerie Ubbes, Department of Kinesiology and Health

Visual Analysis of Cultural Inclusiveness in Oral

Visual Analysis of Cultural Inclusiveness in Oral Health Literacy

A70 Amy Skeels, Kinesiology and Nutrition Major
Abby Garbe, Biology and Premedical Studies Major
Rebecca Bartram, Nutrition and Biology Major
Denise Chan, Nutrition Major
Aisha Fichtner, Nutrition Major

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

Outcomes of a Garden-based Pilot Study with Children Living in Low-Income Housing Complex

Woo Kim, Department of Teacher Education

Experiencing Regret and Moral Decision Making

A71 Joseph Canter, Accountancy Major
 Trevor Sass, Psychology Major
 Rachel Salerno, Psychology and Political
 Science Major
 Advisor(s): Amy Summerville, Department of Psychology
 Brielle Johnson, Department of Psychology

A72 Jack Frankel, Psychology and Premedical Studies Major

Advisor(s): Anna Radke, Department of Psychology Elizabeth Sneddon, Department of Psychology The Effects of Compulsive Drinking on Nucleus Accumbens Inhibition

A73 Joshua Setters, Biochemistry Major
 Julia Hoffman, Psychology Major
 Advisor(s): Anna Radke, Department of Psychology
 Elizabeth Sneddon, Department of Psychology
 Exploring the Effects of Alcohol on Mice in Operant
 Conditioning

A74 Olivia Ramsey, Biochemistry and Premedical Studies Major

Kristen Schuh, Psychology and Neuroscience Major **Advisor(s)**: Anna Radke, Department of Psychology Elizabeth Sneddon, Department of Psychology Role of Medial Orbitofrontal Cortex in Resistance to Punishment

A75 Stacey Henry, Psychology Major
Advisor(s): Camilla McMahon, Department
of Psychology
The Effects of Autism Spectrum Disorder
Symptomology and Diagnostic Disclosure on the
Perception of Job Candidates

A76 Nick Fendinger, Psychology Major
Advisor(s): Kurt Hugenberg, Department
of Psychology
Paige Lloyd, Department of Psychology
Christina Fitzpatrick, Department of
Teacher Education
The Effects of Status on Selective Attention

A77 Rhianna Wessels, Psychology Major
Samantha Asmah, Biology Major
Emena Belt, Psychology Major
Samuel-R.G. Oteng, Biology Major
Advisor(s): Jennifer Quinn, Department
of Psychology
Danielle Tapp, Department of Psychology
Tiffany Campbell, Department of Teacher Education
Impact of Early Life Stress on Social Interaction,
Anxiety, and Stress-Enhanced Fear Learning

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A78 Jennifer Dolecki, Psychology Major
Samantha Miller, Psychology Major
Mackenzie Sigman, Biology Major
Kelly Eyler, Psychology Major

Advisor(s): Jennifer Quinn, Department of

Psychology

Danielle Tapp, Department of Psychology
The Effects of Chronic and Acute Early Life Stress on
Behavioral Flexibility and Compulsivity

A79 Sydney Thompson, Psychology and Premedical Studies Major

Abigail Miller, Psychology and Neuroscience Major **Jake Hallion**, Psychology and Premedical Studies Major

Brendon McLellan, Psychology and Family Science and Social Studies Major

Advisor(s): Jennifer Quinn, Department of Psychology

Danielle Tapp, Department of Psychology

The Effects of Early Life Stress and Maternal Buffering
on Glucocorticoid Receptor Expression in the BNST

A80 James Fisher, Nursing Major Natalie Kash, Nursing Major Katie Shorten, Nursing Major Jenna Pfaff, Nursing Major Abigail Bales, Nursing Major

Christuean (Crystal) Colson, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing

Yoga & Pregnancy

A85 Saagar Dulani, Economics (Quantitative) Major Hannah Baney, Economics and Mathematics Major Hoang Nguyen, Economics Major

Yifei Yan, Business Economics Major **Advisor(s)**: Deborah Fletcher, Department

of Economics

Education Job Match; Update

A86 Allison Dougherty, Psychology Major

Advisor(s): Barbara Oswald, Department of Social and Behavioral Sciences

Fidgeting and Attention in the Classroom

A91 William Carson, Chemistry Major

Sarah Reitz, Psychology and Neuroscience Major

Peter Parras, University Studies Major

Jeff Rhoades, Biology and Environmental Science

(co-major) Major

Advisor(s): Joyce Fernandes, Department of Biology Communication Is Important, Cells Do It Too: Cellular Signaling in Drosophila melanogaster

A92 Danielle Allaire, Biology and Premedical

Studies Major

Jessica Packett, Kinesiology Major

Christian Carrier, Biology and Premedical

Studies Major

Sam Lewis, Biology and Premedical Studies Major **Justin Crookes**, Psychology and Premedical

Studies Major

Advisor(s): Joyce Fernandes, Department of Biology How Fruit Flies Get a Twelve Pack: Genetic Manipulation of the FGF Signaling Pathway in Drosophila

A94 Jacob Schlichter, Zoology Major

Brendan Chetty, Biology Major

Susanna D'Silva, Biochemistry Major

Ian Kausch, Microbiology Major

Spencer Kluth, Biology Major

Madelyn Myers, Microbiology Major

Garrett Schilling, Microbiology Major

Allison Biedenharn, Microbiology Major

Amanda Burgess, Microbiology Major

Advisor(s): Kelly Abshire, Department

of Microbiology

Luis Actis, Department of Microbiology Mitchell Balish, Department of Microbiology

Elizabeth Lucas, Department of Microbiology

Mariah Squire, Department of Physics

Magnar, the Cluster A Cowboy: A New Bacteriophage

from Microbiology 223/224

A95 Hannah Robertson, Biology and English Creative Writing Major

Advisor(s): Andor Kiss, Department of Microbiology Molecular Characterization of the Eye Lens Gamma Crystallins of the Wood Frog Rana Sylvatica

SESSION A: 10:00 - 11:30 A.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

A96 Nicole Rosiello, Spanish and Anthropology Major Advisor(s): Lisa Weems, Department of Educational Leadership Spanish-Only Restaurant Workers' Attitudes Accessing Healthcare

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

(See presenter index on pages 47 - 61)

B 01L Sarah Kammer, Anthropology and Comparative

Religion Major

Advisor(s): Jeb Card, Department of Anthropology

Andor Kiss, Department of Biology Zooarchaeological Methods: Fish Teeth

Identification Project

B 02L Rachel Serafin, Biochemistry Major

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

Anthropology

Paul Flaspohler, Department of Psychology

Comparison of Current Remediation Projects

Intended to Decrease Environmental Lead Exposure in
Kabwe, Zambia

B 03L Amber Henderson, Marketing Major

Advisor(s): Cameron Hay-Rollins, Department

of Anthropology

Paul Flaspohler, Department of Psychology

A Global Health Perspective on the Effectiveness of a Local Food Pantry's Supply Chain and Its Impact on the Community: GHS 401 Immersion Experience

B 04L Andrew Racadio, Biology Major

Advisor(s): Cameron Hay-Rollins, Department of Anthropology
Paul Flaspohler, Department of Psychology
Global Health on a Local Level: Food as Medicine in Pediatric Primary Care

B 05L Hannah Caudill, Psychology and Public Health Major

Madison Hayes, Psychology and English

Literature Major

Greek Step Up Evaluation

Sydney Starkweather, Psychology Major **Mayah Haidar**, Psychology and French Major **Advisor(s)**: Paul Flaspohler, Department of Psychology Jack Baker, Department of Psychology

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

Ben Arias, Zoology MajorKali McKnight, Biology Major

Advisor(s): Susan Hoffman, Department of Biology Jeremy Papuga, Department of Biology The Effects of Natural Bottlenecking on the Genetic Diversity of an Isolated Population of Peromyscus maniculatus gracilis

B02 Aonesti Williams, Biology and Premedical Studies Major

Nicholas Shermis, Zoology Major

Advisor(s): Susan Hoffman, Department of Biology Jeremy Papuga, Department of Biology The Effects of Natural Bottlenecking on the Genetic Diversity of Peromyscus leucopus in Michigan's Lower Peninsula

BO3 Kathryn Riccitelli, Zoology Major

Carly Zeis, Zoology and Computer Science Major Advisor(s): Susan Hoffman, Department of Biology Jeremy Papuga, Department of Biology Gene Flow and Metapopulation Dynamics of the Peromyscus maniculatus gracilis in the Lower Peninsula of Michigan

BO4 Connor Huelsman, Biology Major

Gil Phillips, Biology Major

Advisor(s): Susan Hoffman, Department of Biology Changes in Genetic Variability of Peromyscus leucopus and Peromyscus maniculatus in Northern Michigan over a Decade

B06 John Karikas, Biology and Premedical Studies Major Ashley Laurent, Biology and Premedical Studies Major Advisor(s): Dawn Blitz, Department of Biology Hormone Receptor Distribution in a Rhythmic Motor System

B07 Emily Wyatt, Biology Major

Austin Schafer, Biology and Premedical Studies Major **Advisor(s)**: Kathleen Killian, Department of Biology Mollie Sorrell, Department of Biology *Effects of a Fragile X Knockdown in Adult and Juvenile RNAi Models of Acheta domesticus*

B08 Annastasia Babcock, Biology and Biochemistry Major Advisor(s): Kathleen Killian, Department of Biology

A Tale of Two Phenoloxidases: The Effect of PO

Enzyme on Immunity and Behavior

BO9 Jana Cable, Microbiology Major
Advisor(s): Natosha Finley, Department
of Microbiology
Structural Characteristics of Myosin Binding Protein C
Determine Calmodulin Interactions

B10 Justin Poth, Biochemistry and Premedical Studies Major

Arete Kaffenes, Biology Major

Advisor(s): Michael Robinson, Department of Biology Brad Wagner, Department of Biology Phuong Lam, Department of Biology A CRISPR/Cas9 Approach to Gene Regulation in Mouse Kidney Cells

B11 Anna Porter, Biology and Premedical Studies Major Advisor(s): Michael Robinson, Department of Biology Phuong Lam, Department of Biology

An Ex-Vivo Approach to Induce Neural Retina

Differentiation from Primary/Mouse Retina

Pigmented Epithelium

B12 Silvi Bajrami, Biology and Premedical Studies Major Advisor(s): Michael Robinson, Department of Biology Investigating the Role of PAX6 in Mammalian Retina Regeneration

B13 Katrina Culbertson, Zoology and Environmental Science Major

Megan Archdeacon, Zoology Major Advisor(s): Ann Rypstra, Department of Biology Jake Godfrey, Department of Biology Effects of Glyphosate and Body Conditions on Courtship and Cannibalism in an Agrobiont Wolf Spider

B14 Lindy Latham, Biology Major
Advisor(s): Ann Rypstra, Department of Biology
Altered Behavior in Aphids in Response to Chemical
Cues from a Predator

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

B15 Victoria Borland, Biochemistry and Premedical Studies Major

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

Patrick Emery, Department of Chemistry and Biochemistry

Adam Schafer, Department of Chemistry and Biochemistry

Protons, Neutrons, and Electrons Oh My!: Investigating the Development of Atomic Structure Concepts, Using Guided Inquiry

B16 Brianna Minshall, Psychology and Neuroscience Major Advisor(s): Ellen Yezierski, Department of Chemistry and Biochemistry

Data-Driven Curriculum Reform: Energy Changes during Bond Making and Breaking

B17 Katelyn Ferguson, Chemistry and Premedical Studies Major

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

Maia Popova, Department of Chemistry
and Biochemistry

Symbolic and Space-filling Representations of a Combustion Reaction: General Chemistry Students' Reasoning about Bonding

B18 Breaysha Helm, Early Childhood Education Major
Ethan Clearfield, American Studies Major
Sidney Edwards, Studio Art Major
Advisor(s): Brenda Dales, Department of
Teacher Education
Jason Shaiman, Department of Art
LGBTQ+ Community in African-American Children's
Picture Books

B19 Aaron White, Sport Leadership and

Management Major

LaShawn Huey, Political Science Major
Abbie Kotik, Early Childhood Education Major
Advisor(s): Brenda Dales, Department of
Teacher Education
Jason Shaiman, Department of Art

African-American Picture Books as Lens for Social Justice

B20 Alex Mazursky, Mechanical Engineering and Energy Major

Sae Hyun Sone, Mechanical Engineering Major **Advisor(s)**: Jeong-Hoi Koo, Department of Mechanical and Manufacturing Engineering *Induction Heating of Thin Sheet Materials: Multiphysics Modeling and Simulation*

- **B21 Nathaniel Anderson**, Engineering Technology Major **Advisor(s)**: Banafsheh Seyed-Aghazadeh, Department of Engineering Technology *Vortex-Induced Vibration*
- B22 Chong Kai Wong, Biological Physics Major
 Advisor(s): Paul Urayama, Department of Physics
 Using Spectral Phasor Analysis of UV-excited
 Autofluorescence to Reveal Small Differences between
 Chemically-induced Mitochondrial Responses
- **B23** Matthew Harris, Biology and Premedical Studies Major Advisor(s): Shenyuan Xu, Department of Chemistry and Biochemistry

 Determining Structural Basis of Rotavirus Strains P[6] and P[8] VP8 Surface Protein Interactions with Host-Cell Glycans
- **B24 Sophia Rafferty**, Biochemistry and Premedical Studies Major

Advisor(s): Gary Lorigan, Department of Chemistry and Biochemistry

Utilizing Electron Spin Echo Envelope Modulation to Distinguish between the Local Secondary Structures of an a-Helix and an Amphipathic 3-10-Helical Peptide

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

Stephen Knitter, Chemical Engineering Major **Dylan Roskin**, Chemical and Paper Engineering Major

Finn McCullough, Chemical and Paper

Engineering Major

Torey Loeb, Chemical and Paper Engineering Major

Kaleb Coonfare, Chemical and Paper

Engineering Major

Matthew Meyer, Chemical and Paper Engineering

Major

Advisor(s): Catherine Almquist, Department of Chemical Paper and Biomedical Engineering Synthesis and Application of Aerogels in Insulation Tiles for Improved Combustion Efficiency in

Cookstoves

B26 Christian Horne, Chemical Engineering Major **Alex Lebedev**, Chemical and Paper Engineering and

Premedical Studies Major

Luke Marot, Chemical and Paper Engineering Major **Kristin Campbell**, Chemical and Paper

Engineering Major

Jessica Cleland, Chemical and Paper

Engineering Major

Advisor(s): Catherine Almquist, Department of Chemical Paper and Biomedical Engineering Design of Cookstoves for Improved Efficiency and Safety

B28 Yichao Cai, Chemistry Major

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

Ruoyu Ma, Department of Chemistry and Biochemistry Synthesis of Enantioselectivity Gold Catalyst

B29 Brooke Buckingham, Biochemistry and Premedical Studies Major

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

Chemistry and Biochemistry

Katie Eudy, Department of Chemistry and Biochemistry

Optimizing Arabidopsis thaliana Preparation for Efficient Fluorescence Microscopy B30 Hehe Wang, Chemistry Major

Advisor(s): Scott Hartley, Department of Chemistry

and Biochemistry

Isuru Jayalath, Department of Chemistry

and Biochemistry

Lasith Kariyawasam, Department of Chemistry

and Biochemistry

Learning to Control Molecular Geometry Changes in

Organic Synthesis

B31 Garrett Reed, Biochemistry Major

Mychael Dopirak, Biochemistry and Premedical

Studies Major

Advisor(s): David Tierney, Department of Chemistry

and Biochemistry

Andrew Clarkson, Department of Chemistry and

Biochemistry

Five-Coordinate Cobalt (II) Complex Synthesis Study

B32 Richard Killeen, Biochemistry and Premedical

Studies Major

Advisor(s): Ann Hagerman, Department of Chemistry

and Biochemistry

Evaluation of the Binding Complex of Epigallocatechin Gallate with Bovine Serum Albumin and Copper

B33 Haley Ferguson, Biochemistry and Premedical Studies

Advisor(s): Ann Hagerman, Department of Chemistry

and Biochemistry

Xiaowei Sun, Department of Chemistry and

Xiaowei Sun, Department of Chemistry and Biochemistry

Effects of Fatty Acids and Green Tea EGCGg on Human Serum Protein

B34 Quinn Kistenfeger, Biochemistry and Premedical Studies Major

Studies Major

Advisor(s): Ann Hagerman, Department of Chemistry

and Biochemistry

Why Does Acacia Plant Control Methane Production by Cattle?

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

B35 Andrew Katko, Biochemistry and Premedical Studies Major

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

Alexander Bergstrom, Department of Chemistry and Biochemistry

Probing the Interaction of Aspergillomarasmine (AMA) with Metallo-beta-lactamases NDM-1, VIM-2, and IMP-7

B36 Callie Miller, Biochemistry and French Major Advisor(s): Michael Crowder, Department of

Chemistry and Biochemistry

Alexander Bergstrom, Department of Chemistry

and Biochemistry Spectroscopic Studies of Metallo-b-Lactamases and Dipicolinic Acid Derivatives as Inhibitors

B37 Delaney Clayton, Biochemistry Major

Kelly Mason, Biochemistry Major

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

Classification of the Biochemical and Biophysical Properties of New Delhi metallo- b-lactamase (NDM) variants 1 through 17

B38 Julie Gravelle, Chemistry Major

Advisor(s): Andre Sommer, Department of Chemistry and Biochemistry

Samar Elagamy, Department of Chemistry and Biochemistry

Observing Thin Films Smaller than the Believed Limit of Detection

B39 Braegor Strickley, Biology Major

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

Uptake of Nitrate and Phosphate Ions by Native, Noninvasive Plant Species

B40 Joseph Sparks, History Major

Lydia Ryan, Biology Major

Baylen Thiery, Botany and Geology Major

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

Environmental Earth Science

Reflective Spectroscopy of Animal Specimens for Remote Sensing Applications: Bears, Birds and Bones **B41** Grant Abbott, Geology Major

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

Great Miami River Spectroscopy Studies

B42 Erin Lary, Geology Major

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

Transmission Electron Microscopy Investigation of Mineralogical Composition of Olduvai's Locality 80 Core Samples

B44 Mireille Fouh, Environmental Earth Science Major

Robert Bussell, Geology Major

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

Environmental Earth Science

Initial Investigations of Rare Earth Resources in Volcanic Materials in New Mexico: A Novel Approach

B45 Savannah Boerger, Zoology Major

Advisor(s): Jonathan Levy, Department of Geology &

Environmental Earth Science

Paul Flaspohler, Department of Psychology

Fresh Moves: Utilizing a Converted City Bus to Mobilize Produce Access in Chicago Food Deserts

B46 Sarah Martin, Psychology Major

Advisor(s): Jonathan Levy, Department of Geology & **Environmental Earth Science**

Paul Flaspohler, Department of Psychology Global Health Immersion in Nicaragua: The Effects of Climate Change on Small-Island Freshwater Systems

B47 Samuel Smiley, Chemistry and Geology Major

Advisor(s): John Rakovan, Department of Geology & **Environmental Earth Science**

David Tierney, Department of Chemistry and Biochemistry

The Use of NMR to Study the Intermolecular Changes of Decavanadates Over Time and in Solution

B48 Rosamiel Ries, Geology and Physics Major

Advisor(s): Michael Brudzinski, Department of

Geology & Environmental Earth Science

An Evaluation of an Earthquake-rate-based Strategy for Identifying Cases of Hydraulic-fracturing-induced Seismicity in Oklahoma

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

B49 Joslyn Andrews, Marketing and Economics Major Caitlin Sifuentes, Management and Leadership Major ADVISOR(S): Megan Gerhardt, Department of Management

Cooperative Businesses: The Challenges of Recruiting Millennial Talent

B50 Sophia Pauken, Anthropology and International Studies Major

Advisor(s): Tani Sebro, Department of Anthropology *Refugee Integration in Southwestern Ohio*

B51 Rachel Brand, Anthropology Major

Advisor(s): John Schaefer, Department of Anthropology *Alaska Native Heritage and Education*

B52 Emma Brzezinski, Anthropology and Biology Major Nicole Schapker, Anthropology and Chemistry Major Advisor(s): Linda Marchant, Department of Anthropology

Replication and Extension: Handedness in Termite

Fishing among Gombe Chimpazees

B53 Hana Hall, Political Science Major
Advisor(s): Abigail Matthews, Department of
Political Science
Judicial Blue Slip Process and the Evolution of
Senatorial Courtesy

B54 Phoebe Cheney, Kinesiology and Public Health Major
Zeqin He, Public Health and Economics Major
Kaylee Marihugh, Public Health and Nutrition Major
Hannah Scally, Public Health Major
Katlyn Whitaker, Public Health Major
Advisor(s): Valerie Ubbes, Department of
Kinesiology and Health
Perceived Benefits of Labyrinth Types as Advocated by
Public Health Professionals

B55 Miranda Corpora, Social Work Major
Advisor(s): Angela Curl, Department of Family Science and Social Work
Emotional Support Animals (ESA)

B56 Sarah Jones, Economics and Political Science Major
 Michael Hong, Economics Major
 Dewei Liu, Economics and Engineering
 Management Major
 Advisor(s): Deborah Fletcher, Department of Economics
 Grade Sensitivity and Attrition Rates in STEM

B57 Lily Condron, Business Economics and Finance Major Maddy Heller, Business Economics and Interdisciplinary Business Management Major Mira Patel, Economics and Political Science Major Qi Zhou, Economics Major Advisor(s): Deborah Fletcher, Department of Economics
Miami Greek Culture: Exploring the Causal Effects of Greek Affiliation on Academic Performance

B58 Mengyu Yu, Statistics Major
Samantha Thompson, Statistics Major
Mazie Krehbiel, Statistics Major
Advisor(s): Tatjana Miljkovic, Department of Statistics
Visualization of the Female Actuarial
Research Community

B59 Yuexi Wang, Statistics Major **Advisor(s)**: Byran Smucker, Department of Statistics *Approximate Leveraging Methods to Select a Predictive Regression Model for Big Data*

B60 Alexis March, Zoology Major
What's In a Name? - A Preliminary Study on Dog Breed
Prejudice

B61 Jacob Bishop, Psychology Major
 Devon Kappie, Psychology and Neuroscience Major
 Abby Hart, Psychology Major
 Advisor(s): Amy Summerville, Department of Psychology
 Brielle Johnson, Department of Psychology
 Woo Kim, Department of Teacher Education
 Anticipated Regret in Moral Decision Making

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

B62 Kevin Summers, Psychology and Premedical Studies Major

Advisor(s): Kurt Hugenberg, Department of Psychology E. Paige Lloyd, Department of Psychology Ouch? The Effects of Target Socioeconomic Status on Pain Detection

B63 Jaylen Perkins, Public Health and Premedical Studies Major

Advisor(s): Matthew McMurray, Department of Psychology
Danielle Tapp, Department of Psychology *Exploring Serotonin's Effects on Amphetamine's Pathways*

B64 Amber Simmons, Psychology Major
Advisor(s): Matthew McMurray, Department
of Psychology
Danielle Tapp, Department of Psychology
Shannon Thompson, Department of Teacher Education
The Impacts of Early Life Stressors on Alcohol
Consumption in Adolescent Rats

Megan Ridder, Psychology Major
Mackenzie Trevethan, Psychology Major
Ashley Ezpeleta, Psychology Major
Zach Capretta, Psychology Major
Grace Melanson, Psychology Major
Emily Ashner, Psychology Major
Advisor(s): Joseph Johnson, Department
of Psychology
Mitchell Dandignac, Department of Psychology
The Role of Interoception in Stress and

Decision Making

B66 Carmen Stone, Biology and Premedical Studies Major
 Marie Yamada-Killilea, Psychology Major
 Tara Verghis, Biology and Environmental
 Science Major

Advisor(s): Amanda Diekman, Department of Psychology

Tessa Benson-Greenwald, Department of Psychology Mansi Joshi, Department of Teacher Education Saving the World or Ruling It?: Affordances of Science Predict Attitudes toward Its Role in Policy B67 Brianne Safer, Psychology Major
Advisor(s): Amanda Diekman, Department
of Psychology
Melissa Fuesting, Department of Psychology
Proximal and Distal Communal Goal Pursuit within the
Context of STEM

B68 Nicholas Guiot, Biology Major

Advisor(s): Ronald Cox, Department of Kinesiology and Health

Relationships between the Measures of Aerobic

Relationships between the Measures of Aerobic and Anaerobic Abilities for the Women's Field Hockey Team

B69 Katherine Orr, Public Health Major
Advisor(s): Cameron Hay-Rollins, Department
of Anthropology
Paul Flaspohler, Department of Psychology
A Global Health Immersion: How Socioeconomic
Status Impacts Early Childhood Education in Cape
Town, South Africa

B70 Kailey Kelliher, Strategic Communication Major Advisor(s): Stephen Siff, Department of Media Journalism and Film Effectiveness of AlcoholEdu at Miami University

B71 Jackie Zemper, Psychology Major
Advisor(s): Stephen Siff, Department of Media
Journalism and Film
'Breaking Bad' and the Portrayal of Drug Abuse
and Addiction

B72 Meghan Brandabur, Russian, Eastern European, and Eurasian Studies and Strategic Communication Major Advisor(s): Stephen Siff, Department of Media Journalism and Film Drug and Alcohol Usage in the TV Show "Shameless"

B73 Elisabeth Dodd, Journalism and Sociology Major Advisor(s): Stephen Siff, Department of Media Journalism and Film Advertising Strategies for MadMen's Recreational Marijuana Since the January 1, 2018 Legalization in California

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

B74 Margaret Callaghan, Diplomacy and Global Politics and Journalism Major

Advisor(s): Stephen Siff, Department of Media Journalism and Film

Jefferson Airplane and Disney: How Pop Culture Impacted the War on Drugs in the 1970's

B75 Savannah Lang, Strategic Communication and English Professional Writing Major

Advisor(s): Stephen Siff, Department of Media Journalism and Film

AlcoholEdu and Its Impact on College Students

B76 Emily Wilson, Biology Major

Advisor(s): Rose Marie Ward, Department of

Kinesiology and Health

Sexual Assault and Chinese International Students on a College Campus

B77 Jacqueline Ziegman, Kinesiology Major

Advisor(s): Rose Marie Ward, Department of

Kinesiology and Health

Parental Bonding and Perceived Importance of Alcohol Predict Drinking in Domestic versus International Students

B78 Olivia Callahan, Kinesiology Major

Advisor(s): Rose Marie Ward, Department of

Kinesiology and Health

Examining the Relationship Between Body Mass Index, Physical Activity and Drunkorexia

B79 Antonia Caba, Public Health Major

Advisor(s): Rose Marie Ward, Department of

Kinesiology and Health

Sexual Openness and Menstrual Attitudes as

Predictors of Hookup Behavior and Attitudes among

Undergraduate Women

B80 Karlie Armstrong, Nursing Major

Makenzie Wayman, Nursing Major

Arden Dilbeck, Nursing Major

Julianna Spurlock, Nursing Major

Nathan Campbell, Nursing Major

Abbey Gilbert, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing

Bakri Balloon Effectiveness in Postpartum Hemorrhage

B82 Jeffery Bradley, Nursing Major

Andrew Huitger, Nursing Major

Emma Roberts, Nursing Major

Katie Spoleti, Nursing Major

Alexis Creona, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing

Taking the Pressure Off: The Effect of Mattress Type on

Reduction of Pressure Ulcers

B84 Donna Holbrook, Nursing Major

Rebekah Smith, Nursing Major

Tristen Withrow, Nursing Major

Danielle Swartzel, Nursing Major

Kelly Robinson, Nursing Major

Betty Estes, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing

The Effectiveness of Mechanical Vs Manual CPR: an

Evidence-based Project

B85 Stephanie Salyer, Nursing Major

Esperance Nyiranziza, Nursing Major

Cheyenne Brown, Nursing Major

Rosalinda Lopez, Nursing Major

Sierra Barnes, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing

The Sound of Music: How Music Helps Those with

Mental Illness Cope

SESSION B: 1:30 - 2:45 P.M. JOHN DOLIBOIS ROOM

(See presenter index on pages 47 - 61)

B87 Chaney Steimel, Nursing Major
Danielle Horney, Nursing Major
Madison Vibbard, Nursing Major
Bre-Anne Moffitt, Nursing Major
Jamie Cogan, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing *Emergency Contraception versus Intrauterine Devices*

B89 Ryan Motley, Nursing Major
Lauren Motley, Nursing Major
Briana Berry, Nursing Major
Victor Agyeman, Nursing Major
Nana Roberts, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing What Interventions Are Effective in Reducing the Spread of c diff?

B90 Theresa Creager, Nursing Major
Callie Sove, Nursing Major
Laura Stamper, Nursing Major
Doug Kuykendoll, Nursing Major
Rachel Everhart, Nursing Major
Rosanna White, Nursing Major
Advisor(s), Eyad Musallam, Department of Nursing
In Hospitalized Patients, What Is the Best Practice to

B91 Sundeep Vaswani, Mathematics Major
Bobbie Hall, Psychology Major
Advisor(s): Kate de Medeiros, Department of
Sociology and Gerontology
Age-Friendliness in Oxford: Communication,
Community, and Services

Prevent Intravenous Catheter Infections?

B92 Sarah Heath, Psychology Major
Cole Baker, Biology Major
Tone Pryer, Accountancy Major
Aaron Davidson-Bey, Psychology Major
Advisor(s): Kate de Medeiros, Department of
Sociology and Gerontology
Senjooti Roy, Department of Sociology
and Gerontology
The Accessibility and Inclusion of Oxford: Is It Built
for Everyone?

B93 Brianne Maag, Psychology Major
Advisor(s): Elizabeth Kiel, Department of Psychology
Randi Phelps, Department of Psychology
An Investigation of Child Anxiety Development
through Maternal Parenting Behaviors

B94 Jacob Schlichter, Zoology Major Brendan Chetty, Biology Major Susanna D'Silva, Biochemistry Major Ian Kausch, Microbiology Major Spencer Kluth, Biology Major Madelyn Myers, Microbiology Major Major Garrett Schilling, Microbiology Major Allison Biedenharn, Microbiology Major Amanda Burgess, Microbiology Major Advisor(s): Kelly Abshire, Department of Microbiology Luis Actis, Department of Microbiology Mitchell Balish, Department of Microbiology Elizabeth Lucas, Department of Microbiology Mariah Squire, Department of Physics Magnar, the Cluster A Cowboy: A New Bacteriophage from Microbiology 223/224

B95/96 Lawrence Gardner Jr., Biology Major,
Bioinformatics Minor
Advisor(s): Chun Liang, Bioinfomatics Laboratory,
Department of Biology
Live Demo of the Microsoft HoloLens

SESSION C: 3:00 - 4:30 P.M. SHRIVER I OBBY

(See presenter index on pages 47 - 61)

C 01L John Karikas, Biology Major

Advisor(s): Cameron Hay-Rollins, Department

of Anthropology

Paul Flaspohler, Department of Psychology Literature Misses Reality: The Exclusion of Men in

Efforts to Understand Infant Mortality

CL02 Rachel Serafin, Biochemistry Major

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

Community Perceived Health Consequences of Lead

Contamination in Kabwe, Zambia

CL03 Emily Ratvasky, Anthropology Major

Advisor(s): Jeb Card, Department of Anthropology *Archaeological Education and Gamification*

CL04 Miranda Oates, Anthropology Major

Advisor(s): Jeb Card, Department of Anthropology The Use and Abuse of Human Remains: Ethical, Legal, and Political Issues in Regard to Collection and Analysis

CLO5 Ellie Timmons, Anthropology and German Major Advisor(s): Jeb Card, Department of Anthropology Academic Responses to Pseudoscience and Power: A Case Study from Nazi Germany

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

CO1 Maddy Moe, Biology Major

Advisor(s): Yoshinori Tomoyasu, Department of Biology

Courtney Clark-Hachtel, Department of Biology Detailed Analysis of the Tissues Transforming into Wings in the Cephalothorax Mutants of Tribolium

CO2 Sean Boyles, Microbiology Major

Advisor(s): Yoshinori Tomoyasu, Department of Biology

Kevin Deem, Department of Biology Visualizing Vg Expression Patterns to Investigate a Possible Dual-origin of Insect Wings

CO3 Jacob Schultz, Biology and Premedical Studies Major Advisor(s): Yoshinori Tomoyasu, Department of Biology

> Courtney Clark-Hatchel, Department of Biology Establishing the Giant Mayfly (Hexagenia) as a Model to Study the Origin of Insect Wings

CO4 Kayla Cartwright, Biology and Premedical Studies Major

> Charles Long, Biology and Premedical Studies Major Advisor(s): Paul Harding, Department of Biology Sean Taylor, Department of Biology Cellular Reprogramming of Human Primary Adipocytes into Brown Adipose Tissue (BAT)-like Cells

CO5 Vayda Barker, Biochemistry and Premedical Studies Major

Alyssa Miller, Biology Major

Advisor(s): Katia Del Rio-Tsonis, Department of Biology

George Tsissios, Department of Biology

The Role of Ephrin-B2 on Newt Lens Regeneration

CO6 Andrew Fausey, Biology Major

Aristotle Kayafas, Biology Major

Advisor(s): Katia Del Rio-Tsonis, Department of Biology

Agustin Luz-Madrigal, Department of Biology Erika Grajales, Department of Biology Jared Tangeman, Department of Biology The Role of Epigenetic Modifications in Retina

Reprogramming

Sydney Harris, Biology and Spanish Major Advisor(s): Katia Del Rio-Tsonis, Department of Biology

Tianlin Lu, Department of Biology

Determining Axolotls' Regeneration of Retinal Tissue

C08 Taylor Lentz, Biology and Premedical Studies Major Sam Wallace, Biochemistry and Biology Major Advisor(s): Katia Del Rio-Tsonis, Department of Biology

> Tracy Haynes, Department of Biology Zeyu Han, Department of Biology To Determine the Mechanism by which IL-6 Induces RPE Reprogramming in the Embryonic Chick

Jennifer Bierly, Biology and Premedical Studies Major C09 Advisor(s): Katia Del Rio-Tsonis, Department of Biology

> Tianlin Lu, Department of Biology Mechanism of Complement Component C3a-induced RPE Reprogramming

C10 Ryan Snyder, Biology and Premedical Studies Major Advisor(s): Lori Isaacson, Department of Biology Neuronal Plasticity and Survival in Spinal Cord following Peripheral Axon Injury: Role of glia

C11 MacKenton Johnson, Biology and Neuroscience Major Advisor(s): Lori Isaacson, Department of Biology Jessika Hutchinson, Department of Biology Elimination of Microglia from Mouse Spinal Cord: A Model to Examine Plasticity following Peripheral Axon Injury

Elizabeth Jacobs, Biology and Neuroscience Major Advisor(s): Kathleen Killian, Department of Biology Kathryn Chipchase, Department of Biology Effects of Cold Stress on Gut Lining and Enteric Bacterial Escape in Acheta domesticus

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C13 Kelsy Schultz, English Creative Writing and Premedical Studies Major

Alexa Enders, Biology and Psychology Major **Advisor(s)**: Kathleen Killian, Department of Biology Kathryn Chipchase, Department of Biology *Effect of Cold Stress on Agnostic and Reproductive Behavior of Male Acheta domesitcus Crickets*

C14 Savannah Ballweg, Botany and Environmental Science Major

Advisor(s): Carolyn Keiffer, Department of Biology The Historical Range and Prevalence of the American Chestnut (Castanea dentata) in Ohio

C15 Alessia Saul, Zoology and Environmental Science Major

Advisor(s): Craig Williamson, Department of Biology Limnological Scientific Outreach in Pennsylvania's Pocono Lake Region

C16 Addison Zeisler, Biology Major

Advisor(s): Tereza Jezkova, Department of Biology Diversification in North American Band-winged Grasshoppers (Oedipodinae)

C17 Julia Fleiner, Environmental Earth Science and Biology Major

Megan Schwinden, Biology Major Isabel Frazier, Chemistry Major Ashley Martin, Biology Major

Advisor(s): Melany Fisk, Department of Biology Deer and Honeysuckle Influence on Soil Microbial Activities in Hardwood Forests

C18 Eastyn Newsome, Botany Major

Jared Lutz, Biology and Premedical Studies Major Advisor(s): Robert Baker, Department of Biology Stomatal Density and Leaf Venation: Structure-function Relationships and Water Use Efficiency in Brassica

C19 Casey Horan, Microbiology Major

Advisor(s): Michael Vanni, Department of Biology Tanner Williamson, Department of Biology *Microbial Diversity and Patterns of Denitrification in Lakes with Contrasting Watershed Land Use* C20 Avan Colah, Biology Major

Leigha Raess, Biochemistry Major

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

Marcia Lee, Department of Microbiology Isolation of Potential Antifungal Compounds in Aloe cameronii

C21 Lydia Tressel, Botany Major

Advisor(s): Michael Vincent, Department of Biology Revision of the Trifolium depauperatum Species Complex

C22 Andrew Schaff, Microbiology Major
Advisor(s): Mitchell Balish, Department
of Microbiology
Monica Feng, Department of Microbiology
Effect of Enzymes and Salts on the Dispersal of

C23 Rebecca Wyma, Microbiology and Premedical Studies Major

Mycoplasma pneumoniae Biofilms

Advisor(s): Mitchell Balish, Department of Microbiology

Nathan Schwab, Department of Microbiology The Mycoplasma Attachment Organelle and Amino Acid-Induced Shape Change

C24 Clairissa Hansen, Microbiology Major
Advisor(s): Mitchell Balish, Department
of Microbiology
Efforts toward Targeted Gene Knockout in Poultry
Pathogen Mycoplasma iowae

C25 Jessica Clark, Microbiology Major

Advisor(s): Rachael Morgan-Kiss, Department of Microbiology

Isha Kalra, Department of Microbiology Understanding the Effects of Adaptive Laboratory Evolution on Model Green Alga Chlamydomonas reinhardtii under High Salinity

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C26 Isaiah Jacques, Microbiology and Premedical Studies Major

> Advisor(s): Rachael Morgan-Kiss, Department of Microbiology

Zev Cariani, Department of Microbiology Characterization of the Growth and Photochemistry of Antarctic Mixotrophic Algae: Isochrysis sp. MDV & Geminigera cryophila

C27 Kelly Minuskin, Biochemistry and Neuroscience Major Advisor(s): Andre Sommer, Department of Chemistry and Biochemistry

Low Cost Infrared Microspectroscopy through Modern Advancements

C28 Diya Yang, Biochemistry Major

Advisor(s): Rick Page, Department of Chemistry and Biochemistry Huagun Zhang, Department of Chemistry and Biochemistry Chathura Paththamperuma, Department of Chemistry and Biochemistry

Studying Hsp70 Substrate Ubiquitination by CHIP Using Peptide Rulers

C29 Jamie Stewart, Biochemistry Major

Advisor(s): Rick Page, Department of Chemistry and Biochemistry

Dominik Konkolewicz, Department of Chemistry and Biochemistry

Thaiesha Wright, Department of Chemistry and Biochemistry

Cellulase-Polymer Bioconjugates to Improve Enzyme Stability and Function for Biofuel Production

C30 Meghan Mulligan, Biology and Science and **Education Major**

> Naomi Patten, Science Education Major Advisor(s): Ellen Yezierski, Department of Chemistry

and Biochemistry

Adam Schafer, Department of Chemistry and Biochemistry

Justin Pratt, Department of Chemistry

Question Quality: Characterizing Activities that Use PhET Simulations

C31 Kathryn Yezierski, Chemistry Education Major Advisor(s): Stacey Lowrey Bretz, Department of Chemistry and Biochemistry Timothy Abell, Department of Chemistry and Biochemistry

Assessing Students' Understandings of Bonding, Acid-Base, and Redox Concepts in General Chemistry

Carrie Dobbs, Chemistry Major C32

> Advisor(s): Stacey Lowrey Bretz, Department of Chemistry and Biochemistry Timothy Abell, Department of Chemistry and Biochemistry Students' Understandings of Solution Chemistry

C33 Lillian Huff, Chemistry Major

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

Representations of Elements & Compounds

C34 Charles Spieser, Biology Major

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

Gregory Allen, Department of Chemistry and Biochemistry

Using Cluster Analysis to Explore Students' Misconceptions About Atomic Emission and Absorption

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C35 Alex Kloster, Biochemistry and Premedical Studies Major

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

Michael Allegrezza, Department of Chemistry and Biochemistry

Nethmi De Alwis Watuthanthrige, Department of Chemistry and Biochemistry

Reaction and Reactor Conditions Affect Photoinduced Electron/Energy Transfer Reversible Addition Fragmentation Transfer(RAFT) Polymerization

C36 Jeremy Via, Biochemistry and Premedical Studies Major

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

Progyateg Chakma, Department of Chemistry and Biochemistry

Erika Stopler, Department of Chemistry and Biochemistry

Self-healing Polymers and Reinforcement with Carbon Nanotubes

C37 Alex Danielson, Biochemistry and Music Performance Major

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

Michael Kennedy, Department of Chemistry and Biochemistry

Reversible Addition-Fragmentation Chain Transfer Polymerization Using Horseradish Peroxidase as a Catalyst

C38 Zachary Digby, Chemistry and Biochemistry Major Advisor(s): Dominik Konkolewicz, Department of Chemistry and Biochemistry Progyateg Chakma, Department of Chemistry and Biochemistry

> Small Molecular Study of the Dynamic Exchange of the thiol-Michael Reaction

C39 Lan Dao, Chemistry Major

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

Ruoyu Ma, Department of Chemistry

and Biochemistry

Synthesis of Novel NHC-Au(I) Complexes with Extremely Bulky Groups

C40 Mitchell Singstock, Anthropology and

Neuroscience Major

Advisor(s): Suzanne Klatt, Department of Family Science and Social Work

Mindfulness Program for the Knolls of Oxford

C41 Madison Scott, History Major

Advisor(s): Andrew Offenburger, Department of History

The U.S. Dakota War of 1862

C42 Kathryn Moreno, Special Education Major
Advisor(s): Darrel Davis, Department of
Educational Psychology
Function and Use of Time in Belizean Schools

Anna Hill, Special Education Major
Amber Karkiewicz, Special Education Major
Advisor(s): Sarah Watt, Department of
Educational Psychology

Uncovering the Attitudes and Beliefs towards Inclusion among General and Special Education Preservice Teachers

C44 Terra Collier, Economics and Anthropology Major
Eashwar Nagaraj, Economics and Mathematics Major
Evan Jelley, Economics and History Major
Sanchit Arvind, Economics Major

Advisor(s): Deborah Fletcher, Department of Economics

Revisiting Figlio: Are Tenure Track Professors Better Teachers?

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C45 Deanna Manolio, Individualized Studies and Psychology Major

Advisor(s): Hays Cummins, Western Program Rose Marie Ward, Department of Kinesiology and Health

The "Miami Image" and Eating Disorders

C46 Emily Mendenhall, Individualized Studies and Sociology Major

Advisor(s): Jacqueline Daugherty, Western Program
Hays Cummins, Western Program
Student Understanding and Navigation Patterns of
Miami University Sexual Violence Webpages

C47 Jonathan Tetrick, Finance Major

Adam McCoy, Marketing Major **Kyle Fischer**, Marketing Major

Advisor(s): Megan Gerhardt, Department of Management

How Do Home Values Affect Job Searches?

C48 Blair Arnell, Business Administration and East Asian Languages and Cultures Major

Advisor(s): Kate de Medeiros, Department of Sociology and Gerontology *Civic Participation and Employment in Oxford, Ohio*

C49 Brooke Bennington, Sociology and Strategic Communication Major

Advisor(s): Kate de Medeiros, Department of Sociology and Gerontology Senjooti Roy, Department of Sociology

Aging and Social Participation in Oxford

and Gerontology

C50 Dania Puente, Strategic Communication and East Asian Languages and Cultures Major

Advisor(s): Christopher Sutter, Institute for Entrepreneurial Leadership Understanding Farmers Motivations for Certification

onderstanding ranners rieuvations for Gertineatie

C51 Max Leveridge, Environmental Earth Science and Environmental Science Major

Advisor(s): Amelie Davis, Department of Geography Comparing Environmental Attitudes and Relational Value Systems of Populations within the Great Bear Rainforest C52 Audrey Short, Biochemistry and Physics Major
Advisor(s): Michael Kennedy, Department of
Chemistry and Biochemistry
William Joesten, Department of Chemistry
and Biochemistry
Understanding Declining Insulin Production Rates as
Type 1 Diabetes Progresses in a Mouse Model

C53 Alexander Dwyer, Biochemistry and Premedical Studies Major

Advisor(s): Michael Kennedy, Department of Chemistry and Biochemistry Shuisong Ni, Department of Chemistry and Biochemistry Shenyuan Xu, Department of Chemistry and Biochemistry

Structural Insight into the Rearrangement of the Switch I Region in GTP Bound G12A K-Ras

C54 Jana Abdul-Samad, Biochemistry Major
Advisor(s): Michael Kennedy, Department of

Chemistry and Biochemistry

Shuisong Ni, Department of Chemistry

and Biochemistry

Faizule Hassan, Department of Chemistry

and Biochemistry

Engineered Adenovirus Containing Hyper Binding Sites Targeting Oncogenic HMGA Decreases Pancreatic and Liver Cancer Cell Viability

C55 Daniel Stent, Journalism and Sport Leadership and Management Major

Advisor(s): Stephen Siff, Department of Media Journalism and Film

An In-Depth Analysis of Anti-Marijuana Advertisement Campaigns in California Prior to Proposition 64 Being Passed

C56 Leah Kuhn, Chemistry and Engineering Physics Major Advisor(s): Neil Danielson, Department of Chemistry and Biochemistry

> Capillary Electrophoresis of Glycosaminoglycans with Indirect Detection Using Naphthalene Sulfonates

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C57 Yudan Chen, Chemistry Major

Junyi Wang, Chemistry Major

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

The Separation of Peptides in Pluronic F127 Gel by Electrophoresis with MALDI Detection

C58 Elise Leonard, Chemistry and Premedical

Studies Major

Advisor(s): Neil Danielson, Department of Chemistry

and Biochemistry

Ashley Richardson, Department of Chemistry

and Biochemistry

Weak Anion Exchange Chromatography of Sulfonated

Biological Polymers

C60 Madeline Burke, Zoology and Premedical

Studies Maior

Kristen Gray, Psychology and Neuroscience Major **Brianna Minshall**, Psychology and Neuroscience Major **Shiane Toleson**, Psychology and Premedical

Studies Major

Tiffany Campbell, Psychology and Premedical

Studies Major

Advisor(s): Jennifer Quinn, Department

of Psychology

Danielle Tapp, Department of Psychology

The Role of Glucocorticoid Receptors in Adolescent

Stress-Enhanced Fear Learning

C61 Drew Schleicher, Biochemistry and

Neuroscience Major

Advisor(s): Anna Radke, Department of Psychology Jennifer Quinn, Department of Psychology

Novel Mouse Model of Early Life Stress-enhanced Fear Learning and Its Implications for the Development of

Post-traumatic Stress Disorder

C62 Isabel Held, Psychology and Neuroscience Major

Advisor(s): Anna Radke, Department of Psychology Jennifer Quinn, Department of Psychology Impact of Acute Early Life Stress and Adolescent Alcohol Exposure on Adult Stress-Enhanced Fear

Learning and Alcohol-seeking Behavior

C63 Austin Nader, Psychology Major

Advisor(s): Anna Radke, Department of Psychology Elizabeth Sneddon, Department of Psychology Do the Orbitofrontal Cortex and Medial Prefrontal Cortex Contribute to Compulsive Alcohol Seeking?

C64 Emma Feld, Psychology Major

Zach Shoemaker, Psychology Major

Brendan Tracy, Psychology Major

Terry Reid, Psychology and Major

Leah Sprock, Psychology and Marketing Major

Abigail Groome, Psychology Major

Rupert Delacruz, Psychology Major

Gabby Lee, Psychology Major

Gao Heng, Psychology Major

Advisor(s): Jay Leonard Smart, Department

of Psychology

Anthony Drew, Department of Psychology Social Media Usage and Motor Control:

Unapparent Links

C65 Nicholas Daman, Biology and Premedical

Studies Major

Caleb Kozuszek, Chemistry Major

Advisor(s): Dominik Konkolewicz, Department of

Chemistry and Biochemistry

Kevin Burridge, Department of Chemistry

and Biochemistry

Incorporating Spin Labels into Polymers to Probe

Protein Polymer Interactions

C66 Katherine Rodriguez, Biology and

Neuroscience Major

Advisor(s): Matthew McMurray, Department

of Psychology

Danielle Tapp, Department of Psychology

Social Motivation of Adolescent Binge Drinking

C67 Bryson Sanders, Psychology Major

Brittany Nordhaus, Psychology Major

Advisor(s): Matthew McMurray, Department

of Psychology

Animal Preference between Brain Stimulation

Reward Sites

Poster Presentation Listing by Poster Number

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C68 Rachael Weesner, Psychology Major
Advisor(s): Kurt Hugenberg, Department
of Psychology
E. Paige Lloyd, Department of Psychology
Group-Based Pain Sensitivity Stereotypes and
Their Accuracy

C69 Kevin Summers, Psychology and Premedical Studies Major

Advisor(s): Kurt Hugenberg, Department of Psychology

E. Paige Lloyd, Department of Psychology Poverty, Pardons, and Pedagogy: Erroneous Beliefs of Low-SES Students as Insensitive to Pain Biases Allotted Recovery Time in Education

C70 Zhifan Cai, Physics and Mathematics Major
Carolina Vissers, Biological Physics and Premedical
Studies Major

Advisor(s): Paul Urayama, Department of Physics Optical Sensing of Cellular NADH During Extreme Concentration Limits of Chemically-induced Metabolic Transitions

C71 Andrew Peachman, Physics and Premedical Studies Major

Advisor(s): Karthik Vishwanath, Department of Physics

Anthony Young, Department of Psychology Using Laser Speckle Contrast Imaging to Determine Fluid Flow of Non-Scattering Media

C72 Max Kreider, Mathematics and Spanish Major
Andy Rodriguez, Biological Physics and Premedical
Studies Major

Advisor(s): Paul Urayama, Department of Physics Overview of Spectral Phasor Analysis in Biomedical Optics

C75 Carter Gadola, Biology Major

Advisor(s): Randal Claytor, Department of Kinesiology and Health Jarod Vance, Department of Kinesiology and Health Electromyographic Indices of Acute Muscle Fatigue in Response to Multiple Sets and Repetitions of a Single-leg Knee Extension Resistance Exercise C76 Zezhe He, Media and Culture Major

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

Paul Flaspohler, Department of Psychology
Food Insecurity in Local Area: The Role of The Oxford
Community Choice Pantry

C77 Valerie Schmitz, Kinesiology Major

Advisor(s): Randal Claytor, Department of Kinesiology and Health Jarod Vance, Department of Kinesiology and Health Neuromuscular and Mechanical Assessment of Muscle Fatigue during 1-leg Knee Extension Resistance Exercise

C78 Andrew Renggli, Kinesiology and Premedical Studies Major

Tom Minik, Kinesiology Major

Advisor(s): Randal Claytor, Department of Kinesiology and Health

Jarod Vance, Department of Kinesiology and Health Work, Power, Velocity and the EMG Indices of Fatigue during Resistance Exercise

C80 Bryn McElroy, Speech Pathology & Audiology Major Megan Igel, Speech Pathology & Audiology Major Theresa Adams, Speech Pathology & Audiology and Psychology Major

Advisor(s): Aaron Shield, Department of Speech
Pathology and Audiology
Linguistic Differences in the Production of Narratives
by Adolescents with and without Autism
Spectrum Disorder

C81 Cody Loveless, Biology and Spanish Major
Advisor(s): Rose Marie Ward, Department of
Kinesiology and Health
Examining College Student Drinking Motives by
Academic Division

Poster Presentation Listing by Poster Number

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C82 Laura (Dannie) Roberts, Kinesiology and Premedical

Studies Major

Advisor(s): Rose Marie Ward, Department of

Kinesiology and Health

The Power of Parenting: Is There a Relationship between the Occurrence of Orthorexia Nervosa and Parenting Style?

C83 Lamuel Bean, Public Health Major

Advisor(s): Rose Marie Ward, Department of

Kinesiology and Health

Correlation between Alcohol Consumption &

Fluid Intelligence

C85 Trisha Kalkhof, Nursing Major

Mark Ball, Nursing Major

Joseph Hudson, Nursing Major

Westen Judd, Nursing Major

Nathaniel Smith, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing In Hospitalized Patients, What Is the Best Practice for

Foley Catheter Insertion to Prevent Infections?

C86 Laura DeWitt, Nursing Major

Elizabeth Reist, Nursing Major

Rachael Barker, Nursing Major

Timothy Wiggins, Nursing Major

Jessica Wilkins, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing Is Breastfeeding More Effective than Bottle-feeding in

Regards to the Health of an Infant?

C87 Brittany Botkin, Nursing Major

Macie Blevins, Nursing Major

Haley Reed, Nursing Major

Courtney Hyde, Nursing Major

April Williams, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing

Anxiety among Nursing Students: Interventions to

Improve Coping Skills

C88 Brett Tillery, Nursing Major

Austin Campbell, Nursing Major

Leah Wendel, Nursing Major

Sarah Huber, Nursing Major

Jermecka Rumph, Nursing Major

Advisor(s): Eyad Musallam, Department of Nursing

As a Surgical Prep Solution, Is Cholorohexidine

Gluconate or Povidone Iodine Better at Reducing

Surgical Site Infections?

C89 Harley Humphrey, Nursing Major

Maddie Colliver, Nursing Major

Megan Hoffman, Nursing Major

Megan Shiflett, Nursing Major

Brookelynne Smith, Nursing Major

Advisor(s), Eyad Musallam, Department of Nursing

Does Smoking Marijuana during Pregnancy Increase

the Risk of Poor Neonatal Outcomes?

C91 Arushi Chalke, Microbiology and Premedical

Studies Maior

Mackenzie Coyne, Biology and Premedical

Studies Major

Yitong He, Biology Major

Allison Biedenharn, Microbiology and Premedical

Studies Major

Leeann Tran, Medical Laboratory Science and

Premedical Studies Major

Advisor(s): Joyce Fernandes, Department of Biology

Aswati Subramanian, Department of Biology

Investigating the Impact of Motor Neuron Death on

Peripheral Nerve Organization in Drosophila

C92 Gwendolyn Thomas, Biochemistry Major

Krystina Hird, Biochemistry Major

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

Chemistry and Biochemistry

Investigating Chloroplast Protein Transport through

Crosslinking Interactions between Stromal cpTatC and

Mature Precurso

Poster Presentation Listing by Poster Number

SESSION C: 3:00 - 4:30 P.M. JOHN DOLIBOIS ROOMS

(See presenter index on pages 47 - 61)

C93 Bailey Haynes, Biology Major

Advisor(s): Katia Del Rio-Tsonis, Department

of Biology

Christian Gutierrez, Department of Biology

A Newt Ex Vivo System to Study

RPE Transdifferentiation

C94 Jacob Schlichter, Zoology Major

Brendan Chetty, Biology Major

Susanna D'Silva, Biochemistry Major

Ian Kausch, Microbiology Major

Spencer Kluth, Biology Major

Madelyn Myers, Microbiology Major

Garrett Schilling, Microbiology Major

Allison Biedenharn, Microbiology Major

Amanda Burgess, Microbiology Major

Advisor(s): Kelly Abshire, Department

of Microbiology

Luis Actis, Department of Microbiology

Mitchell Balish, Department of Microbiology

Elizabeth Lucas, Department of Microbiology

Mariah Squire, Department of Physics

Magnar, the Cluster A Cowboy: A New Bacteriophage

from Microbiology 223/224

C95 Zaheer Choudhury, Microbiology and Premedical

Studies Major

Advisor(s): Kelly Abshire, Department

of Microbiology

Paul Flaspohler, Department of Psychology

How Late Is Too Late? Obstacles to Positive Maternal

and Neonatal Health Outcomes in Bangladesh

C96 Ashlyn Anderson, Microbiology and Premedical

Studies Major

Advisor(s): Eileen Bridge, Department

of Microbiology

Chandramoni Kafle, Department of Microbiology

Differential Regulation of Mitotic Marker Phospho-

Histone 3 during Adenovirus Infection

A STUDENT REFLECTION:

Miami Mentors Engaging Students in Research

By Tarah Mason Class of 2018

In early February, ORU Coordinator Martha Weber asked me to write a letter about my personal experience working with a faculty mentor at Miami. We thought that this would be an easy task for me, given that I had just wrapped up a year-long research project. With my experience, I should be able to explain how crucial faculty mentors are to undergraduate research. Yet, after nearly two months of thinking and writing and rewriting, I realized that this letter was, in actuality, an immensely difficult endeavor.

It was so difficult because mere words could not possibly capture the enormity of what our mentors do for us - of what my mentor has done for me. How could I describe the extent to which I have relied on my mentor to guide me through this new and daunting process? How could I pare down the hundreds of hours that my mentor has spent helping me into only a few sentences? How could I make you understand just how much I have learned as a student - and grown as a person - because of my mentor? Honestly, I don't think that I could.

Faculty mentors go above and beyond for their students every single second of every single day. They are always available to answer the thousands of questions we email to them. They take the time to teach us all the concepts we do not understand. They critique dozens of our rough drafts, and they listen to our presentations over and over again until they are perfect. At one point, my own mentor actually journeyed to the office where I work – which was completely out of his way – and hand-delivered to me comments on my paper so that I could work on it over the weekend. Extraordinary acts like these are routinely performed by our mentors, proving just how dedicated they are to undergraduate research and to student learning.

Moreover, mentors are not required to do any of it. They are not required to sacrifice untold amounts of their free time to help an undergraduate work through a research project – but they do. They bring all their knowledge and resources to bear in order to make sure we succeed – not because they have to, but because they want to. They believe that we are capable of achieving incredible things, and they are driven by a desire to help us get there. That, in my personal opinion, is the most astounding aspect of a mentor.

The rest of the Undergraduate Research Forum staff and I hope you will take a few moments to recognize the truly amazing contributions from Miami's dedicated faculty. Without them, none of the research you see here today would be possible.

RESEARCH MENTORS

2018 Undergraduate Research Forum

Anthropology

Jeb Card

Cameron Hay-Rollins Linda Marchant Leighton Peterson Clara Scarry John Schaefer

Art

Stephanie Baer

Biology

Robert Baker
Dawn Blitz
Michelle Boone
Kathryn Chipchase
Courtney Clark-Hatchel

Kevin Deem

Katia Del Rio-Tsonis Joyce Fernandes Melany Fisk Jake Godfrey

Erika Grajales Christian Gutierrez

Zeyu Han

Paul Harding
Tracy Haynes
Susan Hoffman
Tyler Hoskins
Jessika Hutchinson

Lori Isaacson Paul James Tereza Jezkova Carolyn Keiffer

Kathleen Killian

Kristen Krolick Phuong Lam Chun Liang Tianlin Lu

Agustin Luz-Madrigal Jessica McQuigg Richard Moore Stephanie Padula Jeremy Papuga

Lam Phuong Joe Powers Peipei Qi

Michael Robinson Ann Rypstra Haifei Shi Mollie Sorrell

Aswati Subramanian Jared Tangeman Sean Taylor

Yoshinori Tomoyasu George Tsissios Michael Vincent Brad Wagner Craig Williamson Tanner Williamson

Chemical Paper and Biomedical Engineering

Catherine Almquist

Chemistry and Biochemistry

Timothy Abell Michael Allegrezza Zahilyn Roche Allred Alexander Bergstrom

Richard Bretz

Stacey Lowery Bretz Kevin Burridge Progyateg Chakma Andrew Clarkson Michael Crowder Carole Dabney-Smith

Neil Danielson
Gunjan Dixit
Daniel Drew
Samar Elagamy
Patrick Emery
Katie Eudy
Benjamin Gung
Ann Hagerman
Scott Hartley
Faizule Hassan
Isuru Jayalath
William Joesten
Michael Kennedy
Dominik Konkolewicz

Gary Lorigan

Ruoyu Ma Shuisong Ni Rick Page

Maia Popova Justin Pratt

Ashley Richardson
Adam Schafer
Andre Sommer
Xiaowei Sun
David Tierney
Thaiesha Wright
Shenyuan Xu
Ellen Yezierski

Classics

Deborah Lyons

Huaqun Zhang

Comparative Religion

Nathan French James Hanges Liz Wilson

Computer Science and Software Engineering

Valerie Cross

EconomicsDeborah Fletcher

Educational Leadership

Chasity Dittmann Lisa Weems

Educational Psychology

Darrel Davis Sarah Watt

Electrical and Computer Engineering

Mark Scott

Engineering Technology

Banafsheh Seyed-Aghazadeh

RESEARCH MENTORS

2018 Undergraduate Research Forum

English

Larysa Bobrova Margaret Luongo

Family Science and Social Work

Angela Curl Suzanne Klatt

Geography

Amelie Davis

Geology and Environmental Earth

Science

Michael Brudzinski
Patrick Cullen
Brian Currie
Maureen Haley
Mark Krekeler
Jonathan Levy
Claire McLeod
John Rakovan
Carrie Tyler

German

Mila Ganeva

Global and Intercultural Studies

Gwendolyn Etter-Lewis

Tani Sebro

History

Elena Jackson Albarrán

Tammy Brown Aaron Cavin Steven Conn Erik Jensen

Andrew Offenburger

Institute for

Entrepreneurial Leadership

Christopher Sutter

Kinesiology and Health

Randal Claytor Ronald Cox Rebecca Galvin Karly Geller Beth Miller

Valerie Ubbes Jarod Vance Mark Walsh

Rose Marie Ward

Management

Megan Gerhardt

Mechanical and

Manufacturing Engineering

Jeong-Hoi Koo Hamed Samandari

Media Journalism and Film

Hongmei Li Stephen Siff

Microbiology

Kelly Abshire
Luis Actis
Mitchell Balish
Eileen Bridge
Zev Cariani
Monica Feng
Natosha Finley
Chandramoni Kafle

Isha Kalra
Andor Kiss
Marcia Lee
Gabrielle Lopez
Elizabeth Lucas
Rachael Morgan-Kiss
Nathan Schwab

Music

Elizabeth Hoover

Nursing

Eyad Musallum

Physics

Samir Bali Paul Urayama Karthik Vishwanath Abigail Matthews **Psychology**

Tessa Benson-Greenwald

Jijun Chen

Mitchell Dandignac

Ken DeRose

Amanda Diekman

Anthony Drew

Paul Flaspohler

Melissa Fuesting

Kurt Hugenberg

Brielle Johnson

Joseph Johnson

Vrinda Kalia

E. Paige Lloyd

Camilla McMahon

Matthew McMurray

Jennifer Quinn

Anna Radke

Jay Smart

Elizabeth Sneddon

Amy Summerville

Danielle Tapp

Anthony Young

Sara Zanfardino

Social and Behavioral Sciences

Barbara Oswald

Sociology and Gerontology

J. Scott Brown Kristen Budd

Kate de Medeiros

Ryan Gunderson

Cassandra Hua

Senjooti Roy

Speech Pathology and Audiology

Aaron Shield

Statistics

John Bailer

Thomas Fisher Tatjana Miljkovic

Byran Smucker

Student Success Center

Monica Adkins

RESEARCH MENTORS

2018 Undergraduate Research Forum

Teacher Education

Brenda Dales

Western Program

Hays Cummins
Jacqueline Daugherty

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

In fall 2017, Miami welcomed Dr. Joyce J. Fernandes as the Director of the Office of Research for Undergraduates.

The ORU champions the vision, marketing, and coordination of research and creative efforts by Miami University undergraduate students. The ORU focuses on: increasing participation in research and creative efforts of students in all majors; increasing the overall quality of undergraduate research at Miami, as evidenced through publications, grants, and fellowships; and broadening student participation and faculty mentorship in diverse disciplines and backgrounds. In addition to the Undergraduate Research Forum, the ORU is responsible for:

- Promoting and publicizing the research achievements of Miami students
- Coordinating multi-disciplinary curricular efforts, such as the First-Year Research Experience (FYRE)1
- · Administering university-wide undergraduate research programs, such as DUOS, URA, and USS
- Offering co-curricular program support including: workshops, seminars, site visits, etc.
- · Assisting with the identification of appropriate funding opportunities for student-led research
- Offering clear routes to research opportunities, both at Miami and across the nation (e.g. summer programs, internships)
- Collaborating with other offices, such as Global Initiatives, Honors Program, Howe Writing Center, and the University Libraries
- Advocating beyond the university for support of undergraduate research through professional memberships

Council on Undergraduate Research Enhanced Membership through ORU

ORU sponsors Miami's Enhanced Institutional Membership in the Council on Undergraduate Research, enabling an unlimited number of our faculty, students, administrators, and staff to join CUR for free.

The Council on Undergraduate Research (CUR) is a national non-profit educational organization that provides research opportunities for students and faculty. The CUR mission is "to support and promote high-quality undergraduate student-faculty collaborative research and scholarship". The council achieves its vision through the efforts of members within varying disciplines, including: arts and humanities, biology, chemistry, geosciences, health sciences, mathematics and computer science, physics and astronomy, psychology, and social sciences. Representing over 900 colleges and universities, this organization provides publications and outreach activities to share strategies for establishing undergraduate research programs.

Visit	www.cur.ord	K

¹FYRE, DUOS, URA and USS program details available at: http://www.MiamiOH.edu/oru

Undergraduate Research Opportunities

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, and 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 maintains 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.

First Year Research Experience (FYRE)

The FYRE program aims to impact student achievement and retention through involvement in research and inquiry at the very start of their college experience. The program encourages students to develop meaningful relationships with Miami faculty, graduate students, and their peers outside of the classroom. Over 500 Miami students have participated in the program since 2009.

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. 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)
- 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 undergraduate peer mentors with previous research experience. 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, FYRE students may take part in exclusive workshops, colloquia, and other professional development opportunities.

Undergraduate Research Award (URA)

The ORU provides administrative support to the Miami University Senate Committee on The ORU provides administrative support to the Miami University Senate Committee on Undergraduate Research. Since the early 1980's, the university senate has sponsored the URA to provide Miami Undergraduates with faculty-mentored experience in developing grant applications. These partnerships encourage discovery, creative activity and novel, inquiry-based activity. The purpose of these funds is to foster and support research and creative activity from all disciplines, as well as to provide students with a hands-on opportunity to engage in the research process – from conception to proposal to results. While students can propose projects that augment or are related to an existing faculty project, proposals are developed by the student applicant(s), under the supervision of and with sponsorship by a faculty member.

Students may submit individual projects or team projects. Typical awards range from \$150 to \$500, but individual projects of exceptional merit or projects involving student teams may be funded up to \$1,000. Each individual student project or team project must be endorsed by a sponsor who certifies that the project is worth doing, has educational value to the student(s), and can be accomplished in the proposed time frame. The aim and result of specific projects supported by the program may be modest as long as the work can reasonably be interpreted as research or a creative endeavor. Applications may be made for support of a research project that is also being conducted for academic credit.

Undergraduate Research Opportunities

Undergraduate Summer Scholars (USS)

Miami's nationally recognized USS program offers a premier undergraduate research experience. The USS initiative supports 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.

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, or dissemination. For more information, contact the chair of your College of Arts and Science department.

College of Arts and Science Hughes Medical Institute Summer Research Internships

Named after the original sponsoring foundation, the Hughes Summer Internship is available for undergraduates interested in the biomedical sciences. Approximately fifteen 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, and microbiology. The ten-week internship includes a participant stipend and provides twelve hours of credit with tuition costs waived.1

Visit the College of Arts & Science Website for information on Dean's Scholar and Howard Hughes awards.

$University\ Libraries\ Award\ for\ Undergraduate\ Research\ Excellence\ (LAURE)$

Undergraduate students who are conducting research using the Miami University Libraries are eligible for special recognition and a cash prize through the Libraries Award for Undergraduate Research Excellence (LAURE). A partnership between the University Libraries and the Student Library Advisory Committee, the LAURE seeks to recognize undergraduate students who demonstrate excellence in library research conducted in support of student projects.

Undergraduate Research Opportunities

First place earns a \$1,000 cash prize, with additional prizes awarded for second place (\$500) and honorable mention (\$100). To learn more about the award, evaluation criteria and how to submit an entry, visit the http://libguides.lib.miamioh.edu/LAURE

"Our Miami University Libraries have always existed to support the scholarly excellence of our students, and nowhere is that more prevalent than in the advancement of student research," Jerome Conley, dean and university librarian, said. "We are excited to promote and celebrate the research achievements of our undergraduate students while emphasizing the University Libraries' role in strengthening student research at Miami."

Visit www.miamioh.edu/fellowships.

National Prestigious Fellowships Application

Global Initiatives is aligned with Miami University's commitment to advance global learning. Mission statement: promotes the dynamic, comprehensive internationalization of the University through the infusion of multicultural and comparative perspectives in scholarship, teaching, and service.

Our offices include Education Abroad Services, International Student and Scholar Services, the Center for American and World Cultures, the Confucius Institute, and Continuing Education.

Visit: www.miamioh.edu/global

University Honors Program (UHP)

The UHP 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. The UHP provides opportunities that include study abroad, funding for research and travel, internships, and social and cultural activities. The Honors Community is comprised of students from all divisions at the University.

Visit: www.honors.miamioh.edu.

Acknowledgements

Undergraduate Research Forum Planning Committee Members:

James T. Oris, Valerie O. Robinson, Graduate School, Office for Advancement of Research and Scholarship and Office of Research for Undergraduates, Joyce J. Fernandes, Martha E. Weber, Tarah Mason, Frannie Comstock and Dana Johnson.

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: Paula Fogt Guy Moore, Larry Downes
- Staff members: Lou Ann Haines, Vanessa Gordon, and Valerie Robinson
- · Miami's Trucking and Physical Facilities staff members delivering the poster boards
- Shriver Center Staff members: Neila Hanges Jim Baker, Dennis Brown and their crew.
- SOURCE Student organization

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

Arnold and Mabel Beckman

Foundation

Clark Crannell Research Award Fund

Edward Kezur Scholarships

Garden Club of Ohio

Gary W. Barrett Research Award Fund

Goldie Nott Student Research Fund

James E. Bever/David M. Scotford Laboratory Research Fund

J. Beldon Dennison Scholar

Room Fund

Joseph F. Hogan Research

Scholar Fund

Kettering Fund

Madelene and George Shetler Diabetes

Research Award Fund

Marjorie C. Britton Fund

Miami Honors Program Student

Initiative Fund

Miami Provost Office

Nancy Anderson Brown Honors

Program Fund

Susan Roberson Wilson Fund

William Borchers Fund

William and Caroline Stevenson

Research Scholar Fund

William Turrell Herbarium Fund

The Cleveland Foundation

The E.F. and Fern F. Patten Student

Research Fund

The Gund Foundation

The Ohio Board of Regents

To support undergraduate research at Miami, please contact:

Miami University, Director of Development • 725 East Chestnut • Oxford, OH 45056 • Phone: (513) 529-9260

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

Only poster numbers with L are located in Shriver Lobby

All other Poster are located in Shriver JDOL

All oral presentations are located on Shriver 3rd Floor

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Abbott	Staci	Poster*	А	59	Shriver JDOL
Abbott	Grant	Poster*	В	41	Shriver JDOL
Abdul-Samad	Jana	Poster*	С	54	Shriver JDOL
Adams	Theresa	Poster	С	80	Shriver JDOL
Agyeman	Victor	Poster	В	89	Shriver JDOL
Allaire	Danielle	Poster*	А	92	Shriver JDOL
Anderson	Nathaniel	Oral*	II	Bystrom	Shriver 3rd Floor
Anderson	Nathaniel	Poster*	В	21	Shriver JDOL
Anderson	Ashlyn	Poster*	С	96	Shriver JDOL
Andrews	Joslyn	Poster*	В	49	Shriver JDOL
Angi-O'Brien	Elizabeth	Poster*	А	15	Shriver JDOL
Archdeacon	Megan	Poster	В	13	Shriver JDOL
Arias	Ben	Poster*	В	01	Shriver JDOL
Armstrong	Karlie	Poster*	В	80	Shriver JDOL
Arnell	Blair	Poster*	С	48	Shriver JDOL
Arvind	Sanchit	Poster	С	44	Shriver JDOL
Ashner	Emily	Poster	А	44	Shriver JDOL
Ashner	Emily	Poster	В	65	Shriver JDOL
Asmah	Samantha	Poster	А	77	Shriver JDOL
Babcock	Annastasia	Poster*	В	08	Shriver JDOL
Bajrami	Silvi	Poster*	В	12	Shriver JDOL
Baker	Cole	Poster	В	92	Shriver JDOL
Baldari	Alexa	Oral	II	Symmes	Shriver 3rd Floor
Bales	Abigail	Poster	А	80	Shriver JDOL
Ball	Mark	Poster	С	85	Shriver JDOL
Ballweg	Savannah	Poster*	С	14	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Baney	Hannah	Poster	А	85	Shriver JDOL
Barker	Vayda	Poster*	С	05	Shriver JDOL
Barker	Rachael	Poster	С	86	Shriver JDOL
Barnes	Sierra	Poster	В	85	Shriver JDOL
Bartram	Rebecca	Poster*	А	51	Shriver JDOL
Bartram	Rebecca	Poster	А	70	Shriver JDOL
Bastian	Caroline	Poster*	А	35	Shriver JDOL
Bean	Lamuel	Poster*	С	83	Shriver JDOL
Beka Binyam	David	Poster	А	13	Shriver JDOL
Belt	Emena	Poster	А	77	Shriver JDOL
Bennington	Brooke	Poster*	С	49	Shriver JDOL
Berry	Briana	Poster	В	89	Shriver JDOL
Bhardwaj	Meeta	Poster	А	11	Shriver JDOL
Biedenham	Allison	Poster	С	91	Shriver JDOL
Biedenharn	Allison	Poster	A-B-C	94	Shriver JDOL
Bierly	Jennifer	Poster*	С	09	Shriver JDOL
Bishop	Jacob	Poster*	В	61	Shriver JDOL
Blank	Donald	Oral*	П	Bystrom	Shriver 3rd Floor
Blevins	Macie	Poster	С	87	Shriver JDOL
Bobbitt	Katie	Oral*	П	Scott	Shriver 3rd Floor
Boerger	Savannah	Poster*	В	45	Shriver JDOL
Borland	Victoria	Poster*	В	15	Shriver JDOL
Borosky	Bradley	Poster	А	44	Shriver JDOL
Botkin	Brittany	Poster*	С	87	Shriver JDOL
Boyles	Sean	Poster*	С	02	Shriver JDOL
Bradley	Jeffery	Poster*	В	82	Shriver JDOL
Brand	Rachel	Poster*	В	51	Shriver JDOL
Brandabur	Meghan	Poster*	В	72	Shriver JDOL
Brown	Cheyenne	Poster	В	85	Shriver JDOL
Brum	Jared	Poster	А	43	Shriver JDOL
Brzezinski	Emma	Poster*	В	52	Shriver JDOL
Buckingham	Brooke	Poster*	В	29	Shriver JDOL
Burgess	Amanda	Poster	A-B-C	94	Shriver JDOL
Burke	Madeline	Poster*	С	60	Shriver JDOL
Bussell	Robert	Poster	В	44	Shriver JDOL
Caba	Antonia	Poster*	В	79	Shriver JDOL
Cabello	Astrid	Oral*	П	Symmes	Shriver 3rd Floor
Cable	Jana	Poster*	В	09	Shriver JDOL
Cai	Yichao	Poster*	В	28	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Cai	Zhifan	Poster*	С	70	Shriver JDOL
Callaghan	Margaret	Poster*	В	74	Shriver JDOL
Callahan	Olivia	Poster*	В	78	Shriver JDOL
Campbell	Tiffany	Oral*	I	Scott	Shriver 3rd Floor
Campbell	Lauren	Poster*	А	20	Shriver JDOL
Campbell	Kristin	Poster	В	26	Shriver JDOL
Campbell	Nathan	Poster	В	80	Shriver JDOL
Campbell	Tiffany	Poster	С	60	Shriver JDOL
Campbell	Austin	Poster	С	88	Shriver JDOL
Canter	Joseph	Poster*	А	71	Shriver JDOL
Capretta	Zach	Poster	В	65	Shriver JDOL
Carrier	Christian	Poster	А	92	Shriver JDOL
Carson	William	Poster*	А	91	Shriver JDOL
Carter	Martha	Poster	А	20	Shriver JDOL
Cartheuser	Clare	Poster	А	69	Shriver JDOL
Cartwright	Kayla	Poster*	С	04	Shriver JDOL
Caudill	Hannah	Poster*	А	69	Shriver JDOL
Caudill	Hannah	Poster*	В	L05	Shriver Lobby
Chalke	Arushi	Poster*	С	91	Shriver JDOL
Chan	Denise	Poster	А	70	Shriver JDOL
Chen	Yudan	Poster*	С	57	Shriver JDOL
Cheney	Phoebe	Poster*	В	54	Shriver JDOL
Chetty	Brendan	Poster	A-B-C	94	Shriver JDOL
Childers	Ciara	Poster*	Α	13	Shriver JDOL
Choudhury	Zaheer	Poster*	С	95	Shriver JDOL
Chuen	Sydney	Oral*	1	Symmes	Shriver 3rd Floor
Cirkovic	Daniel	Poster*	Α	25	Shriver JDOL
Clark	Jessica	Poster*	С	25	Shriver JDOL
Clayton	Callihan	Poster	Α	44	Shriver JDOL
Clayton	Delaney	Poster*	В	37	Shriver JDOL
Clearfield	Ethan	Poster	В	18	Shriver JDOL
Cleland	Jessica	Poster	В	26	Shriver JDOL
Cloch	Adam	Oral*	V	Symmes	Shriver 3rd Floor
Cogan	Jamie	Poster	В	87	Shriver JDOL
Colah	Avan	Poster	Α	20	Shriver JDOL
Colah	Avan	Poster*	С	20	Shriver JDOL
Cole	Bree	Poster	А	35	Shriver JDOL
Collier	Terra	Poster*	С	44	Shriver JDOL
Collier	Terra	Poster	С	44	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Colliver	Maddie	Poster	С	89	Shriver JDOL
Colson	Crystal	Poster	А	80	Shriver JDOL
Condron	Lily	Poster*	В	57	Shriver JDOL
Coon	Adam	Poster	А	14	Shriver JDOL
Coonfare	Kaleb	Poster	В	25	Shriver JDOL
Corpora	Miranda	Poster*	В	55	Shriver JDOL
Coyne	Mackenzie	Poster	С	91	Shriver JDOL
Creager	Theresa	Poster*	В	90	Shriver JDOL
Creona	Alexis	Poster	В	82	Shriver JDOL
Crookes	Justin	Poster	А	92	Shriver JDOL
Culbertson	Katrina	Poster*	В	13	Shriver JDOL
Culpepper	Abigail	Poster*	А	39	Shriver JDOL
Cunningham	Niya	Poster	А	34	Shriver JDOL
D'Silva	Susanna	Poster	А	22	Shriver JDOL
D'Silva	Susanna	Poster	A-B-C	94	Shriver JDOL
Daman	Nicholas	Poster*	С	65	Shriver JDOL
Danielson	Alex	Poster*	С	37	Shriver JDOL
Dao	Lan	Poster*	С	39	Shriver JDOL
Davidson-Bey	Aaron	Poster	В	92	Shriver JDOL
Deems	Liam	Poster*	А	04	Shriver JDOL
Delacruz	Rupert	Poster	С	64	Shriver JDOL
DeWitt	Laura	Poster*	С	86	Shriver JDOL
Digby	Zachary	Poster*	С	38	Shriver JDOL
Dilbeck	Arden	Poster	В	80	Shriver JDOL
Dobbs	Carrie	Poster*	С	32	Shriver JDOL
Dodd	Elisabeth	Poster*	В	73	Shriver JDOL
Dolecki	Jennifer	Poster*	А	78	Shriver JDOL
Dopirak	Mychael	Poster	В	31	Shriver JDOL
Doran	Evan	Oral*	IV	Scott	Shriver 3rd Floor
Dougherty	Allison	Poster*	А	86	Shriver JDOL
Dulani	Saagar	Poster*	А	85	Shriver JDOL
Dwyer	Alexander	Poster*	С	53	Shriver JDOL
Dziubyk	Laura	Poster*	А	61	Shriver JDOL
Eaton	Adam	Oral*	III	Bystrom	Shriver 3rd Floor
Edison	Megan	Poster*	А	57	Shriver JDOL
Edwards	Sidney	Poster	В	18	Shriver JDOL
Eggert	Adam	Oral*	VI	Bystrom	Shriver 3rd Floor
Eggleton	Lauren	Poster	А	20	Shriver JDOL
Emrick	Sarah	Poster	А	13	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Enders	Alexa	Poster	С	13	Shriver JDOL
Estes	Betty	Poster	В	84	Shriver JDOL
Estridge	Brittany	Poster*	А	18	Shriver JDOL
Everhart	Rachel	Poster	В	90	Shriver JDOL
Eyler	Kelly	Poster	А	78	Shriver JDOL
Ezpeleta	Ashley	Poster	В	65	Shriver JDOL
Fan	Katharine	Poster*	А	55	Shriver JDOL
Fausey	Andrew	Poster*	С	06	Shriver JDOL
Feld	Emma	Poster*	С	64	Shriver JDOL
Fendinger	Nick	Poster*	А	76	Shriver JDOL
Ferguson	Katelyn	Poster*	В	17	Shriver JDOL
Ferguson	Haley	Poster*	В	33	Shriver JDOL
Fernandez	Melanie	Poster*	А	34	Shriver JDOL
Fichtner	Aisha	Poster	А	51	Shriver JDOL
Fichtner	Aisha	Poster	А	70	Shriver JDOL
Fischer	Kyle	Poster	С	47	Shriver JDOL
Fisher	James	Poster*	А	80	Shriver JDOL
Fleiner	Julia	Poster*	С	17	Shriver JDOL
Flint	Jason	Oral*	V	Scott	Shriver 3rd Floor
Fouh	Mireille	Poster*	В	44	Shriver JDOL
Frank	Dillon	Poster*	А	29	Shriver JDOL
Frankel	Jack	Poster*	А	72	Shriver JDOL
Frazee	Taylor	Poster	А	64	Shriver JDOL
Frazier	Isabel	Poster	С	17	Shriver JDOL
Frederick	Allie	Poster*	А	64	Shriver JDOL
Freshkorn	Megan	Poster*	А	50	Shriver JDOL
Fully	Terrence	Poster	А	34	Shriver JDOL
Gadola	Carter	Poster*	С	75	Shriver JDOL
Gadomski	Christina	Poster	А	50	Shriver JDOL
Galiga	Mariana	Poster	А	33	Shriver JDOL
Garbe	Abby	Poster	А	70	Shriver JDOL
Garcia De Jesus	Rebeca	Oral*	IV	Symmes	Shriver 3rd Floor
Gardner	Cameron	Poster*	А	05	Shriver JDOL
Gardner Jr.	Lawrence	Poster*	В	95/96	Shriver JDOL
Gardner Jr.	Lawrence	Oral*	1	Bystrom	Shriver 3rd Floor
Gawrys	Samantha	Poster*	А	03	Shriver JDOL
Gilbert	Benjamin	Poster	А	03	Shriver JDOL
Gilbert	Abbey	Poster	В	80	Shriver JDOL
Golden	Davaughn	Poster	А	35	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Gonzalez	Daniel	Oral*	IV	Bystrom	Shriver 3rd Floor
Graham	Katherine	Poster*	Α	40	Shriver JDOL
Gravelle	Julie	Poster*	В	38	Shriver JDOL
Graves	Erin	Poster*	А	16	Shriver JDOL
Gray	Kristen	Poster	С	60	Shriver JDOL
Greenlee	Jourdan	Poster*	А	65	Shriver JDOL
Groome	Abigail	Poster	С	64	Shriver JDOL
Gruenhagen	George	Oral*	VI	Bystrom	Shriver 3rd Floor
Guiot	Nicholas	Poster*	В	68	Shriver JDOL
Gulla	Evelyn	Poster*	А	11	Shriver JDOL
Haidar	Mayah	Poster	В	L05	Shriver Lobby
Hall	Hana	Poster*	В	53	Shriver JDOL
Hall	Bobbie	Poster	В	91	Shriver JDOL
Hallion	Jake	Poster	А	79	Shriver JDOL
Hansen	Clairissa	Poster*	С	24	Shriver JDOL
Harding	Ben	Poster*	А	23	Shriver JDOL
Harris	Sydney	Oral*	IV	Bystrom	Shriver 3rd Floor
Harris	Matthew	Poster*	В	23	Shriver JDOL
Harris	Sydney	Poster*	С	07	Shriver JDOL
Hart	Abby	Poster	В	61	Shriver JDOL
Hayes	Madison	Poster	В	L05	Shriver Lobby
Haynes	Bailey	Poster*	С	93	Shriver JDOL
Не	Zeqin	Poster	В	54	Shriver JDOL
Не	Zezhe	Poster*	С	76	Shriver JDOL
Не	Yitong	Poster	С	91	Shriver JDOL
Heath	Sarah	Poster*	В	92	Shriver JDOL
Heil	Danielle	Poster*	А	L02	Shriver Lobby
Held	Isabel	Poster*	С	62	Shriver JDOL
Heller	Maddy	Poster	В	57	Shriver JDOL
Helm	Breaysha	Poster*	В	18	Shriver JDOL
Henderson	Amber	Poster*	В	L03	Shriver Lobby
Heng	Gao	Poster	С	64	Shriver JDOL
Henne	Jack	Poster*	А	38	Shriver JDOL
Henry	Stacey	Poster*	А	75	Shriver JDOL
Hicks	Taylor	Oral*	VI	Symmes	Shriver 3rd Floor
Hill	Anna	Poster*	С	43	Shriver JDOL
Hinh	Katie	Oral*	Ш	Symmes	Shriver 3rd Floor
Hird	Krystina	Poster	С	92	Shriver JDOL
Hoffman	Julia	Poster	А	73	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Hoffman	Megan	Poster	С	89	Shriver JDOL
Hogans	Austin	Poster	А	35	Shriver JDOL
Holbrook	Donna	Poster*	В	84	Shriver JDOL
Hong	Michael	Poster	В	56	Shriver JDOL
Horan	Casey	Poster*	С	19	Shriver JDOL
Horne	Christian	Poster*	В	26	Shriver JDOL
Horney	Danielle	Poster	В	87	Shriver JDOL
Huber	Sarah	Poster	С	88	Shriver JDOL
Hudson	Joseph	Poster	С	85	Shriver JDOL
Huelsman	Connor	Poster*	В	04	Shriver JDOL
Huey	LaShawn	Poster	В	19	Shriver JDOL
Huff	Lillian	Poster*	С	33	Shriver JDOL
Huitger	Andrew	Poster	В	82	Shriver JDOL
Humphrey	Harley	Poster*	С	89	Shriver JDOL
Hyde	Courtney	Poster	С	87	Shriver JDOL
Igel	Megan	Poster	С	80	Shriver JDOL
Jacobs	Elizabeth	Poster*	С	12	Shriver JDOL
Jacques	Isaiah	Poster*	С	26	Shriver JDOL
Jaycox	Colleen	Poster*	А	22	Shriver JDOL
Jelley	Evan	Poster	С	44	Shriver JDOL
Jensen	Katelyn	Poster	А	61	Shriver JDOL
Jiang	Kefeng	Oral*	IV	Bystrom	Shriver 3rd Floor
Johnson	Julian	Oral*	II	Scott	Shriver 3rd Floor
Johnson	Alissa	Oral*	IV	Scott	Shriver 3rd Floor
Johnson	Dana	Poster*	А	42	Shriver JDOL
Johnson	MacKenton	Poster*	С	11	Shriver JDOL
Jones	Sarah	Poster*	В	56	Shriver JDOL
Joyce	Jessica	Poster*	А	06	Shriver JDOL
Judd	Westen	Poster	С	85	Shriver JDOL
Kaffenes	Arete	Poster	В	10	Shriver JDOL
Kalkhof	Trisha	Poster*	С	85	Shriver JDOL
Kammer	Sarah	Poster*	А	37	Shriver JDOL
Kammer	Sarah	Poster*	В	LO1	Shriver Lobby
Kappie	Devon	Poster	В	61	Shriver JDOL
Karikas	John	Poster*	В	06	Shriver JDOL
Karikas	John	Poster*	С	L01	Shriver Lobby
Karkiewicz	Amber	Poster	С	43	Shriver JDOL
Kash	Natalie	Poster	А	80	Shriver JDOL
Katko	Andrew	Poster*	В	35	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Kaufman	Pierce	Oral*	VI	Scott	Shriver 3rd Floor
Kausch	lan	Poster	A-B-C	94	Shriver JDOL
Kayafas	Aristotle	Poster	С	06	Shriver JDOL
Kelliher	Kailey	Poster*	В	70	Shriver JDOL
Kenkel	Alex	Oral	VI	Scott	Shriver 3rd Floor
Killeen	Richard	Poster*	В	32	Shriver JDOL
Kissner	Kathryn	Poster*	А	01	Shriver JDOL
Kistenfeger	Quinn	Poster*	В	34	Shriver JDOL
Kloster	Alex	Poster*	С	35	Shriver JDOL
Klucznik	Angelina	Oral*	V	Symmes	Shriver 3rd Floor
Kluth	Spencer	Poster	A-B-C	94	Shriver JDOL
Kmentt	Ashleigh	Poster*	А	19	Shriver JDOL
Knitter	Stephen	Poster*	В	25	Shriver JDOL
Kosse	Sarah	Oral*	V	Scott	Shriver 3rd Floor
Kotik	Abbie	Poster	В	19	Shriver JDOL
Kovesdi	Nick	Oral	II	Symmes	Shriver 3rd Floor
Kozuszek	Caleb	Poster	С	65	Shriver JDOL
Krehbiel	Mazie	Poster	В	58	Shriver JDOL
Kreider	Max	Poster*	С	72	Shriver JDOL
Kuhn	Leah	Poster*	С	56	Shriver JDOL
Kuykendoll	Doug	Poster	В	90	Shriver JDOL
LaBelle	Nicole	Poster*	А	33	Shriver JDOL
Ladha	Inaara	Oral*	I	Symmes	Shriver 3rd Floor
Lang	Savannah	Poster*	В	75	Shriver JDOL
Lary	Erin	Poster*	В	42	Shriver JDOL
Latham	Lindy	Poster*	В	14	Shriver JDOL
Laurent	Ashley	Poster	В	06	Shriver JDOL
Le	Gabby	Poster	С	64	Shriver JDOL
Lebedev	Alex	Poster	В	26	Shriver JDOL
Lee	Andrea	Poster*	А	68	Shriver JDOL
Lentz	Taylor	Poster*	С	08	Shriver JDOL
Leonard	Grace	Poster*	А	31	Shriver JDOL
Leonard	Elise	Poster*	С	58	Shriver JDOL
Leveridge	Max	Poster*	С	51	Shriver JDOL
Lewis	Sam	Poster	А	92	Shriver JDOL
Lipps	Audrey	Oral*	V	Bystrom	Shriver 3rd Floor
Liu	Dewei	Poster	В	56	Shriver JDOL
Loeb	Torey	Poster	В	25	Shriver JDOL
Long	Charles	Poster	С	04	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Lopez	Rosalinda	Poster	В	85	Shriver JDOL
Loveless	Cody	Poster*	С	81	Shriver JDOL
Lu	Weihao	Oral*	V	Symmes	Shriver 3rd Floor
Luo	Nan	Poster*	А	32	Shriver JDOL
Lutz	Jared	Poster	С	18	Shriver JDOL
Maag	Brianne	Poster*	В	93	Shriver JDOL
Madl	Courtney	Oral*	VI	Symmes	Shriver 3rd Floor
Manolio	Deanna	Poster*	С	45	Shriver JDOL
March	Alexis	Poster*	В	60	Shriver JDOL
Marihugh	Kaylee	Poster	В	54	Shriver JDOL
Marot	Luke	Poster	В	26	Shriver JDOL
Marsh	Jane	Oral	II	Symmes	Shriver 3rd Floor
Martin	Sarah	Poster*	В	46	Shriver JDOL
Martin	Ashley	Poster	С	17	Shriver JDOL
Mason	Rachel	Poster*	А	60	Shriver JDOL
Mason	Kelly	Poster	В	37	Shriver JDOL
Mazursky	Alex	Poster*	В	20	Shriver JDOL
McCain	Jeff	Poster*	А	66	Shriver JDOL
McCoy	Adam	Poster	С	47	Shriver JDOL
McCudden	Tracey	Poster	А	53	Shriver JDOL
McCullough	Finn	Poster	В	25	Shriver JDOL
McElroy	Bryn	Poster*	С	80	Shriver JDOL
McKnight	Kali	Poster	В	01	Shriver JDOL
McLellan	Brendon	Poster	А	79	Shriver JDOL
McMaster	Carter	Oral*	VI	Bystrom	Shriver 3rd Floor
McMath	Arden	Poster	А	54	Shriver JDOL
Melanson	Grace	Poster	В	65	Shriver JDOL
Melberg	Katherine	Oral*	II	Scott	Shriver 3rd Floor
Mendenhall	Emily	Poster*	С	46	Shriver JDOL
Mesmer	Ryan	Poster	А	23	Shriver JDOL
Meyer	Chris	Oral	VI	Bystrom	Shriver 3rd Floor
Meyer	Matthew	Poster	В	25	Shriver JDOL
Mickens	Ashley	Poster*	А	08	Shriver JDOL
Miehl	Elizabeth	Poster*	А	56	Shriver JDOL
Mignery	Grace	Poster	А	55	Shriver JDOL
Miller	Samantha	Poster	А	78	Shriver JDOL
Miller	Abigail	Poster	А	79	Shriver JDOL
Miller	Callie	Poster*	В	36	Shriver JDOL
Miller	Alyssa	Poster	С	05	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Minik	Tom	Poster	С	78	Shriver JDOL
Minshall	Brianna	Poster*	В	16	Shriver JDOL
Minshall	Brianna	Poster	С	60	Shriver JDOL
Minuskin	Kelly	Poster*	С	27	Shriver JDOL
Moe	Maddy	Poster*	С	01	Shriver JDOL
Moffitt	Bre-Anne	Poster	В	87	Shriver JDOL
Mokrenko	Valeria	Poster*	А	30	Shriver JDOL
Molchan	Michael	Poster*	А	45	Shriver JDOL
Moreno	Kathryn	Poster*	С	42	Shriver JDOL
Motley	Ryan	Poster*	В	89	Shriver JDOL
Motley	Lauren	Poster	В	89	Shriver JDOL
Mullee	Sean	Oral*	П	Symmes	Shriver 3rd Floor
Mullen	Natalie	Oral*	VI	Symmes	Shriver 3rd Floor
Mulligan	Meghan	Poster*	С	30	Shriver JDOL
Myers	Kevin	Poster	А	33	Shriver JDOL
Myers	Madelyn	Poster	A-B-C	94	Shriver JDOL
Nader	Austin	Poster*	С	63	Shriver JDOL
Nagaraj	Eashwar	Poster	С	44	Shriver JDOL
Newsome	Eastyn	Poster*	С	18	Shriver JDOL
Newton	Kelsie	Poster*	А	58	Shriver JDOL
Nguyen	Ann	Oral	VI	Scott	Shriver 3rd Floor
Nguyen	Morgan	Poster*	А	L04	Shriver Lobby
Nguyen	Hoang	Poster	А	85	Shriver JDOL
Nordhaus	Brittany	Poster	С	67	Shriver JDOL
Nyiranziza	Esperance	Poster	В	85	Shriver JDOL
O'Connor	Caroline	Poster*	А	53	Shriver JDOL
Oates	Miranda	Poster*	С	L04	Shriver Lobby
Odin	Natalie	Oral*	П	Symmes	Shriver 3rd Floor
Orr	Katherine	Poster*	В	69	Shriver JDOL
Oteng	Samuel	Poster	А	77	Shriver JDOL
Ousley	Briana	Poster*	А	49	Shriver JDOL
Owen	Mary	Oral*	V	Bystrom	Shriver 3rd Floor
Ozdemir	Emel	Poster	А	60	Shriver JDOL
Packett	Jessica	Poster	А	92	Shriver JDOL
Parras	Peter	Poster	А	91	Shriver JDOL
Patel	Mira	Poster	В	57	Shriver JDOL
Patten	Naomi	Poster	С	30	Shriver JDOL
Patterson	Marian Kelley	Oral*	Ш	Bystrom	Shriver 3rd Floor
Pauken	Sophia	Poster*	В	50	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Peachman	Andrew	Poster*	С	71	Shriver JDOL
Pennington	Sarah	Poster	А	56	Shriver JDOL
Perkins	Jaylen	Poster*	В	63	Shriver JDOL
Pfaff	Jenna	Poster	А	80	Shriver JDOL
Pfeil	Daniel	Poster*	А	12	Shriver JDOL
Phillips	Gil	Poster	В	04	Shriver JDOL
Pinto	Victor	Oral*	I	Bystrom	Shriver 3rd Floor
Pirochta	Cam	Oral	VI	Scott	Shriver 3rd Floor
Porter	Anna	Poster*	В	11	Shriver JDOL
Poth	Justin	Poster*	В	10	Shriver JDOL
Potineni	Nachiket	Oral*	V	Scott	Shriver 3rd Floor
Price	Ryan Kiehl	Oral*	I	Symmes	Shriver 3rd Floor
Pryer	Tone	Poster	В	92	Shriver JDOL
Puente	Dania	Poster*	С	50	Shriver JDOL
Racadio	Andrew	Poster*	В	L04	Shriver Lobby
Radford	Thomas	Poster*	А	09	Shriver JDOL
Raess	Leigha	Poster	С	20	Shriver JDOL
Rafferty	Sophia	Poster*	В	24	Shriver JDOL
Ramsey	Olivia	Poster*	А	74	Shriver JDOL
Randall	Kristina	Oral*	III	Scott	Shriver 3rd Floor
Ratvasky	Emily	Poster*	С	L03	Shriver Lobby
Redmond	Bridget	Poster	А	20	Shriver JDOL
Reed	Garrett	Poster*	В	31	Shriver JDOL
Reed	Haley	Poster	С	87	Shriver JDOL
Reichert	Brent	Oral*	IV	Symmes	Shriver 3rd Floor
Reid	Terry	Poster	С	64	Shriver JDOL
Reist	Elizabeth	Poster	С	86	Shriver JDOL
Reitz	Sarah	Poster	А	91	Shriver JDOL
Renggli	Andrew	Poster*	С	78	Shriver JDOL
Reynolds	Warren	Poster*	А	24	Shriver JDOL
Rhoades	Jeff	Poster	А	91	Shriver JDOL
Riccitelli	Kathryn	Poster*	В	03	Shriver JDOL
Rice	Savannah	Poster*	А	17	Shriver JDOL
Ridder	Megan	Poster*	В	65	Shriver JDOL
Ries	Rosamiel	Poster*	В	48	Shriver JDOL
Roberts	Emma	Poster	В	82	Shriver JDOL
Roberts	Nana	Poster	В	89	Shriver JDOL
Roberts	Laura (Dannie)	Poster*	С	82	Shriver JDOL
Robertson	Hannah	Poster*	А	95	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Robinson	Kelly	Poster	В	84	Shriver JDOL
Rodriguez	Katherine	Poster*	С	66	Shriver JDOL
Rodriguez	Andy	Poster	С	72	Shriver JDOL
Rosenston	Lauren	Poster	А	57	Shriver JDOL
Rosiello	Nicole	Poster*	А	96	Shriver JDOL
Roskin	Dylan	Poster	В	25	Shriver JDOL
Ross	Alexa	Poster*	А	54	Shriver JDOL
Rumph	Jermecka	Poster	С	88	Shriver JDOL
Ryan	Lydia	Poster	В	40	Shriver JDOL
Rybakowicz	Ross	Poster*	А	10	Shriver JDOL
Safer	Brianne	Poster*	В	67	Shriver JDOL
Salerno	Rachel	Poster	А	71	Shriver JDOL
Salyer	Stephanie	Poster*	В	85	Shriver JDOL
Sanders	Bryson	Poster*	С	67	Shriver JDOL
Sass	Trevor	Poster	А	71	Shriver JDOL
Saul	Alessia	Poster*	С	15	Shriver JDOL
Sawyer	Madison	Oral*	II	Symmes	Shriver 3rd Floor
Scally	Hannah	Poster	В	54	Shriver JDOL
Schafer	Austin	Poster	В	07	Shriver JDOL
Schaff	Andrew	Poster*	С	22	Shriver JDOL
Schapker	Nicole	Oral*	1	Scott	Shriver 3rd Floor
Schapker	Nicole	Poster	В	52	Shriver JDOL
Schilling	Garrett	Poster	A-B-C	94	Shriver JDOL
Schlegel	Christopher	Poster*	А	43	Shriver JDOL
Schleicher	Drew	Poster*	С	61	Shriver JDOL
Schlichter	Jacob	Poster*	A-B-C	94	Shriver JDOL
Schmitz	Valerie	Poster*	С	77	Shriver JDOL
Schneider	Jordan	Poster*	А	27	Shriver JDOL
Schuh	Kristen	Poster	А	74	Shriver JDOL
Schultz	Gillian	Poster*	А	62	Shriver JDOL
Schultz	Jacob	Poster*	С	03	Shriver JDOL
Schultz	Kelsy	Poster*	С	13	Shriver JDOL
Schweitzer	Benjamin	Poster*	А	26	Shriver JDOL
Schwinden	Megan	Poster	С	17	Shriver JDOL
Scott	Madison	Poster*	С	41	Shriver JDOL
Serafin	Rachel	Poster*	А	28	Shriver JDOL
Serafin	Rachel	Poster*	В	L02	Shriver Lobby
Serafin	Rachel	Poster*	С	L02	Shriver Lobby
Setters	Joshua	Poster*	А	73	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Sexton	Aleah	Oral*	II	Symmes	Shriver 3rd Floor
Shafer	Adam	Poster*	В	15	Shriver JDOL
Shaffer	Benjamin	Poster*	А	LO3	Shriver Lobby
Shermis	Nicholas	Poster	В	02	Shriver JDOL
Shiflett	Megan	Poster	С	89	Shriver JDOL
Shoemaker	Zach	Poster	С	64	Shriver JDOL
Short	Audrey	Poster*	С	52	Shriver JDOL
Shorten	Katie	Poster	А	80	Shriver JDOL
Shultz	Madeline	Oral*	III	Symmes	Shriver 3rd Floor
Sidler	Elaine	Oral*	1	Bystrom	Shriver 3rd Floor
Sievering	Kelsi	Poster*	А	36	Shriver JDOL
Sifuentes	Catlin	Poster*	В	49	Shriver JDOL
Sigman	Mackenzie	Poster	А	78	Shriver JDOL
Silber	Rachel	Poster*	А	63	Shriver JDOL
Silverberg	Paige	Oral	П	Scott	Shriver 3rd Floor
Simmons	Amber	Poster*	В	64	Shriver JDOL
Singstock	Mitchell	Poster*	А	LO1	Shriver Lobby
Singstock	Mitchell	Poster*	С	40	Shriver JDOL
Skeels	Amy	Poster*	А	70	Shriver JDOL
Slabinski	Victoria	Oral*	III	Scott	Shriver 3rd Floor
Smiley	Samuel	Poster*	В	47	Shriver JDOL
Smith	Stephanie	Oral*	IV	Scott	Shriver 3rd Floor
Smith	Michael	Poster*	А	46	Shriver JDOL
Smith	Rebekah	Poster	В	84	Shriver JDOL
Smith	Nathaniel	Poster	С	85	Shriver JDOL
Smith	Brookelynne	Poster	С	89	Shriver JDOL
Snyder	Ryan	Poster*	С	10	Shriver JDOL
Sonderman	Grace	Poster	А	69	Shriver JDOL
Sone	Sae Hyun	Poster	В	20	Shriver JDOL
Sonntag	Keara	Oral*	VI	Scott	Shriver 3rd Floor
Sove	Callie	Poster	В	90	Shriver JDOL
Spanier	Nicholas	Poster	А	25	Shriver JDOL
Sparks	Joseph	Poster*	В	40	Shriver JDOL
Spieser	Charles	Poster*	С	34	Shriver JDOL
Spoleti	Katie	Poster	В	82	Shriver JDOL
Sprock	Leah	Poster	С	64	Shriver JDOL
Spurgus	Nicholas	Poster	А	29	Shriver JDOL
Spurlock	Julianna	Poster	В	80	Shriver JDOL
Stamper	Laura	Poster	В	90	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Starkweather	Sydney	Poster	В	L05	Shriver Lobby
Steimel	Chaney	Poster*	В	87	Shriver JDOL
Stent	Daniel	Poster*	С	55	Shriver JDOL
Stewart	Jamie	Poster*	С	29	Shriver JDOL
Stone	Carmen	Poster*	В	66	Shriver JDOL
Strickley	Braegor	Poster*	В	39	Shriver JDOL
Summers	Kevin	Poster*	В	62	Shriver JDOL
Summers	Kevin	Poster*	С	69	Shriver JDOL
Swartzel	Danielle	Poster	В	84	Shriver JDOL
Tetrick	Jonathan	Poster*	С	47	Shriver JDOL
Thiery	Baylen	Poster	В	40	Shriver JDOL
Thomas	Gwendolyn	Poster*	С	92	Shriver JDOL
Thompson	Sydney	Poster*	А	79	Shriver JDOL
Thompson	Samantha	Poster	В	58	Shriver JDOL
Tillery	Brett	Poster*	С	88	Shriver JDOL
Timmons	Ellie	Poster*	С	L05	Shriver Lobby
Toleson	Shiane	Poster	С	60	Shriver JDOL
Towles	Coleton	Poster	А	20	Shriver JDOL
Towles	Coleton	Poster*	А	21	Shriver JDOL
Tracy	Brendan	Poster	С	64	Shriver JDOL
Tran	Leeann	Poster	С	91	Shriver JDOL
Tressel	Lydia	Poster*	С	21	Shriver JDOL
Trevethan	Mackenzie	Poster	В	65	Shriver JDOL
Trummel	Madelynn	Poster	А	62	Shriver JDOL
Tseng	Benita	Oral*	1	Scott	Shriver 3rd Floor
VanNess	Grant	Poster*	А	07	Shriver JDOL
Vaswani	Sundeep	Poster*	В	91	Shriver JDOL
Vaughn	Claire	Oral*	V	Bystrom	Shriver 3rd Floor
Verghis	Tara	Poster	В	66	Shriver JDOL
Via	Jeremy	Poster*	С	36	Shriver JDOL
Vibbard	Madison	Poster	В	87	Shriver JDOL
Vincely	Vinoin	Oral*	IV	Symmes	Shriver 3rd Floor
Vissers	Carolina	Poster	С	70	Shriver JDOL
Wallace	Sam	Poster	С	08	Shriver JDOL
Wang	Hehe	Poster*	В	30	Shriver JDOL
Wang	Yuexi	Poster*	В	59	Shriver JDOL
Wang	Junyi	Poster	С	57	Shriver JDOL
Waterwall	Austin	Poster*	А	47	Shriver JDOL
Wayman	Makenzie	Poster	В	80	Shriver JDOL

Last Name	First Name	Туре	Poster Session	Poster Number	Building Location
Weaver	Kyle	Poster*	А	14	Shriver JDOL
Weesner	Rachael	Poster*	С	68	Shriver JDOL
Wendel	Leah	Poster	С	88	Shriver JDOL
Wessels	Rhianna	Poster*	А	77	Shriver JDOL
Wetsch	Olivia	Poster*	А	02	Shriver JDOL
Whitaker	Katlyn	Poster	В	54	Shriver JDOL
White	Jennifer	Poster	А	59	Shriver JDOL
White	Aaron	Poster*	В	19	Shriver JDOL
White	Rosanna	Poster	В	90	Shriver JDOL
Whitman	Joy	Poster*	А	48	Shriver JDOL
Wiggins	Timothy	Poster	С	86	Shriver JDOL
Wilkins	Jessica	Poster	С	86	Shriver JDOL
Williams	Amber	Oral*	Ш	Bystrom	Shriver 3rd Floor
Williams	Aonesti	Poster*	В	02	Shriver JDOL
Williams	April	Poster	С	87	Shriver JDOL
Wilson	Emily	Poster*	В	76	Shriver JDOL
Withrow	Tristen	Poster	В	84	Shriver JDOL
Wolford	Nicholas	Poster	А	L03	Shriver Lobby
Wong	Chong Kai	Poster*	В	22	Shriver JDOL
Woodford	Cassandra	Poster*	А	41	Shriver JDOL
Wyand	Sarah	Poster*	А	67	Shriver JDOL
Wyatt	Emily	Poster*	В	07	Shriver JDOL
Wydra	Rachel	Oral*	VI	Scott	Shriver 3rd Floor
Wyma	Rebecca	Poster*	С	23	Shriver JDOL
Yamada-Killilea	Marie	Poster	В	66	Shriver JDOL
Yan	Yifei	Poster	А	85	Shriver JDOL
Yang	Diya	Poster*	С	28	Shriver JDOL
Yezierski	Kathryn	Poster*	С	31	Shriver JDOL
Young	Olivia	Poster*	А	44	Shriver JDOL
Yu	Mengyu	Poster*	В	58	Shriver JDOL
Zeis	Carly	Poster	В	03	Shriver JDOL
Zeisler	Addison	Poster*	С	16	Shriver JDOL
Zemper	Jackie	Poster*	В	71	Shriver JDOL
Zheng	Helen	Oral	VI	Scott	Shriver 3rd Floor
Zhou	Qi	Poster	В	57	Shriver JDOL
Ziegman	Jacqueline	Poster*	В	77	Shriver JDOL

Notes

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Your work goes on from today

An invitation from Jerome U. Conley Dean and University Librarian

Congratulations on presenting your research at Miami University's 24th annual Undergraduate Research Forum. Our University Libraries team commends you for using your time as an undergraduate student to not only learn and grow but also to create and contribute something to the collected knowledge of our world.

That contribution does not need to end with today's Undergraduate Research Forum.

The Miami University Scholarly Commons, hosted by the University Libraries, serves as an institutional repository for high quality academic work like yours. It preserves journals, capstone projects, presentation posters, award-winning papers and more, making the important scholarly work of our students and faculty accessible for the future.

We would like to extend you the opportunity to publish your poster in the Miami Scholarly Commons.

In addition to having your work preserved and retaining ownership of your copyright, you will receive a permanent citable reference to your work for your résumé. To upload your files to the Scholarly Commons, visit **MiamiOH.formstack.com/forms/msc**.

Again, congratulations on your achievement. We hope, in the midst of your research, that you have discovered a passion for discovery that extends beyond today. Through the resources and expertise we offer, the Miami University Libraries are eager to support you in the next leg of your research journey.

Sincerely,

Jerome U. Conley

Dean and University Librarian

Contact Information

Miami University King Library 151 South Campus Avenue Oxford OH 45056 MiamiOH.edu/library



MiamiOH.edu/oru