



ANNUAL UNDERGRADUATE SYMPOSIUM FOR RESEARCH AND SCHOLARSHIP

SATURDAY, APRIL 22, 2017
9 A.M. TO 1 P.M.
OLSCAMP HALL, BGSU

BGSU | Center for
Undergraduate
Research & Scholarship
BOWLING GREEN STATE UNIVERSITY

BELONG. STAND OUT. GO FAR.[™]
CHANGING LIVES FOR THE WORLD.

TABLE OF CONTENTS

Schedule of Events.....	1
Welcome.....	2
Guest Speakers and Glass Award.....	3
Undergraduate Research & Scholarship Opportunities at Bowling Green State University.....	4-5
Oral Presentations Overview.....	6
Oral Presentations.....	7-17
Undergraduate Faculty Mentors of the Year Award.....	18-19
Poster Presentations.....	20-24
Olscamp Hall Maps.....	25
Thank You.....	26
Notes.....	27-28

bgsu.edu/cursresearchposters

The Undergraduate Symposium for Research and Scholarship online evaluation can be found at:

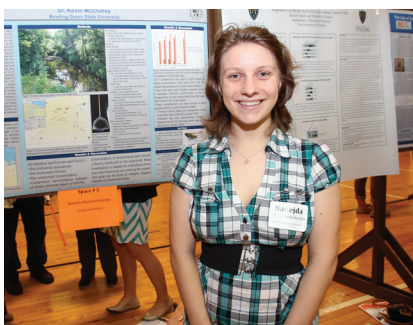
<https://www.surveymonkey.com/r/CURS17>



SCHEDULE OF EVENTS

Saturday, April 22

8:30 a.m.	Doors Open	Olscamp Hall
9:00 a.m. – 9:20 a.m.	Welcome and Opening Remarks <ul style="list-style-type: none">• Dr. Cordula Mora, Director, Center for Undergraduate Research and Scholarship• Dr. Jeffrey Miner, Chair, Department of Biological Services	Olscamp Hall Room 111
9:20 a.m. – 9:30 a.m.	Presentation of the Undergraduate Faculty Mentor of the Year Award <ul style="list-style-type: none">• Dr. Raymond Larsen, Associate Professor of Biological Sciences, School of Biological Sciences• Dr. Mary-Jon Ludy, Assistant Professor of Food and Nutrition, Department of Public and Allied Health	Olscamp Hall Room 111
9:30 a.m. – 9:45 a.m.	Light Breakfast Served	Olscamp Hall Room 111
9:45 a.m. – 1:00 p.m.	Poster Judging and Public Viewing	Olscamp Hall
9:45 a.m. – 11:05 a.m.	1st Round of Oral Presentations	Olscamp Hall Rooms 201, 206, & 225
11:15 a.m. – 12:55 p.m.	2nd Round of Oral Presentations	Olscamp Hall Rooms 201, 206, & 225
11:30 a.m. – 1:00 p.m.	Light Lunch Served	Olscamp Hall Room 111
12:55 p.m. – 1:00 p.m.	Closing Remarks <ul style="list-style-type: none">• Dr. Cordula Mora, Director, Center for Undergraduate Research and Scholarship	Olscamp Hall Room 111



WELCOME

Welcome to the Undergraduate Symposium for Research and Scholarship!

It is no secret that the driver of innovation in America is the strength of creative and critical thinking researchers, scholars, and artists in all fields. While American culture often emphasizes the work in STEM fields – science, technology, engineering, and math – this symposium strives to recognize excellence in academic pursuit across all disciplines, including the arts and humanities, social sciences, education, business, the creative disciplines, as well as the STEM fields. At Bowling Green State University (BGSU), we provide students with the opportunity to develop skills for research, inquiry, critical thinking, creativity, and scholarship through a variety of programs and experiential learning opportunities.

Today, we feature the works of BGSU undergraduate students with a wide range of disciplines being represented at this annual Undergraduate Symposium for Research and Scholarship. I would like to welcome our students, their faculty mentors, their family and friends, as well as any visitors to our campus on Preview Day to this event and encourage them to help us celebrate undergraduate research, scholarship and creative achievements here at BGSU.

The Center for Undergraduate Research and Scholarship (CURS) supports and fosters undergraduate research, scholarship, and creative activities across all disciplines. Such activities are defined as any research, scholarly, or creative project that 1) makes an original intellectual contribution to the discipline, 2) is conducted under the guidance of a faculty mentor specializing in a discipline relevant to the project, and 3) is aimed to be disseminated to student peers, experts in the field, and/or the wider community. Student participants working on such projects are not only able to deepen their understanding of their chosen discipline through hands-on experience while working closely with a faculty mentor, but they are also able to take pride in their intellectual contribution to their field while at the same time preparing themselves for graduate studies or work-life.

As the Director of CURS I would like to congratulate all of the students whose work is being showcased today for challenging and engaging themselves in exemplary ways in research, scholarship and creative work.



Sincerely,
Dr. Cordula Mora, Director
Center for Undergraduate Research and Scholarship (CURS)

GUEST SPEAKERS

Dr. Cordula Mora grew up originally in Germany and was always very interested in understanding why animals behaved the way that they did. She completed her undergraduate and graduate education at the University of Auckland in New Zealand. There she worked for her Ph.D. thesis with homing pigeons trying to understand how they use the Earth's magnetic field to home back to their loft from completely unfamiliar places. For her postdoctoral studies at the University of North Carolina she investigated the behaviour of loggerhead sea turtles to see how they use various sensory cues to find their way in their home territory as well as during long-distance migrations. In 2009, she joined the Psychology Department at BGSU, where she continued her navigation research with homing pigeons as part of the J.P. Scott Center for Neuroscience, Mind & Behavior. She became the director of the Center for Undergraduate Research and Scholarship in 2014.

Dr. Jeffrey G. Miner is the chair and a faculty member in the Department of Biological Sciences at Bowling Green State University. He completed a Master of Science in Environmental Science at the University of Virginia and his Ph.D. at Ohio State University. Dr. Miner also conducted post-doctoral research at the University of Lund in Sweden (as a Fulbright Fellow) and Miami University. After working for an environmental consulting firm for several years, he became part of the BGSU community in 1993. Dr. Miner has been conducting prolific research in the areas of aquatic population and community ecology, invasive species and the Great Lakes, reservoirs and rivers. He has published numerous papers and is often requested to present his research. He serves as a mentor for Ph.D. students and assists undergraduate students with independent research studies.

GLASS AWARD

Three students giving an oral presentation and three students presenting posters will be awarded the CURS glass award designed by BGSU faculty member and glass-blower extraordinaire Joel O'Dorisio. This stunning award symbolizes the student (sphere) being embraced by BGSU (orang and brown falcon talons) with the award as a whole also resembling an abstract eye, symbolizing knowledge. Posters and presentations will be judged by faculty volunteers and the winners will be announced several days after the symposium event.



L-R: Dr. Andrew Gregory (recipient of the Undergraduate Faculty Mentor of the Year Award in 2016) Anthony Colosimo, Gregory Grecco, Matthew Witte, President Mary Ellen Mazey, David Westermeyer, Elizabeth Herringand Lydia Dempsey.

UNDERGRADUATE RESEARCH & SCHOLARSHIP OPPORTUNITIES AT BOWLING GREEN STATE UNIVERSITY

Bowling Green State University strives to increase the visibility, prestige, and material support for participation in research, scholarly and creative activities by undergraduate students. Our belief is that critical and constructive thinking as well as communication are infused into the process of scholarly discovery and the dissemination of results. To that end, BGSU offers programs to enhance the experiential learning experience of undergraduate students by providing support through mentorship, funding, and skill development. Participants do not only experience pride from making an original intellectual or creative contribution within their chosen discipline, but they are better prepared for graduate studies or work-life.

The Center for Undergraduate Research and Scholarship (CURS)

<http://www.bgsu.edu/offices/curs/>

Established in 2004, the mission of CURS is to enhance the undergraduate experience with meaningful research, scholarly, and creative activities in all fields of study. Through experiencing the processes of discovery and dissemination of their results, students become fully engaged members of our learning community.

- Open to all undergraduate students at BGSU from all disciplines
- Fall and spring research grants of up to \$500 for the faculty mentors lab for supplies and a \$200 stipend for the student
- Summer research grants of up to \$500 for the faculty mentors lab for supplies and a stipend of up to \$2,500 for the student are available to support a 10-week (28 hours per week) intensive research project
- Travel grants of up to \$200 for students to present their research, scholarly, or creative activities selected via peer review or juried processes at regional, (inter)national conferences or exhibits.

Contact Dr. Cordula Mora at cmora@bgsu.edu for more information.

Ronald E. McNair Post-Baccalaureate Achievement Program (McNair Scholars Program)

bgsu.edu/offices/sa/trio/mcnair

The McNair Scholars Program is a U.S. Department of Education funded TRIO Program that encourages undergraduate students to pursue graduate studies by providing opportunities to define goals, to engage in research, and to develop the skills and student/faculty mentor relationships critical to success at the doctoral level. Staff work closely with program participants as they complete their undergraduate requirements to encourage them to enroll in graduate programs and to track their progress through to the successful completion of advanced degrees.

- Targets first-generation college students who are economically disadvantaged as well as students from underrepresented racial/ethnic populations with an interest in pursuing the Ph.D.
- Offers research opportunities and presentation experience under the mentorship of a faculty member. Encourages participation in seminars and workshops that assist in understanding the culture of graduate school, the graduate school admission process, and options for financing graduate education.

Contact Tracy Tabaczynski at ttabacz@bgsu.edu for more information.

Academic Investment in Math and Science (AIMS)

bgsu.edu/aims

The mission of the AIMS Program is to establish a world-class training center for graduating-women and underrepresented minorities- STEM Majors. Many of these students will proceed to get terminal degrees in their fields, then ultimately perform cutting edge research, service and/or teaching. Moreover, all should be well prepared to take advantage of an array of opportunities and make valuable contributions as STEM professionals.

- Program is open to incoming first-year students
- Yearly scholarships start at \$2,000 with annual increases for those in good academic standing
- Many program features enhance academic success and preparation for exemplary careers as STEM professionals

Contact aims@bgsu.edu for more information

UNDERGRADUATE RESEARCH & SCHOLARSHIP OPPORTUNITIES AT BOWLING GREEN STATE UNIVERSITY

Building Ohio's Sustainable Energy Future (BOSEF)

The BOSEF scholarship program is funded by the Choose Ohio First program for students in the AIMS program for students who are interested in pursuing careers in research in renewable energy and sustainable environmental practices. BOSEF draws on the special strengths of Northwest Ohio in these fields to provide state-of-the-art education opportunities. It provides scholarships and an innovative program that enriches students' opportunities for research and internships to ensure that they are optimally prepared for the next steps in their preparation for an exciting and highly successful career. Applications are submitted through the AIMS program.

Contact aims@bgsu.edu for more information

Meeting Essential Doctor Needs in Urban and Rural Areas (MEDNURA)

The MEDNURA scholarship program is also funded by the Choose Ohio First program and designed to recruit and support under-represented minority and economically disadvantaged students from urban and rural areas to become physicians providing primary care in under-served areas. Like BOSEF, MEDNURA is also part of the AIMS program and includes all of the support structures and strategies of that program plus additional activities and features to help prepare students for success in applying to and preparing for medical school, especially for the NEOMED-BGSU Pathway program which offers early admission to the NEOMED medical school program.

Contact aims@bgsu.edu for more information.

Northern Ohio Alliance for Graduate Education to the Professoriate (NOA-AGEP)

bgsu.edu/noaagep

Funded by the AGEP program of the National Science Foundation, the primary goal of NOA-AGEP is to increase the number of URM graduate and post-doctoral trainees in STEM fields throughout Northern Ohio who complete doctoral degrees and go on to successful careers in the professoriate. This is accomplished through the development, implementation, and study of innovative evidence-based models, designed to address the unique challenges faced by URM students and to improve their participation, preparation, and success in STEM graduate education and post-doctoral training. Each year, BGSU AGEP Scholars receive:

- A stipend enhancement (in addition to department funding)
- Travel allowance to attend a research conference
- Opportunities to participate in professional development activities/community building events
- Participation in annual research symposia
- A strong, supportive community of scholars and faculty

Contact noa-agep@bgsu.edu for more information.

Northwest Ohio Center for Excellence in STEM Education (NWO)

nwocenter.org

The Northwest Ohio Center for Excellence in STEM Education (NWO) strives to advance STEM education for people of all ages. To serve that mission NWO hosts a wide range of activities, events, initiatives, and programs. Among these are projects which promote the success of under-represented minority and female students in STEM undergraduate and graduate degree programs funded by state and federal grants: Building Ohio's Sustainable Energy Future (BOSEF) and Meeting Essential Doctor Needs in Urban and Rural Areas (MEDNURA) which are funded by the Choose Ohio First Program of the Ohio Board of Regents, and the Northern Ohio Alliance of the AGEP program funded by a grant from the National Science Foundation's Alliance for Graduate Education to the Professoriate (AGEP) program. NWO also plays a role in the AIMS program (Academic Investment in Mathematics and Science).

Contact nwo@bgsu.edu for more information.

Science & Math Education in ACTION (ACTION)

bgsu.edu/action

The ACTION program provides innovative opportunities to BGSU students to prepare the best science and mathematics teachers in the state of Ohio. The goal of ACTION is to increase the number of science and mathematics education graduates and to improve their effectiveness at teaching these subjects. The program achieves these goals by providing early exposure to hands-on science, mathematics, and education topics, research experience, and a "family" atmosphere. Available for incoming first-year students at BGSU who are Ohio residents. Open to top students interested in teaching science and/or mathematics in grades 4 through 12.

Funding covers: a four-year academic scholarship that increases every year, an all-expenses paid residential Summer Bridge experience before freshman year, first-year science or mathematics group research project, sophomore year science or mathematics practicum experience, junior and senior year pedagogical (classroom) research project.

Contact action@bgsu.edu for more information.

ORAL PRESENTATIONS OVERVIEW

Oiscamp Room 201

SPECIAL HISTORY PANEL: Historical Perspectives on Society and Government.

This panel presents historical research based on primary sources. All focus on the modern era (1800-present) and explore global interconnections to present insight on the forces that shape societies and their governments.

Moderator: Douglas Forsyth

- 9:45-10:05am **Laura Francisco**- Deafening Silence: Cultural Erasure of Wartime Rape in Vietnam
10:05-10:25am **Maureen Doyle**- Yellow Jack Moves to New Orleans: The 1878 Yellow fever Epidemic and the effects on Irish Immigrants
10:25-10:45am **Jeffrey Pendelton**- From Ypres to Hiroshima: The Deadly Precedence of Weapons of Mass Destruction
10:45-11:05am **Devin Black**- The Dismantling of Bretton Woods

Oiscamp Room 201

Moderator: Heath Diehl

- 11:15-11:35am **Jessica Bertke**- Design for Christopher Shinn's The Coming World
11:35-11:55am **Kendann Coleman**- Secure your Bobby Pins and Secure your Job: The Relationship Between Natural Hair And Job Security
11:55am-12:15pm **Adrienne Beer**- Sexual Assault Prevention on College Campuses and Why it is Not Working
12:15-12:35pm **Rebecca Wait**- Media Erotics & Adaptation: A Comparative Textual Analysis of Carmilla
12:35-12:55pm **Riley Lane**- Positive Reflection in Working with Older Adults

Oiscamp Room 206

Moderator: Kei Nomaguchi

- 9:45-10:05am **Rebekah Zellers**- Designing a Mobile App Prototype for ASL Learning
10:05-10:25am **Rebecca Lord**- UX Essentials: What Students Need to Know to Prepare for a Successful Career in User Experience
10:25-10:45am **Nicholas Frank**- The Globalized Classroom: Integrating Technology to Improve Communicative and Cultural Proficiency
10:45-11:05am **Troy Yarnell**- Digital History: Archiving Decades of Art and Exhibitions - The SIGGRAPH Archive Project

Oiscamp Room 206

Moderator: Ram Veerapaneni

- 11:15-11:35am **Lindsay Lesh**- Debye Scattering of Triangulene for Comparison with Electron Diffraction Patterns of Graphitic Stardust
11:35-11:55am **Micah Haseman**- Atomic Layer Deposition of Oxide Thin-Films for Optoelectronic and Solar Applications
11:55am-12:15pm **Cody Stombaugh**- Ultrasmall Water-Soluble Colloidal Quantum Dots for Bio-imaging
12:15-12:35pm **Sam Woodburn**- Effects of Sodium Butyrate on Age Related Cognitive Decline: a Behavioral Pilot Study
12:35-12:55pm **Tara Burke**- Integrated Multi-Trophic Aquaculture System: Water Quality Management

Oiscamp Room 225

Moderator: John Farver

- 9:45-10:05am **Chloe Murrell**- Identifying Novel Antibiotics in Marine Vibrio using Transposon Mutagenesis
10:05-10:25am **Jackson Chory**- Creating Photoresponsive Hydrogels from Plant-Based Polymers for Tissue Engineering
10:25-10:45am **Meghan Bishop**- The Crisis in Crisis Intervention: An Analysis of Crisis Care and Community Mental Health in Northwest Ohio
10:45-11:05am **Najae Bolden-Hall**- Does Coloring Mandalas Buffer the Effects of Stress?

Oiscamp Room 225

Moderator: Jerry Schnepf

- 11:15-11:35am **Jessica Fix**- Marching Band and the College Transition
11:35-11:55am **Hannah Cubberly**- Partisan Bias in the Headlines: the 2016 Presidential Primary Race
11:55am-12:15pm **Rachel Carl**- Sororities in The Media: Yet Another Sexist Portrayal of Women
12:15-12:35pm **Anastasia Baker**- Foreigner
12:35-12:55pm **Tabitha DiBacco**- College Students' Perceptions of Abuse

ORAL PRESENTATIONS

Name: Laura Francisco

Major(s): History and Fine Art

Institution: Bowling Green State University

Faculty Advisor(s): Walter Grunden, History

Presentation Time: 9:45-10:05am

Location: Olscamp Room 201

Deafening Silence: Cultural Erasure of Wartime Rape in Vietnam

Rape is a tragic reality for civilians during warfare, and this subject often goes unexplored in outside of the field of Women's and Gender Studies. This presentation will approach the phenomenon of war rape perpetrated by American soldiers against civilian women during the Vietnam War, and look at this subject from a socio-historical perspective. It considers different factors that contribute to the "rapist mindset" and allow perpetrators to rationalize their actions; much of the reasoning perpetrators had for raping civilians often related to cultural ideas about gender, sexuality, race, and violence. War rape in the Vietnam War was the result of intersections between culturally held notions of male dominance and entitlement, ethnic/racial superiority, and sexualized violence. These causes were exasperated by military culture, and previously held notions of masculinity. Rape was used as a way to attack the enemy on a psychological level and assert American dominance over the Vietnamese. This research uses testimony from both veterans who knew of and participated in civilian rape, and assault survivors in order to illustrate this brutal reality. In addition, it will survey the aftermath of wide scale rape: how are the people, communities, and culture effected after war is over? This research will attempt to show that rape is an ongoing psychological tactic of warfare against the enemy. The psychological scarring of rape continues to affect individuals and communities long after war has ended, and the constant threat of rape at the hands of the invaders creates even more terror for civilians during wartime. Sexual violence, and rape in particular, serve as tactics to assert dominance and power over "enemy" women, and thus "win" the war in a different way.

Name: Maureen Doyle

Major(s): History

Institution: Bowling Green State University

Faculty Advisor(s): Rebecca Mancuso, History

Presentation Time: 10:05-10:25am

Location: Olscamp Room 201

Yellow Jack Moves to New Orleans: The 1878 Yellow fever Epidemic and the effects on Irish Immigrants

This presentation will take a look at the research conducted by Maureen Doyle for their thesis written in Fall 2016. An epidemic of Yellow Fever hit New Orleans during the spring of 1878. The New Orleans yellow fever epidemic of 1878 created an environment that changed the social, political and economic aspects of Irish immigrant's lives that lived within the city limits. These changes not only affected Irish immigrants that year also affected the atmosphere for all immigrants in the city during the late 19th century into the early 20th century.

Name: Jeff Pendelton

Major(s): History

Institution: Bowling Green State University

Faculty Advisor(s): Walter Grunden, History

Presentation Time: 10:25-10:45am

Location: Olscamp Room 201

From Ypres to Hiroshima: The Deadly Precedence of Weapons of Mass Destruction

With the introduction of chemical, biological, and nuclear weapons into the arsenal of modern militaries, humanity has achieved the ability to wipe out millions of lives and now possesses the capability to end civilizations, and perhaps all life on earth. Given that chemical and biological weapons had been banned by international treaties and agreements prior to the start of the Manhattan Project, how could the development and use of the atomic bomb be legally and ethically justified by the U.S. government and the scientists who developed the bomb? This essay will argue that while a number of scientists and officials in the U.S. government that were involved in the Manhattan Project had reservations about dropping the bomb on a city, killing thousands of civilians, their concerns were either dismissed or were never even heard by the chief decision makers due to conflicts within the project, prior precedents set in conventional bombing raids on civilian centers in Germany and Japan, ignorance on the effects of an untested atomic weapon, and bureaucratic momentum which made the dropping of the bomb all but an inevitability.

ORAL PRESENTATIONS

Name: Devin Black

Major(s): History

Institution: Bowling Green State University

Faculty Advisor(s): Douglas Forsyth, History

Presentation Time: 10:45-11:05am

Location: Olscamp Room 201

The Dismantling of Bretton Woods

As the Allied victory in the European Theater was seen to be increasingly imminent during the summer of 1944, it became clear to the Allied powers that the old institutions of Europe—both political and economic—would be devastated beyond that which the world had seen at the conclusion of the Great War in 1918. Indeed, the Allied nations responded to such an outlook by holding a summit in Bretton Woods, New Hampshire in July of 1944 to lay out plans for postwar reconstruction and stabilization as well as the creation of a new international monetary and financial order. The agreement that would eventually be finalized after this conference would become known as the Bretton Woods Agreements, which established an international relief bank, new monetary and fiscal policies, and an exchange system that would define international monetary and financial practices until 1971. The Bretton Woods system—both during its practice and even after its dissolution—would usher in an age of economic hegemony for the United States with Western Europe having the world's industrial superpower as its collective creditor. Different stages would also define the Bretton Woods system with the pre-convertible, convertible, and post-convertible periods from 1945 until the years following the system's end during the Nixon Administration. With the abrupt end of Bretton Woods in 1971, questions regarding the agreement's longevity and legacy can be asked. Was the dissolution of Bretton Woods an inevitability? Was the move a balance of power calculation made by the Nixon Administration? How did the Nixon Administration treat international monetary policy in relation to foreign policy? How would the dissolution of the Bretton Woods system play into relations between the United States and Europe? This paper will seek to answer these questions by looking into the origins of Bretton Woods, the various problems that perpetuated it, its implementation, implications for international relations, and its eventual dissolution and aftermath.

Name: Jessica Bertke

Major(s): Theatre Design and Technology

Institution: Bowling Green State University

Faculty Advisor(s): Steve Boone, Department of Theatre and Film

Presentations Time: 11:15-11:35am

Location: Olscamp Room 201

Design for Christopher Shinn's The Coming World

The Coming World is a play by Christopher Shinn and this project's designer is Jessica Bertke. This show takes place in Summer 2001. The design for this show will incorporate the idea of struggle and the journey from darkness to light. There will be many cool and natural colors though they will be mainly subdued. The research will cover how and why the scenic, lighting, costume, make-up, props, and dramaturgy for the show.

Name: Kandann Coleman

Major(s): Liberal Arts

Institution: Bowling Green State University

Faculty Advisor(s): Tracy Tabaczynski, TRIO/McNair Scholars

Presentation Time: 11:35-11:55am

Location: Olscamp Room 201

Secure your Bobby Pins and Secure your Job: The Relationship Between Natural Hair And Job Security

In the past, self-identifying black women felt that they could not wear their natural hairstyles in the workplace because it was not professional. This included hairstyles such as afros, box braids, hair weaves, curly hair etc. There were policies about natural hair and the language that was used such as words as a "Clean" and "Manageable" signified that the ideal hair to be worn at work needed to be straight and manageable. Today, natural hair is more accepted yet black women still feel the fear of wearing their natural hair for the concern of possibly losing their jobs.

ORAL PRESENTATIONS

Name: Adrienne Beer

Major(s): Communications and Creative Writing

Institution: Bowling Green State University

Faculty Advisor(s): Kate Magsamen-Conrad, Communication

Presentation Time: 11:55-12:15pm

Location: Olscamp Room 201

Sexual Assault Prevention on College Campuses and Why it is Not Working

Sexual assault prevention and education programs have been working to develop successful ways to decrease sexual assault for many years now. Research has shown though, that despite efforts there has yet to be a program that effects statistics regarding campus sexual assault. This presentation addresses several issues that explain why prevention programs have fallen short. It includes the study of victim blaming, the college party narrative, stranger rape, and bystander intervention. Examples from first hand reports of sexual assault and the study of BGSU prevention programs are used. The presentation also addresses how our culture plays a role in sexual assault, and why there is a strong prevalence on college campuses.

Name: Rebecca Wait

Major(s): Communication

Institution: Bowling Green State University

Faculty Advisor(s): Sandra Faulkner, Communication, Womens Gender & Sexuality Studies

Presentation Time: 12:15-12:35pm

Location: Olscamp Room 201

Media Erotics & Adaptation: A Comparative Textual Analysis of Carmilla

This project is concerned with understanding the different ways in which *Carmilla* (1872), a gothic novella, and it's 2014 web series adaptation differently approach the same basic narrative, especially with regards to their respective representations of individuals who identify as sexual and gender minorities. One of the major functions of importance in this study was to understand the temporality and cultural conditions which lead to the perceived need for a postmodern adaptation of a pre-modernist text. Through textual analysis, J. Sheridan Le Fanu's *Carmilla* (1872) has been compared to Jordan Hall's *reimagination* (2014). In this analysis, significant differences have been found to exist between the original text and the adaptation of *Carmilla*. This paper argues that with an understanding of media erotics and queer narrative theory, critical audiences can better identify the arguments media creators make about the nature of queerness and marginalized identity within the media products they consume. Implications for further research include the recognition of *Carmilla* (2014) as an example for the ways in which media representations of queerness are changing, as well as a call for further research on the current state of queer representations in more mainstream media outlets.

Name: Riley Lane

Major(s): Communication

Institution: Bowling Green State University

Faculty Advisor(s): Kate Magsamen-Conrad, Communication

Presentation Time: 12:35-12:55pm

Location: Olscamp Room 201

Positive Reflection in Working with Older Adults

The purpose of my presentation is to discuss the importance of positive reflection in helping individuals teach technology skills to older adults over a set period of time. I spent three semesters during my undergraduate career teaching older adults how to use iPads and other tablet devices. During the semesters when I was teaching older adults, I was required to write 500 word reflective journals on my experiences in working with the older adults. The presentation will describe my empirical research, where I systematically analyzed 43 reflective journals that I had written over the span of three different semesters. This empirical research highlights some of the different types of positive reflection that was present during my interaction with the older adults. For example, my research has shown that successful tablet classes (based on the grade we received for teaching) were also accompanied by multiple instances of positive reflection in my written journals.

ORAL PRESENTATIONS

Name: Rebekah Zellers

Major(s): Visual Communication Technology

Institution: Bowling Green State University

Faculty Advisor(s): Jerry Schnepf, Visual Communication Technology

Presentation Time: 9:45-10:05am

Location: Olscamp Room 206

Designing a Mobile App Prototype for ASL Learning

This semester, I designed and refined a prototype for an American Sign Language (ASL) learning application. This mobile app leverages technologies developed by my faculty mentor and his colleagues, which translates spoken English to ASL through an animated avatar. The application I designed helps people learn ASL fingerspelling. The number of college students taking ASL classes is on the rise, as is the number of those who want to use ASL to communicate with friends, family, or colleagues. This application will help such people in their learning pursuits. It will be particularly useful because it provides an interactive fingerspelling generator not available in other learning tools. This tool is capable of producing ASL animations based on dynamically entered text, or from a list of pre-selected words. In designing the app, I had several goals. First, the app needed to effectively help ASL students learn. Second, the app needed to be fun and engaging so it might quickly become a popular game for ASL students. To achieve my goals for the app, I interviewed ASL students regarding how they currently learn and practice ASL. The insight I gained influenced which features I included in the app. Based on the concepts of gamification and design theory, I developed and refined the flow of the app so that it would be as intuitive and engaging as possible. I crafted the look and feel of the app, carefully choosing elements such as color, fonts, and imagery. My faculty mentor's team reviewed my initial prototypes, and I made modifications per their suggestions. The final app prototype is comprised of three modules: Learn, Practice, and Compete. Each module is designed to help users to master ASL fingerspelling, whether they are learning new vocabulary or reinforcing their skills by competing against friends. The app includes useful tools such as text entry and quizzes. The end result of my work this semester is a high-fidelity prototype that can be clicked through like a developed app. This prototype will form the basis of a fully functioning mobile app to be developed over the next few months.

Name: Rebecca Lord

Major(s): Visual Communication Technology

Institution: Bowling Green State University

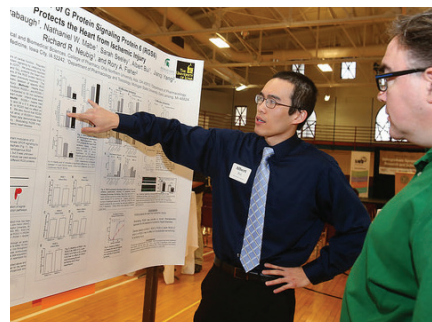
Faculty Advisor(s): Jerry Schnepf, Visual Communication Technology

Presentation Time: 10:05-10:25am

Location: Olscamp Room 206

UX Essentials: What Students Need to Know to Prepare for a Successful Career in User Experience

User Experience (UX) focuses on the interaction between humans and technology; it is the process of creating usable products that are delightful to interact with. Because much of our world has shifted from the physical to the online space, User Experience skills are no longer optional for companies who wish to stay competitive in this growing digital era. Thus, the demand for college graduates in this field continues to increase as well. The current VCT curriculum does not explore User Experience in depth, nor does it examine the methods, tools, and practices employed by UX professionals. For my project, I researched and developed curricula to help students learn the foundations of UX, including the design processes, research methods, and industry standard tools and techniques. Through 8 interviews with UX professionals, I learned what they thought was important and necessary for students to know as they pursue a career in user experience. This information was supplemented through my own research on articles, papers, and tutorials. I also reviewed 6 textbooks, writing summaries and recommendations for their utility as part of this UX course. I then synthesized this information into a week-by-week schedule appropriate for a university course in UX, including the creation of lab assignments, lecture outlines, projects, quizzes, and exams. This course is set to be piloted in the Fall of 2017, taught by my supervising professor, Dr. Jerry Schnepf.



ORAL PRESENTATIONS

Name: Nicholas Frank

Major(s): World Language Education

Institution: Bowling Green State University

Faculty Advisor(s): Brigid Burke, Department of Student Teaching and Learning

Presentation Time: 10:25-10:45am

Location: Olscamp Room 206

The Globalized Classroom: Integrating Technology to Improve Communicative and Cultural Proficiency

The purpose of this project was to explore how the integration of technology effects students' communicative and cultural proficiency in a second language when connecting two world language classrooms from across the globe. Through a series of weekly emails between partner schools, students practiced their interpretive reading and presentational writing skills while gaining knowledge of their partners' cultures and colloquial language in a meaningful and individualized manner. The participants were U.S. high school students learning Spanish and Spanish high school students learning English. This created an authentic and organic environment for language acquisition, showing improvement in both communicative and cultural proficiency. Data collected was qualitative and quantitative to adequately capture student improvement. Through reflection of the feedback, both stated by students and observed, an updated curriculum guide was created to help the project improve in future implementation.

Name: Troy Yarnell

Major(s): Digital Arts

Institution: Bowling Green State University

Faculty Advisor(s): Bonnie, Mitchell, Digital Arts

Presentation Time: 10:45-11:05am

Location: Olscamp Room 206

Digital History: Archiving Decades of Art and Exhibitions - The SIGGRAPH Archive Project.

The project consisted of building an archival website for the SIGGRAPH art exhibitions and related events and exhibitions. Previously, the work had been stored across several different web pages using the technology at the time. This project constructed a centralized archive for the art exhibitions that spans from 1981 to the present, consists of much higher quality of images and documentation, and is scalable for future additions and events.

Name: Lindsay Lesh

Major(s): Physics

Institution: Bowling Green State University

Faculty Advisor(s): Eric Mandell, Physics and Astronomy

Presentations Time: 11:15-11:35am

Location: Olscamp Room 206

Debye Scattering of Triangulene for Comparison with Electron Diffraction Patterns of Graphitic Stardust

The objective of this research is to understand the structure of a subset of graphitic stardust found in primitive meteorites (e.g. the Murchison meteorite). The carbon grains of interest exhibit a core-rim structure, where the core – with a density less than that of the graphitic rim – comprises the majority of the grain. Previous studies have shown that the cores are comprised primarily of unlayered graphene. Electron diffraction is sensitive to small differences in crystal structure and simulated electron diffraction powder patterns can be used to explore the average shape of the graphene within the cores. Here, we seek to improve upon previous attempts to fit the core diffraction data by applying the Debye scattering formula to simulated graphene crystals with an anisotropic, triangular shape known as triangulene. The apex angle of the sheets is varied in each simulation, as we seek to explain differences between the simulated graphene fit and the stardust, and resolve the average structure of graphene within the cores.

ORAL PRESENTATIONS

Name: Micah Haseman

Major(s): Physics

Institution: Bowling Green State University

Faculty Advisor(s): Farida Selim, Physics and Astronomy

Presentation Time: 11:35-11:55am

Location: Olscamp Room 206

Atomic Layer Deposition of Oxide Thin-Films for Optoelectronic and Solar Applications

Aluminum-doped zinc oxide (ZnO:Al) thin films were synthesized by atomic layer deposition on silicon, quartz and sapphire substrates and characterized by x-ray diffraction (XRD), high-resolution scanning electron microscopy, optical spectroscopy, conductivity mapping, Hall effect measurements and positron annihilation spectroscopy. XRD showed that the as-grown films are of single-phase ZnO wurtzite structure and do not contain any secondary or impurity phases. The type of substrate was found to affect the orientation and degree of crystallinity of the films but had no effect on the defect structure or the transport properties of the films. Thermal treatments in various atmospheres induced a large effect on the thickness, structure and electrical properties of the films. Annealing in a Zn and nitrogen environment at 400 C for 1 h led to a 16% increase in the thickness of the film, indicating that Zn extracts oxygen atoms from the matrix and forms new layers of ZnO, while annealing in a hydrogen atmosphere led to the emergence of an Al₂O₃ peak in the XRD pattern, which implies that hydrogen and Al atoms compete to occupy Zn sites in the ZnO lattice. Only ambient air annealing had an effect on film defect density and electrical properties, generating reductions in conductivity and electron mobility. Depth-resolved measurements of positron annihilation spectroscopy revealed short positron diffusion lengths and high concentrations of defects in all as-grown films. However, these defects did not diminish the electrical conductivity in the films.

Name: Cody Stombaugh

Major(s): Physics

Institution: Bowling Green State University

Faculty Advisor(s): Liangfeng Sun, Physics and Astronomy

Presentation Time: 11:55-12:15pm

Location: Olscamp Room 206

Ultrasmall Water-Soluble Colloidal Quantum Dots for Bio-imaging

Nanomaterials continue to be a growing field of study due to their wide range of applications. Quantum dots are artificially synthesized crystalline clusters of atoms able to confine electron motion as a result of their small size. Recently, medical applications of nanomaterials have expanded greatly. Quantum dots are ideal for bio-imaging due to their narrow photoluminescence peaks. By synthesizing quantum dots of a specific diameter, it is possible to predetermine the peak photoluminescence wavelength of a sample. Through ligand exchange and immunoconjugation of the quantum dots with proteins, it is possible to use the quantum dots as biolabels to study the inner machinations of the cellular world. These processes have a predictable effect on the properties of the quantum dots: most importantly, their photoluminescence peak wavelength. By understanding the ways in which these processes effect the quantum dots, it is possible to choose the correct quantum dots for a specific final emission wavelength. Further research is being conducted to perform bio-imaging using these processes and resolve some current limitations found therein.

Name: Sam Woodburn

Major(s): Neuroscience

Institution: Bowling Green State University

Faculty Advisor(s): Verner Bingman, Psychology

Presentation Time: 12:15-12:35pm

Location: Olscamp Room 206

Effects of Sodium Butyrate on Age Related Cognitive Decline: a Behavioral Pilot Study

The goal of this pilot study was to investigate the effects of the histone deacetylase inhibitor sodium butyrate upon an avian model of age related cognitive decline. Recent work has indicated that the use of histone deacetylase inhibitors can ameliorate memory loss resulting from age. However, this work has been almost exclusively tested in rodents, and it remains to be seen whether or not this effect is applicable in avian models such as *Columba livia*. While far from complete, the results of this pilot study may yield promising results upon further investigation.

ORAL PRESENTATIONS

Name: Chloe Murrell

Major(s): Biochemistry

Institution: Bowling Green State University

Faculty Advisor(s): Hans, Wildschutte, Biology

Presentation Time: 9:45-10:05am

Location: Olscamp Room 225

Identifying Novel Antibiotics in Marine Vibrio using Transposon Mutagenesis

Based on previous studies that have shown the competitive nature of non-pathogenic environmental strains of Vibrio, we hypothesize that environmentally derived bacteria can inhibit Vibrio pathogens, and possibly, be a source of novel antibiotics. A previous experiment performed in the lab tested environmental Vibrio strains from various habitats against the pathogenic strains, Vibrio cholerae and Vibrio Parahaemolyticus. Of the 3,456 strains collected, the researchers identified 102 environmental strains of Vibrio that inhibited the growth of both pathogens. The data suggests that environmental Vibrio strains directly inhibit the growth of related pathogens. My project involves the identification of genes responsible for producing those secondary metabolites to find novel antibiotics. To accomplish this task, all 102 strains will be screened for their ability to undergo conjugation and transposon mutagenesis. Candidates efficient in these processes will be subjected to a large scale mutant hunt to identify genes involved in antibiotic production.

Name: Jackson Chory

Major(s): Applied Health Science

Institution: Bowling Green State University

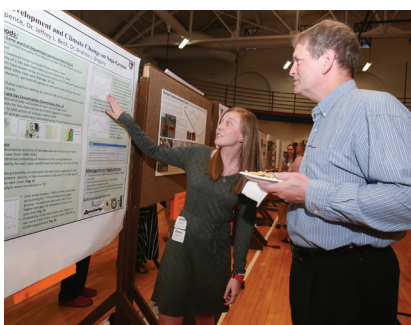
Faculty Advisor(s): Alexis Ostrowski, Chemistry

Presentation Time: 10:05-10:25am

Location: Olscamp Room 225

Creating Photoresponsive Hydrogels from Plant-Based Polymers for Tissue Engineering

Biocompatible hydrogels were created using different polysaccharides and manipulated under light irradiation to change the mechanical properties of the gels. Alginate G (Alg G) and Alginate M (Alg M) were used with Agarose to form the hydrogel, and iron (FeCl_3) was added to the hydrogels to make them photoreactive. The gels were irradiated using a 405 nm light, and a change in shear modulus was observed after the irradiation. The results show we can prepare gels from 65% Alginate G/M and 35% Agarose. There was a large change in modulus after 30 minutes of irradiation, and Alg G had a larger increase in change than Alg M. Alg G produced stiffer hydrogels, while Alg M produced softer.



ORAL PRESENTATIONS

Name: Meghan Bishop

Major(s): Social Work

Institution: Bowling Green State University

Faculty Advisor(s): Hee Soon Lee, Social Work

Presentation Time: 10:25-10:45am

Location: Olscamp Room 225

The Crisis in Crisis Intervention: An Analysis of Crisis Care and Community Mental Health in Northwest Ohio

Lack of collaboration between Crisis Intervention Care and Community Mental Health Centers or fragmentation of the services causes poor follow up care and lower quality of care for clients. These two mental health care delivery systems are a fundamental part for those who have mental health issues. This study explored benefits of collaboration between these two systems. The objective was to identify the crucial needs of these particular mental health systems. We surveyed seven agencies, including four crisis intervention centers and three community mental health facilities with semi-structured interviews. Findings emphasized a holistic view of crisis intervention that may speed up client care, decrease the revolving door and reduce the need for inpatient crisis care. For the best practice in crisis intervention, social workers should advocate for this beneficial collaboration. By raising standards of care in crisis intervention and community mental health, as a profession, we can improve services for our clients.

Name: Najae Bolden-Hall

Major(s): Neuroscience

Institution: Bowling Green State University

Faculty Advisor(s): Sherona Garret-Ruffin, Psychology

Presentation Time: 10:45-11:05am

Location: Olscamp Room 225

Does Coloring Mandalas Buffer the Effects of Stress?

Popular culture suggests the use of mandala coloring books to aid in stress reduction. Recent studies indicate that individuals who colored mandalas experienced greater anxiety reduction compared to those who did not. Moreover, researchers suggest that there is a difference between coloring pre-drawn mandalas versus creating mandalas. Conversely, an overreliance on self-report measures limit the efficacy of these findings. The purpose of this study is to determine whether coloring mandalas buffer the effects of stress by examining heart rate, EEG asymmetry, and self-reported stress. We hypothesize that drawing mandalas will buffer stress as indicated by self-report measures and psychophysiological markers.



ORAL PRESENTATIONS

Name: Jessica Fix

Major(s): Public Relations

Institution: Bowling Green State University

Faculty Advisor(s): Michael King, College of Musical Arts-Bands

Presentation Time: 11:15-11:35am

Location: Olscamp Room 225

Marching Band and the College Transition

The positive effects on personal growth and development from college student engagement and involvement has been a major research interest for several years, especially since theories proposed by individuals like Alexander Astin. However, research on involvement in specific types of organizations or activities has not been nearly as in-depth. The present study examined involvement in college marching band specifically and how it affects transition into college and overall growth and learning of college students. The study analyzes quantitative data of all marching band participants at Bowling Green State University in the most recent year, as well as qualitative data retrieved through focus group sessions with first year marchers and returning marchers. Results of this study suggest that involvement in marching band provides its members with strong connections to peers and a sense of belonging, which positively impact the college transition and growth processes. The presentation will reflect this study's research process, findings, and future benefits for the fields of music and student affairs.

Name: Hanna Cubberley

Major(s): Political Science, Spanish, and Communications

Institution: Bowling Green State University

Faculty Advisor(s): Melissa Miller, Political Science

Presentation Time: 11:35-11:55am

Location: Olscamp Room 225

Partisan Bias in the Headlines: the 2016 Presidential Primary Race

During election cycles, many voters acquire information about candidates and elections through media outlets; therefore, media coverage and portrayal of candidates affects how voters view the candidates and can potentially sway their vote one way or another. The New York Times is known for being a liberal newspaper and endorsing candidates and agendas of the Democratic party. During the 2016 election season, nearly every headline printed by The New York Times pertained to the presidential primary race and the national conventions that took place during summer of 2017 during which the Republican Party and Democratic Party declared Donald Trump and Hillary Clinton as their presidential nominees, respectively. By analyzing newspaper headlines and the frequency in which a candidate is mentioned and the positive or negative tone of the headline, the research seeks to answer the question: did the New York Times cover Hillary Clinton more favorably than Donald Trump thus far in the 2016 presidential

ORAL PRESENTATIONS

Name: Rachel Carl

Major(s): Business Administration

Institution: Bowling Green State University

Faculty Advisor(s): April Conway, English

Presentation time: 11:55-12:15pm

Location: Olscamp Room 225

Sororities in The Media: Yet Another Sexist Portrayal of Women

What do you think of when you think of a sorority girl? Probably a skinny girl with blue eyes, blonde hair, and a designer purse sitting on the front steps of her giant Greek mansion retrofitted with giant indecipherable greek letters that look like an algebraic equation. The girl you're picturing might be seen upside-down over keg with a frat guy holding her legs, or she might be walking out of a frat guy's house on a Sunday morning wearing the same dress from the night before, she might also be failing her math class or bullying the "pledges" of her sorority. For most people who aren't affiliated with a Greek Organization, aka a Fraternity or a Sorority, you might know nothing more about Greek Life than what movies depict. I'm sure you've seen any number of movies about Greek life such as Animal House or Bad Neighbors or the TV Show *GREEK*, but more specifically, movies about sororities such as Legally Blonde or Sydney White or Neighbors 2: Sorority Rising or Sorority Wars. All of these movies have common themes: that sorority girls are ditsy, all they do is party, that all sorority girls are catty, and sexually promiscuous. The media's erroneous portrayal of sororities is sexist because it incorporates a toxic mix of our modern lightning fast media-driven society, reinforcement of ages-old gender stereotypes and sets a cultural narrative about college women that is inaccurate and constricting an entire group of extremely qualified women. In a multimedia podcast consisting of interviews, various audio clips from the movies that depict sororities in a negative light, and evidence derived from academic studies, I study and analyze how these movies effect women negatively and why this is a topic that all women should be all be concerned about.

Name: Anastasia Baker

Major(s): Art (2-Dimensional Studies)

Institution: Bowling Green State University

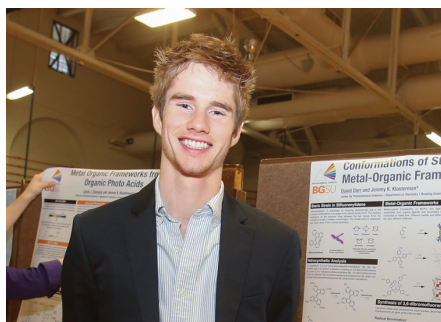
Faculty Advisor(s): Janet Ballweg, School of Art

Presentation Time: 12:15-12:35pm

Location: Olscamp Room 225

Foreigner

In my presentation, I discuss my process in discovering how I understand my cultural identity of being a Korean-American.



ORAL PRESENTATIONS

Name: Tabitha DiBacco

Major(s): Psychology and Communication

Institution: Bowling Green State University

Faculty Advisor(s): Dara Musher-Eizenman, Psychology

Presentation Time: 12:35-12:55pm

Location: Olscamp Room 225

College Students' Perceptions of Abuse

Intimate partner violence has been shown to have serious mental, physical, and emotional consequences for both men and women. Past research has considered low self-esteem as a risk factor, outcome, and moderator of abuse; however, less is known about whether self-esteem influences abuse perception. This study sought to examine the relationships between self-esteem, gender, and type of abuse in college students' perceptions of abuse. The sample consisted of 207 undergraduate students (140 female, 64 male, and 3 preferred not to answer) between the age of 18-23 years ($M= 19.7$, $SD= 2.4$). The procedure included an Abusive Scenarios Survey, the Rosenberg Self-Esteem Scale, and a personal and demographic history survey. Participants perceived situations as more abusive when the abuser was male ($M= 7.1$; $SD= 1.4$) than when it was female ($M= 6.8$, $SD= 1.5$, $t(206)= 7.78$, $p<.05$). Participants rated physical ($M= 8.3$, $SD= 1.5$) abuse as more abusive than sexual, verbal, emotional, and economic abuse (respectively $M= 7.2$, 6.5 , 6.8 , 5.8 , $SD= 1.7$, 1.7 , 1.7 , 1.6 , $t(206)= 12.61$, 19.24 , 16.08 , 24.25 , $p<.05$). There was no significant correlation between level of self-esteem and perception of abuse. These results have implications for working with survivors of abuse as well as implementing prevention programs with college students.



UNDERGRADUATE FACULTY MENTOR OF THE YEAR AWARD



Dr. Raymond Larsen
Associate Professor of Biological Sciences, School of Biological Sciences

Dr. Larsen earned his Ph.D. in Microbiology at the University of Montana in 1986, then served as an NIH Postdoctoral Fellow and subsequently as a senior research associate at Washington State University before joining the faculty at BGSU in the Department of Biology in 2002.

The Larsen laboratory focuses on the mechanisms of energy transfer between bacterial membranes, with current projects addressing the contributions of membrane energization to the susceptibility of bacteria to viruses, the transport of toxins, and resistance to antimicrobial agents. Over 40 undergraduate members of the Larsen lab have completed independent research projects, resulting in presentations at regional and national meetings and in publications.

Dr. Larsen appreciates the opportunity to have undergraduates in the laboratory; their zest and engagement drives a lab community that fosters creativity and diversity of thought. While every member of the community does some lab work, imagination and critical thinking are not confined to the bench. Honors projects in the lab have considered a range of topics, including; “dental hygiene correlates to risk behavior in college students”, “tuberculosis as an iconic theme in 19th century literature”, and “political ideology and health care in the Caribbean”.

A few words from the students who nominated Dr. Larsen:

“Dr. Larsen has made microbiology particularly interesting, because he uses a hands on approach with a project that is unique to me.”

“Dr. Larsen is undoubtedly the epitome of an ideal faculty mentor. He is beyond gracious with his time, the research opportunities and experiences has provided. . . . Dr. Larsen makes each of us feel as though we are a priority and that our research is as important as those vying for the Masters or PhD. . . . I wish that everyone could have the opportunity to work with such a motivating, kind, and intelligent faculty mentor so that they too could find enjoyment and interest in research.”

“Dr. Larsen goes above and beyond for his students and is always willing to help and support his students in whatever it is that they may need.”

“Dr. Larsen goes above any expectation one might have for a faculty mentor and is genuinely interested in how our experience in his lab will benefit us for our future endeavors.”

UNDERGRADUATE FACULTY MENTOR OF THE YEAR AWARD



Dr. Ludy with students and colleagues at the 2016 Food & Nutrition Conference & Expo in Boston, MA.

Front (L-R): Emily Gill (CURS recipient), Sarah Buczkowski, Dr. Ludy, Caroline Dill, Lyndsey Galvin

Back (L-R): Robin Tucker, Maddie Drees (CURS recipient), Josie Mansperger (CURS recipient), Courtney Mosler, Tiffany Smith (CURS recipient)

Dr. Mary-Jon Ludy **Assistant Professor of Food and Nutrition,** **Department of Public and Allied Health**

Dr. Mary-Jon Ludy is a forever Falcon! She graduated from BGSU with a Bachelor of Science in Dietetics in 2002 and joined the faculty in 2011. Dr. Ludy earned a Master of Science in Clinical Nutrition from Tufts University, interned with a Vitamin A program in Nepal, conducted HIV research in Thailand, taught community development in Costa Rica, worked as an outpatient dietitian in Boston, and earned a Ph.D. from Purdue University.

Dr. Ludy's overall research focus is energy balance through dietary manipulation. She is guided by a desire to conduct research that has practical application in real-life situations and involves students in the research process. Dr. Ludy is founding director of the Health, Wellness, and You Academic Learning Community, where first-year students (with the guidance of upperclassmen, graduate students, and faculty mentors) become researchers on their own health patterns and learn strategies for improving their self-care.

Since joining the BGSU faculty, Dr. Ludy has provided many students with their initial immersion into research. Her undergraduate research team has presented their work at regional (n=5), national (n=5), and international (n=1) conferences and published manuscripts in peer-reviewed journals (n=2). Dr. Ludy's hope is that by promoting an early interest, understanding, and appreciation of research among future nutrition professionals, a ripple effect will occur – BGSU will be stronger, students' lives will be richer, and the field will move forward.

A few words from the students who nominated Dr. Ludy:

"Dr. Ludy is an amazing mentor for all of her students. I know we would have never completed our project without her support."

"She continually went above and beyond her role as advisor. ... Dr. Ludy has encouraged me to be ambitious and active in the field of dietetics, which has made a huge impact on my life."

"Dr. Ludy is an amazing mentor, advisor, and teacher. She not only demonstrates excellence teaching her nutrition courses by actively engaging students, but conducts a multitude of student-run research projects."

"Her outstanding mentorship led to me completing my Honor's project as well as presenting my poster at several conferences. Without her help, I would not have had these experiences. She deserves recognition for everything she has done, not only for me, but also for all the other students she has taken under her wing."

POSTER PRESENTERS

ARCHITECTURE AND ENVIRONMENTAL DESIGN

Presenter	Poster #	Title of Presentation
Ben Cook	1	Formal Principles of Force-based Design
Fadl Ageel	2	Design Thinking: Integrating Organizational Principles in Architectural Design
Haley Evans	3	Empathy
Joel Dennis	4	Design Thinking: Integrating Environmental Principles in Architectural Design
Thomas Templin	5	Concatenation
Trayvone Mathis	6	Executive Order

ART

Presenter	Poster #	Title of Presentation
Brianna Moore	7	Biology/Art Collaboration
DaJaniere Rice	8	Art: The Healing Fountain for those Struggling with Depression

ATHLETIC TRAINING

Presenter	Poster #	Title of Presentation
Amanda King	9	Determining the Effectiveness of Core Strengthening Exercise Therapies in Treating Nonspecific Low Back Pain: A Critically Appraised Topic
Kerri Grothaus	10	Correlation between Volitional and Functional Balance Control in Healthy Young Athletes.

BIOLOGICAL SCIENCES

Presenter	Poster #	Title of Presentation
Allison Humbert	28	The Role of Acetylation in <i>Rhodobacter sphaeroides</i> Photosynthesis
	29	Determination of the Bacterial Source of RsaI
Andrew Lostoski	30	Synthesis of Metal Organic Frameworks and Incorporation into Plastics
Ashley Everett	31	CRISPR/Cas9 induced mutations of the white gene of haplo-X and diplo-X <i>Drosophila melanogaster</i>
Catherine Freed	32	Phenotypic Analysis of <i>Arabidopsis thaliana</i> Mutants with Delayed Senescence
Collin Austin	33	Morphological response to current velocity in the zooxanthellate soft coral <i>Sinularia flexibilis</i>
Dale Shank	34	Comparison of growth rate, fertility, and mortality in corn snakes, <i>pantherophis guttatus</i> , relative to the odd gene.
William Gyurgyik	35	Fertility and mortality in corn snakes with the "odd" trait
Edward Lagucki	36	Urbanization reduces abundance of pollinator taxa in Toledo, OH along urban gradient
Erica Eskins	37	Antibiotic Resistance of Environmental and Laboratory Isolates of <i>Serratia marcescens</i>
	38	Positive Environmental Impact of Composting on BGSU Campus

POSTER PRESENTERS

BIOLOGICAL SCIENCES (continued)

Presenter	Poster #	Title of Presentation
Erin Plummer	39	Functional trait variation in bees along an urbanization gradient in Northwest Ohio
Hugh McQuillen	40	Identifying Stem Cells In The Adult Brain
Jamie Justice	41	Development of a Partition Coefficient: Converting Vaterite to Aragonite in Steelhead Trout
Jessica Creech	42	Replication of pRK415 in Rhodobacter sphaeroides 2.4.9
Joshua Simler	43	Evaluation of wastewater treatments to reduce nutrient transport from land application of dairy manure
Katherine D'Angelo	44	Antibiotic Resistance Mechanisms in Rahnella Bacteria
Mahnur Khan	45	Genetic Characterization and Inhibitory Activity of Pseudomonas from Bowling Green, Hungary, and Germany
Malika Day	46	Validation and Characterization of CfERV Insertions in Dogs and Wild Canids
Marissa Gittrich	47	CRISPR/Cas9 induced mutations of the white gene of haplo-X and diplo-X Drosophila melanogaster
Rachel Goldman	48	Effects of Sodium Addition on Invertebrate-Driven Soil Decomposition and Phosphorous Uptake
Shannon Turner	49	Newall Glacier Nucleic Acid Analysis

CHEMISTRY

Presenter	Poster #	Title of Presentation
Christopher Hicks	11	Ultrafast Laser Spectroscopy Traces the Dynamics of Copper-Halogen Bonds in Real Time
Craig Hoffman	12	Collisional Cross Section Analysis of Cyclic Polyesters
Madison Brown	13	Solid State Mechanochemical Synthesis of Cocrystals

COMMUNICATION

Presenter	Poster #	Title of Presentation
Kevin Roberts	14	Activism on Social Media: How Messages on Social Media can Change Beliefs and Attitudes toward Immigration
Jessica Smorul	15	Triadic Relationship Between Writers, Actors, and Fans in the WWE
Kelsey Knoop	16	Sexual Assault Prevention Programs on College Campuses

COMMUNICATION SCIENCES AND DISORDERS

Presenter	Poster #	Title of Presentation
Cortney Hansen	17	English Verbal Lexemes and Morphological Forms: Patterns of Use and Errors in Spanish-English Bilingual Preschoolers
Tarynn Clune	18	Communicative Behaviors Elicited by Leisure Activities in Memory Care Units
	19	: Pause categorization in parkinsonian speech
Alexis Decker	20	Assessing Spanish-Speaking Children: A Comparison of International Practices
Haley Altman	21	"Video Modeling for Social Communication in Adults with ASD"
Kristen Dunlap	22	A Study of Interactional Dynamics in Facilitated Conversations for People with Aphasia

POSTER PRESENTERS

COMMUNICATION SCIENCES AND DISORDERS (continued)

Lindsay Darr	23	Spanish Verbal Lexemes & Morphological Forms: Patterns of Use & Errors in Spanish-English Bilingual Preschoolers
Madison Livingston	24	Relationships Between Cognition and Speech Motor Learning
Sarah Pilkington	25	Teacher Candidates: Vocal Health

DATA SCIENCE

Presenter	Poster #	Title of Presentation
Brenda Emerson	26	Text Mining in a Russian Literature Class: The Benefits of R

DIETETICS

Presenter	Poster #	Title of Presentation
Josie Mansperger	50	The Influence of Modest Weight Gain on Taste and Smell Acuity in College Freshman
Julia Filc	51	Health Markers in First Year College Students
Madeleine Drees	52	Muscle Dysmorphia and Disordered Eating in Undergraduate Student Exercisers and Non-Exercisers
Tiffany Smith	53	Class-based mentoring for Undergraduate dietetics students

ECOLOGY AND CONSERVATION BIOLOGY

Presenter	Poster #	Title of Presentation
Katherine Herzog	54	The Effects of Incubation Temperature on Coloration and Growth in Rhacodactylus Geckos
Thomas Hutsler	55	Classification of terrestrial and aquatic vegetation along the Lake Erie shoreline using UAV images

EDUCATION

Presenter	Poster #	Title of Presentation
Christopher Carter	56	The Journey to a New World: Uncovering Realities of First-Generation College Students
Madeline Garlough	57	Childhood Anxiety Within the Classroom: A Professional Development Experience for Educators
Stephanie Wonnell	58	Transgender Harassment and Violence: Hate Is Not a Phobia

ELECTRO-MECHANICAL SYSTEMS ENGINEERING AND TECHNOLOGY

Presenter	Poster #	Title of Presentation
Brycen Hupe	59	Characterization of Electromechanical Actuator for Robotic Gripper
Hadi Aqeel	60	Test of Human-Like Skin Sensor Platform using Impedimetric Measurement Method Based on Frequency Response Analysis
Mohammed Almajed	61	Modeling and Simulation of a Skin-like wearable garment for human robot interaction

ENVIRONMENTAL SCIENCE, POLICY, AND ANALYSIS

Presenter	Poster #	Title of Presentation
Casey Stephens	62	The Influence of Land Use and Stream Naturalness on NW Ohio Water Quality
Gabrielle Ysassi	63	Testing the effectiveness of eDNA procedures to identify Thamnophis tissue ex situ

POSTER PRESENTERS

ENVIRONMENTAL SCIENCE, POLICY, AND ANALYSIS (continued)

Hannah Olenik	64	Vegetation Diversity and Connectedness in Ditches across Northwest Ohio
Misty Peavler	65	Evolutionary consequences of fragmentation on plant communities in northwest Ohio
Nicholas Gulling	66	Investigating Spatial Drivers of Possible Heat Islands in Northwest Ohio

ETHNIC STUDIES

Presenter	Poster #	Title of Presentation
Breanna Jones	67	The Sistahs are Conscientious: Black Women Owning Themselves in Media
Leigh Dunewood	68	Examining High-Achieving Black Undergraduate Students' Low Participation in Honors Education at Predominantly White Institutions (PWIs)

FORENSIC CHEMISTRY

Presenter	Poster #	Title of Presentation
Alexis Bird	69	Nanocrystals for Luminescent Solar Concentrators
	70	Colloidal Synthesis of Monodisperse Semiconductor Nanocrystals through the Saturated Ionic Layer Adsorption
Holly Eckard	71	Tracking the Energy Flow on Nanoscale via Sample-Transmitted Excitation Photoluminescence Spectroscopy

HISTORY

Presenter	Poster #	Title of Presentation
Caroline Harris	72	A History of Angel Island
Dominique Seo	73	Factors Effecting Living Standards in Early 20th Century Peru
Mathew Wright	74	Impact of Biological Skin Complexion during Late Eighteenth and Early Nineteenth Century Colonial Mexico

MATH AND STATISTICS

Presenter	Poster #	Title of Presentation
Mary Fleck	75	Periods of Variable Stars
Jocelyn Mineo	76	Opportunity, Health, and Mortality: A Focus on Young Adults in Ohio.

PHYSICS

Presenter	Poster #	Title of Presentation
Adam Lahey	77	CCD Imaging of KIC 8462852: Comets or Civilization?
Benjamin Hardy	78	Magneto Optic Kerr Effect in a Magnetized Electron Gun
Christopher Pyles	79	Raman Spectroscopy of the Interfacial Charge Transfer Between C60 and Gold.
Graham Avina	80	Transparent Conductive Oxides: Characteristics, Applications, and the use of ITO
Greg Jensen	81	Tracking the Energy Flow on Nanoscale via Sample-Transmitted Excitation Photoluminescence (STEP) Spectroscopy

POSTER PRESENTERS

POLITICAL SCIENCE

Presenter	Poster #	Title of Presentation
Anya Kaiser	82	Parenting Styles and Mother-Child Relationship Quality
	83	The American Political Mindset: The Interaction of Exceptionalism and Cynicism in Public Opinion
Julie Macmann	84	Bias in the Press Corps? Comparing Coverage of Hillary Clinton by Journalist Gender
Collin Claywell	85	Preventing Protest Mobilization in Authoritative States: Using Courts to Uphold Association Rights

PSYCHOLOGY AND NEUROSCIENCE

Presenter	Poster #	Title of Presentation
Benjamin Fry	86	Effects of Anandamide Administration on Components of Reward Processing During Free Choice
Kayle Keto	87	Do whip spiders use magnetic cues during navigation?
Kendel Strasser	88	Alcohol Outlet Locations and Urban Adolescent Views of Neighborhoods
Kylee Smith	89	Incentive Contrast As A Relative Reward Process
Leah Chipps	90	The Effects of Coloring Mandalas on Mood and EEG Frequency Bands
Natasha Flesher	91	Continued Investigation of Hippocampal Aging in Homing Pigeons
Rowan Wicks	92	Perfectionism as a Maladaptive Construct: An Examination of Perfectionism, Negative Automatic Thoughts, and Conscientiousness
Vanessa Burke	93	Gossip in a Telework Context
Zackery Knauss	94	Getting (Lazy) rats to work: Order effects alter work output in rat model of choice

PUBLIC HEALTH

Presenter	Poster #	Title of Presentation
Ashley Meehan	27	Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS): Student Knowledge at Bowling Green State University (BGSU) in 2016 Compared to 1988

SOCIAL WORK

Presenter	Poster #	Title of Presentation
Anastasia Kuebler	95	Sexism in the Film Industry
Carly Willis	96	Stressors of Grandparenting: How the Community Can Aid Them
Emily Kalman	97	Stressors of Grandparenting: How the Community Can Aid them
Joshua Amaro	98	A Review of Studies Measuring Quality of Life for the Aging HIV Population
Krista Weaver	99	Seasonal Blues: Older Male Adults in Corrections
Maya Leachman	100	Racial Minorities and Majorities: Equal Access to Opportunities?
Marika Boone	101	Botched Beauty

SOCIOLOGY

Presenter	Poster #	Title of Presentation
Elizabeth Kovert	102	The Role of Union Dissolution and Repartnering on Health Later in Life ¹⁸
Morgan Corns	103	The Association Between Teacher-Student Relationship and Academic Performance

THANK YOU

On behalf of the Center for Undergraduate Research and Scholarship (CURS) and BGSU, I would like to recognize the people whose support has been crucial to the success of our students and this symposium. Thank you to the faculty mentors and research advisors for taking the time to assist these students in becoming the future leaders and scholars in their respective fields. Your guidance is integral to the research process and completion of the project. Thank you to the families and friends of the students we recognized today for building a foundation that encourages academic challenge and engagement, cheering them on throughout the process, and attending the symposium today. Finally thank you to the students for sharing their work with us this morning. It is truly incredible to see what our students are capable of accomplishing and is a testament to the value of a BGSU education.

Dr. Cordula Mora,
Director of CURS

