GL🌍BAL SCHOLARS RESEARCH SYMPOSIUM

✳ 2024 ✳

Thursday, April 11 | 4:00 PM | Beren Center

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✳ GLOBAL SCHOLARS ✳ RESEARCH SYMPOSIUM

The Global Scholars Program recognizes and mentors academically talented and motivated undergraduate students interested in global studies. Each year, a select group of sophomores from disciplines across the university are selected for the program. They participate in a semester-long seminar and work with a faculty mentor with similar research interests. Students present their research during the spring semester of their senior year.

SENIOR COHORT & MENTORS

Sivani Badrivenkata
Pharmacy

Blake Bruno
Accounting

Dorothy Haggard
Chemical Engineering

Samuel Harder
Aerospace Engineering and Mathematics

Rachael Lawler
French, Global & International Studies, and History

Preston Means
Psychology, Sociology, and Political Science

Kaitlyn Moore
Secondary English Education

Gustavo Moreira
Electrical Engineering

Diana Nguyen
Psychology

Aalana Scherl
Political Science and Philosophy

Larissa Thome
Finance and Exercise Science

MENTORS
We would like to offer a special note of thanks to our research mentors and seminar professor, Dr. Ketty Wong who taught "Music and Migration" in Spring 2022.

Dr. Michael Hageman
Pharmacy

Dr. Maya Stiller
Korean art history

Dr. Adela Rambi Cardones
Dermatology

Dr. Brian Lagotte
Global & International Studies

Dr. Akiko Takeyama
Women, Gender and Sexuality Studies

Dr. David Mai
Film and Media Studies

Dr. Rongqing Hui
Electrical Engineering and Computer Science

Dr. Glenn Adams
Psychology

Dr. Phil Duncan
Philosophy

Dr. Atanas Mihov
Finance

Sivani Badrivenkata

Major: Pharmacy

Research Mentor: Dr. Michael Hageman, Valentino J. Stella Distinguished Professor of Pharmacy

Title: Bad Bugs: Overview of Antimicrobial Resistance and a Deep Dive into Preventing Vaginal E. coli Infections During Pregnancy and Childbirth Using Lactoferrin Protein

A report from the World Health Organization in 2019 stated that if no action is taken, antibiotic resistance can lead to 10 million global deaths per year by 2050, surpassing other leading causes of death like diabetes and cancer. It is evident that antibiotic resistance should be a primary public health concern. If left unchecked, global health systems are at risk of collapsing, for even common medical procedures and interventions can expose patients to dangerous resistant bacteria. In fact, we are already seeing the effects in lower- and middle-income countries when it comes to resistant vaginal E. coli infections in pregnant patients passing on to newborns during pregnancy and childbirth, ultimately causing high rates of neonatal sepsis. New preventative therapeutics are necessary, and proteins like lactoferrin show early promise in helping combat infections.

Blake Bruno

Major: Accounting

Research Mentor: Dr. Maya Stiller, associate professor of Korean art and visual culture

Title: Plastic: How It Affected Korean Art in the 1980s

My Global Scholars research project explores the relationship between art in South Korea during the Minjung cultural movement and the use of plastic, specifically in regards to economic development and the introduction of credit. The Minjung cultural movement started in the late 70s and began to develop more in the 80s after the Gwangju massacre. Shin Hakchul and Lee Bul are two artists that highlight the crossroads between plastic and cultural revolution at the time.

Dorothy Haggard

Major: Chemical Engineering

Research Mentor: Dr. Adela Rambi Cardones, tenured professor and chief of the Division of Dermatology, University of Kansas Medical Center

Title: A SEER Analysis of Variance in Melanoma Patient Outcomes Based on Race and Ethnicity

While patient outcomes have improved, there are still large racial disparities in melanoma patient outcomes. The purpose of this analysis is to provide an update on the variation of melanoma patient outcomes based on race and ethnicity. Data analysis was conducted using the Surveillance, Epidemiology, and End Results (SEER) Program, including 22 registries throughout the United States from 2000-2020, geographically covering 47.9% of the US population and including 1,097,140 melanoma patients. Patient outcomes included the development of an invasive tumor or additional cancer, survival, cause of death, and months from diagnosis to treatment. Various confounders were analyzed, including age, sex, Clark Level of Invasion, anatomic site, histology, and stage. Black, Hispanic, and API patients were more likely to develop invasive cancer, more likely to have a cause of death attributed to a melanoma diagnosis, and more likely to have a longer period between diagnosis and treatment. Black and Hispanic patients were more likely to be diagnosed before age 50 than other patients. Black, Hispanic, and API patients were significantly more likely to be diagnosed with acral lentiginous melanoma and to have a Stage IV diagnosis.

Samuel Harder

Majors: Aerospace Engineering and Mathematics

Research Mentor: Dr. Shawn Keshmiri, Spahr Professor of Aerospace Engineering

Title: Dynamic Modelling of sUAS

Dynamic modelling of sUAS supports flight testing and the development of novel control laws for unmanned aircraft. This presentation will provide a summary of the author's contributions to this area of work at the University of Kansas Garrison Flight Research Laboratory and how this technology promises to impact quality of life in global urban environments.

Rachael Lawler

Majors: History, Global & International Studies, and French

Research Mentor: Dr. Brian Lagotte, assistant teaching professor and director of undergraduate studies in the Center for Global and International Studies

Title: Modesty and Modernity: A Study on French Modest Fashion Brands

Feminist research, especially since the 1980s, attempts to move away from colonial rhetoric and stereotypes, and, as a result, researchers have begun to call into question certain narratives and rhetoric surrounding Muslim women, particularly within France. Thus, the current study attempts to use a feminist, transnational framework for understanding modest fashion and its resulting consumption and distribution by Muslim and non-Muslim women alike within a highly secularized French society. Current research on modest fashion, particularly those living in Western countries, places less of an emphasis on modest fashion designers and brands in comparison to bloggers, consumers, and models.

Preston Means

Majors: Psychology, Sociology, and Political Science

Research Mentor: Dr. Akiko Takeyama, professor of women, gender and sexuality studies and director for the Center for East Asian Studies

Title: Japan's Queer Escape: An Examination of Shinjuku Ni-Chōme's Spatial Exceptionalism

Shinjuku Ni-Chōme is a well-known square shaped gay bar district in Tokyo's Shinjuku ward. This enclosed space is widely seen as an international gathering space of queer folks from the next block over to the other side of the globe. Ni-Chōme operates as a queer gathering place within the conservative country, allowing for an escape for Japanese and foreign queer folks alike. While the district's physical layout creates a visual boundary between Ni-Chōme's queer space and the main roads, the conceptualized contact zone may be more subjective, resulting in differing interpretations of when and where people are able to express their queer identities more freely. Through a series of interviews with people who visited Shinjuku Ni-Chōme, I attempted to explore the ways in which identity shaped perceptions of and experiences in queer space.

Kaitlyn Moore

Major: Secondary English Education

Research Mentor: Dr. David Mai, assistant professor of film and media studies

Title: The Globalization of Anime and Manga

This presentation aims to provide a brief definition of what anime and manga are, a history of its creation and globalization, the significance of the artistic mediums of anime and manga, and how the spread of anime and manga from its orgin country of Japan has helped to sponsor cross-cultural learning. Through examining the economic, aesthetic, and cultural impacts of anime and manga, this presentation aims to inform and, hopefully, entertain the audience with a cultural product that contains infinite possibilies.

Gustavo Moreira

Major: Electrical Engineering

Research Mentor: Dr. Rongqing Hui, professor of electrical engineering and computer science

Title: Advancing Lidar Technology: Researching the Potential of Self-Homodyne Coherent Systems

We have proposed and experimentally demonstrated a simple lidar scheme based on coherent self-homodyne detection in which the local oscillator carries the same linear chirp waveform as the lidar signal. Doing so proved to improve lidar sensitivity as well show advancements in current Lidar systems. In this presentation, I will demonstrate important features of my research, showcase current uses of lidar systems, such as mapping of ice sheets, vibration sensing, and atmosphere composition. Finally, I will present a global perspective on why it is important to obtain those measurements and how my research plays a global role.

Diana Nguyen

Major: Psychology

Research Mentor: Dr. Glenn Adams, professor of psychology

Title: The Role of American and Ethnic Identity in Asian Americans' Immigration Support

In this study, I am interested in whether Asian Americans' strength of specific ethnic identification (e.g., Japanese, Japanese American, Southeast Asian etc,), rather than a pan-Asian identification, predicts support for immigration from specific regions, including in-group (Asian) and out-group (non-Asian) regions. This study also investigates whether stereotypes about immigrants from different regions fuel support or opposition for immigration from specific regions. The results indicate that strength of ethnic identification is positively associated with immigration support, more so for in-group immigrants, and more positive stereotypes about immigrants. Strength of American identification is negatively associated with immigration support, more so for out-group immigrants, and non-significantly associated with less positive stereotypes about immigrants. The possible psychosocial processes involved, as well as inter-group and intra-group consequences are discussed with respect to the results.

Aalana Scherl

Majors: Political Science and Philosophy

Research Mentor: Dr. Phil Duncan, associate teaching professor of linguistics

Title: Cross Analysis of English and Patois in Wh-the-hell Syntactic Construction

In this research, I embark on a cross-linguistic exploration of the characteristics of wh-the-hell constructions in English and their Patois counterpart, wh-di-baxide. The central objective is to determine whether these constructions exhibit comparable semantic features, contributing to a deeper understanding of how speakers convey uncertainty, surprise, or incredulity in each language. Drawing on insights from den Dikken and Giannakidou's (2002) observations of English wh-the-hell, I conduct a comprehensive cross analysis to investigate whether the identified properties extend to wh-di-baxide in Patois. Additionally, I delve into Martin's (2020) exploration of other properties associated with English wh-the-hell, and through a systematic comparative analysis, examine whether the observed patterns align when applied to Patois constructions. By synthesizing these linguistic perspectives, this study aims to elucidate the potential grammatical similarities and differences between wh-the-hell in English and its Patois counterpart, wh-di-baxide.

Larissa Thome

Majors: Finance and Exercise Science

Research Mentor: Dr. Atanas Mihov, associate professor of finance

Title: Culture Distance and MNC locations

Within the finance area, with the guidance of my mentor, I researched cultural distance based on Hofstede from the U.S and the relationship to where their subsidiaries are located using regression analysis and descriptive statistics. That gave way to analyze the effect to stock returns.