

SRD

student research day

2018

Celebrating students' research,
scholarly, and creative work.



April 6, 2018
9 a.m.- 3:30 p.m.



INDIANA UNIVERSITY EAST

Welcome **to Student Research Day!**

Student Research Day is a special event for students to showcase their work and for the campus to celebrate their achievements. By recognizing the hard work of our student scholars, we hope to validate their extraordinary efforts and to inspire others to follow in their path of excellence in research, academic, and creative work. Likewise, we hope Student Research Day will provide an excellent opportunity for parents and family members to come to campus and participate in the celebration of their student's scholarly growth and success.

Student Research Day began nearly two decades ago as an afternoon of presentations of the Summer Research Scholars work only. Over the years, significant enhancements have been made to the program. We have also joined with others to expand the breadth of student presentations, and this year, we are proud to be including art, music, professional development and the applied sciences. In total, the event will be the culmination of a celebration of student scholarly works throughout the campus, and we are glad you are here to experience the day with us!

Thank you for attending this year's excellent event, and thank you again for supporting the research and work of our student scholars.

Sincerely,
Ange Cooksey, Senior Lecturer in Humanities
Student Research Day Committee, Chair
School of Humanities and Social Sciences

Schedule of Events



8:30 a.m.	Registration and Poster Set Up *Continental Breakfast
8:45 a.m.	Welcome and Introductions Ange Cooksey
9:00 a.m.	Narrated Poster Session
9:30 a.m.	Oral Presentations – Session 1
11:00 a.m.	Keynote Speaker – T. J. Rivard
11:10 a.m.	Oral Presentations – Session 2, SUMRS Scholars Presentations
12 p.m.	Artists and Scholars’ Luncheon Sue McFadden Presentation
12:30 p.m.	Oral Presentations – Session 3
1:50 p.m.	Afternoon Break
2 p.m.	Oral Presentations – Session 4
3:10 p.m.	Just Desserts – A Scrumptious Awards Presentation

Selected Research Opportunities at Indiana University East

Art Student Showcase

The annual Student Showcase includes works of art from Summer and Fall semesters of 2017 and Spring semester of 2018. Art pieces are produced by students in courses, including Painting, Drawing, Sculpture, 2-D and 3-D Design, Ceramics, Art & Design, and Metalsmithing. In addition to the individual entries, Senior Capstone exhibits are included. Merit monetary awards are given annually through the sponsorship of Staggs Safety of Richmond, Robert Warfel, President.

Honors Program & MEHA Conference

Students in the IU East Honors Program complete at least 15 hours of Honors Option courses, as well as a Honors Senior Thesis. This capstone experience requires a scholarly, creative, or service learning project completed under the guidance of a faculty mentor. Students also have the option to present at the Mid-East Honors Association (MEHA) Conference.

Student Research Day

Student Research Day is an opportunity for all undergraduate students to present their research to the campus and larger community. In developing this year's ambitious program, we have included Summer Scholar students, the Honors Program scholars, and presentations from course projects from all campus disciplines. We have also invited our growing online population to participate.

Summer Scholars

The Summer Research Scholars Program provides support for students to make a substantial commitment to research and scholarly activity. Students work closely with a faculty mentor to develop a project which they will complete independently. This program is open to students in all disciplines, and the potential projects may take on many forms.

POSTER PRESENTATIONS

Societal Stigma, Power, and Schizophrenia: Reduction Strategies

Rachel Bertram, Greenville, Ohio

This project has been formed for the Senior Seminar course conducted by Denise Bullock. Research has been collected about societal stigma in the essence of Erving Goffman. His work and scholarly journals are included in this body of research. Power dynamics between the schizophrenic inmate and correctional institutions are examined. Also included in the research are articles detailing stigma being present in the mental health system in which sufferers are encouraged to utilize. The project is focused on education and training to reduce stigma in both jails and mental health professionals and improve the lives of those with schizophrenia.

Single-Sex Schools: Hosts of Discriminatory Environments

Karli Hall, Rushville, Indiana

Single-sex schools, a proposed and controversial alternative to co-ed education, do not effectively provide a conducive learning environment to students of the LGBTQ community. With the increase of acceptance of diverse students, especially those who are part of the LGBTQ community, schools must change to accommodate and ensure that students of this community are valued and have a safe environment; single-sex schools lack these resources. Students of the LGBTQ community often face ridicule from their peers and teachers, are targeted, and are not able to express themselves within the conformist style of single-sex schools.

A Case Study for Counterurbanization in the Midwest

Eric Josephson, Brownsville, Indiana

This project will discuss the climate of rural America in a continually more globalized world. This presentation will discuss national trends as well as local trends, both demographically and economically.

Induction of ALDH1A1 In Ovarian Cancer Cells leads to Chemoresistance

Umer Khan, Richmond, Indiana.

Ovarian cancer is the most lethal gynecological cancer and is the 5th leading cause for cancer related deaths among women in USA. Most patients respond well to chemotherapy initially but cancer stem cells survive and finally cause lethal relapse. No major improvement in patient outcome has been seen in the past three decades. Research shows that ALDH1A1 is associated with poor cancer prognosis. Cancer cells that are resistant to carboplatin have shown a higher ALDH1A1 expression and stem cell like properties. In this study we focus on the viability of ovarian cancer cells with higher ALDH1A1 expression after carboplatin treatment.

Adoption and Stigma

Brittany Lampke, Muncie, Indiana

This project is concentrated on the stigma of adoption with the majority of the focus being on transracial adoptions. Research has presented multiple themes of stigma related to this topic. Adoption in general produces a stigma, but data has shown that transracial adoptions are more vulnerable to receiving even more negative stigmas. Research has also shown that stigma associated with adoption is relevant today. Education on adoption and awareness of this issue contributes to a solution for this problem.

We're All Human

Amanda Mittenthal, Richmond, Indiana

In this project, I will discuss transgender identity, obstacles, difficulties, and love. My research will be based on Jennifer Boylan's "She's not There," and I will relate Boylan's autobiography to Richmond, Indiana and to its many people who misunderstand, discriminate, or who are transgender.

Life Out of Balance: An Anthropological Examination of our Biocultural Discordance

Seth Winstead, Connersville, Indiana

Humans have evolved primarily in two ways, biologically and culturally. Overtime, as our cultural evolution has grown in complexity and distance from our biological nature, Western societies specifically are seemingly starting to notice the consequences of this discordance. In the United States specifically, primary components of our culture, such as medicine/technology, diet, and sexual reproduction, have become imbalanced in how we psychosocially approach them. These components are present in one form or another in most people's lives and each are vital to humans as a species. This poster presents these components from a biocultural, anthropological perspective.

ORAL PRESENTATIONS 1

9:30 a.m.

Lifestyle of Puerto Rico

Logan Beeson, Richmond, Indiana

This project will be over the ways of life Puerto Rico. I will also look at the similarities and differences between the other countries that I have visited through Indiana University East. These other countries include Spain and the Dominican Republic. I will observe food, dances, and general life.

9:40 a.m.

The Daily Puerto Rican Diet

Carlee Breanne McCulloch, Laurel, Indiana

This presentation will display the results of research into Puerto Rico concerning The Daily Puerto Rican Diet. For this area of interest, I will start by looking into how many meals Puerto Ricans eat on a daily basis. (I am interested to see if Puerto Ricans eat the traditional breakfast, lunch, and dinner, such as Americans do.) Also, I want to research the time at which meals are eaten. Then, I will research of what their meals consist. Finally, I will look into how their meals are prepared. I will document ingredients/recipes and take pictures of meal preparation and the final entrees.

9:50 a.m.

The Cats of Old San Juan

Marybell Molina, New Castle, Indiana.

This project will be over the cats in Puerto Rico. It will involve It is a normal life style for these cats to be in busy streets of Old San Juan. I will explain the observations made over how the cats react and how people react towards these cats. The project results will show the importance of these cats and why the cats began to live in the area from the beginning. I will also be explaining the importance of the organization, "Save a Gato."

10 a.m.

You are what you drink: A Look at the Coffee Industry in Puerto Rico

Tessa Rhodus, New Paris, Ohio

This presentation will showcase findings of research into the coffee industry in Puerto Rico, specifically, coffee production. I will be researching a couple different topics that deal with coffee. First, the steps of coffee production and all about the farms. Second, I will research how coffee affects the economy. Lastly, I want to research everything about the retail side of coffee in Puerto Rico.

10:10 a.m.

Got Drugs

Carissa Wright, Fountain City, Indiana

This presentation explores what healthcare and pharmaceuticals are like while in Puerto Rico. Specifically, the research comprises an investigation of the healthcare options available for those individuals along with obtaining knowledge about what pharmacies are like in PR. Because of the hurricane, also included is an exploration of what issues individuals have faced in these two areas.

10:20

People Use More Vigor to Push Unattractive Faces Away and Pull Attractive Faces Towards Themselves

Nathan Rose, Bradford, OH

Reaction times during approach (i.e. pulling) and avoidance (i.e. pushing) movements have been extensively studied. Results from such studies show faster reaction times for approaching positive stimuli and avoiding negative stimuli. However, the sustained force during approach-avoidance movements has not been extensively studied. We measured the force of approach-avoidance movements in response to images of face that varied in ethnicity, gender, and attraction. We found that participants apply more force to pull attractive faces towards themselves and to push unattractive faces away. The effect is nearly twice as larger for males ($R^2 = 18\%$) than for females participants ($R^2 = 10\%$). These results support our hypothesis and add to the existing body of approach-avoidance movement research.

10:40

Using Effective Communication Practices to Boost Employee Retention Rates

Amy Coyle Centerville, Indiana

According to the Bureau of Labor Statistics, there were more than 23 million employee quit last year. In this presentation I am going to talk about why companies have high turnover rates and what they can do to gain employee retention.

10:50

An Overlooked Mexican Feminist

Sandra Calderon, Richmond, Indiana

Feminism has been in the process of change for a long time. Who were the firsts to start the movement? When did women take a stance? All kinds of women have been combatting inequality equality for centuries. A well-known poet, philosopher, and feminist, Sor Juana Inés de la Cruz started battling it in the 17th century Mexico. Non Spanish speakers may not recognize the name, but through her poetry Sor Juana was a true fighter against the patriarchy. In this presentation I will examine 'Hombres Necios Que Acusáis' to show how Sor Juana employed the baroque literary techniques of conceptism, pessimism and verifiability to critique the inequality of genders.

SUMMER RESEARCH SCHOLARS PRESENTATIONS

11:10 a.m.

High Open

Westley Smith, Richmond, Indiana

As a poet and Army veteran (1987-2002), I write about my combat experiences during Desert Storm, as well as the challenges of reintegration into civilian life. High Open, the poetry manuscript on which I am currently working at Indiana University, provides readers a glimpse into the inner life of a soldier struggling to confront the violence of the forgotten middle-eastern war, as Desert Storm veterans often refer to this conflict. During my presentation, I would read and briefly discuss a selection of these poems in order to dispel the myth that Desert Storm veterans did not experience the same horrors....

11:20 a.m.

Stateside

Stephanie Beckner, Richmond, Indiana

I am passionate about this project as I have three children who have served or are currently serving in the US military. My oldest son was injured in Afghanistan as an infantryman in Operation Enduring Freedom that continues on today. My middle daughter, who left school as a pre-med major to serve in the United States Army as a combat medic. My youngest son, who chose to follow in the footsteps of his siblings, has graduated boot camp, and awaits orders for deployment. The impact of their military service is the focus of my first book-length project titled "The Service of My Children."

11:30 a.m.

**Motivating Self-Referenced Approach and
Avoidance Movements with Emotional Images**

Cassidy Clouse, Richmond, Indiana

Ms. Clouse performed a comprehensive statistical analysis of the results gathered in a previously implemented experiment that evaluated approach and avoidance movements in response to emotional stimuli. She was able to present these findings at the APA Annual Convention in Washington, D.C.

11:40 a.m.

**Examining the Effects of Lindane on
Gene Expression in Fruit Flies**

Breanna Nowak, Richmond, Indiana

Nowak worked on the model organism *Drosophila melanogaster*, to identify key genes whose expression levels have altered upon exposure to Lindane, an organochlorine insecticide. The stress of the insecticide Lindane, a carcinogen, is expected to alter the expression levels of various genes with the genome of the fruit fly.

11:50 a.m.

Fear and Trembling, Indiana

Gregg Sells, Brookville, Indiana

Sells revised his poetry manuscript that he drafted as a 2016 Summer Research Scholar. After the revisions, he will submit individual poems to literary journals and magazines. Sells' ultimate goal is to publish his manuscript, "Fear and Trembling, Indiana," in its entirety.

ORAL PRESENTATIONS

12:30 p.m.

Alexa Loses Her Voice

Madison Schlamb, Greenville, Ohio

The purpose of this research is to investigate the Super Bowl LII 2018 most popular advertisement *Alexa Loses Her Voice*. The advertisement shows many white or light-skinned actors voicing Alexa. This advertisement plays into sexualization in media, beauty ideals, social identities, and it fits and promotes many stereotypes that have been portrayed in the media for years. In order to explore these issues, the investigator employed rhetorical analysis techniques guided by critical theory lenses including critical race theory and feminism. Among the author's 2018 findings are evidence of women being sexualized in the advertisement, a false idea of beauty being portrayed, and the presence of common race-related stereotypes.

12:40 p.m.

Manual on Team Efforts in a Clinical Setting

Lucas Smart, Eaton, Ohio

This presentation will showcase the work that has been done for our manual. This will be over what exactly the manual entails, and how it is important. This also includes some of the most interesting findings from our research.

12:50 p.m.

The Food of Puerto Rico

Madison Day, Winchester, Indiana

I would like to research Puerto Rican food while I visit the country over Spring Break. Puerto Rico is a new territory to me since I have never been there or heard much about it. The only information I have is from my friend that is Puerto Rican. Hispanic culture has always been very interesting to me and this will allow me to fulfill my Spanish minor as well as become a more rounded person.

1:00 p.m.

Invasive Species of Puerto Rico

Hannah Buehner, Connersville, Indiana

Invasive species are increasingly becoming a problem throughout the world. Puerto Rico is especially susceptible to these species due to the continuous of movement of people to and from the island. While in Puerto Rico, I will observe the environment and interview various subjects to determine how these species are damaging the island's environment. As I interview subjects, I will gauge their knowledge of invasive species and seek to determine whether they're aware of the threat these species pose. I will focus mainly on the Green Iguana since it has affected Puerto Rico greatly in the past few years.

1:10 p.m.

What It Means to be a Woman in Puerto Rico

Kaylyn Mundt, Richmond, Indiana

This presentation is about what it means to be a woman in Puerto Rico. I am looking to find out if there is a cultural difference between Puerto Rican women and women from the United States. Are there any women in their history that has made significant change? Also what roles do women have and how has that changed over time?

1:20 p.m.

She Would Be King

Welby Thomas Cox, Jr., Richmond, Indiana

At a time when a woman's value was measured in terms of wealth, Eleanor of Aquitaine's vivid leadership inspired and dazzled those about her. She bore eleven children, two of which became King. And yet, born to rule, leader of crusade... she was continually repressed and threatened by the men who overshadowed her life. ... or, was she simply shrewd, playing the shadows with female charm and the fortune from which she inherited from her father? Could she have it both ways? This flaming question is as appropriate today as in the 12th century.

1:40 p.m.

Lever Pulling in Moral Dilemma Decision Making

Zach Catron, Richmond, Indiana

The trolley problems are widely used moral dilemmas for understanding how people reason morally. Here we measured the force people use to pull a lever in two different trolley problem scenarios. We asked participants to pull a lever in a scenario that is regarded as more morally acceptable (switching the track the trolley is traveling on) and compare it to when participants pull a lever in a less morally permissible scenario (opening a trapdoor). We observed less vigorous lever pulling during the less morally permissible trolley problem scenario, which suggests that the moral uncertainty influences the vigor of movement decisions.

2 p.m.

The Harsh Reality of Death

Aubrey Stomberg, Richmond, Indiana

The harsh reality of death can be devastating for some people. When one reaches the point of realizing that this life is only temporary, the beauty of life itself dissolves into pain. It is so easy to get caught up in the worries and struggles of life and the lack of focus on the successes and beauty of life. Sometimes people can find the opposite and feel so in love with their lives, the people around them and the things around them that they were unaware of the fact that someday everything would fade and disappear. It seems that in the Koch Butterflies literary work these feelings of similar negation are presented and can be examined and studied more closely. The literary work studied for this presentation can be explained in a simple term as confusing but at the same time striking for the reader. The short story extends and touches all the feelings and senses of the emotions. This is a literary work between reality and fantasy that displays interesting theories related to death. This work was written by Antonia Di Benedetto, born in Argentina. Mr. Benedetto has a unique style and there are many analyzes in regards to coping mechanisms that will be studied more thoroughly in this paper and will be presented.

2:10 p.m.

Sex, Politics, and Poetry: A Reading with Commentary on Writing Poems

Sara Baxter, Richmond, Indiana

In this presentation, I will read and discuss several of my original poems, as well as work from a few of my favorite poets, in an effort to demonstrate some of the most valuable experiences I have had as a student poet. Issues I discuss include learning the craft, writing about challenging topics, and finding my poetic voice.

2:20 p.m.

Addressing Deception in Online Dating

Lillian Harrist, Richmond, Indiana

The phenomenon of “catfishing,” or falsifying one’s identity and leading another person on in a romantic relationship online, has created enough of a problem that the concept has its own television show. My group has set out to create three PSAs in the form of a pamphlet, radio session, and brief video in order to raise awareness of the issue. We chose to target young adults using apps such as Tinder.

2:30 p.m.

Predicting Student Success in Online Learning Environments: Combining Currently Available Measurement Tools to Improve Accuracy

Katie Elsmore, Fishers, Indiana

The current study focuses on research instruments used to measure motivation, computer literacy, online course readiness, academic entitlement, and targeted demographic data. This study investigates the reliability of the development of a new instrument for predicting success for distance learners. The current study’s survey was developed by combining a variety of already-available instruments and measures that current research suggests is predictive of student success. Based on previous research, the current study expected to find these variables to be predictive of student success. A total of 74 students from two online courses at Indiana University East participated in the study.

2:40 p.m.

Commercial and Personal Agriculture in Puerto Rico

Christina Brandenburg, New Richmond, Wisconsin

In this presentation, I will discuss an analysis of commercial and personal agriculture in Puerto Rico, including historical context and current practices, designed to answer the question, "How Does Puerto Rico Feed Itself?". Research sources include written historical accounts, ethnographic investigation conducted in Puerto Rico.

2:50 p.m.

So, who really are the Puerto Ricans?

Maria McKinney, Pendleton, Indiana

Although Puerto Rico has a rich history of indigenous population and recent DNA analyses reveal that the majority of the population possess Taíno heritage, not all people identify themselves as indigenous Taíno. Some rejected the idea of indigenous heritage. Another group of Puerto Ricans try to repair Taíno extinction through the active reclamation of Taíno identity in cultural and linguistic terms. So, who really are the Puerto Ricans?

3 p.m.

Healthcare in Puerto Rico

Sarah Acton, New Castle, Indiana

This project is about the perception of health care in Puerto Rico. In the United States there is a large focus on prevention care, and I want to see if it is the same in Puerto Rico.



Judges Panel

Paul Kriese, Professor Emeritus in Political Science

Jessica Raposo, Assistant Professor of Music

**Catherine Griffith, Adjunct Professor in Philosophy
and Religious Studies**

Terri Hardy, Adjunct Professor in Sociology

Donna Spears, Real Estate Specialist, Lingle Real Estate

Josh Beal, Assistant Professor, Mathematics

Parul Khurana, Associate Professor, Biology

Lora Baldwin, Associate Librarian

Planning Committee

Ange Cooksey - Chair, Philosophy, HSS

Ann Kim - Assistant Professor of Art

Eevett Loshek, Lecturer, Psychology

Sue McFadden - University Library

Steven Petersheim - Assistant Professor, English



Special Thanks

Special thanks to the Office of Academic Affairs that has provided the funding for our program and cash awards. Thank you to the Planning Committee, the Physical Facilities staff and The Den for all their hard work in making this event successful.



Notes

This image shows a full page of white paper with horizontal grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing or drawing. There are no margins, text, or other markings on the page.

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