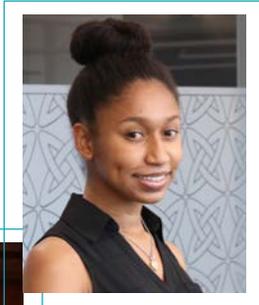




UNIVERSITY OF  
NOTRE DAME

ARTS & LETTERS



# 2022

## SENIOR THESIS PROJECTS

Study everything. Do anything.<sup>SM</sup>



### *Greetings!*

I'm delighted to present this collection highlighting senior thesis projects completed by students in the College of Arts & Letters Class of 2022.

Within these pages, 280 seniors describe their 298 theses, capstones and creative projects. This package represents countless hours of original research, practice, analysis, interviews, writing, and creative work.

The projects detailed here are as interesting and diverse as the students who chose them. They include exploring the foundation for cluster algebras, writing a musical comedy, studying the role of faith in political participation, preserving an endangered language, and examining discrimination in the mortgage lending market.

During these endeavors, seniors have worked one-on-one with their advisors, who have provided valuable support, expertise and guidance. Many students also have benefited from generous grants that enabled them to travel, view archived manuscripts, purchase materials, and gain knowledge and cultural experiences. They have also demonstrated tremendous resiliency throughout the many challenges that COVID-19 has posed to their undergraduate careers — including the ways it forced many of them to reshape or recalibrate their projects.

Each year, seniors affirm that both the process and knowledge gained are invaluable, and often transformative.

I am proud of these seniors for pursuing their interests, making discoveries, and contributing to academic scholarship and the creative arts. I'm also extremely pleased that the percentage of Arts & Letters seniors completing theses, capstones, and creative projects has increased from 8% in 2008 to approximately 40% the last few years.

I hope that you enjoy learning about their projects as much as I have.

*Sarah A. Mustillo*

Sarah A. Mustillo

I.A. O'Shaughnessy Dean  
College of Arts & Letters

**Grace Akin**

- Major: Film, Television, and Theatre
- Minors: Peace Studies and Sustainability
- Glynn Family Honors Program
- Advisor: Fr. Terrence Ehrman, C.S.C.

## Water Law in the Great Lakes Region

Fresh water is a critical resource that is becoming increasingly more precious due to pollution and the impact of climate change. The Great Lakes account for more than 20% of the world's surface fresh water; they are both highly sought after and highly protected due to their importance.

Current legal agreements limit water use of the Great Lakes to within the Great Lakes watershed with few exceptions. The Waukesha, Wisconsin, water diversion, which took more than a decade to be approved, is one instance of an accepted water diversion due to radium-contaminated local groundwater.

My thesis explored the current legal framework for water diversions in the Great Lakes, the ecological perspective of conserving the Great Lakes, and the Catholic theology behind ethical implications of both protecting the sanctity of water and providing human beings with their fundamental needs. I used these perspectives through which to analyze the Waukesha diversion specifically and offer insight into future applications for diversions by balancing environmental and human needs.

Growing up near Lake Michigan, I've always appreciated the Great Lakes for the important resource that they are. I decided to focus on water law because I'm interested in going into environmental law, and I wanted to look at the existing framework through the Catholic lens and be informed by other cultures and traditions. It's rare to be able to combine all my interests of law, the environment, and the Catholic faith, but this gave me the opportunity to do so.

**Langley Allen**

- Majors: Political Science and Psychology
- Glynn Family Honors Program
- Advisor: Anré Venter

## Restorative Justice: A Comprehensive Understanding of its Framework and Implications on Society

In the wake of the violent killing of George Floyd, the police and larger criminal justice system are facing heightened scrutiny as governments attempt to resolve some of the issues that affect police misconduct. Through a restorative justice approach to situations involving crimes, crimes are treated in the context of that individual's environment. This research focused on opportunities that restorative justice can provide and explored possible limitations that come from such a progressive yet compact approach to justice.

This topic allowed me to examine restorative justice within the South Bend community, where gun violence has recently increased. Through this research, I also learned how I may positively impact my own community of Prince George's County, Maryland. Consideration for alternative strategies has become more commonplace and, given the success stories within the restorative justice approach, I wanted to explore its utility on a larger scale.

**Megan Allen**

- Majors: Business Analytics and Economics
- Advisor: Christopher Cronin

## Do IUDs Prevent Abortions?: Using the Colorado Family Planning Initiative to Analyze the Relationship Between Long-Acting Reversible Contraceptives and Abortions

Beginning in 2009, the Colorado Family Planning Initiative (CFPI) provided funding for Colorado Title X clinics to provide long-acting reversible contraceptives (like IUDs and implants) for free.

My project attempted to understand the relationship between the CFPI and abortions to determine if providing free, long-acting reversible contraceptives can be an effective policy step to reduce rates of abortion.

I knew going into the thesis process that I wanted to study something related to public health and policy. The CFPI jumped out because it seemed to be an effective policy that helped improve outcomes for women in Colorado.

**Pamela Alvarado-Alfaro**

- Major: Political Science
- Minor: Education, Schooling and Society
- AnBryce Initiative Scholar
- Advisor: Luis Ricardo Fraga

## A Village Divided: The Impact of Demographic Change on Successful Referendum Passage in Indiana

I addressed how demographic trends allow us to study whether race matters with regard to increases in public school funding.

The study addressed the lack of support for new funding opportunities in the Elkhart, Indiana, school district by examining the influence of demographics on the community's changing sentiments toward education referenda that increase school financing in a district serving a predominant minority population.

I chose this topic after interning at the Center for Civic Innovation and working on a community-based project in which we attempted to find technology-based solutions for the communication gap between non-English-speaking parents and educators in Elkhart.

Being a part of this project allowed me to see the disparities in education that exist within the community, and motivated me to try to address why they exist.

**Caroline Amrol**

- Major: Program of Liberal Studies
- Supplementary Major:  
Arts & Letters Pre-Health
- Advisor: Joseph Rosenberg

**Virginia Woolf and the Self**

In my thesis, I discussed how Virginia Woolf explores different conceptions of self. While some of her characters experience tension between a collection of selves, others exemplify the ideal modernist character by shielding all selves. In addition, the narrator plays the role that the self, or stream of consciousness, takes in the human person. Woolf leads her readers to an understanding of the self as something complex, constantly in flux, and ultimately unattainable.

I was fascinated by both the works and life of Virginia Woolf, a modernist writer from the 20th century. She wrote during a time of tremendous psychological research, and I was interested in observing the influence of those discoveries on her writing.



### Yuehan An

- Major: Art History
- Minor: Business Economics
- Advisor: Ingrid Rowland

## Renaissance Palaces in Rome

I used the field research that I conducted while studying in Italy during the fall semester of my senior year, as well as research in Europe, to explore the relationship between the “ideal palace” and the real Renaissance palaces in Rome. I compared architectural treatises and examples of palaces in Rome to note similarities and discrepancies between these sources, and I explored the meanings behind them.

I have always had a passion for architectural history, and wanted to use my honors thesis as an opportunity to train my research skills in this area. I went to Hungary and Serbia to study the international influences of Italian architecture. This trip was delayed twice due to the pandemic, so I started working on my project before conducting field research. However, since my Rome study abroad was pushed to the fall semester of my senior year due to the pandemic, I had the rare experience of researching in Rome while writing my thesis.

*Traveled to Italy, Hungary, and Serbia with funding from the Nanovic Institute for European Studies.*



### Lauren Anastas

- Major: Sociology
- Supplementary Major: Arts & Letters Pre-Health
- Minor: Catholic Social Tradition
- Advisor: Kraig Beyerlein

## Legal, Free, and Safe: Catholic Obstetrician-Gynecologists in Argentina on Choosing to Perform Abortion

On Jan. 24, 2021, Argentina legalized abortion on request up until the 14th week of pregnancy, adding the country to the very short list of Latin American countries where abortion on request is legal. The Catholic Church's longstanding influence on public policy and culture in Argentina has been strongly declining in recent decades, and the legalization of abortion shows that Argentinians are shifting away from strict adherence to Church doctrine.

My research was originally supposed to be done in-person by traveling to Argentina during summer 2021. When summer international travel was canceled, I changed my research design to a virtual format. Through Zoom interviews during summer 2021 with Catholic OB-GYNs in Argentina about their support for abortion legalization, I understood how their relationship with Catholicism and their experiences in the medical field have guided them to choose to provide legal abortion.

I believe obstetrics and gynecology is a unique medical field in that it is influenced by politics and religion. Abortion legalization in Argentina made me wonder how OB-GYNs were influenced by their faith and professional practice in deciding to perform abortions. As the gatekeepers of legal, safe, and free abortion access, I wanted to hear the unique perspectives of these physicians.

*Received funding from the Kellogg Institute for International Studies and the Institute for Scholarship in the Liberal Arts.*



## **Bridget Andree**

- Major: English
- Minors: Computing & Digital Technologies and Digital Marketing
- Advisor: Orlando Menes

## ***Papier-mâché*, a Poetry Collection**

*Papier-mâché* is a poetry collection that imaginatively draws out the tension between how women are falsely represented in media, culture, and society, and how they themselves achieve self-representation and affirmation in the creation of their own art.





### **Camila Antelo Iriarte**

- Majors: Political Science and Economics
- Minor: Computing and Digital Technologies
- Glynn Family Honors Program
- Hesburgh-Yusko Scholars Program
- Kellogg International Scholars Program
- Advisor: Scott Mainwaring

## **Explaining Party System Collapse in Bolivia, 2002-2005**

In order to explain the collapse of parties in Bolivia and the implications and lessons for parties not in power, I discussed the elements that motivated voters to abandon traditional parties and vote for outsider candidates and parties. Why did voters cease to identify with predominant parties? And why did leaders within the established parties not make strategic choices to preempt voter alienation, or to attract alienated voters?

There is extensive literature on party collapse and party system collapse, yet few of these works deal with Bolivia. Bolivia is an excellent case study because the three main parties from 1982 to 2002 (MNR, ADN, MIR) all collapsed within a short time in the 2000s.

In La Paz, Bolivia, I explored the literature and the streets of the country. I found amazing works of literature that I hadn't heard of before in various street stores, markets, and libraries. I got a deeper understanding of the culture, identity, and economy that influenced Bolivian politics. I also became more aware and knowledgeable of cultures in Bolivia and connected with my traditional practices.

*Traveled to La Paz, Bolivia, with funding from the Hesburgh-Yusko Scholars Program.*

**Alyssa Arbuiso**

- Major: Biochemistry
- Minor: Musical Theatre
- Glynn Family Honors Program
- Advisor: Matthew Hawkins

## The Interplay Between Theatre/Music Performance in Mexico and the USA

Through my capstone project, I explored how musical expression is affected by globalization. Specifically, I looked at the relationship between theatre performance in Mexico and the United States. I examined the effects of Broadway culture on Mexican musicals/theatre performances as well as the history of Latin/Mexican expression on the American musical stage.

I am passionate about travel and learning about different cultures, as well as musical theatre. I know that both of these spheres inform each other and wanted to explore the intricacies of the relationship.



**Sara Atassi**

- Majors: Philosophy and Political Science
- Advisor: Michael Rea

## How Pornography Consumption Patterns Affect College-Aged Males' Ideas of Masculinity and Sex

Using interviews with male undergraduate students at Notre Dame, I looked at how college-aged males think about pornography, how they define it, and how those ideas influence their perspectives on sex.

My thesis is in the field of experimental feminist philosophy and aims to draw conclusions about how pornography — and the lens through which young-adult males view it — subconsciously takes the place of real, empirical knowledge regarding masculinity and sex.

Much literature exists on how pornography affects how men view and interact with women, but there is no philosophical literature on how pornography affects what men think of themselves and of each other. I was curious to know how much of male sexual education is learned, experienced, or simply taken from pornography.

**Jiarui Bai**

- Major: Economics
- Supplementary Major: Applied and Computational Mathematics and Statistics
- Advisor: Jing Wu

## The Effect of Passive Investment Strategies on Stock Comovement

Following inclusion in a major stock index, stocks tend to exhibit both abnormal returns and excess comovement with the relevant index. The increase in comovement has raised potential concerns for financial stability, since it may result in wider and accelerated propagation of return shocks across index members. I examined price comovement following index inclusions and investigated its correlation with passive investment.

Passive investment, which seeks to track and mirror a market index or portfolio through minimal trading, is an important financial innovation that offers a low-cost and efficient investment strategy. However, different from active investment strategies, index-linked investing ignores characteristics of individual companies, except those related to index-weighting methodologies, but makes trading decisions based on market environment or sentiment. Hence, despite the efficiency and cost advantage of passive investing strategies, I think it's interesting to analyze whether they will jeopardize financial stability.

**Olivia Balcer**

- Major: Business Analytics
- Minor: Hesburgh Program in Public Service
- Sorin Scholar
- Advisor: Warren von Eschenbach

## Digital Health Access and Literacy: Investigating Ethical Responsibilities of Providers, from Physicians to Governments

My project explored how digital technologies in health care, such as electronic medical records and wearable devices, make health information more accessible for patients and can improve outcomes. The COVID-19 pandemic partially inspired my undertaking of the project, as the advancements in telehealth that have been made as a result, and the corresponding research into its effects, have been invaluable. But these new innovations also invite concern about inequities relating to digital health access and literacy, which have been exacerbated by the pandemic. By applying a biomedical ethical framework to this situation, I theorized how physicians, hospital systems, and governments should address inequities in a fair, responsible way.

My thesis combined topics I am most passionate about — health care, technology, ethics, and public policy — into a single project. The COVID-19 pandemic illustrated how important digital technologies in health care will be going forward, and I wanted to examine how traditionally underserved populations might be affected, as digital health literacy might be considered a new social determinant of health.

**Peter Baltes**

- Majors: History and Political Science
- Advisor: Daniel Graff

## Surveilling the Steelworkers: The Army's Occupation of Gary, Indiana, and the Birth of a Domestic Surveillance State

My project focused on the U.S. Army's three-month occupation of Gary, Indiana, during the 1919 Steel Strike. I used this incident to analyze the evolution of the military's role in suppressing labor strikes from the late 19th century to the beginning of the 1920s. I argued the unique circumstances of World War I led to the creation of a vast military surveillance network targeting the labor movement, and that the Army's crushing of the strike at Gary relied on tactics honed during this period of widespread domestic surveillance.

I chose this topic because I am interested in the history of the American labor movement, as well as the role that the military and the federal government have sometimes played in abridging civil liberties. I also was interested in researching and producing scholarship with regional relevance to northern Indiana.

*Traveled to Gary, Indiana, with funding from the Institute for Scholarship in the Liberal Arts.*

**Lincoln Bargender**

- Majors: Philosophy and German
- Minor: Constitutional Studies
- Advisor: Robert Audi

## The Complementarity of the First Two Formulations of Kant's Categorical Imperative

My thesis addressed the question of whether Immanuel Kant's first two formulations of the categorical imperative are equivalent and, thus, whether his ethical theory can rightly be called a master principle theory. I examined the first two formulations of the categorical imperative — the rational universalizability and humanity formulations. I argued that they are complementary to, rather than distinct from, one another, which makes Kant's ethical theory, with relation to the first two formulations of the categorical imperative, a master principle theory.

I decided to write about Kant's ethical theory because I have found his moral system the most appealing in my study of moral philosophy, and I wanted to reconcile this seeming contradiction in his moral philosophy between the claim that the categorical imperative is the sole principle of morality and the categorical imperative being presented in various formulations.

**Isabel Barnidge**

- Major: Spanish
- Supplementary Major: Arts & Letters Pre-Health
- Minor: International Development Studies
- Advisor: Pedro Aguilera-Mellado

**'A War in the Shadows': The Reconstruction of the Spanish Civil War through Volunteer Nurses' Care Narratives**

In my Spanish thesis, I analyzed the personal texts of four nurses who served during the Spanish Civil War: Spaniard Ana Pibernat, American Lini M. de Vries, Briton Priscilla Scott-Ellis, and Swiss Elizabeth Eidenbenz. After studying their writings, I presented a new genre of war literature: the care narrative. I further argued this type of narrative should be obligatory reading when it comes to war education. My thesis asserted that women's voices and efforts are crucial to war retellings.

As a Spanish and pre-health major, I wanted to pursue a topic that bridged the two disciplines. Over the course of my studies, I have often felt women's absence in both the humanities and the sciences. My project aimed to shine a light on the efforts of female nurses from around the globe to care for those injured during the Spanish Civil War. These women utilized both their talents and their interests while serving during a divisive conflict.



### **Alix Basden**

- Major: International Economics (French)
- Minor: Hesburgh Program in Public Service
- Glynn Family Honors Program
- Kellogg International Scholars Program
- Advisor: Lakshmi Iyer

## **Health Outcomes and Corruption in Africa**

My thesis looked at the effects of transparency (as measured through access to information laws) on corruption and health outcomes in Africa. I used the Afrobarometer, a large-scale dataset that asks Africans about their perceptions of government, as my primary source.

My research in the Kellogg International Scholars Program exposed me to the Afrobarometer and all the possible directions it could go. I have always been excited about public health, so this was a great topic to explore.

*Received funding from the Glynn Family Honors Program.*

**Lauren Bauman**

- Major: History
- Supplementary Major:  
Arts & Letters Pre-Health
- Minor: Data Science
- Advisor: Gail Bederman

## Examining Early Portrayals of the Birth Control Pill in *Ladies' Home Journal*

The birth control pill has a troubling history in America. Early versions of the pill led to many women experiencing health problems, such as blood clots, strokes, and heart attacks. In January 1970, Barbara Seaman, a women's magazine writer, encouraged U.S. Sen. Gaylord Nelson to lead hearings about it. I investigated how the pill was presented in *Ladies' Home Journal* before and after the Nelson hearings, to understand how the *Journal* navigated this controversy and communicated the pill's medical issues with women.

As an aspiring health professional, the topic of women's health is really important to me. I am grateful for the opportunity to synthesize my majors with this thesis and study questions related to women's health history, the pill, informed consent, and medical communication.

**Marina Bernovich**

- Major: History
- Supplementary Major: Theology
- Advisor: Rebecca Tinio McKenna

## The Impact of the United States' Entry into World War I on Foreign Language Education in Milwaukee Public Schools

At the start of the 20th century, Milwaukee, Wisconsin, had a strong program of foreign language instruction in primary schools. Prior to World War I, approximately three-fourths of the student population were enrolled in a foreign language course.

After the United States entered the war in 1917, parents pulled their children out of foreign language courses. The program permanently lost its pre-war momentum, despite school administration opposition to ending foreign language instruction.

I am from Milwaukee and am interested in local history. Studies on how World War I led to the decline of the German language in Milwaukee have not addressed how the public school system was affected, even though the schools had a strong program in teaching German. I wanted to bring attention to an understudied aspect of this pivotal moment in Milwaukee history.

*Received funding from the Institute for Scholarship in the Liberal Arts.*



### **Susan Bibbs**

- Major: Biological Sciences
- Minor: Science, Technology, and Values (STV)
- Advisor: Anna Geltzer

## **Ethics of Clinical Trials in Oncology**

My capstone explored the ethics of how oncology clinical trials are structured and conducted, particularly in the context of the treatment of human subjects. This project aimed to highlight the unique ethical problems faced in oncology clinical trials relative to other fields and to analyze trends in personal experiences shared by patients and clinicians in these trials.

I chose this topic because I am interested in oncology and the ethics of scientific research. I wanted to pursue a topic that would spread awareness about how human values affect the way research is conducted, and clinical trials that focus specifically on oncology provide unique examples over a long history.

**Caroline Bickerton**

- Major: Neuroscience and Behavior
- Minor: Catholic Social Tradition
- Advisors: Bill Purcell and Nancy Michael

## Access to Green Space as a Factor of Child Mental Health

My capstone project explored the mental health benefits that urban green spaces provide, particularly for children. In our increasingly urbanized society, many children lack access to local parks and greenery, which can impact their stress levels and risk for mental illness later in life. My project aims to highlight how access to local green spaces could impact child mental health in the local context of St. Joseph County.

After taking a Catholic Social Tradition course on sustainability, I was eager to explore the interplay between our natural environment and our brain development. This capstone gave me the opportunity to integrate my interest in environmentalism with my neuroscience background to advocate for access to green space as critical for our well-being and Earth's well-being.



### Mary Biese

- Major: Program of Liberal Studies
- Minors: Theology and Liturgical Music Ministry
- Advisor: Steve Fallon

## Sodden-with-its-Sorrowing-Heart: Prayer Amidst Tragedy and Poetry as Prayer in J.R.R. Tolkien's and Gerard Manley Hopkins' Poetry

I put J.R.R. Tolkien's unfinished poem, *The Lay of Eärendel*, alongside Gerard Manley Hopkins' *The Wreck of the Deutschland*. After connecting the authors biographically and thematically, I explored how these two poems articulate harrowing loss, a crying-out (prayer), and the merciful response of the divine to that prayer. I also investigated the authors' invitation to pray with poetry, especially in the face of great tragedy.

I've loved Hopkins' poetry and Tolkien's fictional corpus for many years. Tolkien's poetry is a subject rarely studied, which made for an interesting investigation. I was further inspired by a recent groundbreaking book on Tolkien, which encourages scholars to take into account Tolkien's Catholicism and his wide readership.

*Traveled to London and Oxford in England with funding from the Nanovic Institute for European Studies.*



**Maria Jesus  
Bobenrieth Agurto**

- Major: Economics
- Supplementary Major: Asian Studies
- Advisors: Denise Della Rosa and Eva Dziadula

## Demographic Characteristics of Korean Immigrants in Japan

I contextualized Korean migration to Japan and described the age and gender of immigrant cohorts. Then, I analyzed why the South Korean immigration to Japan has diminished in the last 20 years. I have great interest in Korea and Japanese society. I had a class during my junior year that inspired me to investigate this topic.





### John Boland

- Major: Political Science
- Minors: Philosophy, Politics and Economics; and Classical Studies: Civilization
- Balfour-Hesburgh Scholars Program
- Advisor: Samuel Piccolo

## Potawatomi Relations with British and American Governance

My thesis examined the differences in British and American Indian policy from 1754 to 1838 and how various Potawatomi villages resisted removal. Potawatomi villages across the Old Northwest were removed to different areas at different times by the American government in the 1830s, with the Pokagon band successfully resisting removal altogether. This thesis hopes to better understand the reasons behind these disparities, and my research included traveling to the British Indian Department at The National Archives in Kew over fall break.

I became passionate about Native history, in particular the Potawatomi, after conducting research on their history with Notre Dame. I wanted to explore the nuances of Native American removal, and the Potawatomi provided excellent case studies for instances of Native resistance.

*Traveled to London, England, with funding from the Institute for Scholarship in the Liberal Arts.*



### Margaret Borgos

- Majors: English and Gender Studies
- Minor: History
- Kennedy Scholar
- Advisor: Barbara Green

## Althea Gibson's Autobiography (Life-Writing and Sport)

I researched women in sport through an analysis of tennis player and golfer Althea Gibson's autobiography. Her narrative shared her experiences of competition during the 1950s. I integrated various theories to understand the manifestation of the female athletic body in written text. Gibson's work is evidence of women's sporting narratives serving as forms of social resistance to the dominant culture of sport as their bodies become "sites of trauma," "sites of spectacle," and "sites of resistance."

Female athletes' narratives demonstrate how women's inclusion in sport has broader implications for social justice initiatives. Women's entrance into sport introduces new questions of who is an American athlete, how athletics relate to citizenship and identity, and how the greater inclusion of all people in sport shifts broader social structures.

*Received funding from the Gender Studies Program's Genevieve D. Willis Gender Studies Research Grant.*



### Margaret Borgos

- Majors: English and Gender Studies
- Minor: History
- Kennedy Scholar
- Advisor: Katherine Walden

## The ESPN Body Issue: An Intersectional Analysis Through Mulvey

Female athletes have begun producing digital rhetoric with the advancement of new technology for photography and social media. Identifying this shift inspired me to pursue a Gender Studies capstone project exploring whether *ESPN The Magazine's* "The Body Issue" publication may unintentionally reinforce "the male gaze" as defined by Laura Mulvey.

My research concerned how the specific contexts of the visual images in "The Body Issue" implicitly reflect either the sexualization and/or empowerment of female athletes. "The Body Issue" allowed for an exploration of the portrayal of female athletes in the media. The performance-focused images, video interviews, and textual quotes in its campaign work to subvert "the male gaze" by presenting female athletes as active subjects with power, agency, and autonomy.

*Received funding from the Gender Studies Program's Genevieve D. Willis Gender Studies Research Grant.*

**Tyler Bove**

- Major: Economics
- Supplementary Major: Statistics
- Glynn Family Honors Program
- Advisor: Robert Collinson

## Racial Discrimination in the Mortgage Lending Market

Despite the presence of legal protections, many studies have found that implicit discrimination still influences decisions in the mortgage lending market. This paper quantifies the influence that race has on the likelihood of a loan application being rejected in 52 of the most populated counties in the United States. I examined if there is a differential impact on the likelihood of home ownership and having a mortgage for Black versus white heads of households based on variation in the estimated discrimination levels for these counties.

I chose this topic because it explores the interesting potential tradeoffs between predictive power and equitable lending. Many of the factors that lenders frequently use in their decision process may indirectly (or potentially directly) discriminate against minority applicants. This has major implications for building wealth and generational economic mobility.



### Chelsey Boyle

- Major: English (Honors Concentration in Creative Writing)
- Minor: Computing and Digital Technologies
- Advisor: Orlando Menes

## *Abject Beauty: A Poetry Collection*

My poetry collection is an exploration of a loss of innocence. It begins in a whimsical, childlike state and descends into abjection, weaving themes of womanhood, mental health, and the body. Yet, beauty and grace are found beginning to end as my work praises the downfallen and revels in queasy sensations. A new voice emerges, one brave enough to search for the prettiest words to hang around the neck of despair and ugliness. The end makes peace with both sides — the innocent and the corrupt, the beautiful and the grotesque.

My collection reflects my maturation as a poet. I wanted a work that aged with me, and I finished with a time capsule of growth, self-exploration, and a changed view of “beautiful art.”

**Megan Brinkman**

- Major: Political Science
- Minors: Russian Studies and the Hesburgh Program in Public Service
- Allan J. and Reda Radwan Riley Scholar
- Advisor: Dan Lindley

## Never Say Never: Analyzing the Effectiveness of 'No Negotiation' Policies in Minimizing Terrorist Group Violence

I hoped to answer the question of under what conditions will “no negotiation” policies alter terrorist group strategies. My research focused on why terrorist groups pursue cooperation or escalation with the state in the face of “no negotiation” policies. Finally, I was curious what predictive power these questions hold for ongoing conflicts, more specifically with organizations operating in Central Asia and the Middle East and North Africa (MENA) region, including the Taliban and the Islamic State–Khorasan Province (ISIS-K).

My coursework through the Notre Dame International Security Center and with the Program in Arabic and Middle Eastern Studies encouraged me to consider which factors determine the resiliency of violent non-state actors. In particular, I am interested in how the communication of state intentions affects the strategy of insurgent and terrorist groups.

**Lily Brouder**

- Major: Psychology
- Minor: Journalism, Ethics, and Democracy
- Advisor: Gerald Haeffel

## Does Content Matter?: Testing the Incremental Contribution of Written Attributions for Predicting Depressive Symptoms

The goal of this project was to determine if the traditional measure of cognitive vulnerability can be improved. Cognitive vulnerability is a tendency to make negative inferences about causes, consequences, and self-worth in response to life stress that ultimately leads to hopelessness and depressive symptoms. By analyzing a written component of the Cognitive Style Questionnaire, I sought to improve the assessment of cognitive vulnerability to better predict which individuals will develop depressive symptoms.

I chose this topic because I am really interested in the study of depression, as it is the leading cause of disability in the world. I want to contribute to the field of depression research by improving the assessment of depression risk, in order to better understand which individuals will require intervention.



### John Burke

- Majors: Program of Liberal Studies and Economics
- Minor: Classical Studies: Civilization
- Advisor: Kirk Doran

## The Ends of Economics

My research delves into the development of decision theory, the history of utility maximization, and especially the contributions of Gary Becker and George Stigler, inventors of human capital theory. The goal of my thesis was to discover how economics moved from a discipline primarily focused on the economy and the market to a discipline whose essential characteristic is the study of scarce resources.

During my first year of college, someone asked me what it meant to study economics. Though in a broad sense, I knew that to study economics was to study the allocation of scarce resources and how people interact with market forces, I could not figure out what it meant more concretely. I wrote this thesis in an attempt to answer that question.

**Matthew Carranza**

- Majors: Economics and Political Science
- Certificate in International Security Studies
- Advisor: Dan Lindley

**International Law and the Arctic Region**

I analyzed the legitimacy of international law in settling maritime disputes between states in order to predict the role that it will play in settling Russia's claims to the Arctic region. I focused on the realist and liberal theories of international relations to analyze previous cases and the current conditions in the Arctic.

I chose this topic because academic literature is divided on whether international law can peacefully settle disputes between states. Realists argue there are outside factors that influence states' actions, while liberals argue that international law has legitimate authority. This split interested me, and I wanted to investigate further.



### Jessie Carvelli

- Major: Sociology
- Minors: Constitutional Studies and Computing and Digital Technologies
- Advisor: David Gibson

## Cybercrime Law

I conducted research to identify areas where cyberlaw is not fully developed, has been misapplied, or is confused in application to real-world issues related primarily to privacy concerns paired with advancing technology. Additional research included identifying gaps in the law, as well as the current procedures of those who understand the law and those who understand the technology to effectively work together.

As a result of taking the course Cybercrime and the Law in fall 2020, I became extremely interested in the incongruence between individuals who make and enforce cybercrime law and individuals who understand the technology involved.



## Emilia Castelao

- Major: History
- Supplementary Major: Global Affairs
- Posse Scholar
- Advisor: Katlyn Carter

## King Louis XIV and Diplomacy in French Colonial Louisiana

My thesis explored diplomacy in French Colonial Louisiana during the reign of King Louis XIV. I chose this topic because I grew up in New Orleans and am interested in its history. Over winter break, I traveled to Paris, France, and conducted research at the archives at the Palace of Versailles, which was built by Louis XIV.

*Received funding from the Nanovic Institute of European Studies and traveled to Paris, France.*



### **Kristen Cavanaugh**

- Majors: Marketing and History
- Advisor: Elisabeth Köll

## **The Public Perception of J.P. Morgan as a Financier, Collector, and Philanthropist**

At the turn of the 20th century, J.P. Morgan was the uncrowned king of Wall Street who accumulated his wealth through his private bank. When panic struck the American financial ecosystem, however, he was suspected of having too much control in the American banking industry. J.P. Morgan did not work exclusively in finance, however, as the media publicized his work in art collection and philanthropy. In light of his donations and passion for art, the public sentiment surrounding the banker became more colorful and complex.

As a marketing and history major, I wanted to integrate both of my areas of study. I wanted to explore whether J.P. Morgan's philanthropy and art collection played a hand in changing his reputation over time. After taking a course on the history of financial markets, I wondered about the public relations aspect of accumulating wealth and acts of philanthropy for a public figure's reputation. J.P. Morgan, as one of the strongest brands in the world today, seemed like the perfect figure. His legacy remains cemented in modern America in two ways — finance and art — the combination of which has transformed his perception from a figure of greed and distrust to his name being on one of the most respected banks in the world.



### Shannon Celeste

- Major: Psychology
- Minor: Education, Schooling, and Society
- Advisor: Nicole McNeil

## Optimizing Feedback to Improve Children's Understanding of Mathematical Equivalence

I explored how to optimize feedback that elementary students receive during an intervention to promote understanding of mathematical equivalence. I worked on a grant-funded project to take the Improving Children's Understanding of Equivalence program online, and my research informs the manner in which feedback should be either accumulated or diminished as students work through the problem sets.

Due to the uncertain situations in schools with the pandemic, we decided to forgo our plan of in-person data collection, included TutorND students in our interventions, and used tutors to administer the problem sets. I could not have collected my data without the help of tutors.

I have been a member of Nicole McNeil's Cognition, Learning, and Development Lab for more than two years and have always been very interested in promoting children's understanding of math concepts. Through my work with TutorND, I have seen the importance of equivalence as students move to higher-level math courses. I hope this research can help students receive helpful feedback as they learn.



**Elias Chahoud**

- Majors: Science-Computing and Philosophy
- Glynn Family Honors Program
- Advisor: Tijana Milenkovic

## Analysis of Molecular Networks in the Context of Protein Function Prediction

My thesis project involved studying the ability of biological network-of-networks (NoN) structures, which combine existing knowledge of protein-protein interactions and protein structural information, to yield novel protein function predictions. My project specifically aimed to investigate the capacity of a biological NoN incorporating both experimentally derived and high-confidence predicted structures to make protein function predictions, attempting to remediate deficiencies in available experimentally derived protein structures.

I chose this topic because it presented an opportunity to apply my interest in computer science to my career-driven interests in biology and medicine. This topic has ultimately allowed me to sharpen my interdisciplinary skills by working at the intersection of these two fields of study.

**Lucia Chang**

- Majors: Biochemistry and Theology
- Minor: Catholic Social Tradition
- Advisor: John Betz

## A Divine Remedy: Restoration through Humility

At the start of creation, God created human beings from the ground, which shares the same root as humility. Soon after, pride distorted human's nature. Yet, with humility, Christ, as the new Adam, redeemed human nature. This project examined how the great Saints imitated Christ and cultivated humility through love and dependence on God. Further, it examined how people in the modern day can rediscover their true self through humility and better love God and others.

Humility and love are two important virtues that have appeared constantly in my academic endeavor in theology and have guided my spiritual journey to be more open to God's grace. I hoped that through learning more about them, I could better appreciate and celebrate everyone's gift from God.

**Lucia Chang**

- Majors: Biochemistry and Theology
- Minor: Catholic Social Tradition
- Advisor: Bill Purcell

## Opioids — A Blessing and a Curse

Derived from the beautiful poppy seed plant, opioids have been both a great blessing as an analgesic for patients suffering severe pain and a deadly curse that has taken hundreds of thousands lives in the United States. My project involved creating artwork to illustrate benefits and harms brought by opioids and how society can still remain hopeful in fighting against the opioid crisis, from the perspective of Catholic social teaching.

Drug addiction is a serious and widespread problem with severe consequences. It can result from prescription abuse and severely increases the burden for the most vulnerable population. As someone who desires to pursue a medical career to be of service to the vulnerable community, I hope that learning more about the crisis can help me better understand and support patients suffering through addiction.

**Elizabeth Chen**

- Major: Economics
- Minors: Accountancy and Data Science
- Advisor: Maciej Kotowski

## How Do Objectives on Disease Transmission or Mortality Impact Vaccine Prioritization Strategies?

I built theoretical models that describe the transmission of disease within the simulated population in simple structures and analyzed how different parameters such as age groups and mortality can impact the ultimate transmission severity. These models can show us different results that we can achieve by prioritizing vaccination for one group rather than the other if we focus on controlling either mortality rates or contact rates.

During the course of COVID-19, different countries have distributed vaccines based on different age priorities. The United States prioritized elders in Phase 1b, yet China pushed this age group to the end. I was curious how effective the vaccine prioritizations were in achieving different objectives and whether they can contribute to long-term effects.



### Emily Chen

- Major: Science-Business
- Minor: Anthropology
- Advisor: Lee Gettler

## University Students' Physiological Cortisol Production and Psychosocial Stress During COVID-19

This project investigated Notre Dame undergraduates' psychosocial well-being and social relationships and their correlations to a stress-related physiological marker (cortisol) during a COVID-19-impacted semester. Using data collected during spring 2021, it also aimed to assess undergraduate students' satisfaction with the previous "HERE" campaign that was part of the university's COVID-19 response.

Through the measurement of cortisol production in fingernail clipping samples and students' psychological well-being through validated survey instruments at the Hormones, Health, and Human Behavior Laboratory, the study provided valuable information about individual differences in young adults' stress-related physiological profiles and sources of psychosocial resilience during on-campus student life.

I am interested in the combination of biological and psychosocial factors that play into individuals' health and well-being. It was difficult for everyone to adjust to new routines during the pandemic, and the experiences the student body witnessed during fall 2020 were unlike others at universities that suspended in-person instruction. Many of my peers, myself included, were worried about our health, social relationships, and academic performance during the semesters we were on campus before the vaccine was released.

*Received funding from the Institute for Scholarship in the Liberal Arts.*



### Jihan Chen

- Majors: Program of Liberal Studies and Economics
- Advisor: Gretchen Reydam-Schils

## The Myth of Er: An Apology of Poetry

My thesis project aimed to answer the question: Why does Plato use the myth of Er as an ending to the *Republic*? Through this question, I explored how the myth of Er relates to the greater project of the *Republic* and, ultimately, to understand the relationship between poetry and philosophy in Plato's dialogues.

I'm fascinated by Plato's poetic language and his use of myths in his largely philosophical dialogues. This topic helped me to think about the intimate relationship between philosophy and literature.





### Robert Christmann

- Major: Political Science
- Minor: Business Economics
- Advisor: Erin Rossiter

## Every Man a King, or How the Democratic Party Can Win Back Rural Voters

Republican candidates are hoping to emphasize cultural issues heading into the coming elections. Their reasoning is clear — these issues help them to win over rural communities. Surveys have repeatedly shown that rural voters tend to be more culturally conservative than their urban and suburban counterparts. These same voters, however, tend to hold more liberal economic positions. As Republican candidates seek to drive up rural turnout to win elections, they have undergone an intense effort to emphasize these cultural issues.

This paper evaluated the capability of Democratic candidates to do the opposite. Can Democrats use campaign priming to more strongly emphasize issues of economic populism? I have worked on a variety of campaigns in different states during my college career and developed an interest in vote choice in rural communities. This interest was piqued after reading *What's the Matter with Kansas?* by Thomas Frank, so I decided to conduct a study.

*Received funding from the Flatley Center for Undergraduate Scholarly Engagement.*

**John Clark**

- Major: Anthropology
- Minor: Collaborative Innovation
- Advisor: Maurizio Albahari

## The Conflict Between Ideology and Agency in the British Punk Subculture of the 1970s

My thesis is about the ways women of the male-dominated British punk subculture rebelled against the rebels of their own community. Relying on memoirs, interviews and autobiographies from the past decade that challenge the revisionist myth of gender equality in punk, I explored the dynamics of practice and agency that these women of punk have articulated in their own words. I already had a wealth of knowledge about the British punk subculture. I arrived at the specificity described above after reading Viv Albertine's autobiography, *Clothes, Clothes, Clothes. Music, Music, Music. Boys, Boys, Boys.*, which was the first source I'd read that challenged the dominant patriarchal discourse.

I read recently that anthropologist David Graeber wrote so that his mother, who didn't have a college education, could read and understand it. I also read that shortly before he died, when speaking to a friend about *The Dawn of Everything*, he remarked with a mischievous tone, "This is going to mess things up!" As an anthropologist and as an accomplice, I aspire to produce work that is both accessible and mischievous.

**Victoria Clinton**

- Major: Science Pre-Professional Studies
- Minor: Musical Theatre
- Advisor: Matt Hawkins

**Stage manager for FTT's production of *Cyrano***

This year's Department of Film, Television, and Theatre production was *Cyrano*, based on Edmond Rostand's play. Our version, adapted by Matt Hawkins, is a swashbuckling love story with modern adaptations, including music by Veronica Mansour, TikTok-inspired bar scenes, and Cyrano being a woman. I served as stage manager, beginning with the first table reading and finishing with nine sold-out shows. Throughout the process, I created the production schedule, ran rehearsals, called the show, and even got to dabble in sword fighting.

In class with Matt Hawkins, I became interested in the production side of theatre. Taking Musical Theatre History allowed me to appreciate how theatrical works have developed over time and participating in the Performance Techniques course showed me the intricacies that go into a single performance. Being the stage manager for *Cyrano* allowed me to be part of the creation of a brand-new piece of work.



### Alena Coleman

- Majors: English and Spanish
- Minor: Education, Schooling, and Society
- Advisors: Mark Sanders, Tatiana Botero, and Maria McKenna

## 'A Woman is Everything a Man Need': African Religious Ritual and Gender in August Wilson's *Joe Turner's Come and Gone*

My project is two-fold. In the first part of my thesis, I looked at the intersection of rituality, realism, and androcentrism in August Wilson's *Joe Turner's Come and Gone*. I argued that women in the play are prevented from access to ritual and thus are unable to articulate their spirituality. The second part of my project analyzed the efforts of the South Bend Civic Theatre to produce Wilson's plays in South Bend schools.

I have worked with the South Bend Civic Theatre's *August Wilson Project* as a researcher and curriculum writer for three years and have seen the impact of Wilson's plays about Black American life on students. My work with the students inspired me to continue improving our understanding of Wilson's plays.

Originally, I planned to conduct focus groups with high school students before and after they viewed a live production of *Joe Turner's Come and Gone* in their school. However, due to the COVID-19 pandemic, the production was pushed back into the summer. Because students wouldn't be seeing the play, I adapted my project. I decided to conduct additional interviews via Zoom with educators and theatre personnel involved in the project and to use data from previous research to craft a three-year descriptive analysis of the South Bend Civic Theatre's *August Wilson Project* as an arts intervention in education.

*Received the Flatley Center for Undergraduate Scholarly Engagement's Conference Presentation Grant.*

**Grace Condon**

- Major: Economics
- Supplementary Major: Chinese
- Advisor: Eva Dziadula

## In-State Tuition Policies for Undocumented Immigrants

My thesis analyzed state-level policies that extend access to in-state tuition at public colleges and universities to undocumented immigrants. Since 2001, 20 states have passed legislation offering undocumented students with specific residency requirements access to college tuition subsidies.

My research used a difference-in-difference approach exploiting temporal and state variation in the implementation of these policies and found these policies significantly impact college enrollment of likely undocumented immigrants. Last year, I had an internship at a legal advocacy organization and worked on a team focused on immigration policies. This work sparked my interest in state-level policies that aim to improve outcomes for undocumented immigrants.



### Julianna Conley

- Major: Sociology
- Supplementary Major: Arts & Letters Pre-Health
- Minor: Journalism, Ethics, and Democracy
- Glynn Family Honors Program
- Advisor: Erika Summers-Effler

## Hyperfemininity in Tween Television and its Correlation with Conceptions of 'Professionalism'

My thesis investigated the portrayal of hyperfemininity in tween television and its correlation with conceptions of "professionalism" in the workplace. I analyzed tween television's portrayal of hyperfemininity and its influence on the legitimacy of female leadership. I coded films for markers of femininity, noting the types of characters who exhibit them, and created a survey about conceptions of professionalism. I also interviewed women about their experience negotiating their identity as a woman and a professional.

By investigating how the media influences perceptions of professionalism, my thesis sought to better understand why women are underrepresented in leadership positions and why certain pursuits and characteristics are more valued than others.

I chose this topic after reflecting on the media that I consumed growing up and realizing a pattern — that the "girly girl" was almost always the mean girl or the airhead. Internalizing that misogyny, for a long time I thought I couldn't act girly or feminine if I wanted to be taken seriously. I wanted to see whether other girls internalized that way of thinking too, and investigate what other messages the media teaches girls.

**Sarah Conley**

- Majors: History and Political Science
- Minor: French and Francophone Studies
- Advisor: Sarah Shortall

**Fin-de-siècle French Feminism and Empire**

I studied how French feminists at the end of the 19th century, including Hubertine Auclert and Louise Michel, viewed and discussed empire. Their views range from pro-empire with great enthusiasm for the French mission and a desire to incorporate women into the colonial project, to anti-colonial in active support of Indigenous uprisings. I chose this topic because I was interested in the historical context of how modern French feminists approach cultural integration and issues such as the headscarf ban in French public schools.

In the summer, I went to Paris, France for two weeks to conduct archival research. At the Bibliothèque Historique de la Ville de Paris and the Bibliothèque Marguerite Durand, I read letters, newspaper articles, and manuscripts from the women I studied.

*Traveled to Paris, France, with funding from the Nanovic Institute for European Studies.*

**Kate Connolly**

- Majors: International Economics (Russian) and Political Science
- Minors: Computing and Digital Technologies and European Studies
- Advisor: Forrest Spence

## Impact of the 2014 Amendment of Federal Law No. 115-FZ on Russian Migration

I did an economic analysis of the impact of a 2014 migration policy change on Russian immigration numbers, specifically on the Commonwealth of Independent States, to see if the policy was effective in bringing in more economic migrants into the Russian Federation.

I am passionate about migration topics and find Russia's approach to migrant policymaking and control to be unique. I believe that understanding how migration policy functions can allow governments to improve policy and allow for more humane management of migrant flows.

**Kate Connolly**

- Majors: International Economics (Russian) and Political Science
- Minors: Computing and Digital Technologies and European Studies
- Advisor: James McAdams

**The Constitution as an Authoritarian Tool: Orbán and Hungary**

This was a case study of Viktor Orbán's rise to power in Hungary and how he evolved as an authoritarian leader. I identified key characteristics that he exhibits as a leader, and how these characteristics are reflected through his interactions over time with the Hungarian constitution.

I believe that populism and democratic backslides are the biggest threats to international peace. Understanding how authoritarian leaders come to power and how they gain influence is growing even more relevant, and I believe that analyzing Orbán's rise to power can contribute to understanding the populist phenomenon.



### Emma Connors

- Major: Design (Concentration in Visual Communication Design)
- Minor: Anthropology
- Advisor: Neeta Verma

## Enhancing Educational Experiences of Visitors to Public Lands

Knowledge is power. Our world needs us to use our power positively. Public lands, “America’s Best Idea,” conserve ecosystems, culture, and playgrounds to explore. But they’re in danger. In Glacier National Park, glaciers are melting, but most visitors don’t know that. Knowing something fosters care about it; care compels positive action. Enter Park Pack, trading cards I designed that encourage visitors to hike, explore visitor centers, and ask rangers questions. Cards about wildlife, Indigenous history, and more can be collected physically and digitally — encouraging folks to collect, care, conserve.

Hiking and skiing mountains, fly-fishing rivers, camping in Yellowstone, and backpacking in GNP made me who I am. I gained respect for diversity, care for the vulnerable, confidence, and grit. Following my curiosity fostered a deep care for public lands that manifests in action. I pursued a thesis to enhance the education of visitors to public lands, guided by a belief that knowledge fosters care; care fosters positive action.

In the fall, I visited Glacier National Park to explore, take photos for my trading cards design, collect materials, and chat with park rangers and visitors. I visited both sides of the park, hiked five different trails, and talked with six groups of visitors about their reasons for visiting, what they know about the park, and how they’d like to learn more about it.

*Received funding from the Undergraduate Research Opportunity Program to travel to Glacier National Park in Montana.*

**John Consolie**

- Majors: Theology and Arabic
- Minor: Philosophy, Religion, and Literature
- Advisor: Kimberly Belcher

**Our Sure Foundation — An Ecumenical View on Liturgy and Ministry**

I identified points of unity and disunity in how “traditionalist” and “mainline” liturgical communities in parishes enact ministry in individual formation, family formation, and ministry outside the parish. I attended Eucharist at an Episcopal parish in downtown Detroit, Michigan, and had conversations with the rector of the parish.

Through ethnographic studies in Episcopal parishes, I identified the fruits from liturgy in these ministries, compared them to their Roman Catholic counterpart, and offered an ecumenical exhortation to come together despite liturgical differences to minister to God’s children and broader society.

I have witnessed both large-scale and personally how the Christian faithful’s reception of certain forms of liturgical celebrations and the denominations from which they come actively divide people both inter- and intra-denominationally. This thesis attempted to point to the fruit of both liturgies in ministry and exhort Christians to reconciliation among ourselves.

*Traveled to Detroit, Michigan.*

**Paige Cooper**

- Major: Psychology
- Minor: Hesburgh Program in Public Service
- Advisor: E. Mark Cummings

## Emotional Security in the Family and Adolescent Sectarian Antisocial Behavior: The Moderating Role of Maternal Outgroup Trust

Using questionnaire data from Northern Ireland residents in the post-peace accords era, my thesis examined emotional security in the family as a buffer against three negative adolescent outcomes: low emotional security in the community, displays of aggression, and participation in sectarian antisocial behavior. The mother's level of trust in the opposing sociopolitical group was examined as a moderator of this relationship.

I selected this topic because I am interested in the sociopolitical environment as a stressor in child development. It is undoubtedly difficult for parents to raise children while community, national, or global circumstances are stress-inducing, but research has demonstrated that secure familial relationships greatly benefit child development, even in these circumstances.

**Paige Cooper**

- Major: Psychology
- Minor: Hesburgh Program in Public Service
- Advisor: Kathleen N. Bergman

## Parent-Child Interaction Therapy: Cost-Efficient Reduction of Child Maltreatment and Domestic Violence in South Bend

My capstone project was a policy memo detailing parent-child interaction therapy (PCIT) and its usefulness for families with a history of intimate partner violence or child maltreatment. I argued that parent-child interaction therapy would be an effective addition to the domestic violence prevention efforts already at work in the South Bend area. I also discussed how costs of the intervention could be mitigated as well as the positive effects on the community and the state that would result from the reduction of violence within families.

I chose this topic because I am interested in the implementation of psychological interventions in public health. As a lifelong resident of Indiana, I am particularly interested in interventions for maltreating families. Indiana, sadly, has one of the highest rates of child abuse and neglect in the country. Thankfully, interventions like PCIT have proven effective at reducing child maltreatment.

**Matthew Cotner**

- Majors: Political Science and Economics
- Minor: History
- Advisor: Brian Fogarty

## How Partisanship Affects School Funding in Indiana

Public K-12 schools receive much of their funding at the local level, making local referendums an important factor in their overall funding. It is unclear how much partisanship can affect these local referendums. To examine these relationships, I used data on Indiana school referendums, presidential vote choice, and the U.S. Census data from November 2008 to May 2019.

My father is a high school teacher, so education issues are important to me. Indiana is my home state, and I know how valuable referendums can be to communities and school quality, so I wanted to analyze what factors play a significant role in their results.



### Jonathan Couri

- Major: Biological Sciences
- Minors: Studio Art and Theology
- Glynn Family Honors Program
- Stamps Scholars Program
- Advisor: Lacey Ahern

## The Difficulty of Breaking Bad News: Experiences and Perspectives of Pediatric Healthcare Workers at Queen Elizabeth Central Hospital (QECH) in Malawi

My project was a mixed-methods study that investigated why pediatric health care workers may not be successfully communicating to patients and families so that they understand their diagnosis. Surveys were distributed to pediatric health care workers at Queen Elizabeth Central Hospital (QECH) in Malawi and semi-structured interviews were conducted with a subset of this group. Due to COVID-19, I did not have the option to travel to Blantyre, Malawi, to conduct the study at QECH. As a result, my international study was conducted through an all-virtual research collaboration.

To coordinate the research team, I was the point person and scheduled biweekly Zoom meetings with my supervisors in Africa and the United States. In research meetings, I led discussions in study design and implementation, while learning about Malawi's culture and context. I also remotely checked in with our two local research assistants to talk about their roles in data collection and analysis. Results identified the scope of palliative care training received by pediatric health care workers at QECH and factors influencing their ability and willingness to break bad news to pediatric patients and their families.

I find global palliative care to be resonant and understand that breaking bad news is crucial, as it determines what patients are able to hear, process, and understand. In many areas, especially lower-middle-income countries, the task is not done well. I saw this topic as a step toward improving communication.

*Received funding from the Glynn Family Honors Program.*

**Katie Coury**

- Major: Political Science
- Minors: Education, Schooling, and Society; Italian; Musical Theatre; Theology
- Advisor: Andrea Christensen

## Measuring the Extent to Which Education Initiatives Change After their Implementation in the State of Arizona

This study investigated how frequently education initiatives in the state of Arizona are changed — reinforced, revised, or repealed — after they've been passed and implemented. It additionally sought to determine the most common path that Arizona education initiatives take on their road to revisions.

I chose this topic to begin to demystify political processes that may occur without the community's knowledge following an initiative's success on the ballot that could have a different impact on the community than voters anticipated. I additionally wanted to learn how these policies could be better designed and altered, if needed, to serve their intended functions in our communities.



**Katie Coury**

- Major: Political Science
- Minors: Education, Schooling, and Society; Italian; Musical Theatre; and Theology
- Advisor: Matt Hawkins

**Assistant director for FTT's production of *Cyrano***

For my musical theatre capstone, I was an assistant director for the Department of Film, Television, and Theatre's spring musical, *Cyrano*, which was adapted and directed by Matt Hawkins, with new music and lyrics from Notre Dame graduate Veronica Mansour. I served in this role during the pre-production and early stages of rehearsals and provided insight to the director, production team, and cast. Once *Cyrano* opened, I attended the show and reflected on its final form as compared to earlier stages.

Through the musical theatre minor I have cultivated my passion for performing and directing and have been fortunate to practice both areas in eight campus productions. I decided to pursue directing to better learn how to lead a production, as well as how to best support actors through holistic character development and performances.

**Andrew Crecca**

- Major: Biological Sciences
- Minor: Musical Theatre
- Advisor: Matt Hawkins

***Flip Flop Swap: A Musical Comedy***

*Flip Flop Swap* is a musical comedy about long-term relationships. After his parents, Bob and Anne, divorce, Robert and his wife, Kathy, vacation in Mexico where Robert meets Steve and realizes they swapped flip-flops years ago. They also swap partners when Robert falls for Steve's girlfriend, Jenna, and Kathy for Steve. Meanwhile, the resort physician, Dr. Acula, courts Anne and desires to suck her blood, but Bob vows to save her. As shenanigans ensue, audience members wonder who will end up with who.

I began writing *Flip Flop Swap* last semester in Matthew Hawkins' musical theatre lab/composition course. Inspired by a wild family vacation to Mexico and a recent breakup with a long-term partner, I pursued *Flip Flop Swap* over other show ideas because it felt true to me and fun.

**Zef Crnkovich**

- Major: Classics
- Minor: Constitutional Studies
- Advisor: David O'Connor

## The Shipwrecked Sailors: The Shared Nostos and Bliss of Penelope and Odysseus

My thesis attempted to show how essential the restoration of Odysseus' marriage to Penelope is to his return home. I argued that Penelope herself undergoes a sort of homecoming in parallel to Odysseus, which manifests the mutuality of their relationship. Without Penelope's own homecoming to the marriage bed in Book 23, Odysseus would experience a homecoming like that of Menelaus or, worse, Agamemnon.

I wanted to write about this topic because I believe Penelope is the best female character in all ancient literature, and definitely among the best of all time. However, Odysseus' return takes center stage, and I wanted to explore how Penelope's share in their marriage relationship helps Odysseus truly return home.



**Chandler James  
Cunningham**

- Major: International Economics (Chinese)
- Advisor: Forrest Spence

## Singaporean Foreign Domestic Worker Laws and the Female Labor Supply

In 1978, the Singaporean government introduced changes to allow foreign domestic workers (FDW) to obtain visas, with a stated goal to increase the labor force participation rate of female citizens by removing barriers to entry into the workforce. This paper analyzed the effect of this policy change, highlighting how FDWs have impacted labor force, marriage, and fertility decisions for working women in a society in which one in five households today has a helper at home.

Growing up in Singapore, I found myself surprised by the widespread normalization and the quiet inequalities of domestic help in a country that strives for egalitarianism amongst its citizenry. The consensus argued that working women benefit from FDWs. But a dearth of econometric research exists, which provided the impetus for this project.

**Elizabeth Cunningham**

- Major: Design (Concentration in Industrial Design)
- Minor: Italian
- Advisor: Ann-Marie Conrado

## Communication and Statistics in Sports

I worked to design a system that allows for coaches and players to have more communication about specific and personalized training. The system has two components: a physical statistics tracker and an app. The app has a calendar, messaging, and an area where statistics are uploaded from the physical product. Coaches can then comment on players' workouts/training to help them improve their skills.

I picked this topic because I want to venture into design for sports. After doing interviews with a target audience of athletes age 14 and older, I found communication between coaches and athletes to be one of the biggest problem areas and decided to go forward with it.

**Haleigh Czarnecki**

- Major: Neuroscience and Behavior
- Minor: Anthropology
- Advisor: E. Mark Cummings

## Interactions of Typically Developing Siblings and Siblings with Intellectual or Developmental Disabilities: Behavioral Responses During a Family Problem-Solving Task

My thesis involved developing a behavioral coding system to identify specific behaviors and the constructiveness and destructiveness of interactions between typically developing siblings and siblings with an intellectual or developmental disability (IDD). The codes were examined to determine how emotional security in the family and exposure to interparental conflict were related to the observed communication, as well as how the constructiveness of sibling interactions changed over the course of a family intervention.

Experiences throughout my life have shown me the important role of siblings of a child with an IDD. Through this project, I hoped to better understand how this unique sibling relationship functions within a family context and perhaps offer insight into ways to better support these individuals.

**Carrie Davis**

- Majors: Physics and English
- Glynn Family Honors Program
- Advisor: Maxime Brodeur

## Formation of Slow Radioactive Ion Beams for St. Benedict

The Superaligned Transition BEta NEutrino Decay Ion Coincidence Trap (St. Benedict) conducted precision tests of the Standard Model by allowing for a determination of the  $V_{ud}$  element of the Cabibbo-Kobayashi-Maskawa matrix for many mirror transitions for the first time. This required slow radioactive ion beams and several differential pumping regions. The differentially pumped extraction system included a radio frequency (RF) carpet. My thesis reported on the commissioning of the RF carpet in static gas and with gas flow.

Conducting precision measurements in low-energy nuclear physics is a method of exploring fundamental questions about the building blocks and interactions of the universe. Experiments like St. Benedict can help us determine whether the current Standard Model is complete and guide our search for new physics.

*Received funding from the Glynn Family Honors Program and the Department of Physics.*



### Samuel Delmer

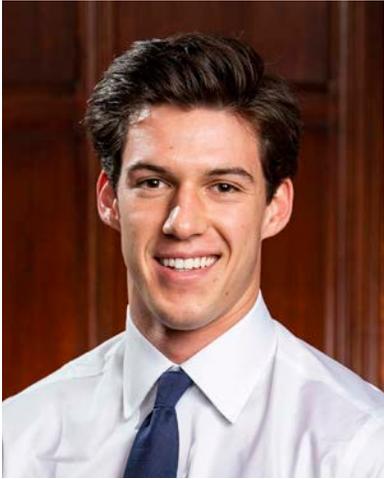
- Majors: Economics and Philosophy
- Minors: Constitutional Studies and Theology
- Glynn Family Honors Program
- Brennan Family Scholar
- Advisor: Michael Pries

## Financial Economics

I explored how a stock's inclusion in the S&P 500 affects its correlation with the market, specifically within the context of the rise of passive investing. Thus, I limited my scope to only those companies from 2000 to 2020 to find trends in their market betas which allow me to reach some conclusion about an index effect in market correlation.

I chose this topic because of my interest in financial economics, which has led me to take several classes on the subject. Thus, when thinking about a thesis idea, I looked at interesting developments over the past 20 years in this field and decided to examine the rise of passive investing.



**Thomas Deslongchamps**

- Major: Program of Liberal Studies
- Minor: Business Economics
- Advisor: Stephen Fallon

## Embracing God's Design in Shakespeare's *Hamlet*: The Perspective of the Gravedigger

I argued in this paper that in Shakespeare's *Hamlet*, the Gravedigger's example changes Hamlet's perspective on the world. Before meeting the Gravedigger, Hamlet attempts to overcome his challenges by assuming the role of God and trying to control everything and everyone. After his encounter with the Gravedigger, however, Hamlet realizes the madness of this perspective and comes to a different understanding of God's cosmic design.

This project was born of a desire to dive more deeply into Shakespeare's *Hamlet*. I wrote a shorter paper on *Hamlet* in Professor Stephen Fallon's Literature II class last year, and he suggested that I extend it as a thesis project. I learned that Professor Fallon is one of the most patient and helpful men I have ever met, and I am extremely grateful that he never gave up on me.

**Devin Diggs**

- Major: Neuroscience and Behavior
- Minor: Education, Schooling, and Society
- Hesburgh-Yusko Scholars Program
- Advisor: Jessica Payne

## Lecture vs. Testing: Exploring the Relative Effectiveness of Retrieval Practice and Lecture on Long-Term Retention

The “testing effect” is a phenomenon in cognitive psychology in which long-term memory is increased when information is retrieved from memory rather than reread. However, this effect has never been compared to lecture, the predominant instructional method in education. My thesis was a text-based memory experiment comparing retrieval practice and lecture as study strategies.

Due to the pandemic, data collection was conducted virtually rather than having participants come to the lab space. The results indicated significantly greater recall for information studied via retrieval practice than lecture, suggesting students may benefit from increased practice testing.

I chose this topic for two reasons. It integrates my major of neuroscience with my minor in education, schooling, and society. And, the research has real-world applications, as the results preliminarily showed that opportunities for practice testing in the classroom setting may benefit student learning.

*Received funding from the Institute for Scholarship in the Liberal Arts.*

**Shane Dilbeck**

- Major: Program of Liberal Studies
- Minor: Philosophy
- Advisor: Christopher Chowrimootoo

## Rap Music and Rap Beefs

I analyzed the development of the creative context in which rap music has been made over time by closely examining various rap beefs in different eras, from its creation to today. Much of this analysis was focused on how rap's ever-increasing popularity and commercial success affected this creative context and how these effects were reflected in the particular rap beefs I examined.

I have been a big fan of rap music since I was a kid, and my appreciation for it as an art form has greatly increased throughout my time in college. As I started thinking about a specific topic, the beef between Drake and Kanye West became a hot topic on social media, and I began to think that looking at beefs — which I knew dated back to at least the 1990s — could be interesting. From there, my advisor helped me refine and develop this idea into a topic and a complete thesis.



### Grace Doerfler

- Major: History
- Supplementary Major:  
Africana Studies
- Glynn Family Honors Program
- Suzanne and Walter Scott  
Scholars Program
- Advisor: Kathleen Sprows  
Cummings

## Finding Women's Voices in the Catholic Clergy Sex Abuse Crisis

I examined the role of whistleblowers in the clergy abuse crisis, specifically Catholic sisters who blew the whistle in their different roles in the Church. Through this lens, I examined how gender and power ultimately functioned to delegitimize women's voices and reinforce silence about clergy sex abuse.

I have been interested in researching the abuse crisis since I began college. Over the past few years, I have learned a lot about the too-little-known stories of women in Catholicism. Choosing this topic was an opportunity to learn from those who are too seldom heard.

*Received funding from the Glynn Family Honors Program to travel to Boston.*



### Mary Doheny

- Majors: Finance and Film, Television, and Theatre (Concentration in Theatre)
- Advisors: Tarryn Chun and Kevin Dreyer

## Recreating the Women's Work Wardrobe

I created a capsule wardrobe for the lead character, Eliza, in the show, *What We're Up Against* by Theresa Rebeck, which examines the development of women's workwear throughout the 20th century.

On stage, professional women wear costumes that allow for mobility and comfort, two elements lacking in the modern workplace. I am a finance and theatre major and combined my love for business with my passion for sewing and costume design. I explored clothing strategies for professional working women both on- and off-stage since the script for office wear for women is convoluted compared to the male approach to dress in the office.

I traveled to New York City to conduct research at museums and exhibits, including the Metropolitan Museum of Art and the Christian Dior: Designer of Dreams exhibit at the Brooklyn Museum. I also met with costume designers and purchased fabrics in the garment district. This trip helped inform my thesis as I surveyed the variety of fabrics available in New York City and came to better understand the process of creating costumes for the stage by meeting with designers and seeing a Broadway show. Additionally, at museums I could see the history of women's workwear and the prescriptive and descriptive nature of its fashions throughout time on the rest of society.

*Traveled to New York City with funding from the Undergraduate Research Opportunity Program.*



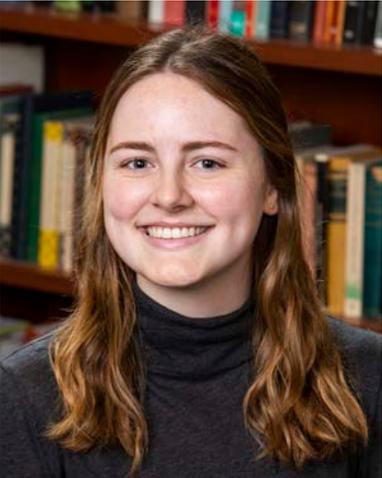
### **Duncan Donahue**

- Major: Sociology
- Supplementary Major: Peace Studies
- Minor: Africana Studies
- Advisor: Garrett Fitzgerald

## **The Intersection on Stolen Land: Critical Engagements Between Intersectionality and Indigenous Resurgence**

In 2019, Patricia Hill Collins warned that “without serious self-reflection, intersectionality could easily become just another social theory that implicitly upholds the status quo.” In the interest of combatting its hollowing, my research reflected on intersectionality in light of another critical knowledge project — Indigenous resurgence. Through three lines of engagement with Indigenous resurgence, I constructively problematized several currents and applications of intersectionality in the academy and popular discourse.

I have developed a keen interest in decolonial theory in my studies at Notre Dame and thought there was much to be gained from the productive tension between Indigenous resurgence and intersectionality as two critical theories from the North American context.



### Josie Donlon

- Major: International Economics (Spanish; Concentration in Financial Economics and Econometrics)
- Minors: Brazilian and Portuguese Studies
- Advisor: Zachary Stangebye

## The Impact of COVID-19 on Borrowing Costs for Latin American Governments

My thesis looked at the impact of the COVID-19 pandemic on borrowing costs for Latin American governments, as measured by sovereign bond spreads. I used Google Mobility data to proxy for how hard a country was hit by the pandemic and investigated the relationship between COVID-19 and bond yields.

This topic allowed me to use my background in financial economics to investigate how the pandemic has affected bond markets in Latin America, a region of interest for me because of my studies in Spanish and Portuguese.



**Olivia Dopheide**

- Major: Anthropology
- Minors: Latino Studies and International Development Studies
- Advisor: Catherine Bolten

## Refugee Integration via Agricultural Incubation Programs

My senior international development capstone explored how an agricultural training program in Kansas City facilitated holistic integration for recently resettled refugees. I emphasized the reciprocal aspect of integration, including actions by both refugees and host community members to create a welcoming environment and provide the opportunity for refugees to retain their cultural identity. My research utilized anthropological methods to observe that farming offers refugees and host community members many opportunities to engage with holistic integration processes. But barriers still emerge.

I chose this topic to engage with an international humanitarian issue within the United States context. I wanted to frame integration and refugee resettlement within a sustainability lens by exploring the interactions between small-scale farming, integration, and the experiences of refugees in Kansas. I conducted fieldwork for 10 weeks in my hometown of Kansas City, working with the New Roots for Refugees program as a farm volunteer and with Catholic Charities of Northeast Kansas as a case aide.

*Received funding from the Kellogg Institute for International Studies.*

**Olivia Dopheide**

- Major: Anthropology
- Minors: Latino Studies and International Development Studies
- Advisor: Catherine Bolten

## Human Dignity and Refugee Farmers

My senior thesis was an anthropological exploration of refugee farmers' experiences with dignity. By utilizing interviews and observations, I sought to understand how farming contributes to an individual's realization of their human dignity. My research focused on an agricultural training program in Kansas City called New Roots for Refugees. I demonstrated that agriculture spurs multidimensional experiences of dignity for farmers, highlighting the individualized nature of human dignity itself.

I chose this topic because I wanted to explore the role of human dignity in human development. Human dignity does not have a concrete definition, so I wanted to provide original insight into how small-scale agriculture interacts with experiences of dignity. With a growing number of refugees, I wanted to provide a person-centered perspective on sustainable solutions to potentially improve well-being. For 10 weeks, I worked in my hometown of Kansas City with the New Roots for Refugees farming program as a farm volunteer for resettled refugees.

*Received funding from the Kellogg Institute for International Studies.*



### Kyle Dorshorst

- Majors: International Economics (French) and Political Science
- Minor: Constitutional Studies
- Glynn Family Honors Program
- Advisors: Mary Flannery and Denise Della Rossa

## A Comparative Analysis of the French and American Approaches to Competition Policy in the Digital Economy

I compared the approach that France's competition authority has taken to regulate the digital economy to that of antitrust agencies in the United States. In general, the European Union and its member countries like France have brought a greater number of successful cases against Big Tech firms for violating competition rules, while the United States has a lot of political rhetoric regarding the impact of these companies but with comparatively fewer results. I focused on one case, in which France successfully fined Google for abusing its dominance in the digital advertising market.

I chose this topic after researching the role that Facebook played in allowing the French gilets jaunes (Yellow Vests) protests to spread. I did that as part of the Civility in Discourse project with the Nanovic Institute for European Studies and the Dublin Global Gateway during last year's Winter Session. Through this, I discovered how European nations have started to take the lead on grappling with the societal and economic effects that American Big Tech companies have caused around the world.

*Received funding from the Nanovic Institute for European Studies.*



### Kyle Dorshorst

- Majors: International Economics (French) and Political Science
- Minor: Constitutional Studies
- Glynn Family Honors Program
- Advisor: Mary Flannery

## Taming 'MAAMA': The Role of Competition Policy in the Digital Economy

For my thesis, I extended my earlier research to look more deeply into the ways in which the changing structure of the digital economy has affected competition policy/antitrust enforcement. Big Tech firms like Facebook and Google operate quite differently from more conventional companies, since they don't charge their users a fee to use their main services (eg. social media and search). This makes it difficult for competition authorities to use traditional measures based on price to successfully bring antitrust cases against them. Various efforts are underway to address this —from new laws to a reevaluation of the standard approaches, yet the best path forward is still up for debate.

After taking a class on competition policy the summer after my freshman year, I have been increasingly interested in the intersection between economics and the law. At the same time, developments surrounding Big Tech regulation have been consistently in the news during the past few years. This topic seemed like an ideal way to combine my academic interests with an issue of emerging scholarship and current significance.

While the pandemic limited my ability to travel abroad for research, it also influenced my choice of a digitally focused topic. Big Tech firms gained increased economic and social relevance as our lives moved online during lockdowns and social distancing, which had its own benefits and drawbacks. This shift toward the increasing digitalization of our daily lives was already underway, but the pandemic accelerated the trend and its effects are likely here to stay.

*Received funding from the Nanovic Institute for European Studies.*



### Julianne Downing

- Major: American Studies
- Supplemental Major: Peace Studies
- London Kennedy Scholar
- Advisor: Peter Cajka

## When the War on Terror Became the War for Women: Feminism as Counterterrorism

The Sept. 11 attacks on the United States transformed Western/liberal feminism into a counterterrorism project. My thesis examined *Ms.* magazine's presentation of the post-9/11 war in Afghanistan. Despite the stated prioritization of nonviolence by the Feminist Majority Foundation, which owns *Ms.*, the magazine ran articles affirming the war on terror. I identified Orientalism as an underexamined sine qua non of Western/liberal feminism to explain how *Ms.* justified its alignment with the violent foreign intervention.

I found my topic by letting my primary sources speak to me — after reading 136 back issues of *Ms.* magazine, its coverage of the war on terror stuck with me and left me with questions. I never expected this would be my topic, and that's the beauty of undergraduate research!

Because I was unable to travel to examine archives during the pandemic, and my sources were unavailable through the Hesburgh Libraries or an interlibrary loan, my advisor, Peter Cajka; the American studies specialist librarian, Rachel Bohlmann; and I decided that my best path would be to purchase the sources — back issues of *Ms.* magazine. I applied for and won a grant from the Flatley Center for Undergraduate Scholarly Engagement and purchased 136 issues of *Ms.* magazine from 1987 to 2021.

*Received funding from the Flatley Center for Undergraduate Scholarly Engagement.*

**Emee Marjorie Dy**

- Major: Marketing
- Minors: Asian Studies and Sociology
- Advisor: Sharon Yoon

**Policy paper (Asian Studies)**

For my capstone, I dove into what is necessary for diplomatic cooperation and harmony in East Asia. After what I learned in my Connecting Asia class along with other Asian studies classes, I explored the importance of this issue and constructed a policy that seeks to address it. Of course, with every policy, there are challenges in execution. So this project suggested ways for policymakers to overcome these barriers.

Coming from the Philippines, this project is of great importance to me. I have witnessed various disputes between my home country and other East Asian countries and realized the rippling effects of such disputes. This project emphasized the importance of harmony, especially in areas that are in close proximity to one another. As a Notre Dame student, I've long believed that achieving diplomatic cooperation is extremely powerful and effective policies play a huge role in making that happen.

**Matthew Eaton**

- Majors: Political Science and Economics
- Advisor: Sebastian Rosato

## Evaluating the 'Nuclear Revolution': Why Nuclear Weapons Don't Explain the Peace Between Nuclear Powers

My thesis explored why states possessing nuclear weapons have not gone to war with one another. It is widely accepted that the nuclear peace is a byproduct of a nuclear revolution, which refers to how the massive destructive power of nuclear weapons has fundamentally changed the landscape of international politics. I challenged the explanatory power of different theories of the nuclear revolution and presented an alternative explanation for the nuclear peace.

I have been fascinated by the scholarship around nuclear weapons since I was first exposed to it as a sophomore. I chose this topic so I could further explore the impact nuclear weapons have had on international relations and gain a better understanding of the role they play in today's world.



### Samuel Ebner

- Major: Music (Concentration in Vocal Performance)
- Supplementary Major: Arts & Letters Pre-Health
- Advisor: Kiera Duffy

## Senior Recital

As a senior performance major in the Department of Music, I organized, prepared, and performed a senior recital, which is the culmination of years of vocal work that includes sets from numerous composers, including JS Bach, Manuel de Falla, and Gabriel Fauré. I also am proud to include a set from Florence Price, a 20th-century African American female composer whose work has unfortunately been disregarded and underperformed until recently.

I chose these composers to challenge myself vocally, and to illuminate incredible artists like Price. The recital was specifically designed to include multiple languages and sets from various time periods. Ultimately, I chose songs that I could relate to and that had important meaning in my life.

**Fouad El Zoghbi**

- Major: International Economics
- Advisor: Forrest Spence

## The Effect of the Slave Trade on Modern-Day Levels of Trust

I estimated the effect of the transatlantic slave trade on modern-day levels of trust in Brazil and Argentina. I used data from the seventh wave of World Values Survey (conducted between 2017 and 2020) to obtain different measures to construct a trust variable in Brazil and Argentina. I also used data from SlaveVoyages to get figures associated with the slave trade in Brazil and Argentina. Interpersonal, institutional, and political trust/mistrust have been shown to have significant impacts on economic performance and growth, and is therefore an important variable to study in the field of economics.

**Kieran Emmons**

- Majors: Theology and Political Science
- Advisor: Matthew Ashley

## A Positive Definition of the Catholic Laity and Post-Vatican II Developments

With my thesis project, I attempted to offer a survey of the development of Catholic layperson theology integral to the spirit of the Second Vatican Council. I further evaluated the fruits of a positive theology of the laity in the activity of the post-Vatican II Church, tracking a continuity and progression in Church texts alongside developments in lay Catholic self-understanding and participation in recent years.

In my studies as a theology and political science major, I naturally gravitated toward the study of religion in politics. After an incredible class experience studying the texts of Vatican II and the nature of Catholic social and political responsibility in the modern world, I took a greater interest in Church ecclesiology and a theology of the laity, finally landing on my topic after many changes.

**Haley Fakouri**

- Major: Business Analytics
- Minor: Education, Schooling, and Society
- Advisor: Matthew Kloser

## Female Perceptions of and Participation in School Sports and Activities

My capstone project investigated female high school students' sense of belonging to their schools in relation to their relative level of participation in high school sports and activities and the level of investment in sports and activities by the school.

School sports and extracurricular activities can define how comfortable and supported a student feels within their school, which can ultimately affect their level of self-esteem and academic achievement. My project studied how female students were impacted by their schools' investments.

Most high school students in the United States experience a huge football culture with an enthusiastic band and a cheerleading squad to support the team. I wanted to explore how this stereotypical experience influences the female perspective of their respective high school's investments and their involvement in school sports.

**Samuel Fallon**

- Majors: Science Pre-Professional Studies and Economics
- Glynn Family Honors Program
- Advisor: Ethan Lieber

## The Affordable Care Act's Effect on Shingles Vaccine Utilization

The Affordable Care Act mandated that private insurers cover certain preventive health care services with zero cost-sharing, meaning no copays or coinsurance.

My project sought to determine whether this mandate achieved its goal of increasing utilization of important services, focusing specifically on the shingles vaccine to gain insight into the mandate's impact.

I am very interested in public health policy, especially at the intersection between my pre-medical studies and economics majors. I thought exploring this question would be a great opportunity to learn about health policy and strategies to evaluate policy outcomes, especially regarding a significant aspect of a major health care reform law.

**Analie Fernandes**

- Major: Political Science
- Supplementary Major: Arts & Letters Pre-Health
- Minor: Poverty Studies
- Glynn Family Honors Program
- Notre Dame Scholar
- Advisor: Vania Smith-Oka

## Caring Communities: Evaluating the Trauma Processing Group Model

My thesis explored the impact of a newly formed women's trauma processing group in South Bend, Indiana, and evaluated its effect in the community, contextualizing the group within existing literature on community healing and trauma-informed care. The thesis focused on themes, including socioeconomic status, access to health care, and clinical mistrust. Recognizing that the impending physician shortage will impact future availability of clinical care, this thesis aimed to shed light on the possible utility of processing groups to supplement traditional clinical care.

I wanted to choose a topic that would allow me to translate the classroom knowledge I've been privileged enough to accrue into real change in my community. I've learned so much about health equity, systemic barriers to care, and patterns of trauma. And I've seen myriad ways in which a community can support its members in healing, which gives me hope. Originally, this was intended to be an exploration of medical mistrust involving data collection in clinical settings for comparison. Due to COVID restrictions, my data collection process changed, and my focus narrowed to trauma processing in group settings.



### Sam Ferraro

- Major: Program of Liberal Studies
- Minor: Data Science
- Advisor: Joseph Rosenberg

## Trans\*Narrativity in *Orlando: A Biography, A Biography, a biography*

This thesis explored: what *Orlando: A Biography* by Virginia Woolf becomes when a biography denotes a branch of literature; what *Orlando: A Biography* becomes when a biography denotes a written account of life; and what *Orlando: A Biography* becomes when a biography denotes a human life in its course.

*Orlando: A Biography* is always in the process of becoming, which is made apparent by trans\*narrative readings of the text. *Orlando's* trans\*narrativity contains an unbounded wardrobe of interpretations to clothe the mind. Trans\* is not a destination, but an unbounded process of becoming. When gendered embodiment becomes consciously trans\*, gender becomes unfixed from one meaning and signifies many things, like *Orlando's* title.

After I read *Orlando*, I followed my curiosity to learn more about its obscurity and landed on my topic long afterwards. I knew I was interested in using the thesis project to think through the process of constructing alternative narratives that develop new mental perspectives. *Orlando* provided me with a text that lends itself to constant reinterpretation and re-readings.

**Thomas Filip**

- Major: History
- Minor: Italian
- Advisor: John Deak

## Soldiers' Experience of Trauma in World War I

My project used three memoirs as foundational primary sources. The works are by German author Ernst Juenger, British poet and novelist Robert Graves, and French barrelmaker Louis Barthas. These sources show readers how someone remembers a traumatic experience and how they choose to censor that experience for an audience. Furthermore, these sources portray manners of rationalizing violence for those who have gone through painful experiences.

In Ypres, Belgium, and Lile, France, I drove to several memorial sites for fallen soldiers during the Great War. I also went to museums in France and Belgium. My thesis placed itself as a contemporary example of Great War historiography by focusing primarily on the experience of the soldier.

I took a history capstone about the Great War during my junior year, and it was foundational in instilling an interest in the subject matter. I found myself asking how so many men could have died. What did they die for?

*Received funding from the Nanovic Institute for European Studies to travel to Ypres, Belgium, and Lile, France.*



### Audrey Filonczuk

- Majors: Statistics and Psychology
- Glynn Family Honors Program
- Advisor: Ying (Alison) Cheng

## Robust Estimation of Ability in Multidimensional Item Response Theory

I proposed a robust estimator for a multidimensional item response theory (IRT) model. IRT accounts for differences between items on an exam, such as the difficulty of the question. However, when taking an exam, there may be disturbances in the data, such as cheating or careless behavior. In order to get a more accurate score, this estimator can be used.

Such an estimator has been developed for unidimensional data in which only one ability is estimated from a test (such as reading ability). But I derived one that can be used in multidimensional data, where one test may give different scores for different abilities, such as reading comprehension and mathematics.

Quantities like velocity and population growth can be directly measured. However, psychological traits cannot be measured as directly, due to their latent nature. Quantifying abilities in psychology fascinates me since there is this extra challenge, and statistical practices can virtually always be improved in order to reduce error.

Due to the pandemic, I worked virtually, mostly from my home desk, and had to learn mostly independently. I thank the Glynn family and program, along with my lab, for the tremendous help in making this project possible. I will be attending graduate school for this work, and this project has helped me realize how much I enjoy this field of study.

*Received funding from the Glynn Family Honors Program.*



### **Catherine Fitzpatrick**

- Major: International Economics (German)
- Supplementary Major: Applied and Computational Mathematics and Statistics
- Minor: History
- Advisor: Forrest Spence

## **The Effect of the 2016 Gender Quota on Female University Enrollment in Germany**

In 2015, Germany passed the "Frauenquote," which required 30% female representation on supervisory seats as of 2016. This applied to boardrooms of publicly listed companies that have a 50/50 co-determined supervisory board. The effects of this policy on female human capital decisions was examined using a difference-in-differences empirical strategy. Specifically, women's enrollment to business schools was compared to men's before and after the implementation of the policy. I chose this topic because gender quotas and policies to enforce diversity are controversial and there is a lack of evidence of the effects of such policies.



### Grace Fjermedal

- Major: English
- Supplementary Major: Arts & Letters Pre-Health
- Minor: Education, Schooling, and Society
- Advisor: Julie Dallavis

## Factors Influencing Fourth-Graders' Choices of Books for Independent Reading

"Don't judge a book by its cover" is a timeless phrase used to encourage students to look beyond the outward appearance and explore inner value and meaning. Yet, is this advice always true? For my capstone project, I assessed what factors most strongly influence elementary students' book selection for independent reading. I conducted a qualitative case study of fourth-grade students at Muessel Elementary School in South Bend to learn which factors — including title, cover illustrations, genre, and cultural connections — most directly impacted their choice.

This capstone project has allowed me to share new book titles with the elementary students and gain a greater understanding of the factors that excite and interest them the most to turn the page and begin reading. By uncovering the most fundamental influences on book choice, educators and book publishers can best organize and transform classroom bookshelves with culturally relevant, enriching, and enticing literature to appeal to students' interests and heighten their motivation to read.



### **Victoria-Katharina Flick**

- Major: Political Science
- Minors: Business Economics and Constitutional Studies
- Notre Dame International Security Center Fellow
- Advisor: Eugene Gholz

## **Would the Europeans Deter Russia Against an Invasion of the Baltics?**

During recent years, Russia has sought to increase its influence on the European continent. It has especially begun posing a threat to smaller countries such as the Baltics — Latvia, Lithuania, and Estonia— as well as to Finland and Poland. Most notably, the annexation of Crimea in 2014 and the most recent military action against Ukraine have exhibited Russia's military strength and continuous desire to expand territorially. The continued discussion about one of Europe's main allies — the United States — to decrease its military presence in this part of the world has further aggravated this security menace.

Since the end of World War II, the U.S. has stationed a large number of troops across Europe. Due to the differing perspectives linked to Europe's ability to defend the Baltics, I pose the question: "If the U.S. were to pull out of NATO and withdraw military forces from Europe, could European countries cooperate politically to protect the Baltic states in case of aggressive military action from Russia?" Within this question, I emphasized European countries' ability or inability to cooperate or balance against Russia by looking at their defense strategies and their possibility to align them. More generally, I am interested in the factors that make countries invest in military capabilities and potential reasons that render them more or less inclined to cooperate in order to defend another member of the European Project.

To come up with a sound argument that contributed to existing literature on this topic, I looked at two case studies: Germany and France. Due to my international background, my research is conducted in English, German, French and Russian to provide a more authentic evaluation of the countries' defense policies. Being an international student from Austria, the security situation in Europe is highly relevant and interesting to me. Furthermore, considering recent developments concerning the conflict between Russia and Ukraine, I deemed it to be an aspect that needs to be studied to address it more effectively in the future. As I am planning a career in diplomacy, European security concerns of that nature will play an important role in my job and future life.

**Annie Foley**

- Major: Anthropology
- Supplementary Major: Global Affairs
- Kellogg International Scholar
- Advisor: Rachel Sweet

## Evidence Quality in Conflict Settings: Blurring the Lines Between Regional Armed Group and International Terrorist Regime

This project critically analyzed the production and circulation of (mis)information about armed conflict in the eastern Democratic Republic of the Congo, where the Islamic State (ISIS) has increasingly claimed responsibility for attacks carried out by state-sponsored militias.

When ISIS claims responsibility for attacks that it did not commit, state-rebel collusion goes unpunished. This project investigated how the international media legitimizes ISIS's claims and deflects attention from the real perpetrators.

This stemmed from my work with assistant professor Rachel Sweet on her project examining violence misattribution in eastern DRC. I enjoyed the investigative nature of that work and wanted to build it out by conducting my own analysis of conflict dynamics in the region.



### Alex Ford

- Majors: English (Concentration in Creative Writing) and Theology
- Minor: Russian Studies
- Advisor: Xavier Navarro Aquino

## *Nor the Bee: A Novel*

This literary fantasy novel is a parable about the Church disguised as an adventure novel about magical treasure-hunting teens, where magic is an allegory for queerness, farming is an allegory for ministry, and hidden treasure is an allegory for erased history and lost ancestry. The concept for this book was born in 2017, and it has gone through many iterations and transformations since, but the central image remains the same: A boy under a big blue sky wants to be rid of the magic in his hands. This is a book for and about people with parts that don't fit.

To paraphrase the late James Baldwin's words about his debut novel, *Go Tell It on the Mountain*, which incidentally also was about faith, youth, and Americana, this book is the one I had to write if I am ever going to write anything else. It's the book I wished I had as a teenager, a summary of colors I've seen and questions I haven't answered. I am very excited to integrate my artistic pursuits with my academic career in the form of a thesis.

The long winter break we had in 2020-21 provided extra time to write the first 100 pages of this novel. Special thanks to my mom's coworker who helped me recover the first 56 pages when my computer crashed trying to download *World of Warcraft* in a fit of cabin fever.



### CJ Foronda

- Majors: History and Political Science
- Balfour-Hesburgh Scholars Program
- Advisor: Paul Ocobock

## Comparing Language Policies in the Philippines Under Spanish and American Colonization

My thesis explored the different ruling philosophies, goals, and strategies of the Spanish and American colonial regimes in the Philippines in order to understand how imperial powers handled language in a region with more than 120 indigenous varieties. Using both primary documents and secondary sources, I highlighted factors that made Americans successful in establishing English as a lingua franca despite their considerably shorter tenure as the archipelago's ruling power, and I then highlighted Spain's shortcomings.

I immigrated from the Philippines with my family at a young age, and though I grew up immersed in cultural traditions, language wasn't passed down. I wanted to explore this dynamic and dedicate my thesis to a topic that would help me understand the broader historical context of my personal circumstances.

Many archives were closed during the summer due to COVID-19, and I could not coordinate international travel. Instead, I took advantage of resources near my hometown, conducting archival research at Wheaton College and the Newberry Library in Chicago. At Wheaton, I looked at documents from American 20th-century Christian missionaries, and the Newberry Library provided an opportunity to study Catholic writings and letters from the Spanish period.

*Received funding from the Balfour-Hesburgh Scholars Program to travel to Wheaton College in Wheaton, Illinois, and the Newberry Library in Chicago.*

**Julia French**

- Major: Philosophy
- Supplementary Major: Education, Schooling, and Society
- Minor: Theology
- Sorin Scholar
- Advisor: Andrea Christensen

## The Impact of Gender on Pedagogy, Personas, and Professors' Self-Efficacy in the University Classroom

My project explored how gender stereotypes in teaching impact professors' pedagogy choices, instructional personas, and self-efficacy in their higher-education classrooms. I found that while gender can influence how a professor teaches, other factors matter more. Caring for both the content and students, being authentic within and outside the classroom, and seeing teaching as a vocation all contribute to a strong classroom, and none of these elements of teaching are restricted to a single gender.

I chose this topic because I was fascinated by the variety of teaching styles I have encountered at Notre Dame. Since I'm teaching after graduation through the Alliance for Catholic Education, I wanted to know how professors shaped the teaching personas and education philosophies that informed their classroom.



### Anna Frericks

- Major: Design (Concentration in Visual Communication Design)
- Advisors: Clinton Carlson and Neeta Verma

## Facilitating Poultry Consumers' Ethical Decision-Making Through Education and Transparency

My project considered poultry consumers' engagement at the point-of-purchase, and how this experience can be enhanced to become a place of education. My design intervention focused on a reinvention of the current animal welfare certification system and implementing this hypothetical into a grocery store environment (Whole Foods, specifically). My goal was to help consumers paint a clearer picture of the environment in which chickens are raised so they could make a more educated purchasing decision.

Animal welfare is a topic that has always caught my attention. I narrowed this to farm animals since the factory farming industry is so destructive. I learned that chickens are not protected by any federal animal welfare laws in the United States, and decided to build off this.

*Received funding through a William and Connie Greif Art Award from the Department of Art, Art History & Design.*



### Vitor Furtado Farias

- Majors: Mathematics and Economics (Honors)
- Advisor: Christiane Baumeister

## Explaining Economic Fluctuations in Brazil with a Weekly Index

This thesis introduced an innovative economic condition index to measure the state of the Brazilian economy on a weekly basis. It uses a dynamic factor model, exploiting information in a broad range of economic indicators at weekly, monthly, and quarterly frequencies. I used this index to identify the individual contribution of different economic sectors in three recent periods of economic turmoil. I also examined the index forecasting performance on the Brazilian GDP.

Since the start of the pandemic, weekly indicators measuring macroeconomic conditions have been developed for countries around the world, which allows researchers to investigate economic developments that happened in these turbulent years. I saw this thesis as an exciting opportunity to bring this concept to my country and to contribute to the study of recent periods of fast-evolving conditions using a modern approach.

*Received funding from an Undergraduate Research Opportunity Program's Summer Comprehensive Grant.*

**Patrick Gallagher**

- Majors: English and Economics
- Advisor: Kate Marshall

**Madness, Isolation, and the History of the Novel in *Don Quixote***

My project centered around *Don Quixote* by Miguel de Cervantes. This text unabashedly parodies the courtly romance/adventure books that were popular in the 17th century and follows the story of Don Quixote — a Spanish nobleman who becomes mentally ill after reading too many chivalric texts. My specific interest lies with Quixote's mental illness; I am curious about how isolation is related to this character's deteriorating mental state.

The idea for my proposal stems from a past unpleasant experience in my life. Last March, I caught COVID-19 and was isolated for two weeks. The lack of socialization definitely took its toll on my mental health and affected my interpretation of madness in *Don Quixote*.



## Andrew Ganahl

- Majors: Physics and Music  
(Concentration in Piano Performance)
- Minor: Philosophy
- Advisor: John Blacklow

## Senior Piano Recital

I performed several pieces of solo repertoire by Bach, Beethoven, and Chopin, as well as a chamber work by Shostakovich.



**Megan Gass**

- Majors: Marketing and Program of Liberal Studies
- Advisor: Katie Bugyis

## Teaching Servant Leaders: Dante Alghieri's *Commedia*

My thesis aimed to describe how Dante teaches us to become servant leaders while we read *The Divine Comedy*. Dante the poet, as our guide, shows us how to walk on the path of human dignity by loving us first. It was the aim of this thesis to demonstrate how Dante the poet does this because, in acting this way, he takes on the role of a servant leader for us.

I chose this topic because while reading the *Commedia*, I experienced how Dante can save us as individuals and as leaders. As leaders, we must take responsibility for the people we lead. Therefore, to become a servant to others, we must transform ourselves. I found Dante's *Commedia* transformative regarding how I thought about others. I believe the work holds weight to forming us as more conscious individuals as we pilgrim with Dante.



### Aysha Gibson

- Majors: Neuroscience and Behavior and History
- Balfour-Hesburgh Scholars Program
- Advisor: Rebecca McKenna

## The Louisiana State Penitentiary's Transition from Convict Leasing to State Control at the Turn of the Twentieth Century

Through an examination of official penitentiary records, newspaper articles, and legal documents, my project compared two formative eras of the Louisiana State Penitentiary and how state decisions impacted the lives of those who were incarcerated, with an emphasis on geography, labor, race, and prison reform. Studying the early operations of the penitentiary matters for a broader understanding of the penal farm infrastructure in the American South and the roots of mass incarceration.

A high school senior class visit to the Louisiana State Penitentiary left me with questions about the history of Southern penal systems. Led by my desire to learn more, I decided to undertake this project to uncover the early history of the institution that has earned the nickname "Alcatraz of the South."

*Traveled to the Louisiana State Archives in Baton Rouge, Louisiana, with funding from the Balfour-Hesburgh Scholars Program.*

**Mallory Girvin**

- Majors: Mathematics and History
- Advisor: Colin Barr

## W.B. Yeats and the Relationship Between Irish Folklore and Nationalism

I examined the relationship between folklore and nationalism in the late 19th century. I briefly discussed the state of Irish nationalism by the end of the 19th century then focused on the case of W.B. Yeats, a renowned Irish poet writing during the period. I assessed his authorial intent with some of his earlier works of folklore and examined their reception and impact in Ireland.

I am drawn to history — I love learning about stories and how those stories are used and told throughout time, hence my desire to explore the relationship between Irish folklore and nationalism. Like C.S. Lewis' argument that fairy tales are for all ages, I believe that W.B. Yeats was not merely penning these stories for children's enjoyment. Rather, I hoped that like the Grimm brothers in Germany, Yeats was looking to further nationalistic feelings with his writing.



### Claire Glennon

- Major: Film, Television, and Theatre
- Supplementary Major: Gender Studies
- Minor: Digital Marketing
- Advisors: Jason Ruiz and Anne Garcia-Romero

## Gender Performance and Drag Queens

My paper was about the intersection between gender performance and stage performance through the lens of cross-dressing and drag queens. It explored the various definitions and interpretations of sex and gender, and how they apply to people's everyday lives, as well as how they are played out for an audience, especially in terms of drag shows.

Studying both film, television, and theatre and gender studies, I was interested in the overlap between the two. I wanted to explore the differences and similarities between gender performance and stage performance. I also love watching drag shows.





### Roshni Goela

- Major: Economics
- Minors: Digital Marketing and Education, Schooling, and Society
- Advisor: Andrea Christensen

## Teacher Methodology and Aesthetic Involvement: A Study of Elementary Schoolchildren's Reader Responses to Multicultural Literature

I was interested in learning about the implementation of multicultural literature in the classroom and best practices associated with it. The demographic landscape of classrooms in the United States is continually changing. The curriculum, however, does not seem to be keeping up with the majority-minority student body, which leads to disengagement and exclusion of students.

Even when measures of inclusion, such as multicultural literature, are brought up, implementation and execution seem to be a problem. This can be attributed to teaching methodology and approach to this newer, different content, as teachers have been found to have effects on student social, academic, and overall development.

Certain methods have benefited students' learning, assessed through aesthetic involvement more than others. These effects are studied through elementary schoolchildren's reader responses to multicultural literature under different teaching methods, teacher interviews, and classroom observations. A more learner-based style was found to push students further along their aesthetic involvement journey, while a learner-based style mixed in with teacher-oriented strategies also showed students well-progressed in the journey, but to a lesser extent than the former.



### **Campbell Goff**

- Majors: Mathematics and Economics
- Glynn Family Honors Program
- Advisor: Jeffrey Diller

## **Convexity, Brouwer's Fixed-Point Theorem, and Some Applications**

In my thesis, I engaged with the topic of convexity. I specifically looked at and proved Brouwer's Fixed-Point Theorem. From there, I used the theorem in a few different and interesting ways. One of the most interesting is the Perron-Frobenius Theorem, which was integral to the first algorithm that Google used to rank search results.

I began reading about different topics that I could write about during the second semester of junior year. I was drawn to Brouwer's Fixed-Point Theorem because of an interesting analogy to the real world: In a shaken water bottle, one molecule will end up exactly where it started.

**Patrick Gouker**

- Majors: Theology and French
- Minor: Philosophy
- Advisor: Rev. Kevin Grove, C.S.C.

**Candlemas**

My thesis is a historical, liturgical, and critical study of Candlemas. It offers a perspective on what liturgy should be and how liturgy, properly celebrated, should convey a theology which is complete — meaning one that presents all theological foci of a feast, even when they seem contradictory or in tension with one another.

I began to think about this project in 2020 because I served as the master of ceremonies for a liturgy according to these ancient rubrics. Not only was the Mass stunningly beautiful, but the reactions of those who participated in the liturgy made me curious about the unique rituals I had witnessed.





### Helen Gu

- Major: Neuroscience and Behavior
- Minor: Anthropology
- Glynn Family Honors Program
- Advisor: James Brockmole

## Body Posture Attentional Cueing in Multi-Person Social Contexts

Social cues from the body provide crucial information about an individual's internal state, as well as the environment around them. It is well-established that some social cues, such as eye-gaze and head direction, can direct visual attention.

Since we often interact with groups of people at a time, such as when speaking to an audience, my thesis project sought to extend these findings to body postures in a multi-person social context. Specifically, we sought to determine whether attentional cueing occurs for group body cues, whether these effects differ from individual body cues, and whether these effects can influence perceptual judgments.

I have always had an interest in body postures and body language, especially in relation to how they are interpreted in social settings. Combining this interest with my lab's focus (visual cognition) led to this project. The projects I worked on previously in the lab also helped to inform my design process.

*Received funding from the College of Science and the Glynn Family Honors Program.*



**José-Miguel  
Guevara-Hernández**

- Majors: English and Philosophy
- Advisors: Barbara Green and Romana Huk

## Art, Spirituality, and Humanity in Virginia Woolf's *Mrs. Dalloway* and David Jones' *In Parenthesis*

In my project, I showed that Virginia Woolf and David Jones conceived of art and its connection to the spiritual in similar manners. I argued that Woolf interrogates the redemptive power of art and the societal threats which inhibit art in *Mrs. Dalloway*. I also read *In Parenthesis* as a war poem which represents the technologies of the Great War, using verse to transform them into objects of beauty, showing the potential art has to discover humanity in the midst of trauma.

This project developed from my love of Jones and Woolf and my desire to put these writers in conversation with each other. Much has been written about each writer individually, but there has not been a critical conversation which engages them together.



**Charles Hallinan**

- Majors: History and Applied and Computational Mathematics and Statistics
- Minor: Real Estate
- Advisor: Jon Coleman

## Wastelands: Forest Fires, Mine Explosions, and Conservation in Progressive-Era West Virginia

In December 1907, 356 miners perished in an underground explosion near Monongah, West Virginia. The following summer, wildfires consumed 1.7 million acres of the state's forests. My thesis investigated how various groups, including timber and coal companies and conservationists, explained these disasters. In particular, I was interested in how these events shaped perceptions of nature's place in the market, and how Progressive-era ideas of efficiency and the administrative state took form in West Virginia.

I chose this topic because I'm fascinated by how Americans understand Appalachia as a distinct region. Extraction of natural resources is a trait many associate with Appalachia. I wanted to study this idea through the lens of environmental history, and I was able to find a tremendous amount of primary sources online.



### Reynold Hamar

- Major: Finance
- Minors: Education, Schooling, and Society (ESS) and Catholic Social Tradition
- Advisor: David Lantigua

## Subsidiarity and Care for Creation: Individual Actions for our Communal Home

Actions focused on the pillar “Care for Creation” generally focus on macro institutions: governments, major businesses, and the global community. Individuals, however, also hold responsibility to care for creation although individual impact is hard to quantify. This project analyzed 18 potential ways that individuals can care for creation and provided personalized environmental and financial savings.

I have always felt a responsibility to participate in care for creation, yet was frustrated with the lack of tools to evaluate the best way to participate for my life. By breaking down technical terms and conversions into actionable metrics, I hoped to create a tool that individuals can use to understand climate action in their lives.

**Grace Harlan**

- Majors: Program of Liberal Studies and Political Science
- Advisor: G. Felicitas Munzel

## Truth and Politics: Are These Concepts Oil and Water? Or is a Positive Relationship Possible?

In my thesis, I examined the history of the relationship between truth and politics, one which Hannah Arendt calls “a long and complicated conflict” in her article Truth and Politics. Through the lens of various authors from the Program of Liberal Studies curriculum (i.e., Thucydides, Aristotle, Cicero, Machiavelli, Hobbes), I discovered this conflict is extremely complicated and the nature of factual truth specifically does not hold up well in the political realm.

Nevertheless, it seemed that a careful consideration of the relationship between thinker and actor on the part of the individual could help remedy this problem. Though truth and politics tend to clash with each other, there is some hope for a positive relationship between them. I was inspired by Professor Jim McAdams’ political science seminar, Truth, Politics, and Democracy. We discussed truth and post-truth in the political realm and the consequences that these concepts have on democracy. I was inspired by our readings and discussions to research truth and politics from the point of view of my PLS education. I think that investigation of this topic is vital to the success of truth in the political sphere, especially during this tumultuous time.



### Brigid Harrington

- Majors: Political Science and Film, Television, and Theatre (FTT)
- Minor: Hesburgh Program in Public Service
- Sorin Scholar
- Advisor: Joshua Kaplan

## The Theatre of Politics

Comparisons between politicians and actors are frequently drawn in American political discourse, yet they are often made incorrectly. Such comparisons imply the politician is behaving deceptively. However, acting is fundamentally concerned with uncovering truth. Therefore, the connection between these two fields must be reexamined. I argued that politicians can utilize acting devices, skills, and tropes in a beneficial way to communicate effectively with the American people and become better public servants.

As a professional actor studying both theatre and political science, I wanted my senior thesis to explore the connection between my two fields, as I see it. I went to Washington, D.C., to conduct research and used onsite resources at the Library of Congress.

*Received funding from the Center for Undergraduate Scholarly Engagement to travel to Washington, D.C.*

**Emily Healy**

- Major: Program of Liberal Studies
- Minor: Hesburgh Program in Public Service
- Advisor: Gretchen Reydams-Schils

## The Applicability of Genocide and the Erasure of Native Identities in Twentieth-Century Indian Residential Schools

My thesis focuses on the Internal Revenue Service system in the 1900s and its impacts on Native personhood. I studied the initial interactions between European colonists and Indigenous communities, then segued into an analysis of the federally mandated assimilationist policies that were the basis for the creation of the IRS system.

My research culminated in an analysis of the IRS system and its devastating impacts on hundreds of thousands of Native children in the United States. I supplemented the analysis with an examination of the applicability of genocide to the IRS system. Finally, I examined the possibility for truth and healing within Native communities and the benefits of federal reparations to mitigate the intergenerational trauma that occurred as a result of the IRS system.

I have been passionate about Native-specific justice initiative efforts since high school and knew that I wanted to write my thesis in a way that centered around Indigenous communities. Discussions of genocide in my PLS Ethics course supplemented my interest in Indigenous communities' rights. I decided to unite these two interests in my senior thesis.

**Destiny Herndon**

- Major: Political Science
- Supplementary Major: Global Affairs (Concentration in Civil and Human Rights)
- Advisor: Abby Cordova

## Redefining the Refugee: Using Policy to Protect Women Against Gender-Based Violence

I examined the effects of the legal inclusion of women as a recognized social group in asylum policy, as well as policy language, on reporting rates of gender-based violence in destination countries among immigrant women.

I am a senior fellow with the Gender Relations Center on campus and have worked with the center throughout my time at Notre Dame. In class and during the summer, I have focused my research and professional experiences on the experiences of immigrants seeking asylum in the United States. For my senior capstone, I wanted to combine these two major interests in my life, which led me to focus on the experiences of female immigrants seeking refuge from violence and how American policies can better prevent compounding their trauma by protecting them upon arrival.

**Jane Hilger**

- Majors: English and Political Science
- Advisor: Ian Newman

## The Evolution of Love Letters in the Novel

I looked at the evolution of love letters in the novel, focusing on the introduction of new technology and how the ways characters express their love for each other has changed along with the technological changes. I focused on four novels from four distinct time periods, studying the differences and similarities in the written expressions of love.

I have seen firsthand how quickly technological advancements come about and how they change the way we communicate. I wanted to mix English literature and media studies to examine these advancements and how they affect the everyday life of characters in novels, since life imitates art.

**Clare Hillen**

- Majors: Political Science and Russian
- Certificate in International Security Studies
- Advisor: Christina Bambrick

## Russian Foreign Agent Law

In my thesis about Russian foreign agent law, I discussed how the term “foreign agent” has developed and changed over time, and how the law has impacted free speech in Russia. I explained the Soviet Constitution and laws regarding “enemies of the state” and explored how this term is similar and different to the modern foreign agent law in Russia. I analyzed the Constitution of the Russian Federation, the law itself, and Constitutional Court opinions regarding the law.

I major in political science and Russian and became interested in the foreign agent law after speaking with Russians and former Soviet citizens. I am very interested in how the legal and constitutional aspects of the foreign agent law relate to the legal philosophies of the Soviet Union and Russia, and how the legal system is utilized in the name of protecting national security.



### Liam Hollen

- Majors: History and Economics
- Minor: Chinese
- Advisor: Patrick Griffin

## The Glorious Revolution in Virginia

The late 17th to early 18th centuries was a critical period for determining the makeup of Virginia, which has had a pivotal impact on the course of American history. For my history thesis, I used Virginia's reaction to the Glorious Revolution in 1688–89 to reveal the conditions and trends of Virginia and its relationship with England during this period. I traveled to England and Williamsburg, Virginia to conduct archival research.

I chose the topic since I am from Virginia and have an interest in early colonial formation and English political philosophy.

*Traveled to England and Williamsburg, Virginia, with funding from the Institute for Scholarship in the Liberal Arts and the Nanovic Institute for European Studies.*



### Nayun Hong

- Major: Architecture
- Minors: Asian Studies and Architectural Practice and Enterprise
- Advisor: Jennifer Huynh

## The Asian American Experience in Hawai'i

Race relations, hierarchies, and tensions in Hawai'i do not rely on (as heavily) the white-Black binary that drives the conversations on race in the continental United States. Hawai'i is affected by a different history and stratification; from the arrival of New England missionaries and other white settlers in the 18th century, Asian migrants during the plantation era of the 19th century, and military occupation and consequent overthrow of the Hawaiian Kingdom in 1893. Asian migrants and military occupants played especially significant roles in influencing contemporary race and social positions, with Asian Americans assuming the hegemonic role and the military residents characterizing the local-haole (foreigner) tensions that some perceive to be the extent of Hawai'i's dialogues on race.

This paper focused on the history of Asian Americans in the Islands and the impacts of Asian settler colonialism in shaping the living and maintained social structure in Hawai'i, challenging the stereotype and misconception of Hawai'i as a racial paradise. I didn't realize, until I came to Notre Dame, that my experience as an Asian American growing up in Hawai'i was a privilege and different from the experiences of Asian Americans in the continental United States, especially those who did not grow up in Asian-majority communities.

I wanted to explore why my experience in Hawai'i was so different from those in other places around the United States. Professor Jennifer Huynh's class on Asian American studies helped me to come to this understanding and made me more curious about the topic. This project could not have been completed without her mentorship and guidance. My experience in her class was so positive that I'm pursuing a related thesis project for my architecture major: I am proposing a building for the Asian American Resource & Research Center at the University of California, Berkeley, to study how the "Asian American" identity physically manifests into our built environment and buildings.

**Adriana Hunt**

- Major: Neuroscience and Behavior
- Minor: Catholic Social Tradition
- Advisors: David Lantigua, Beth Hlabse, Lisa Anderson

## Proposal for a New SSLP Site that Allows Students to Accompany Those Living with a Mental Health Disorder

My project centered around the mental health crisis taking place in our country. With so many people falling through the cracks, I was interested in finding a way for Notre Dame students to accompany those living with mental health issues.

After learning about the issues surrounding our approach to mental health in my colloquium course this semester, I felt compelled to find a new way to support those living with mental health conditions. Proposing a new Summer Service Learning Program program felt like the perfect way to merge core Catholic social tradition principles of accompaniment and human dignity with real and concrete supportive methods for those living with mental health issues.



### Ahlering Jackboice

- Major: BFA in Visual Communication Design
- Advisor: Clinton Carlson

## Mental Well-Being in College Students

My thesis focused on the mental well-being of college students at Notre Dame. College students face immense pressure in their day-to-day lives and, as a direct result, are stressed beyond belief. Through the format of a Secret Society, presented as a mental well-being initiative, my project aimed to provide an opportunity for students to take a break. The Idle Minds Preservation Society encouraged students to prioritize their well-being by giving them permission to just do nothing.

As a college student, I have experienced all of the stress of attending a University where academic achievement is the No. 1 priority. I have witnessed students around me struggle to manage stress and juggle a multitude of resume-building responsibilities. Mental well-being in college students has been extremely negatively affected by the pandemic and that largely impacted my methods of research as well as my results.

*Received the William and Connie Greif Art Award from the Department of Art, Art History & Design.*



### Parker Jochum

- Majors: Mechanical Engineering and Film, Television and Theatre (Concentration in Film)
- Advisor: Jim Collins

## Tom King and the Construction of Postmodern Comic Book Authorship

My thesis explored how contemporary comic book script-writers have altered the manner in which their authorship status is conceived via metafictional and subversive means. I juxtaposed this against the historical patterns of authorship established by, and in the wake of, the rise of the graphic novel and its progenitors. I did this by analyzing author Tom King's recent works: *Rorschach* (2020); *Batman Vol. 2: I Am Suicide* (2017); and *Batman Vol. 4: The War of Jokes and Riddles* (2017).

Comics are a rich and wildly fun medium that I hope more people will discover and fall in love with, as I have. By creating and sharing new knowledge about the form, I want to inspire interest in, and excitement about, comics that can create and sustain new communities of enthusiastic readers on college campuses and beyond.

**Liam Johnson**

- Major: History
- Minors: Theology and Philosophy
- Advisor: Fr. Wilson D. Miscamble, C.S.C.

## The Liberation of Dachau and Buchenwald Through the Eyes of American Soldiers

I investigated the experiences of American liberators at Dachau and Buchenwald.

I examined the history of the two concentration camps and the various military divisions involved in the liberation, as well as experiences of soldiers from the United States. I traveled to Washington, D.C., to do research in the United States Holocaust Memorial Museum archives and examined various primary sources.

I am quite interested in American history and the history of the Holocaust. This project combined these two interests into one project.

*Traveled to Washington, D.C.*



## Alesis Juntunen

- Majors: Political Science and Theology
- Minor: Constitutional Studies
- Advisor: Joshua Kaplan

## The American Welfare State and the Christian Church

I wanted a topic that I was passionate about and that would combine aspects from each of my majors. So, I researched the growth of the American welfare state since the Great Depression, in conjunction with the Christian Church's role in providing aid to local communities and "caring for the least of these."



**Matt Kearney**

- Major: Political Science
- Minors: European Studies and Digital Marketing
- Advisor: Michael Desch

## Examining Reacquisition of Lost Territory in the Context of Russia and its Neighbors

By looking at examples of Russian relations with the Baltics and Ukraine, I sought to answer the question of when countries will try to reacquire territory that they have lost. I hope to use my findings to recommend policy responses for the United States and its NATO allies in the region.

After 2014, Ukraine and Russia had become a hot topic in international relations, so I originally sought to explore something I thought was overlooked: Russia's relationship with the Baltic countries to its West. As the situation in Ukraine escalated throughout the winter and spring, I saw an opportunity to include both cases by addressing the larger question of how states behave toward territory they had formerly owned — by using the Russian example.

**Matt Kearney**

- Major: Political Science
- Minors: European Studies and Digital Marketing
- Advisor: Richard Heffernan

## Speeches and Public Statements of Vote Leave Leaders during Brexit

For my European studies capstone project, I analyzed speeches and public statements made by key leaders in the Vote Leave campaign in the United Kingdom during the period between the time the Brexit referendum was announced and when it occurred. I used these sources to highlight the strategies used by Vote Leave activists to influence public opinion and ultimately get the United Kingdom withdrawn from the European Union.

Brexit is undoubtedly one of the most notable statements made in domestic world politics in recent years, making its causes and effects important to the future of international organizations and political campaigning around the world. As the capstone project for the minor is centered around primary sources, I was inspired to use speeches and public statements related to such a momentous event and analyze the discourse used by leaders to convince citizens to make such an unprecedented decision.

**Maria Keller**

- Majors: Program of Liberal Studies and Medieval Studies
- Advisor: Jennifer Newsome Martin

## Veiling the Imago Dei: Decadent Artifice and Self-Creation in Evelyn Waugh's *Brideshead Revisited*

My senior thesis investigated Evelyn Waugh's aesthetic philosophy in *Brideshead Revisited* as a revision and reorientation of Oscar Wilde's self-creative aesthetic philosophy and analyzed Waugh's relationship with the decadents of the 1890s. I argued that Waugh addressed how Wilde's philosophy of forming oneself as a work of art may serve either self-isolating or fruitful ends, insofar as artifice can serve to veil the image of the divine in oneself.

I read *Brideshead Revisited* during my sophomore year, and fell deeply in love with its richness and depth. I did not, however, decide to write my thesis about it until the end of junior year, when I realized I would regret not writing about it.

*Traveled to London and Oxford, England with funding from the Nanovic Institute for European Studies.*

**Bridget Kelley**

- Major: American Studies
- Minors: Collaborative Innovation and Anthropology
- Advisor: Perin Gürel

## Podcasting and the Production of History: Rememory of Silenced American Narratives in the Aural Medium

My thesis explored the connections among podcasting, history, memory, and sound. I identified and analyzed three podcasts and their creators who are doing the ideological work of rememory; that is, attempting to re-insert silenced narratives from United States history into the collective memory of the American public.

I closely listened to Radiotopia's *This Day in Esoteric Political History*, the independent podcast *You're Wrong About*, and Crooked Media's *This Land* and analyzed rememory strategies, hosts' construction of authority, and usage of the audio medium. I treated these texts as primary documents and focused on how the authors of the sources are seeking to rememory events centered on historically marginalized groups, in pursuit of justice.

I took the American studies course Podcast America in 2020 and learned that podcasts — a medium that I love — can be studied critically the same way literature and films can. I'm also interested in how historical narratives and popular culture can have real effects on culture, policy, and justice. My topic combined these research interests in an exciting way.

*Received funding from the Undergraduate Research Opportunity Program.*

**Juliette Kelley**

- Major: Economics
- Supplementary Major: Applied Computational Mathematics and Statistics
- Minor: Computing and Digital Technologies
- Kellogg International Scholars Program
- Advisor: Michael Pries

## ESG Investing & Returns on Investment

In my thesis, I sought to answer whether a change in Environmental, Social, and Governance (ESG) score impacts the return on investment (i.e., cost of capital) that investors can expect.

I conducted a study in which the date on which the ESG score changes is an “event,” and examined how the abnormal returns of a stock do or do not change after the event to determine whether the change in ESG score affects these abnormal returns.

I’m interested in the effect that ESG investing has on companies and their stocks. If having a higher ESG score is good for a company, this could motivate companies to have better practices. That could have further implications not only for established businesses but also when considering sustainable development and investing in developing countries.



### **Brian Kelly**

- Major: Economics
- Supplementary Major: Applied and Computational Mathematics and Statistics
- Glynn Family Honors Program
- Advisor: Jeffrey Campbell

## **Central Bank Digital Currencies**

My thesis evaluated the necessity for and the consequences of launching a central bank digital currency (CBDC) in the United States. I discussed three recent trends in how Americans use money and how those trends are changing the American financial system. I considered which trends might warrant the launch of a CBDC in response. To conclude, I analyzed some general repercussions of introducing a CBDC into the American economy.

I developed an interest in central bank digital currencies while taking a class on monetary policy during my junior year. Convinced of CBDCs' potential to transform the way we'll spend money in the near future, I was inspired to further explore the topic.



**Caroline Kelly**

- Majors: Political Science and American Studies
- Minor: Constitutional Studies
- Advisor: Peter Cajka

## A Legal, Political, and Cultural Analysis of Pretextual Traffic Stops

I explored the legal, political, and cultural reasons that pretextual traffic stops are a problematic tactic utilized by police officers today in the United States. I presented how these stops represent an erosion of the protections guaranteed by the Fourth Amendment; focused on the inherent potential for racial profiling, as well as the lack of safeguards to protect against this; and highlighted the policy's connection to the destructive media campaign that advanced the zero tolerance drug policies during the Reagan administration. I concluded the paper with possible paths to reform, including banning traffic stops altogether.

After graduating from Notre Dame, I will pursue a legal career dedicated to reforming the criminal justice system in America. The existing system disproportionately impacts those of lower socioeconomic status, along with people of color, and I wanted to deepen my knowledge on one particular policy that requires reform.

**Lauren Kelly**

- Major: History
- Minor: Irish Studies
- Advisor: Rory Rapple

## Evaluating Responses to Oliver Cromwell's 1654 Church Settlement

Oliver Cromwell's Church Settlement of 1654 addressed England's religious turmoil that culminated with the execution of Charles I in 1649. While significant research has addressed Cromwell and his Church Settlement, there appears to be far less attention paid to the responses of the average man. So, I addressed how people without political or religious stature responded, which revealed another reason as to why the republic ultimately failed.

I am fascinated by religious history. I lack answers to certain questions asked by the period's contemporaries, in that while I know how the wars will end, and which legislation will pass, I cannot answer which religious meditation was most correct. That is both humbling and exciting. The Interregnum was riddled with religious diversity and uncertainty, and therefore seemed like an excellent period to become familiar with this historical paradox of unknowing.

This project has affirmed my interest in pursuing a career in academia. As I prepare for graduate school this fall, I am certain the skills and experiences I acquired throughout this thesis project will transfer to my next project.

**Patrick Kelly**

- Major: Political Science
- Supplementary Major: Latino Studies
- Advisor: Luis Fraga

## Anti-Immigrant Sentiment in the U.S. Over Time

My thesis compared anti-immigrant sentiment through the lens of Congressional speeches, both on the floor and in committee, surrounding six major pieces of immigration legislation from 1790 to 1986. The goals were to find similarities in rhetoric spanning various economic periods, waves of immigration, and cultural trends and to answer the question: Why has anti-immigrant sentiment generally been so consistent throughout American history?

I focused on anti-immigrant sentiment at an institutional level because it was the best way to combine both of my majors. I am passionate about immigration policy and wanted to develop a better understanding of how we have treated immigrants throughout history in the United States.

**Marty Kennedy**

- Major: Sociology
- Supplementary Major: Peace Studies
- Minor: Data Science
- Advisor: Rory McVeigh

## LGBTQ+ Student Activism, Social Movement Framing, and Op-Ed Articles

This project examined student newspaper op-eds from five selected universities to understand how proponents and antagonists of LGBTQ+ rights situated their arguments for or against LGBTQ+ rights within the institutional discourse of the university in which they are embedded. This highlighted how, even though both groups are arguing different sides, the university context shapes how pro- and anti-LGBTQ+ groups frame their arguments.

I chose this topic to research an underrepresented group in society, the LGBTQ+ community. Time and time again, the LGBTQ+ community has been marginalized and discriminated against. This research hopes to bring LGBTQ+ voices, opinions, and arguments to the forefront of sociological discussion.



### Sophia Kics

- Major: Spanish
- Supplementary Major:  
Arts & Letters Pre-Health
- Minor: Gender Studies
- Kellogg International Scholars  
Program
- Advisor: Vanesa Miseres

## Liberation and 'Higienismo': Chilean Feminism in *Acción Femenina*

I explored the manner in which the Chilean feminist magazine *Acción Femenina* represented the development of Chilean feminism during the first half of the 20th century. I evaluated the presence of "higienismo" (or social hygiene) in the magazine, and asserted that in upholding traditional concepts of feminine beauty, the ideology also policed the feminine body and, in doing so, hindered the progress of early Chilean feminist movements.

I have worked with Vanesa Miseres in the Kellogg International Scholars Program for the past three years and have extensively read and researched *Acción Femenina* while assisting her with her book. I noticed the magazine's contrasting themes of radical feminism and traditionally feminine beauty practices, and I developed this into my thesis topic.

**Abigail Kiernan**

- Major: Neuroscience and Behavior
- Minor: Catholic Social Tradition
- Advisor: Bill Purcell

## Catholic Social Teaching and Autism

My capstone investigated how the Catholic social teaching (CST) theme of a preferential option for the poor can be applied in the case of autism spectrum disorder. Autism is often discussed as pathology, but recently there has been a movement in the autistic community to view it as neurodiversity. This capstone focused on how listening to the experiences of people with autism can inform a CST-based response to this debate on pathology versus neurodiversity.

Most of the scientific research on autism spectrum disorder was completed by neurotypical individuals and did not include perspectives of people with autism. I wanted to use my background in both CST and neuroscience to understand how we can approach autism in a scientific way that centers experiences of people with autism.

**Sarah Kikel**

- Major: Program of Liberal Studies
- Minor: Sustainability
- Advisor: Eric Bugyis

## 'Cursed Be the Fiend': Reanimating the Socially Dead with *Frankenstein* as a Historical Slave Narrative and Afropessimist Text

My thesis analyzed Mary Shelley's 1818 literary masterpiece *Frankenstein* as a historical slave narrative, with the Creature acting as an enslaved being and Frankenstein as a master. Despite Shelley's personal faith in efforts to gradually assimilate formerly enslaved people into society, her novel reaches a starker conclusion. As a result, *Frankenstein* can be classified as an Afropessimist text, as the Creature is barred from humanity, and thus experiences perpetual slavery in his state of social death.

I was intrigued by how Shelley's *Frankenstein* predates Afropessimism, a 21st century school of thought. Shelley depicted very similar relations between Frankenstein and the Creature as Afropessimism reveals in white society and the Black body. In allowing the Creature to speak his narrative mid-novel, Shelley gives voice to the socially dead, which is as jarring to white society as it is to his creator.

**Sarah Kikel**

- Major: Program of Liberal Studies
- Minor: Sustainability

## Dust Cloud Disappear: Voices from the Appalachian Economic Transition in Southwest Virginia

My capstone project is a collection of poems that highlight a diverse account of stories, projects, and viewpoints from individuals and organizations contributing to a just transition of Appalachia's economy in southwest Virginia.

The project is part travelogue, part vignette, and examines the role of documentary poetry in encapsulating a historical narrative of environmental progress, as Appalachia shifts from environmentally destructive practices to an ecologically sustainable economy.

When visiting Abingdon, Virginia and the surrounding region over fall break with the Center for Social Concerns, I was deeply moved by southwest Virginia's environmental struggles and revitalization efforts. I heard stories of many people, including farmers, coal miners, and grassroots organizers — all of whom inspired me to reflect on their experiences and consider how their regional efforts can be models for environmental change throughout our country.

*Traveled to Abingdon and other areas in southwest Virginia.*



### Veronica Kirgios

- Majors: Honors Mathematics and Anthropology (Honors)
- Glynn Family Honors Program
- Advisor: Eric Haanstad

## Influence of Grammatical Structures on the Perceptions of Mental Health in Different Communities

I explored linguistic and cognitive anthropology as I summarized the current connections and findings between language and culture and language and mental health. I also posited my own theory regarding grammatical structures and their influences on the perceptions of mental health in different communities, more specifically Spanish-speaking and English-speaking communities.

Through an anthropological lens, many stones remain unturned in the discussion of mental health and linguistics. Often, we see statistics indicating suicide is a leading cause of death around the globe, especially in young people. As mental health awareness becomes more important in society, many scientists can contribute original research that explores the various structures and dimensions of language that affect mental health, how mental health is viewed, and care for mental health. As someone who has struggled with mental health, I view this research as being extremely impactful to our society.



### Veronica Kirgios

- Majors: Honors Mathematics and Anthropology (Honors)
- Glynn Family Honors Program
- Advisor: Michael Gekhtman

## The Foundations of Cluster Algebras

Cluster algebras is a very new, small field in mathematics. My paper focused on one of the main motivations for the development of the field, total positivity. This thesis offered an accessible exposition to the foundations of cluster algebras by focusing on the notions of total positivity and primary examples found today in research: square matrices, Grassmannians of 2-planes, and basic affine spaces.

Throughout my years at Notre Dame, I have grown to greatly love theoretical algebra. The opportunity to work with one of my highly esteemed professors on a topic such as cluster algebras was an opportunity I could not pass on.



**Genevieve Klein**

- Major: International Economics (French)
- Supplementary Major: Global Affairs
- Minor: Data Science
- Advisors: Denise Della Rossa and John Firth

## Violence and Health Care in the Democratic Republic of Congo

My senior research project analyzed the relationship between conflict and health outcomes in the Democratic Republic of Congo following economic sanctions enacted by the United States to prohibit sourcing tin, tantalum, and tungsten for electronic manufacturing. In addition to heightened violence and decreased household incomes posing as barriers to the uptake of health services, the eastern Congo remains fraught with sexual violence against women and male-dominated gender dynamics that decrease the demand for health care services.

Over the summer, I interned with USAID's Integrated Health Program in the Democratic Republic of Congo. I was tasked with identifying the program's greatest successes, using data analytics on its key indicators. Despite the efforts of USAID interventions, there was little uptake. Therefore, I was curious to explore the underlying cultural and social dynamics that could influence the demand for health care.

**Ellie Konfrst**

- Major: Political Science
- Minor: Hesburgh Program in Public Service
- Glynn Family Honors Program
- Mulva Scholars Program
- Advisor: Christina Wolbrecht

## Faith in Government and the 'Freedom to Farm': Policy Feedback Effects and Republican Vote Choice in Rural Areas, 1996-2018

Rural areas have become increasingly favorable to Republican candidates since the 1990s. Using General Social Survey (GSS) data from 1994 to 2018, this paper attempted to understand that trend from a material perspective through the lens of policy feedback effects. I theorized that the failure of the 1996 Farm Bill had a negative impact on rural voters' economic conditions, which decreased their confidence in government and increased the appeal of the Republican Party's anti-establishment rhetoric.

I chose this topic due to a combination of my experience growing up in a primarily rural state and due to my experience in classes that focused on low-income Americans. I believe increased polarization leads some to oversimplify the motives of rural and low-income voters, and I wanted to see whether there is empirical evidence for a more material explanation.

*Received funding from the Mulva Scholarship Enrichment Fund.*

**Mia Konkey**

- Major: Sociology
- Minors: Computing & Digital Technologies and Collaborative Innovation
- Advisor: Mim Thomas

## The Racial Dissonance of Rap and Hip-Hop in the United States

My project sought to understand race and how people construct images of race in the context of art, specifically within the popularizing art forms of rap and hip-hop. Due to the authenticity inherent to the genre, artists utilize the medium as a presentation of self, which is often used by the audience to construct perceptions of race. The current rise in popularity is particularly important since many of the consumers are of other races, and use hip-hop and rap as their primary source for an understanding of the lived experiences of Black people in America.

I hoped to learn how authenticity of the storytelling in rap and hip-hop functions as society's construction of race in the United States, whether that be for African American listeners a recognition for collective identity, and for non-Black listeners a way to construct a meaning for what it is to be a Black person in America. Furthermore, I wanted to extract how the authenticity of rap and hip-hop guides and directs the social perceptions of African Americans in America.

*Received funding from the Center for Undergraduate Scholarly Engagement.*



### Genny Kortick

- Major: Environmental Sciences
- Minor: Sustainability
- Glynn Family Honors Program
- Stamps Scholars Program
- Advisors: Gary Lamberti and Sisi Meng

## An Assessment of Fluridone as an Invasive Plant Treatment Option in Alaska Wetlands

My thesis has two parts. The main section is scientific and the supplementary section focuses on economic and political implications. The main research question is: Do fluridone applications for the control of an invasive aquatic plant impact dissolved organic carbon (DOC), total nitrogen (TN), or chlorophyll a in wetland ecosystems? My secondary research question is: What are the economic and political considerations involved when treating an invasive plant with a chemical herbicide such as fluridone?

I chose this topic because I am passionate about issues related to our aquatic ecosystems. When I joined the Stream and Wetland Ecology Laboratory, this project fell into my lap. Even though I had never studied something like this before, the damage caused by Elodea and how difficult it is to manage were fascinating to me. The pandemic set my data collection back a bit and left us with fewer data for 2020, but we still pulled the project together and got enough data to draw conclusions.

**Maura Kostelni**

- Major: American Studies
- Glynn Family Honors Program
- Advisor: Jennifer Huynh

## The Pancit Pot: Tracing Shared Pasts and Presents of Filipino Food

My thesis traced the role of food in cultivating a sense of belonging and identity in Filipino Americans, both historically and in the lives of today's Filipino college-aged students. Food studies is a window into histories of colonialism, resistance, and identity. I explored these themes through a study of Filipino food and United States imperialism, a chapter on today's "mainstream" attitudes toward Filipino ingredients like ube, and a food frequency survey of students who identify as Filipino on the Notre Dame campus.

My fondest memories from childhood are of watching and helping my mother cook. My thesis is an ode to my mother's cooking and an exploration of how food connects me not just to my mother but also to those who came before me.

*Received funding from the Glynn Family Honors Program.*

**Emily Krejci**

- Major: Political Science
- Minor: Constitutional Studies
- Advisor: Emilia Justyna Powell

## The Treatment of Insanity in Islamic Criminal Law

Islamic culture may be among the first to study and conceptualize mental illness, but scholarly attention has been scantily applied to insanity in Islamic criminal law. My senior thesis attempted to fill this gap by providing a comprehensive review of insanity in Islamic law, both in its classical and modern applications. This included examining insanity in the Qur'an and Muhammed's teachings, comparing differing classifications in the schools of jurisprudence and, finally, studying insanity in modern Islamic legal states' criminal justice systems.

I became interested in the insanity defense after an assignment on the topic early in my undergraduate career. I then began working as a research assistant for associate professor Emilia Powell in the fall of my junior year, studying Islamic international law. For my thesis, a combination of these interests seemed logical and the lack of existing scholarly work made me feel a study in this area was necessary.

**Sophie Kressler**

- Major: Art History
- Minor: Digital Marketing
- Advisor: Nicole Woods

## Italian Futurist Architecture in the First World War Era

My thesis examined the work of Antonio Sant'Elia of the Futurist movement, with particular attention paid to his project *La Città Nuova*. I attempted to prove the importance of his legacy and recast him as a leader in his field and a founder of modern architecture. Sant'Elia died in World War I before most of his work could be realized, but hundreds of his drawings prove him to be innovative and an avid appreciator of the marvels of modern technology.

I knew I wanted to write about modern art, and I speak some Italian, so that led me to the Futurist movement. I used to be an architecture student and am very interested in architectural history. I thought that discussing that was a strength that I had that most others did not. So, I settled on looking mainly at Sant'Elia because he was the lead architect of the movement and one of Italy's most famous architects at that time.

*Traveled to Milan and Como, Italy, with funding from the Nanovic Institute for European Studies.*

**Jessamine Kuehn**

- Majors: Biochemistry and Theology
- Glynn Family Honors Program
- Advisor: Katharine A. White

## The Effect of Intracellular pH on the Expression and Localization of Glycolytic Enzymes and Metabolites

In cancer cells, metabolism is changed so glycolysis is preferred over oxidative phosphorylation. Cancer cells have an increased intracellular pH (pHi). It is possible that increasing pHi in normal cells may drive cancer-like metabolic changes. To test this hypothesis, pHi in normal cells was manipulated and the expression of metabolic enzymes and metabolites was quantified. If increased pHi causes metabolic changes seen in cancer, pHi is a potential therapeutic target for combating cancer metabolic reprogramming.

Cancer affects a significant proportion of the population; nearly everyone knows someone with cancer. There is a need for improved cancer diagnostics and therapeutics, and intracellular pH appears to be a promising therapeutic target. Research investigating this topic will contribute to the ongoing process of developing new cancer treatments.

*Received a Research Like A Champion grant from the Harper Cancer Research Institute.*



### Alexander Kuptel

- Majors: Economics and Philosophy
- Minor: Data Science
- Sorin Scholar
- Advisor: Jeroen Dalderop

## Critical Slowing Down in Technology Adoption

Some technologies, including those needed to mitigate climate change, seem to explode in popularity after reaching a tipping point. And creating policies to target those tipping points would rapidly reduce the costs of green technologies and reduce emissions. To do this, we need to predict when a tipping point is near. In other fields like physics and Earth science, tipping points are predicted with “critical slowing down.”

As a system approaches a tipping point, its recovery rates to small shocks slow because the factors that keep the system in that equilibrium are being weakened. So, critical slowing down serves as an “early warning signal” of a tipping point. However, this model has not widely been applied in the social sciences, especially technology studies. My thesis was the first paper to statistically analyze whether critical slowing down precedes growth in technology adoption, especially in green technologies like electric vehicles and renewable energy.

I liked that this project was an interdisciplinary topic that applied a model from the physical sciences to a social phenomenon. I also liked that it had real consequences on climate change mitigation. If this method could predict tipping points in technology adoption, we could time those policies to bring green technologies over those tipping points and decrease their costs.



### Marie Latham

- Major: Art History
- Minors: Business Economics, Digital Marketing, and Italian
- Advisor: Tatiana Reinoza

## Mosaic Modernism: Tracing Emilio Pettoruti's Painting from Italy to Argentina

I argued that Italian-Argentine painter Emilio Pettoruti was able to synthesize his distinctive geometric paintings because of his study of Byzantine mosaics. His theories on light, movement, and color advanced modern art in Argentina and abroad. Many of his works, however, are read in a Eurocentric manner, assuming him to be a disciple of French Cubism or Italian Futurism. I traced elements which are uniquely Argentine in his works and writings to dismantle these current structures of external categorization.

While working with Tatiana Reinoza in a 20th-century Latin American Art course, I was introduced to Pettoruti's vibrant paintings. He represents a generation of young Latin American artists who studied abroad in Europe, and I was intrigued by how that dynamic impacted art movements in their home countries. In January, I traveled to Buenos Aires, Córdoba, and La Plata in Argentina and conducted visual analysis on his large-scale mosaic pieces which form the central focus of my paper, including *Primavera* (1914) at the Universidad Nacional de La Plata and *Meditazione* (1915) at the Museo Municipal de La Plata.

These pieces almost never travel from their local contexts, as they are difficult to transport and are understudied elements of Pettoruti's career. I also studied display tactics of local museums, including how they described Pettoruti's pieces for visitors, how they placed them in conjunction with his contemporaries, and the analytical structures they imposed.

*Traveled to Buenos Aires, Córdoba, and La Plata, Argentina, with a Gero Family Travel Grant and funding from the Department of Art, Art History & Design.*

**Dinah Lawan**

- Major: Political Science
- Minors: Peace Studies and Studio Art
- Balfour-Hesburgh Scholars Program
- Advisor: Caroline Hughes

## The Impact of the Global Oil Market on Peacebuilding in the Niger Delta Region of Nigeria

Natural resource/extractivism is considered to be one of the variables that contribute to social, political, and ethnic conflicts. Nigeria has crude oil in the Niger Delta in the southern part of the country, which has been one of the major factors that has triggered conflicts in the region. My capstone investigated how ethnic diversity and crude oil exploitation influence the conflicts in the Niger Delta and how the Nigerian government can govern the oil industry better — politically, socially, and economically.

The Niger Delta is a fascinating case study. Researching the relations between oil exploitation and peacebuilding is interesting and it's also kind of a better way to understand what is happening in the region of the Niger Delta, and in a region that I am not from.

**Dinah Lawan**

- Major: Political Science
- Minors: Peace Studies and Studio Art
- Balfour-Hesburgh Scholars Program
- Advisor: Ernesto Verdeja

## Dismantling Terrorist Networks (Boko Haram, Northern Nigeria): A Review of Post-Conflict and Peace Resolution Strategies

What factors lead to the emergence of terrorist organizations? What are effective strategies for dismantling terrorist groups and promoting long-term peace? My senior project extensively investigated these issues in Africa, particularly in the case of Boko Haram in the North East geopolitical zone of Nigeria. I mainly focused on examining past and current efforts to defeat Boko Haram, including military approaches, civilian self-organizing, peace initiatives program, and deradicalization initiatives.

I proposed to apply the strategic peacebuilding framework, as it offered broader ways to think about the issue of terrorism and imagine possible solutions to dismantle Boko Haram and promote peace in northern Nigeria. One goal was to produce recommendations that can be useful to policymakers in Africa, particularly those of Nigeria. I took a lot of courses in my major and minor that involved research, which I enjoyed. I am also a victim and a survivor of Boko Haram, which influenced me to research this topic on a deeper level.



### Uyen Le

- Major: English
- Supplementary Major: Gender Studies
- Glynn Family Honors Program
- Advisor: Sara Maurer

## Faith and Feminism in Charlotte Brontë's *Jane Eyre*

Charlotte Brontë's *Jane Eyre* examines the relationship between Christianity and womanhood, presenting faith as a journey on which our heroine embarks. In my thesis, I investigated the binaries that Brontë depicts — secular vs. religious, earthly vs. divine, male spirituality vs. female spirituality — and how Jane navigates these seemingly opposing factors of her life to form an individual, specialized relationship with God.

*Jane Eyre* is my favorite novel because it provides a truthful and raw account of a woman who struggles to reconcile her faith and her relationship to her surroundings. *Jane Eyre* was revolutionary for its time because it conveys that faith empowers rather than suppresses women. Brontë presented ideas that challenged Christian norms and showed women that autonomy coincides with a trust in God.

**Mia Lecinski**

- Majors: Philosophy and Economics
- Minors: Collaborative Innovation and Italian
- Advisor: Meghan Sullivan

## A Friendship Philosophy Following the COVID-19 Pandemic

My thesis described how we can discover philosophical truths through our friendships with others. I began by exploring ancient friendship philosophies outlined by Aristotle and Confucius and proceeded by building off the works of Edith Stein and Albert Camus. I coined my model of friendship as “existential friendship.”

Unlike how we typically conceive of friendships, an existential friendship doesn’t require similarity or familiarity; it can occur between two complete strangers. I argue this type of friendship occurs when we employ empathy and experience ourselves in community with another person. This bond is existential because the interaction makes us aware of what it means to be human. For this reason, existential friendship requires bonding with all kinds of different people so that we may gain knowledge of all of ourselves.

I chose this topic because my God and the Good Life course freshman year emphasized how philosophy is a deeply practical discipline, and should inform how we live. During lockdown in March 2020, I found myself missing strangers more than my closest friends.

In order to understand this phenomenon, I turned to philosophical works. As a result, I have learned why strangers are so important to my conception of self and my philosophy of friendship. My hope is that my thesis also demonstrates for others how a more inclusive friendship philosophy has major sociopolitical implications for a society recovering from a pandemic.

**Michael Lee**

- Majors: Biochemistry and English
- Minor: Philosophy
- Advisor: Mark Sanders

## The Duality and Progression of the Narrator's Invisibility in Ralph Ellison's *Invisible Man*

My thesis investigated the duality of invisibility in Ralph Ellison's *Invisible Man*. Specifically, it explored how invisibility in the novel progresses from being a consequence of the narrator's desire to conform to a particular system to being a way for the narrator to defy such a system, through which he can finally understand who he really is. The thesis aimed to understand the purpose of this progression that contributes to the apparent duality of invisibility in the novel.

After I read *Invisible Man* in one of my English classes, I have pondered the possible meanings of invisibility in the novel. I knew that by writing a thesis about this book, I could offer one of many possible interpretations.



### Andrew Lege

- Major: Economics
- Supplementary Majors: Applied Computational Mathematics and Statistics; Theology
- Advisor: William Evans

## The Impact of Medicaid Expansion on Hospital Bed Count

As a result of the passage of the Affordable Care Act (ACA), all but 12 states have expanded their Medicaid programs. Much of the literature examining the impacts of the ACA have focused on the impact of Medicaid expansion on health outcomes, health care usage, and insurance coverage rates.

In this paper, I exploited the variation across states in Medicaid expansion decisions to examine the impact of higher insurance coverage rates on hospital beds per capita. Hospitals have historically charged off billions of dollars annually in unreimbursed care due to uninsurance. Many predicted that the Medicaid expansions may strengthen a hospital's financial viability, reduce hospital closures, and increase expected access to inpatient services. Comparing per capita bed counts of expansion and nonexpansion states, I found that Medicaid expansion has had little to no effect on hospital beds in the United States, which suggests that the ACA has not drastically impacted access to hospitals or hospitals' financial wellness.

I am pursuing a career in health care administration, so I knew I wanted to examine something at the intersection of health and economics. Medicaid expansions have been controversial and limited research has been done on how it affected hospitals in the United States. I found this topic to be relevant to both my upcoming career and my understanding of how health policies can affect providers of health care.



**Maria Camila Leon  
Buitrago**

- Major: Psychology
- Supplementary Major: Latino Studies
- Advisors: Karen Richman and Daniel Lapsley

## US College Students' Beliefs about Saving, Retirement, and the Pandemic

This study investigated how the pandemic influenced the financial literacy of college students. It examined their beliefs and attitudes about the material, moral and financial dimensions of aging, including their economic and caring obligations to others, their expectations of reciprocity in retirement, and the support from the state.

This interdisciplinary analysis applied the qualitative and quantitative methods from the two disciplines to highlight how aspects of morality, class, and citizenship affect beliefs and attitudes about collectivism, individualism, and retirement. The findings can inform financial education programs and policies.

I picked up this study this past summer when I was working as a research assistant for Karen Richman. I spent so much time dedicated to the project that I ultimately turned it into my senior thesis project, and I am so glad that I did!



### Ashley Lizana

- Major: Political Science
- Supplementary Major: French
- Minor: Education, Schooling, and Society
- Advisor: Matthew Kloser

## Black Girls and School Discipline: A Story of Adulthood

This study explored the way that school discipline of Black girls' hairstyles, clothing, and body types affects the way they feel about themselves and their sense of belonging in their academic environments, as well as how they change themselves as a reaction to this discipline. Through conducting interviews with 11 Black female college students, I gathered examples of discipline and discrimination from their retelling of middle and high school experiences.

I have personally experienced school discipline in relation to my hair and body type, and wanted to explore this topic in depth and hear from others who have experienced similar or worse situations.

*Presented research at the 2022 Human Development Conference.*

**Amelia Love**

- Majors: Program of Liberal Studies and Economics
- Advisor: Thomas Stapleford

## Christian Ecology

My thesis explored how different interpretations of Christianity impact the way humans interact with the environment. I traced Lynn White's argument that historically people have interpreted Christianity as an anthropocentric religion: one that prioritizes humanity over all other living beings. White argues that this interpretation has contributed to climate change.

I then explored how Pope Francis' understanding of Catholicism in *Laudato Si'* has the potential to fight against climate change. I chose this topic because I was interested in learning more about sustainability and climate change. As I began researching, I realized how important it was to explore how religious beliefs shape how humans view themselves and their place in the world around them.

**Katie Lucenko**

- Majors: Biological Sciences and Theology
- Advisor: Gerald McKenny

## Contraception in Catholic Clinical Ethics

In my thesis, I discussed the Catholic Church's teaching on contraception and presented nuances that are important to authentically understand her teaching. I also discussed how the papal encyclical of St. Pope Paul VI, *Humanae Vitae*, contributes to the Church's understanding of the purposes of marriage. Additionally, in light of *Humanae Vitae*, I analyzed complicated bioethical scenarios related to the use of contraception by Catholic hospitals and physicians.

My thesis has allowed me to explore questions in clinical ethics from a theological perspective and aligns well with my personal and academic interests. It also highlighted the importance of bringing faith into conversation with scientific practice, which has long been interesting and important to me.



### Mary Lusebrink

- Major: English (Concentration in Creative Writing)
- Minors: Linguistics and Computing & Digital Technologies
- Advisor: Hana Kang

## Gamification and Motivation

My linguistics thesis was a research project about the motivational effects of the language learning tool Duolingo on second language learners. Working off previous research, I conducted a 10-week study to determine how specific gamified aspects of Duolingo affected participant motivation. The specific elements included the short lesson length, the heart system, the badge system, the gem system, the community leaderboard, and the animated characters.

The idea for this research came from my desire to better understand Duolingo, which I use. It also was an opportunity to combine my knowledge of linguistics and digital technologies. I hope that it reveals something about how technology affects the way we learn languages.

**Mary Lusebrink**

- Major: English (Concentration in Creative Writing)
- Minors: Linguistics and Computing & Digital Technologies
- Advisor: Dionne Irving Bremyer

**Zap: An Excerpt of a Novel**

My creative thesis was an excerpt from a fiction novel that I am writing about superheroes, white saviors, and climate change. It follows a group of white superheroes who, after gaining nature-based powers, each believe they are some type of “chosen one.” They each follow this instinct by trying to save their world as it slowly deteriorates due to ecological disaster. Their misadventures subvert the chosen one trope and reveal them as the white saviors they truly are.

I wrote this thesis because I love superhero stories and superhero critiques, but I have consistently been disappointed by their endings. This, combined with my growing awareness of my own white privilege and the vastness of the ecological crisis we all face, led me to try to write a novel that draws on all of these issues and encourages others to examine them in their own lives.

**Trevor Lwere**

- Major: Economics
- Supplementary Major: Global Affairs
- Minor: Philosophy, Politics, and Economics (PPE)
- Glynn Family Honors Program
- Hesburgh-Yusko Scholars Program
- Kellogg International Scholars Program
- Advisor: Amitava Dutt

## Growth and/or Development: Africa's Experience with Modernity

Africa's post-independence leaders have been preoccupied with the question of (economic) development, i.e., how to transform Africa into a prosperous continent and to significantly improve the material well-being of Africans. Yet, despite all the earnest effort undertaken, development has seemingly eluded Africa.

This paper analyzed two cases of attempts at modernization in Africa: the Ujamaa experiment in Tanzania and the neoliberal experiment in Uganda. The study examined reasons for the failure of these efforts and explored alternative paths to development for the next generation of African leaders to consider.

*Received funding from the Glynn Family Honors Program.*



### **Katherine Machado**

- Majors: Psychology and American Studies
- Minor: Education, Schooling, and Society (ESS)
- Advisors: Peter Cajka and Daniel Lapsley

## **Cultivating Religious Identity in Christian Schools**

I studied factors that influence high school students' religious identity and the role that faith-based schools can play in that process. I did so to form recommendations for how faith-based schools can improve religious identity formation. I analyzed research on religious identity formation and the ways that faith-based schools have historically influenced that process. I identified two high schools that are particularly effective at religious identity formation — one Lutheran and one Catholic. I traveled to Jesuit High School in New Orleans and Concordia Lutheran High School in Fort Wayne, Indiana, to interview faculty and administrators about their approaches toward faith-based education.

I chose this topic because many faith-based schools aim to prioritize religious identity development but lack the knowledge of how to do so. I wish to see what we can learn from exemplar schools about cultivating strong religious identity. Thesis writing has been one of the most rewarding experiences of my undergraduate career. If you have a question you're been pondering for a while (as I did with my thesis topic), consider writing about it.

*Received funding from the Institute for Scholarship in the Liberal Arts to travel to New Orleans, Louisiana, and Fort Wayne, Indiana.*

**Julia Mackey**

- Majors: Economics and Global Affairs
- Brennan Family Scholars Program
- Glynn Family Honors Program
- Advisor: Kraig Beyerlein

## Black Lives Matter and Protest Behavior

Based on a survey of adults in the United States conducted in summer 2020, I examined the ways in which religious Black Lives Matter supporters relate to prayer and protest as means of social involvement. More specifically, are prayer and protest viewed by religious BLM supporters as substitutes — in which each activity takes the place of another — and supporters will choose prayer or protest as means of social action? Or are they complementary — in which supporters perform both activities (prayer and protest) concurrently? I also measured whether other factors, such as religious affiliation and frequency of prayer reported, are related.

I chose this topic because I am interested in understanding the factors that motivate people to mobilize. As a supporter of Black Lives Matter, I wanted to explore what gets people out on the streets to protest.

**Samantha Manfreda**

- Majors: Computer Science and Spanish
- Advisor: Ben Heller

**Translating Letters from Norah Borges**

I explored the life of visual artist and art critic Norah Borges through her words and eyes as she described places she has visited, books she has read, interactions she has had, and more in personal letters spanning 40 years. Working with these handwritten letters has been fascinating. In many ways, they felt like a portal into her world.



**Samuel Mansfield**

- Major: Design (Concentration in Industrial Design)
- Supplementary Major: Environmental Science
- Advisor: Jim Rudolph

## Cultivating Urban Ecological Restoration

I explored how drone technology and organic materials can be leveraged to create 3D fiber structures, which can later be populated by organic plant matter. I created “co-fabricated” yarn/vine structures by placing climbing vines in close proximity to environmentally specific yarn structures. In doing so, I could guide the climbing vine to entwine itself into the yarn and populate the yarn structure with greenery. As plant matter is the foundation of the trophic pyramid, the remaining organisms which facilitate ecosystem homeostasis naturally begin to populate the city.

I chose the topic because I believe that humans have the power to design ecosystems that also provide human-centered functionalities, such as buffering wind, cooling cities, and dispersing precipitation.

*Received funding from the Undergraduate Research Opportunity Program and the Da Vinci Summer Grant Program.*

**Katherine Mansourova**

- Majors: Finance and Political Science
- Minor: Russian
- Kellogg International Scholars Program
- Advisor: Susanne Wengle

## Russia's Pursuit for Digital Sovereignty and its Effectiveness

Russia has made a dramatic shift in how it regulates cyberspace over the last decade. Regulations have become more overall stringent over time, yet it is notable that the Russian government has not treated each private actor with the same severity. This study examined the uneven ways in which the government has pursued digital sovereignty, and it answers questions that arise about the effectiveness of Russia's digital sovereignty policy.

I chose this topic because I wanted to combine my interests in political science and business into one project that is relevant in today's environment. The relationship between the Russian state and these private actors in the digital sphere has several important implications in Russia and beyond.

**Nicole Marcinkus**

- Majors: English and Political Science
- Minor: Medieval Studies
- Advisor: Michelle Karnes

## The Medieval Quest Narrative in the Modern Day

I aimed to discover, firstly, what the standard medieval quest looked like in its original time period. Then I traced its development over time, through stories set with knights in King Arthur's court, *The Lord of the Rings*, a historical fiction novel set in the American Civil War, and the cyberpunk novel *Neuromancer*. I discussed the significance of the introspective journey that takes place alongside the physical quest, the evolution of the dichotomy between good and evil, and moving from stark to complex.

I studied the quest narrative in my Middle Ages and British Literature classes but discovered that it didn't have a clear or universal definition. Each historian and literary expert has a general idea of it, but the definition changes with each story. I was interested in exploring this evolving narrative and tracking how it changes in the modern day while retaining its identifiable structure.

**Andrew Mariados**

- Majors: Finance and Economics
- Advisor: Jeffrey Campbell

## The Exposure of Real Estate Equity to Monetary Policy Risk

This paper aimed to answer the question of how exposed real estate is to monetary policy risk. I find that the real estate market is relatively unaffected by Federal Reserve communications over the medium run, but that in the short run monetary policy surprises affect real estate prices more than the capital asset pricing model would suggest given the risk exposure of real estate to the overall market.

I chose this topic because I was curious about how monetary policy affects real estate, which is a broad asset class. Although I focused on real estate equities due to the liquid nature of the securities, I thought that this question would be of interest to anyone involved in the real estate market — from homebuyers to commercial entities.



### John Edward Mariano

- Majors: Political Science and Program of Liberal Studies
- Notre Dame International Security Center Fellow
- Advisor: Sebastian Rosato

## Where Conscience Meets Power: A Theory of Moral Rhetoric in International Relations

How does the use of moral rhetoric affect the likelihood of international conflict? This thesis sought to examine state leaders' use of moral rhetoric in the international system, specifically during times of American conflict escalation. I concluded that the use of moral rhetoric, while seemingly pacifist in nature, hinders interstate cooperation and instead makes nation-states more prone to war.

Departing from the existing literature that regards rhetoric as mere "cheap talk," I claimed that moral rhetoric is a strategic tool of power politics for states to achieve desired political goals. I argued that moral rhetoric increases the likelihood of international conflict through two causal logics.

First, actors who use moral rhetoric risk antagonizing their international audiences, who will be less likely to compromise diplomatically. Second, a leader's moral rhetoric triggers their domestic audience's moralized attitudes, leading to either vehement support or outright opposition. These domestic reactions, in turn, create audience costs, which constrain state leaders to honor their declared ethical obligations. That said, I tested my theory's robustness against the historical record through qualitative case study analysis.

As a PLS and political science major, I wanted to pursue a thesis project that involved applying the philosophical issues found in the liberal arts into the international system. As I researched, I found that moral questions and rhetoric pervade the international arena, and how we use rhetoric has profound implications for the likelihood of cooperation or conflict.



### **Michael Marino**

- Majors: Environmental Sciences and Economics
- Minor: Theology
- Advisor: Joseph Kaboski

## **Agricultural Soil Quality Impacts of Conservation Incentives Provided through the USDA's Environmental Quality Incentives Program**

In 2020, the U.S. Department of Agriculture's Environmental Quality Incentives Program (EQIP) provided more than \$1.8 billion in technical and financial assistance to farmers in the United States to implement conservation practices expected to generate public environmental benefits, including cleaner runoff and healthier soils. This project attempted to assess, at both national and intrastate scales, the soil quality impacts of certain EQIP practices expected to improve soil quality. Specifically, soil organic carbon contents are monitored in relation to conservation practices.

U.S. agricultural soils are clearly headed on an unsustainable path of degradation that leads to negative environmental outcomes and creates new challenges for farmers. Many agroecological solutions have succeeded in addressing this issue on a small scale. But large-scale change requires large-scale solutions such as those already offered by the USDA through EQIP and similar programs.

A critical question requiring further research is whether sustainable farm management can be profitable and productive. Environmental sciences and economics offer exciting potential to validate the management changes that seem so urgently necessary for the nation's dying soils.

**Daut'e Martin**

- Major: Africana Studies
- Minor: Education, Schooling, and Society (ESS)
- Posse Scholars Program
- Advisor: Maria McKenna

## Imagining What's Possible from Notre Dame and Beyond

This project aimed to understand the ideologies of Black educators in historically white spaces. One of the main goals of this project was to make it apparent that there's a particularity to how Black educators teach, especially in historically white spaces. Using autoethnography, I offered my learning experiences from Black educators within interdisciplinary fields. I explored how a single experience of a Black female student encouraged Black educators to enter the world of higher education.

I choose this topic because I believe that my experiences at Notre Dame matter. More importantly, it's been hard to imagine what senior year and graduating from Notre Dame would look like. I want my thesis to be a remembrance of my transformative growth and legacy at Notre Dame.

**Macy M. Mateer**

- Majors: Film, Television, Theatre (FTT) and History
- Minor: Musical Theatre
- Advisors: Anne García-Romero and La Donna Forsgren

## Staging Historiography: An Exploration of Historical Storytelling through Theatre

Theatre has a unique power to inspire a deeper connection between audience and history. I examined three different works of American theatre to explore how it attempts to capture this power in three distinct ways: in the fictionalization of history in Disney's *Newsies*, the hybridization of primary source and fiction in Mary Kathryn Nagle's *Sovereignty*, and the staging of the archive in Sankoff and Hein's *Come From Away*.

I am deeply fascinated by the overlap between history and the arts, namely the staging of history via theatre. Immediacy is what makes theatre what it is and, thus, when an audience is in the same room as a historical event or figure, the connection can be powerful and the impact visceral. I am a firsthand witness to the power that theatre holds to invoke empathy in its audience.

With the effects of the pandemic still impacting the theatre industry, COVID-19 forced me to be creative with the texts I was going to analyze. I decided to choose texts that had professional recordings, and thus had consistent access to these texts should I need to return to and scrutinize them.

*Received funding from the Department of Film, Television, and Theatre.*

**Nora Maus**

- Major: Neuroscience and Behavior
- Minor: Business Economics
- Advisor: Kristin Valentino

## Maternal Childhood Maltreatment and Mother-Child Reminiscing

Childhood trauma is highly prevalent in the United States and across the world and can lead to an increased risk of numerous mental and physical health issues. Mother-child reminiscing has been investigated in instances of child maltreatment. It provides an opportunity for bonding and promotes the child's understanding of emotions and how to adequately regulate these emotions.

The goal of this study was to look at how a mother's childhood trauma influences her elaboration and sensitive guidance during reminiscing about specific past events. After working in Professor Kristin Valentino's Development and Psychopathology Lab over the past three years, I became interested in studying mother-child interactions and what factors affect them, including childhood trauma.



**Mary Ellen (Emmie)  
McCabe**

- Majors: Political Science and Psychology
- Advisor: Christina Wolbrecht

## Political Partisanship and Social Media

My senior thesis explored the rise of negative partisanship, which is a dislike and distrust of the opposing party, in the American electorate and the role of social media in activating these feelings. In a survey experiment, I saw how feelings toward the opposing party might be activated by viewing an image of a Facebook post supporting that party. My hope is that we are better able to understand the role of social media and political influences.

I chose my topic because after and during the 2020 election, there were many social media posts about political parties, and I wondered how that might affect users' emotional reactions and views of the party. In another class, I was introduced to negative partisanship and wanted to learn more about it. This was a really meaningful way to conclude my academic undergraduate career at Notre Dame, and I am very grateful to my advisor and other professors who have assisted me in this journey.

*Received funding from the Rooney Center for the Study of American Democracy.*

**Madison McCafferty**

- Major: Anthropology
- Minor: Irish Studies
- Advisor: Eric Haanstad

## Collective Memory: How the Traumas of the Past Shape Us Today — Ireland's Mother and Baby Homes

My research looked into the atrocities committed at Ireland's mother and baby homes, exploring their historical context as well as the effects they have had on the current generation of Irish people. Furthermore, my research sought to discover how these instances occurred in a more global context, and how reparations can begin to be made to their victims.

I chose this topic because it combined my interests in anthropology and Irish Studies. Furthermore, as the research into Ireland's mother and baby homes is relatively recent, it's important to expand the field of academic sources about them. Only through education can we redress the wrongs of the past.

**Devin McCarthy**

- Major: Political Science
- Supplementary Major: Global Affairs
- Glynn Family Honors Program
- Advisor: Susan Rosato

## Disarmament and Civil War Recurrence

Over the last several decades, researchers in the fields of political science have noticed a significant trend in the nature of armed conflict. Interstate wars have become less common, causing intrastate wars to be the dominant mode of armed conflict in the present day. Several scholars have sought to explain why certain civil wars recur in order to predict and prevent future conflict in post-civil war states.

While proposed explanations vary immensely, one factor that remains unexplored is the role of post-war disarmament processes in increasing or reducing the likelihood of civil war recurrence. This thesis aimed to develop a theory of successful implementation of sustainable disarmament programs in states that implemented peace accords to terminate civil wars. I was struck by how frequent civil wars have become over the last several decades and wanted to find ways to address this issue.

**Michael McElroy**

- Major: Economics
- Supplementary Major: Applied and Computational Mathematics and Statistics
- Minor: Theology
- Glynn Family Honors Program
- Advisor: Eric Sims

## An Evaluation of Average Inflation Targeting in a New Keynesian Model

To test the hypothesis that average inflation targeting yields better macroeconomic outcomes relative to a fixed symmetric policy rule, I used MATLAB (a programming and numeric computing platform that can analyze data, develop algorithms, and create models) to simulate the response of inflation to economic shocks under backward-looking, forward-looking, and hybrid policy rules. I measured the relative performance of each policy rule under a fixed set of parameters, then adjusted parameters individually to evaluate the robustness of the inflation response under each rule.

I chose to study this topic because I was curious about the potential implications of the Federal Reserve's adoption of average inflation targeting (AIT) in August 2020. AIT is a relatively novel and unexplored area of monetary policy research and needs more macroeconomic research for future policy discussions.

**Margaret McGreevy**

- Majors: English and Philosophy
- Advisors: Ernest Morrell and Michael Rea

## Exploring the Theory of Intersectional Identity in Three Toni Morrison Novels

My project centered on the question: What does it mean to be a known person, according to Toni Morrison? I answered this question by outlining a framework of identity, supplied in part by philosophical investigations of intersectionality. I linked up this work about social identity to the framework of narrative identity, with an interest in how individual narratives interact with larger social narratives. Through a close examination of three Black female characters, I argued that Morrison's writing makes characters known by illuminating the complicated interactions between oppressive narratives and individual agency.

I am endlessly interested in what it takes to know another person. During classes with professors Michael Rea, Sara Bernstein, and Ernest Morrell, I became even more interested about how individuals relate to abstract identity categories (like race and gender) and what those categories mean when they are embodied in an individual. With my work, I hope to complicate common intuitions about individual identity and freedom.

**Katherine McLaughlin**

- Major: Political Science
- Minor: Business Economics
- Certificate in International Security Studies
- Glynn Family Honors Program
- Advisor: Sebastian Rosato

## The Clever Combatant: A Theory of Coercion in the Gray Zone

With artificial islands appearing in the South China Sea, uniformed soldiers without insignia entering Ukraine, or jammers interfering with GPS signals, today's battles are not waged solely with pure military might. Instead, the international system has witnessed a shift toward conflicts that blend a range of cyber, military, and space-based instruments.

In this "gray zone" environment, states employ coercive, nontraditional means to advance their political or military objectives, blurring conventional conceptions of peace and war. Although international relations scholars have recognized this trend, the literature on the changing nature of conflict is underspecified. Even within gray zone scholarship specifically, there is disagreement with respect to actors, characteristics, and tactics.

This project sought to define the gray zone and construct a framework for classifying its tactics, as well as answer the question: Why are some gray zone tactics more successful than others? I analyzed this question by applying two logics of coercion discussed by Robert Pape and others, namely denial and punishment. Using case studies, I argued that if a state employs gray zone denial tactics to generate significant costs for a target, it will have a greater likelihood of advancing its strategic objectives than if it pursues punishment tactics.

**Julia McSpedon**

- Majors: Neuroscience and Behavior and Greek and Roman Civilization
- Advisors: Christopher Baron and Catherine Schlegel

## Sympathy for the Murderer — Gender Norm Defiance in Euripidean Tragedy

The Athenian woman in 5th century BCE held almost no autonomy, yet Euripides' tragedies provide supportive contexts for female rule-breakers. My study examined three Euripidean women — Helen (*The Trojan Women*), Electra (*Electra*), and Medea (*Medea*) — who function independently within this gender system. The text, however, defends their actions; they do not receive punishments proportional to their crimes.

When comparing these characters and the historical context, it is evident that at least one man pondered the position and trials of women by supporting the most infamous mythological women in tragedy. I find it fascinating that the mythological women in these plays act beyond the real-life position of Athenian women. By looking at plays and literature such as the tragedies in this study, we understand that the public opinion of women at this time was not a misogynistic monolith.

**Brigid Meisenbacher**

- Major: Economics
- Supplementary Major: Mathematics
- Minor: German
- Glynn Family Honors Program
- Advisor: Kirk Doran

## The Impact of Immigration Enforcement on the Economic Resources of Unauthorized Immigrants

I estimated how increased immigration enforcement has impacted the public benefits usage of unauthorized immigrant households in the last decade to further investigate the relationship between enforcement and take-up. I am interested particularly in public benefits addressing food insecurity, health care, and financial insecurity.

I used empirical methods that combine the likely unauthorized status with state-level immigration enforcement activity to determine if variation in enforcement leads to variation in benefits usage for these households. Research on households with unauthorized immigrant parents indicates that children of these households are vulnerable to several risk factors associated with their parents' unauthorized status. Additionally, national immigrant enforcement policy has faced many reforms in the last decade that provide a natural context for further exploration into public benefits and immigration.

**Caroline Melancon**

- Majors: English and Physics
- Advisor: Sandra Gustafson

## Gender in American Coming-of-Age Novels

I was interested in characters who come of age and for whom gender roles play a major part in this process, such as Scout Finch or Jo March. In particular, there is a movement toward conformity that occurs as part of the coming-of-age process, and I was curious about how this is portrayed in post-Civil War novels.

I was specifically interested in how novels are chosen to be taught at a middle-school level and what lessons we may inadvertently be promoting by choosing certain books. Is it healthy for children to be told that growing up requires that they conform to a predetermined set of characteristics based on gender?



**Kossivi Mignondje**

- Major: Biological Sciences
- Minor: Theology
- Glynn Family Honors Program
- Advisor: David Cory

## Time, Eternity, and God: Augustine's Quest for Unity

I explored Augustine's discussion of time and what it reveals about humans and God. It shows that humans are changeable, subjected, and scattered, among other things. It shows that God is unchangeable, free, and unified, among other things. This contrast between humans and God is meant to draw the reader toward God because it is better to be like God.

I chose this topic because I remember reading Book 11 of the Confessions in my humanities seminar and really enjoying it. I found his discussion on time very interesting and wanted to delve deeper into it. I wanted to explore notions of time.

**Greg Miller**

- Major: Applied and Computational Mathematics and Statistics (ACMS) and Economics
- Minors: Hesburgh Program in Public Service and Constitutional Studies
- Advisor: Rob Collinson

## Rent Stabilization and Tenant Welfare in Manufactured Housing Communities: Evidence from California

While significant research attention has focused on rent stabilization in site-built housing and apartments, there is a lack of evidence on the unique role of rent stabilization in manufactured housing parks (MHPs). These ordinances stabilize the rent of the land underneath the housing and not the housing itself, an important distinction from traditional measures levied on apartment complexes, as most MHP residents own the commercial coach that rests on the land.

Using heterogeneous differences in rent stabilization policies in MHPs across California, this paper was an effort to fill the gap in literature. It may be the first paper to analyze the welfare implications of MHP rent stabilization ordinances.

Manufactured housing is the largest source of unsubsidized affordable housing in the United States as it boasts half the costs per square footage as conventional alternatives. MHPs accommodate more than 17 million people in the United States. Hedge funds across America have found opportunity, saying tenants are like “Waffle House customers tied to their booth.” In our housing crisis, manufactured housing may be an avenue to homeownership and intergenerational wealth for low-income Americans but only if it’s stable and not exploitative.



### **Savannah Miracle**

- Major: Neuroscience and Behavior
- Minor: Constitutional Studies
- Glynn Family Honors Program
- Advisor: Daniel Lapsley

## **Kids in Court: A Neuroscience-Informed Approach to Improving the Examination of Child Witnesses**

My thesis explored how the process of testifying in court could be improved to better meet the needs of child witnesses. After examining ways that children remember and report events, I provided guidelines for encouraging accurate testimony while dispelling falsehoods about children's inability to be effective witnesses. Additionally, I considered how trauma or relationships with authority figures may impact a child's ability to testify, and discussed possible strategies for minimizing stress in the courtroom.

While studying developmental neuroscience, I was intrigued by how children are often able to process information and handle difficult situations better than we give them credit for. I was curious about how this intersected with law and wanted to explore different ways to support children in a legal system designed for adults.



### Ana Miravete

- Majors: Economics and Russian
- Minor: Computing & Digital Technologies
- Glynn Family Honors Program
- Advisor: Jeffrey Campbell

## Predicting Cybersecurity Attacks and the U.S. Response to Cyber Threats

My thesis looked at cyber attacks from the past 20 years that exceeded more than \$1 million. I analyzed the Department of Defense's spending on cybersecurity since the 2000s and analyzed if there is a way to predict cyber attacks on the United States and around the world.

I chose the topic because of my interest in cybersecurity. I learned about its importance at my job as a digital forensics analyst with Notre Dame's Cyber Crimes Unit. Working as a cyber incident response associate during the summer, I was exposed to the detrimental effects of cyber attacks and I wanted to further explore if there were trends as to why specific targets were chosen.

**Margaret (Adair) Molinsky**

- Major: Economics
- Supplementary Major: Spanish
- Minor: Hesburgh Program
- Advisor: Timothy Dunne

## Establishment Size and Intergenerational Entrepreneurship

In my thesis, I used data from the U.S. Census Bureau and County Business Patterns to test the relationship between the size distribution of establishments in 1980 and entrepreneurial activity in the period 2012 to 2016 at the county level. The motivation for this analysis was a 1961 paper by economist Benjamin Chinitz. I tested his claim that the propensity to become an entrepreneur is passed on from parent to child.

I chose this topic because I am interested in economic topics related to competitive markets and innovation, and I see entrepreneurs as central to both of these areas. For this reason, I wanted to study possible determinants of entrepreneurship.

**Grace Monagan**

- Major: Psychology
- Supplementary Major: Spanish
- Minor: Digital Marketing
- Advisor: Nicole McNeil

## Optimizing Mathematical Equivalence Instruction for Spanish-Speaking ESL Students

The goal of my thesis was to gain insight into how to best instruct mathematical equivalence with Spanish-speaking English as a second language (ESL) students. Mathematical equivalence is important for facilitating children's mathematical achievement and algebra readiness.

I expanded upon Professor Nicole McNeil's research about math equivalence to design and conduct an empirical research study with bilingual students at Harrison Primary Center in South Bend. Participants were members of Harrison's Boys & Girls Club after-school program. The results of this study will help answer the question: Is math equivalence language-specific or higher-level conceptual?

I was interested in a thesis that combined both of my majors — psychology and Spanish — and incorporated my passion for fostering education equity. The project results addressed the significant gap in math performance between native English speakers and ESL students that's present in kindergarten and becomes wider in subsequent grades.

Next year, I will be teaching high school math in Indianapolis through Teach for America, and many of those students likely speak Spanish at home. It has been wonderful to gain insight into how to effectively teach important math concepts to these students. I will carry these insights with me into my career as a math teacher.

*Traveled to Harrison Primary Center in South Bend.*

**Tess Monahan**

- Major: Economics (Honors)
- Supplementary Major: Global Affairs
- Advisor: Patrizio Piraino

## Evaluating the Effects from Changing the Age of Enrollment in Grade R (Kindergarten) in South Africa

My thesis examined how the 2002 amendment to the South African Schools Act of 1996 — which changed the age at which children born in the first semester of the year could begin grade R (kindergarten) — affects later student outcomes. With data from the Quarterly Labor Force Survey from 2018 through 2021, I took cross sections of students who were born pre- and post-policy change to examine the relationship between birth dates and educational attainment.

I chose this topic because of my interest in the ability to use early childhood education as an opportunity to diminish inequality in schools for children of different socio-economic statuses. South Africa presented a particularly interesting example as new policies were developing in the wake of the end of apartheid.

**Ryan Moore**

- Major: Political Science
- Minor: Constitutional Studies
- Advisor: Levi Allen

## Elite Sensationalism: Partisan Rhetoric in 240 Characters

My thesis revolved around the U.S. Senate's use of Twitter. I looked at how often senators attacked members of the opposite party on the social network and compared the frequency of their attacks in the Trump and Biden administrations.

Polarization seems like an unstoppable force. If our political elites have started showing their polarized opinions on Twitter (which has hundreds of millions of daily users), it could cause a more polarized voting populace in America. I had to completely teach myself how to code in R (software for statistical computing and graphics), which was pretty unexpected for a political science major. I'm very happy with the way my code turned out!

**Lorena Morejon-Lasso**

- Major: Biological Sciences
- Supplementary Major: Latino Studies
- Glynn Family Honors Program
- Latino Studies Scholars Program
- Advisor: Karen Richman

## From Curanderismo to Biomedicine: Mexican-Origin Farmworker Health and Healing Explored through Literature

In the case of Mexican-origin farmworkers, the healing system of curanderismo — which holistically treats disorders through religious, spiritual, and health-related means — has been reportedly used in the United States in conjunction with the predominant medical system, biomedicine.

The goal of my thesis was to determine how farmworkers navigated these two systems and what their experiences have been like, including how their personhood is acknowledged and treated. I analyzed representative stories in literature to provide data for these questions.

I did a summer project and directed reading involving migrant farmworkers with my thesis advisor, and I was interested in exploring another health-related topic with the same population. I was excited to develop a truly interdisciplinary thesis combining medical anthropology concepts and analysis through literature.



**Jennifer  
Moreno-Mendoza**

- Major: Marketing
- Supplementary Major: Latino Studies
- Minor: Catholic Social Tradition
- Advisor: Bill Purcell

## The Church Today: The Intersection of Faith, Identity, and the Media

My capstone project focused on exploring connections between the Catholic Church, identity, and the role of the media. I am particularly interested in studying Latinx identity, given that Latinos account for about 40 percent of the Church.

In my work, I interviewed Latinx students with varied experiences and feelings toward the Church. I plan to explore the role that different forms of media can play in connecting the Church to a younger generation of Latinx people. Additionally, I plan to connect the importance of these findings to the mission of the U.S. Conference of Catholic Bishops' (USCCB) National Encuentro.

Growing up in a Mexican-American family, religion has played a crucial role in everything we do. However, my faith journey was significantly transformed after I left home, leaving me to ponder on the importance of identity in faith exploration. I'm fascinated by the different reactions that Latinx youth have toward the Church and am excited to continue learning more.

**Amani Morrell**

- Major: Political Science
- Supplementary Major: Spanish
- Glynn Family Honors Program
- Advisor: Daniel Philpott

**Urban Planning**

I examined the features of cities that lead to human flourishing, examined how these features are being applied in South Bend, and expressed my thoughts about future development in the city. I began the thesis by examining the idea of human flourishing and the importance of community and civic friendship. I explained the concepts of walkability and mixed use, and ultimately explained how these principles are being applied in current projects in South Bend, and how they might be implemented in the future.

I live in South Bend and care about the future of the city. Since my sophomore year, I have been intrigued with the idea of creating a built environment that facilitates greater human interaction and produces socially and economically sustainable communities. I wanted to take that interest a step further by deepening my knowledge of the factors that create these conditions and how they might be applied in South Bend.

I walked through several Chicago neighborhoods that are considered highly walkable and mixed use and conducted interviews with citizens and representatives to better understand what makes them successful.

*Traveled to Chicago.*

**Kate Morse**

- Major: Applied and Computational Mathematics and Statistics
- Supplementary Major: Education, Schooling, and Society
- Minor: Digital Marketing
- Advisor: Andrea Christensen

## Examining the Effects of COVID-19 on Student Participation and Performance on the 2020 AP STEM Exams

COVID-19 was the inspiration for my project, which investigated the extent to which the pandemic caused changes in the 2020 AP STEM exams, specifically in terms of format, demographics, participation rates, and score distributions at the international and school district levels.

A quantitative analysis of data from the College Board, coupled with qualitative student and teacher interview data, revealed how the 2020 AP STEM exam scores were likely unfair and not reflective of student knowledge when compared to previous years.

I chose this topic because COVID-19 challenged the current education system and accelerated advancements that would have likely taken years to put in place. This created an optimal research opportunity to investigate what changes failed and what positive changes can be implemented to improve the future of testing.

**Alexis Moskala**

- Majors: English and Film, Television, and Theatre (FTT)
- Advisor: Susan Cannon Harris

## 'Home Sweet Home?': Illusions of Safety in the Black Domestic Spaces of Angelina Weld Grimké's *Rachel*

Angelina Weld Grimké's *Rachel* is an anti-lynching play that showcases the lasting effects of racism on the Loving family. The family believes the North provides more safety from the racism that destroyed their Southern home, but I argue that racism in the North invades their home in a way that is more subtle. Through the experiences of Black mothers and an evolving understanding of motherhood, the damaging effects of racism are revealed.

I also explored the further suffering that racism causes the Black community and analyzed the play's dissatisfactory ending — with special attention to what messages were presented to the audience. I first read *Rachel* in an English course sophomore year and wrote a short paper that was hardly able to skim the surface of the meaning I saw hidden beneath. It was then that I knew that I needed to write more. I was hooked.

**Jim Moster**

- Majors: Program of Liberal Studies and Political Science
- Advisor: Debra Javeline

## Climate Policy in Republican-Led Cities

Several large Republican-led cities in the United States have pledged to reduce their greenhouse gas emissions. This decision, which runs contrary to political incentives in national partisan politics, merits explanation.

Using a quantitative, medium-N study, I tested whether independence from fossil fuels, the presence of climate activists, and climate vulnerability make local officials more likely to pass a pledge. I supplemented the quantitative analysis with case studies of three Republican-led cities that passed climate pledges: Miami, San Diego, and Fresno.

The global average temperature has risen 1.1 degrees Celcius above pre-industrial levels and continues to increase, making the Paris Agreement seem increasingly utopian. Meanwhile, climate policy continues to stall and fail at the federal government level. Cities may provide an alternative venue for climate action, but the effort will need to involve all cities, not just Democratic-led ones.

**Christopher Mothersill**

- Major: Political Science
- Minors: Business Economics and History
- Advisor: Susan Rosato

## A Comparative Study of the Use of Misinformation in the US and the UK

The use of misinformation by politicians is on the rise. I argued that the spread of misinformation is affected by four key variables: subject matter, political party, susceptibility, and legality. To test my argument, I explored four cases: the 2016 United States election, the 2020 U.S. election, the 2016 UK Brexit Referendum, and the 2019 General United Kingdom election. The evidence suggested the key variables mentioned do play a role in how misinformation is spread.

This research on misinformation by politicians is important and especially pertinent to the ongoing political polarization happening today in politics in the U.S. and the U.K. Furthermore, the comparative nature of this project provides an interesting contrast between misinformation in the U.K and the U.S. to hopefully shed much-needed light on a potential solution.

**Thomas Moynihan**

- Major: Program of Liberal Studies
- Minor: Business Economics
- Advisor: Elizabeth Mazurek

**The Dehumanizing Effect of War in the *The Aeneid***

Using Anchises' framework for the ideal Roman from *The Aeneid*, I examined which characters, if any, best conformed to the Roman ideal. Virgil's increasingly complex characterizations resist simple assessment as he not only conflates characters on the two sides of battle but identifies strictly Roman virtue with both the Italians and Trojans. We find that Virgil's *The Aeneid* is much more complex than simple praise and that his various descriptions of war contain a veiled call to peace.

I'm intrigued by the intricacy of *The Aeneid* and the subtlety of Virgil's meanings. I closely examined Book 10, a book which seems to add little to the plot but actually contains a rich commentary on war. Virgil describes the gods and founding Romans as deeply flawed characters, constantly subverting one-dimensional interpretations and asking a question that is still relevant today: is war ever worth its costs?

*Received the Monteverdi Prize from the Program of Liberal Studies.*



### Mary Mueller

- Major: Theology
- Minors: Philosophy, Studio Art, and Catholic Social Teaching (CST)
- Advisor: Ann Astell

## Fear of the Lord in Julian of Norwich and Sirach

In the Book of Sirach, fear of the Lord is seen as an act of seeking toward the wisdom, which underlies the whole created order, and personified Wisdom Herself that gives wisdom to those who seek her. Julian of Norwich recovers Sirach's fear of the Lord that is a deep awe that longs toward Christ, who is the wisdom of the Trinity and who reveals the wisdom of His cross, which is overwhelming, undeniable love.

I chose this project because I saw that there was a common misconception of fear of the Lord. It is a virtue that allows one to see the beauty of the cross which was, ultimately, the greatest gift that the Catholic faith has ever revealed to me. An offshoot of my thesis will be my Catholic social teaching capstone, which will be on the ethics of Sirach and how fear of the Lord underlies Catholic social teaching discipline.



### Mary Mueller

- Major: Theology
- Minors: Philosophy, Studio Art, and Catholic Social Teaching (CST)
- Advisor: David Lantigua

## Catholic Social Tradition in the Book of Sirach

This capstone looked at how the biblical Book of Sirach exemplifies Catholic social tradition. I chose this topic as an extension of my theology thesis. There is a space in CST thought for a connection to Scripture, and a book from the wisdom literature is an unusual choice. This project will be an opening path for more connections between CST and wisdom literature in particular.



**Nora Murphy**

- Major: Political Science
- Glynn Family Honors Program
- Advisor: Andrew Gould

## The Politics of Patrimony

My senior thesis focused on the connection between ethno-nationalist movements and cultural patrimony. Using Nagorno-Karabakh, North Macedonia, and Spain as case studies, I found that nationalist actors use historical memory and cultural heritage sites as resources to promote political narratives that strengthen territorial claims, bolster in-group identity, and vilify selected out-groups.

My research on this topic drew on my interests in group identity formation and the connection between culture and politics. My coursework on modern migration flows in Europe, research on the Western Balkans, and an internship with an Israeli organization sparked my interest in how past conflicts, competing historical narratives, and perceived differences shape modern-day political processes. I used my thesis to explore these topics in more depth.



### Shea Murphy

- Majors: History and Film, Television, and Theatre (FTT)
- Minors: Digital Marketing and Irish Studies
- Advisor: Colin Barr

## Militant Women in 20th Century Ireland: Examining the Irish Suffrage and Republican Movements

My thesis considered the role that militant women played in Irish politics during the early 20th century, focusing on their involvement in the republican and suffrage movements. It examined how female militancy and violence has been historically regarded in Ireland, exploring issues of femininity and the "role of women." Focus was given to how women were treated differently depending on which cause they campaigned for: nationalism or women's suffrage.

I have devoted much of my studies here to Irish history, a topic which is of keen interest to me. Throughout my studies I realized that women were remarkably absent from much of Ireland's historical narrative, despite their undoubted involvement. I sought a project that would allow me to try to recover these women's lost stories.

Over the summer, I traveled to Dublin and went to the National Library of Ireland and the National Archives of Ireland. At the archives, I explored collections related to prominent Irish suffragettes and republican women as well as prison records of those arrested for involvement in the women's suffrage movement.

*Received funding from the Nanovic Institute for European Studies and traveled to Dublin, Ireland.*

**Marlena Muszynska**

- Majors: Anthropology and Biological Sciences
- Advisor: Eric Haanstad

## Eastern Europe's Communist Alcohol Crisis: A Systematic Review of History, Politics, and Social Dynamics Behind the Cultural Habit

Many nations of Eastern Europe are often grouped together and portrayed as detrimentally impacted by high levels of alcohol consumption. My thesis aimed to synthesize evidence that contextualizes the intricate historical, political, and social paradigms of the pervasive cultural habit and its resulting stereotype. I conducted a thorough review of existing literature that relied on both qualitative and quantitative data collection. I focused on the political ideology of the time and explained the resultant social dynamics, those manifesting in a stark gender divide in responsibilities, alcohol consumption, and health outcomes.

As a first-generation Polish-American, I have sought the opportunity to pursue thorough study of a cultural stereotype of particular personal relevance and interest. Completing this thesis allowed me to better understand the history, politics, and other structural elements that inevitably, continuously change and shape societal interactions and functions throughout time. The applicability of multiple anthropological theories to the behavioral patterns seen in Eastern Europe shed light on the complexity of the human condition.

**Mary Frances Myler**

- Major: Program of Liberal Studies
- Minors: Theology and Constitutional Studies
- Advisor: Jennifer Martin

## Matter and Metaphysics: The Nature and Aim of Flannery O'Connor's Fiction or, A Good Thesis Is Hard to Find

Through an examination of Flannery O'Connor's essay *The Nature and Aim of Fiction*, I articulated her philosophy of writing, which depends largely on Thomistic epistemology and the prominent role of the senses. I traced the roots of O'Connor's thought in Aquinas' writing on both the bodily senses and the senses of scriptural interpretation, explicated the relationship between sense and symbol and, ultimately, articulated the connection between the physical and metaphysical in O'Connor's approach to the craft of writing.

I've always been fascinated by the phenomenon of authorship, particularly with regards to works of fiction. When I read this essay by O'Connor, I knew that I'd found something I could read over and over again for months on end. She's an excellent writer — sharp, perceptive, witty, and concerned with truth.



### Anna Nelson

- Majors: Finance and Music  
(Concentration in Piano Performance)
- Advisor: Daniel Schlosberg

## Senior Piano Recital

My senior piano recital consisted of pieces written by composers such as Domenico Scarlatti, Franz Schubert, Johannes Brahms, and Béla Bartók. The approximately one-hour recital consisted of both solo and collaborative piano works. This recital is the capstone of my music education of nearly 17 years, and it especially highlights my piano studies at Notre Dame under the direction of Daniel Schlosberg.





### Matthew Nguyen

- Major: Neuroscience and Behavior
- Minors: Theology and Education, Schooling, and Society (ESS)
- Advisors: TJ D'Agostino and Mike Szopiak

## Perceptions of Socioeconomic Integration: Exploring how Elite Status Students Were Impacted by Their Experiences with Low-Income Peers

Using qualitative and quantitative data from a prior study assessing the impacts of socioeconomic integration on low-income students, this thesis explored how the same socioeconomic integration program affected the perceptions of high-income, elite students. Specifically, it explored how the program altered their perceptions of low-income students and how such experiences impacted their social identity through the lenses of person perception and contact theory.

When assessing the success of socioeconomic integration, there is a scant amount of research regarding how high-income students are impacted by the program. Part of the hope of socioeconomic integration programs is to expand the perspectives of high-class students who may never had relationships or experiences outside of their elite circles.

With a passion for youth development and psychiatric health, I believe it is crucial to assess adolescent development through a diverse variety of perspectives; using a social psychological foundation, this thesis combines sociology, education, and psychology to investigate an aspect of human relations.



### **Xolisa Ngwenya**

- Major: Psychology
- Minor: Business Economics
- Advisors: E. Mark Cummings and Kathleen Bergman

## **The Role of Warmth and Autonomy in Children Conflict Response: Emotional Security as a Mediator**

Given the well-documented positive impacts of parental warmth and autonomy in child development outcomes across research, it is important to understand how these factors help children regulate themselves during family interactions, such as marital conflict, and if regulatory processes such as emotional security can account for children's responses to conflict.

Results suggested that only autonomy significantly predicts children's responses to conflict. This means that autonomy-enhancing family atmospheres promote regulated responses to conflict, when emotional security is a mediator.

I chose this topic because I believe it is crucial to understand how psychological mechanisms improve children's ability to regulate after experiencing events that threaten their security and safety in their surrounding environment (family, community, etc.). It helps inform interventions that can be implemented to improve child and youth mental health issues in underdeveloped countries, such the one I originate from (Eswatini), with inadequate resources to address children's psychological needs on a larger scale.



### **Bella Niforatos**

- Majors: Psychology and English (Honors Concentration in Creative Writing)
- Advisor: Joyelle McSweeney

## **A Novel about Jewish Identity, Faith, and Antisemitism**

My thesis is a novel that employs magical realism as a device to explore the loss of faith and identity in the context of recent antisemitic hate crimes. The novel explores, through a mystical lens, what exactly it means to be Jewish. This thesis delves into the relationship between diaspora, generational trauma, womanhood, faith, memory, history, and intersectional identities.

I chose to write this novel while grappling with my own identity as a Jewish, queer woman in a shifting and often hateful world. I am proud to be Jewish and partake in the rich history of its ethnocultural, religious, and tribal roots, and I want others to begin to understand the complexities of this identity.

Throughout the COVID-19 pandemic, we have been confronted with our own potential for empathy and what it means to have a global consciousness. Both have informed my thesis, as well as my own reckoning with trauma, both historical and personal, throughout the ongoing pandemic.

**Allan Njomo**

- Major: Business Analytics
- Advisor: Anna Geltzer

## Administrative Costs in Health Care

The purpose of my project was to dive into the current system of health care in the United States and hone in on the drivers of health care costs, specifically within administrative spending. In a system dominated by private insurance, some amount of administrative cost is necessary, however, the U.S. spends more on administrative costs than comparable health care systems. While administrative costs cannot be wholly eliminated, I wanted to understand what policy actions would assist in reducing these costs and, in turn, increase the affordability of health care.

This topic arose out of my interest in health care policy. I've always been interested in understanding the intersection between poverty and health. In this, I'm driven to create more access to health care through increasing affordability. In the scope of things, the administrative costs of health care represent a small part of health expenditures. However, in the long run, addressing these costs can help create conditions for much-needed change.

**Bradley Noble**

- Major: Science Pre-Professional Studies
- Minors: Asian Studies and Bioengineering
- Advisor: Liang Cai

## A Comparison of the Social Networks and Geographic Mobilities of Meng Tien and Wei Qing

In this paper, social network (through the digital application Gephi) and geographical analysis are applied to two Chinese military commanders during the Qin and Han dynasties: Meng Tien and Wei Qing. After creating geographical social network relationship maps, the governing forces behind their career trajectories are established and compared. Finally, broader thematic connections in the context of Chinese history are established.

The digitalization of history and use of computer software to aid research has always been of interest to me, and one of my courses focused on using digital software in the context of Chinese history. Inspired by this, I was motivated to expand what I had learned during class to a full senior thesis project.

**Colin Nolta**

- Major: Program of Liberal Studies
- Advisor: Walter J. Nicgorski

**Machiavelli: An Evaluation of Evil and Politics in *The Prince***

I analyzed Machiavelli's *The Prince* and tried to answer if Machiavelli promotes evil within his works. I explored how *The Prince* was not a portrayal of evil but rather a discussion of human nature and politics' influence on man and societal organization. More importantly, I worked to establish four norms Machiavelli establishes in *The Prince* and showed how these norms go against evil, and help both the prince and the citizens he serves in a unique portrayal of the common good.

In prior readings of Machiavelli, I encountered classmates and others who labeled Machiavelli and *The Prince* as evil, and I wanted to try to disprove this opinion. Moreover, I wanted to explore the connection between political organization and human nature and how both influence the moral compass of man.

**Brennan O'Brien**

- Major: International Economics (Italian)
- Minor: Real Estate
- Advisor: Forrest Spence

## The Effect of the Euro on Italian Olive Oil Exports

When a country adopts a shared currency with other countries, it relinquishes its ability to conduct its own monetary policy. Thus, a country cannot weaken its currency to make its exports more attractive. Having a shared currency, though, can facilitate trade with other countries in the union, among other benefits. I intended to determine what effect Italy's adoption of the euro had on its exports of olive oil.

I thought it was interesting to talk about a product so integral to Italian culture, as well as to its economy. Wearing a mask during the first couple weeks of this semester hampered my learning process, but I was able to overcome this with hard work.

**Maggie O'Brien**

- Major: Political Science
- Supplementary Major: Italian
- Minor: Anthropology
- Advisor: Joshua Kaplan

## The Politics of Historical Preservation and its Connection to Controversies about Monuments/Statues

My thesis explored the complexities of historical preservation and connected it to current political issues about statues and monuments, attempting to use the broader context of historical preservation to better understand them. I am from Virginia and have had a lot of exposure to these issues and historical preservation more broadly, so I wanted to explore the connections between them.



**Annie O'Neil**

- Major: Economics
- Minor: Sustainability
- Advisor: Timothy Dunne

## Labor Transition Plans for Coal Miners at Shut-Down Coal Mines

I developed a labor transition plan for the coal miners of Petersburg, Indiana, and Campbell County, Wyoming. I used information and data from previous coal mine closures to develop a proper transition plan. I am very interested in the energy industry and wanted to include an economic aspect in my sustainability capstone project. We have seen coal miners struggle to transition into a new career after coal mines shut down, and I want to help people avoid that situation in the future.



### Hailey Oppenlander

- Majors: American Studies and Sociology
- Glynn Family Honors Program
- Advisor: Peter Cajka

## Lil Nas X's Construction of Queer Spaces

Lil Nas X deliberately queers traditional religious and American narratives, using entertainment as social critique. I analyzed Lil Nas X's music videos and audience reception to them because I wanted to understand how his music combats heteronormativity, homophobia, and the erasure of queer people of color in the United States. This case study helps readers understand how music can subvert racial, gender, and sexual norms.

As a fan of Lil Nas X's music, I appreciate how he uses entertainment to level critiques of racism, homophobia, and restrictive gender norms. I took this opportunity to dive deeper into the narratives and imaginative worlds he creates in his music videos and think about how and why his works thrive in a hegemonic society.

*Received funding from the Glynn Family Honors Program.*



### Ethan Osterman

- Major: Philosophy
- Supplementary Major: Applied and Computational Mathematics and Statistics
- Glynn Family Honors Program
- Advisor: Curtis Franks

## American Pragmatism, Philosophy of Science, and Ecology

In spite of decades of climate pledges and other forms of putative international action, our ecological situation has continued to worsen. How should we think about this troubling history? Should we say, for example, that this represents a crisis of science? How should we think about science in general, and how might this thinking inform our thoughts on ecological issues?

Developing these questions from a Deweyan pragmatic perspective, and integrating insights from systems-theoretical thinking, I attempted to develop a clear picture of the issues at play, with a mind, ultimately, for the practical consequences of such a picture.

My thesis began with the broad topic of the philosophy of science in American pragmatism. As I continued to research further, my interests drifted more and more toward particular, practical applications to ecological issues, and toward my dissatisfaction with common ways of conceptualizing the nature of ecological crisis (e.g., as a crisis of values, or a crisis rooted in mere greed). My thesis began to take shape in dialogue with, and as a critique of, these sorts of conceptions.

**Jacob Ottone**

- Majors: History and Psychology
- Advisor: Darren Dochuk

## Perceptions of the UFW's Strikes in the Salinas Valley Throughout the 1970s

I wrote about the United Farm Workers' labor activities in the Salinas Valley throughout the 1970s and the narratives and rhetoric used by proponents and opponents of their efforts.

I am from the Salinas Valley and found this history to be a fascinating case study in the power of public perception. Because of the pandemic, I was not able to travel to conduct research. Therefore, I requested scanned documents from the archives I had hoped to visit.

*Received funding from the Institute for Scholarship in the Liberal Arts.*



### Jackson Oxler

- Majors: Anthropology and Political Science
- Supplementary Major: Global Affairs
- Minor: International Development Studies
- Kellogg International Scholars Program
- Advisor: Catherine Bolten

## Good Cause Eviction: Tenants' Rights and Structural Violence in New York City

My thesis examined the history and current state of tenants' rights in New York City through a structural violence theoretical framework. Structural violence occurs when systems of power and social institutions directly harm individuals. Tenants have always faced uphill battles in maintaining stable and affordable housing; the COVID-19 pandemic has further exacerbated the vulnerabilities that renters face.

Over winter break, I traveled to New York City to interview tenants, tenants' unions, housing rights organizers, and politicians. These interviews and ethnographic methods provided the bulk of the data for my thesis. I got interested in housing after reading the book *Evicted: Poverty and Profit in the American City* by Matthew Desmond. Inspired by his exploration of the injustices in eviction processes, I wanted to apply a structural violence lens to the general rights renters have to protect themselves.

*Received funding from the Undergraduate Research Opportunity Program and Department of Anthropology to travel to New York City.*



### Jackson Oxler

- Majors: Anthropology and Political Science
- Supplementary Major: Global Affairs
- Minor: International Development Studies
- Kellogg International Scholars Program
- Advisor: Catherine Bolten

## Queens is the Future: Immigrant Experiences of Structural Violence in Housing in New York City

My capstone in international development studies was an ethnography of three neighborhoods in New York City: Jackson Heights, Corona, and Elmhurst. They're three of the top five neighborhoods for immigrants in New York. During summer 2021, I lived in New York City and interviewed immigrants living and working in the community. I also did research in the public archives, and embedded myself in the community.

Understanding the particular vulnerabilities that immigrants face in the housing industry, my capstone highlights the structural violence present in the housing market. With broad research experiences, my capstone brought together interests in housing, immigration, and development studies. Housing is a basic human right. Without a stable home, the future possibilities an individual has are limited. I wanted my project to shed light on some injustices that American immigrants face in the housing industry.

*Received funding from the Kellogg Institute for International Studies and Department of Anthropology to travel to New York City.*



### Christopher Parker

- Major: History
- Supplementary Major: Classics
- Minor: Journalism, Ethics and Democracy
- Advisor: Elizabeth Mazurek

## Science Fiction and Ancient Epic

I wrote the first book of a science fiction story in the style of an epic poem. Then, I critically analyzed Virgil's *The Aeneid* and showed how my poem borrowed from and responded to Virgil's. I love *The Aeneid* and wanted to show how it inspired me as a student. The creative route seemed like the most interesting way to do that.



**Daniela Parra**

- Major: Psychology
- Minors: Data Science and Portuguese and Brazilian Studies
- Advisor: Gabriel Radvansky

## Impact of Wakeful Rest on Memory Retention

The goal of this study was to more fully understand the influence of small periods of wakeful rest on memory retention. I presented three groups of participants with a series of sentences followed by memory tests. During the learning session, each group had a different number of rest periods. Results of this study could provide insight into the implications of wakeful rest on learning, whether it boosts memory retention or harms it.

I have an interest in the mechanisms underlying memory, among other areas of cognition. The idea for this project arose as I studied for an exam in my Learning and Memory class taught by my advisor, Gabriel Radvansky. I wondered which sleep-study intervals would yield a higher grade (Should I sleep now and study in the morning? Should I study late into the night and sleep a few hours? Should I take a few naps in between studying?). I joined Professor Radvansky's lab, and he suggested that a period of wakeful rest may be sufficient to improve memory. We then dug into previous literature and began to craft the design of the study.

**Abigail Patrick**

- Majors: English and Anthropology
- Minor: Business Economics
- Advisor: Chante Mouton Kinyon

## Oscar Wilde's Fairy Tales and Self-Dramatization

When reading about Oscar Wilde to begin my project, I noticed that critics often talked about *The Picture of Dorian Gray* and Wilde's fairy tales together, without really explaining why that's a natural comparison. So, to find out for myself, I compared two of Wilde's fairy tales, *The Happy Prince and The Nightingale and the Rose*, and *The Picture of Dorian Gray*, identifying similarities of plot, theme and other formal elements, reading them as acts of self-dramatization.

I've always loved *The Picture of Dorian Gray* and Wilde's prose more generally. I've wanted to dig deeper on him as an author and this felt like the right opportunity to make more sense of him and all his contradictions. I don't know that I've accomplished that, even after all this work, but I've certainly enjoyed the attempt.

**Lucrezia (Lulu) Phifer**

- Majors: Film, Television, and Theatre (FTT) and Philosophy
- Minor: Musical Theatre
- Advisor: Christine Becker

**Creative Screenwriting Project: Modern Day *Romeo and Juliet***

For my creative project, I wrote a pilot script of a miniseries adaptation of *Romeo and Juliet* that imagined the story taking place in a modern midwestern town. During summer 2021, I worked in Los Angeles with my screenwriting mentor, J.J. Philbin. I wanted to combine my passions for screenwriting and Shakespeare to create something that continues to make his work accessible and celebrated.

*Received funding from the Meruelo Family Center for Career Development to travel to Los Angeles, California.*

**Marc Philippon Jr.**

- Major: Studio Art
- Supplementary Major: Arts & Letters Pre-Health
- Advisor: Jason Lahr

## Addressing Gender and Identity Through Traditions in Oil Painting

For my thesis project, I produced a series of surrealist portraits of male figures that reference and combine the styles of Renaissance figure painting and 18th-century flower painting. Through this approach, I aimed to satirize some of the rigid barriers of gender prevalent in the history of oil painting and male self-expression in general, and depict the male figure in harmony with nature and the passage of seasonal time.

I believe gender identity is a powerful and restrictive force that has influenced me profoundly without my being aware of it. My goal is to create imagery that merges subject matter and concepts that have traditionally been separated by barriers of gender in order to produce a more liberating presentation of male identity.

**Caroline Pineda**

- Major: Film, Television, and Theatre
- Minor: Journalism, Ethics, and Democracy
- Glynn Family Honors Program
- Advisor: Christine Becker

## The Plausibility of Relocating a National Football League Team to the United Kingdom

For decades, the NFL has devoted significant resources toward establishing and growing a fan base in the United Kingdom, and there have been indications that those efforts could culminate in the relocation of a franchise to London. The relocation concept is not without its logistical faults, but a passionate contingent of fans of American football has emerged in Europe. My thesis explored this potential franchise relocation and the obstacles that must be overcome in order to see the idea become a reality.

As I prepared to study abroad in London in 2019, I realized that I also would have a chance to explore this personal area of interest about the possible relocation of an NFL team to the United Kingdom. I'd been curious about the idea since watching the NFL's annual games in London while I was in high school, and I was excited to turn the topic into my senior thesis.

*Received funding from the Glynn Family Honors Program.*

**Catherine Prather**

- Major: Economics (Concentration in Financial Economics and Econometrics; Honors)
- Minors: Sociology and Hesburgh Program in Public Service
- Honors Economics Program
- Advisor: Jeffrey Campbell

## Uncovered Interest Parity in Eastern European Markets

My thesis examined uncovered interest parity (UIP) in Eastern European markets using the carry trade. The countries under focus were Poland, Czech Republic, Romania, and Hungary, which are part of the European Union but not the Eurozone.

UIP is tested by seeing if carry trade returns are on average non-zero and/or predictable based on previous returns and monetary policy indicators.

**Radoslava Pribyl  
Pierdinock**

- Major: History (Honors)
- Supplemental Major: Environmental Science
- History Honors Program
- Advisors: Joshua Specht and Darren Dochuk

## Historical Analysis of the Counterculture's Influence on the Vegetarian Diet

In the 20th century, the federal government grew in size, the influence of mass media expanded, and technology advanced beyond the imaginations of previous generations. These massive changes transformed American society, influencing everything from transportation to Hollywood, from freeways to food.

The latter is of particular interest to me: How did Americans' relationship with food change in the late 20th century? This study broadened the understanding of how diets and dietary trends evolved during this time. Specifically, my topic explored the counterculture's influence on the vegetarian diet. I went to Cornell University to examine the Moosewood Collection — menus, cookbooks, restaurant policies, photographs, and correspondence — from the collectively owned Moosewood Restaurant, which was a force in vegetarian cooking.

As a history and environmental science major, I have tried to focus my academic interests on nutrition, fitness, and the role of culture in changing eating habits; a topic that I find extremely interesting. Food, just as anything else, can express the cyclical patterns of history, which I hope to use as a tool.

*Received an American Dream Grant from the Institute for Scholarship in the Liberal Arts to travel to Cornell University in Ithaca, New York.*

**Charlotte Probst**

- Majors: Biological Sciences and Philosophy
- Glynn Family Honors Program
- Advisor: Joel Ralston

## Seasonal Differences in Roosting Behaviors at a Local Chimney Swift (*Chaetura pelagica*) Roost

The chimney swift, a migratory bird species, uses large chimneys as communal roosts. I observed swifts roosting in the chimney of Columba Hall and found that the Columba Hall roost is in the 99th percentile of reported spring roost sites by size. I also found that swifts enter the chimney significantly faster in the fall than in the spring, a novel finding indicating that roosting behavior may be influenced by seasonal factors.

I volunteered at a swift roost in high school and was fascinated by the spectacle of thousands of birds funneling into a chimney. When I discovered the Columba Hall roost, I realized I had a great opportunity to further study swifts and raise awareness about the roost site on campus.

Chimney swifts, like many aerial insectivores, are in steep decline. Chimney swift populations have fallen by 67% since 1970, and it is hypothesized that this might be partially driven by loss of roost sites. I hope that my thesis work highlights the significance of having such a large roost on our campus and will serve as a motivation to preserve this roost site for years to come.

**Meghan Pryor**

- Major: Psychology
- Minor: Journalism, Ethics, and Democracy
- Advisor: David Watson

## Assessing Exercise Habits and Interpersonal Emotion Regulation

My project assessed how interpersonal emotion regulation relates to exercise habits — specifically, social exercise habits. I wanted to see if those who exercised with one or more partners also more frequently included others in their emotion regulation processes and found their efforts effective.

I have been involved in emotion regulation research since sophomore year, and I conducted my own project during my junior year. I was interested in seeing how exercise could relate to what I had read. I will also present this research at the 2022 Midwestern Psychological Association Psi Chi Conference.

*Received funding from the Center for Undergraduate Scholarly Engagement to present at the Midwestern Psychological Association Psi Chi Conference in Chicago.*



**Philip Quinton**

- Majors: Political Science and International Economics
- Advisors: Denise Della Rossa and Davin Raiha

## The Impact of Youth Football Academies on the Success of Their Parent Clubs

By examining the entire history of Spanish football clubs and their creation of youth academies, I used a difference-in-differences approach, along with ordered probit and logit models, to analyze nine independent variables that measure the impact of youth academies on parent clubs' success both contemporaneously and with lags.

I found there is a statistically significant relationship between the establishment of a youth academy and the on-field success of the club. Youth football academies produce the top football talent in Europe — players who are worth millions of euros at a fraction of the price that it costs clubs to buy players. This is just one way youth academies impact the decisions of football clubs as economic agents.



### Anna Rask

- Major: Political Science
- Supplementary Major: Latino Studies
- Minor: Constitutional Studies
- Advisor: Geoffrey Layman

## Anti-intellectualism in Republican Politics

My thesis considered the following questions: Has anti-intellectualism grown in elite Republican rhetoric over the last 50 years? How do voters respond to anti-intellectual rhetoric? To address the former, I analyzed the rhetoric of four significant Republican presidents: Richard Nixon, Ronald Reagan, George W. Bush, and Donald Trump. I addressed the latter question through a survey experiment.

I was shocked by Trump's repeated disparagement of science and experts during his presidency, specifically during the COVID-19 pandemic. As a result, I became interested in exploring whether his behavior was a symptom of a larger trend in Republican politics.

*Received funding from the Department of Political Science and the Rooney Center for the Study of American Democracy.*



### Luke Reifenberg

- Major: Philosophy
- Supplementary Major: Mathematics
- Glynn Family Honors Program
- Hesburgh-Yusko Scholars Program
- Advisor: Juan Migliore

## The Cayley-Bacharach Theorem (a Result in Algebraic Geometry)

This thesis was an expository paper regarding the Cayley-Bacharach Theorem, a result in algebraic geometry about the number of independent conditions imposed by sets of points on curves of certain degrees. The paper gave an explicit rendition of the proof of Chasles' Theorem as found in Eisenbud-Green-Harris (1996), and provided a novel proof of Chasles' Theorem using Davis' Theorem. Lastly, the paper gave a brief exposition about the conjectures generalizing the Cayley-Bacharach Theorem.

I chose this topic at the suggestion of my advisor, with whom I took the Introduction to Algebraic Geometry class. The topic is very rich, as it is a generalization of some classical results, dating as far back as the third century B.C. (with a geometric theorem given by Pappus of Alexandria) and the 17th century (with a result given by Pascal), but also to modern times, with some novel conjectures and proofs given in the 21st century.



### Ziyu Ren

- Major: Psychology
- Supplementary Major: Applied and Computational Mathematics and Statistics
- Advisor: Guangjian Zhang

## The Invariance of the Big Five-Factor Model in Men and Women

The five-factor model (FFM) is a well-established personality model with a profound influence on many fields of psychology. Gender inequality is one of the most enduring problems, and solving it requires a scientific understanding of gender differences in personality. To compare the differences of the FFM across genders, researchers must address the psychometrical similarity between the factors.

This study applied the latent response variable approach in factor analysis to investigate the problem. I have a strong interest in the FFM of personality and related quantitative methods. Previous research treated ordinal variables in Likert scale and continuous variables directly, so I believe the necessity of conducting research to treat ordinal variables in a more appropriate way using the latent response variable approach.

**Lillie Renck**

- Majors: Psychology and Economics
- Glynn Family Honors Program
- Advisor: Daniel Lapsley

## College Student Engagement in and Abstinence from Risk Behaviors: A Self-Determination Theory Approach

Risk-taking, long considered a hallmark of adolescence, is also a common activity during the protracted transition to responsibility known as emerging adulthood. While there is a plethora of research that points to experimentation as a developmental rite of passage, there is little research on why individuals might choose to abstain from these behaviors.

My thesis investigated differential motivation for risk engagement and avoidance in emerging adulthood using self-determination theory as a lens, which suggests that motivation can be characterized based on internalization. Affectionately known as my fan letter to researcher Sam Hardy, my thesis is an investigation into individual decision-making. I was inspired by my coursework in developmental psychology and the behavior of college students to question the motivation behind seemingly typical decisions of this age group.

**Anna Renfro**

- Major: Spanish
- Supplementary Major: Arts & Letters Pre-Health
- Minor: Gender Studies
- Advisor: Thomas Anderson

**Mississippi as a Symbol of American Bigotry in Cuban Writing**

My thesis examined how Mississippi and the South were represented by Cuban writers during the Civil Rights Movement. I also showed how, by reporting on instances of racial hatred in Mississippi and connecting them to the South and the United States as a whole, Cuban writers could transform the state into a symbol of American bigotry and hatred to elucidate the systems of oppression woven into the foundation of American democracy.

I chose this topic because I have always been acutely aware of how people view the state of Mississippi, as well as my home's sordid past. After taking a class on U.S. and Caribbean relations, I became very interested in Cuba and its revolutionary past. After guidance from Thomas Anderson, I found a way to academically combine those interests.

**Erica Robison**

- Major: History
- Minors: Constitutional Studies and Education, Schooling, and Society (ESS)
- Advisors: Linda Przybyszewski and Jodene Morrell

## The Philadelphia House of Refuge: Juvenile Delinquency, Dependency, and Education

My thesis focused on the early years of the Philadelphia House of Refuge, which opened in 1828. Occupying a space in society somewhere between schools and prisons, houses of refuge were both educational institutions and the first penal institutions designed specifically for youths. I explored these two aspects of the Philadelphia House of Refuge while analyzing its function as an asylum for orphaned, neglected, and abused children.

I chose the topic after becoming interested in contemporary controversies regarding reform schools. Those who criticize 21st century reform schools sometimes argue the root of their problems date back to the house of refuge era, and I hoped to find out if there was truth to the claims.

I traveled to the Philadelphia area to conduct research at the Historical Society of Pennsylvania and the archives on the Glen Mills School campus. Glen Mills School was founded as the Philadelphia House of Refuge, so many records related to the House of Refuge are either on its campus or in the Glen Mills School Collection at the HSP. I sifted through and analyzed admission records for children committed to the Philadelphia House of Refuge from 1828 to 1841. The records detail each child's family background, disposition, the reason that they were committed, and level of education.

*Traveled to Philadelphia and Glen Mills, Pennsylvania.*



### Hayleigh Rockenback

- Major: Sociology
- Minors: Hesburgh Program in Public Service and Italian
- QuestBridge Scholar
- Advisor: Joshua Kaplan

## Alternatives to Fresh Water Usage for Golf Courses in Arizona

My capstone project is a public policy memo directed toward the Arizona Department of Water Resources in agreement with its 5th Management Plan that decreases the percentage of water allocated to golf courses in Arizona. I provided alternative landscapes and incentive programs for golf courses that inherently decrease necessary water usage, outlining examples across the world.

I chose this topic because I am from Arizona and water conservation is an important issue to me; however, I also recognize the need for golf courses for our economy related to the tourism industry. In this sense, I thought this topic would be interesting to explore further.



### **Maggie Roop**

- Majors: Neuroscience and Behavior and Sociology
- Advisor: Amy Langenkamp

## **Mental Health and Methods of Delivery: Impact Study of Changes to Adolescent Education**

The purpose of this project was to determine how different styles of classroom learning have affected the experiences of middle-school students. As a whole, the pandemic changed the education system as many districts adapted to remote or hybrid learning.

In light of these changes, it's important that the quality of education and the social experience/socialization provided by classical education isn't compromised. Ultimately, the goal of this project was to identify and explain any differences in school attendance and adolescent mental health that resulted from the use of different education delivery styles (virtual/hybrid/in-person) during the COVID-19 pandemic.



## Wendy Ruan

- Major: Science Pre-Professional Studies
- Supplementary Major: Asian Studies
- Minor: Studio Art
- Advisor: Sharon Yoon

## Diplomatic Cooperation and Harmony in East Asia

I made a case for why a particular issue is important and constructed a feasible policy that seeks to address this issue.



**Angelica Ruiz**

- Major: Sociology
- Supplementary Major: Latino Studies
- Minor: Anthropology
- Advisor: William Carbonaro

**Asian American Academic Outcomes in Schooling Contexts**

I looked at how Asian Americans perform in schools based on the racial composition of the schools. I examined if there are peer effects — any externality in which peers' backgrounds, behavior, or outcomes affect an outcome — when more Asian students are in a classroom. I wanted to focus on educational achievement for my thesis and I realized that Asian Americans are an understudied group in academia, and I wanted to contribute to that literature.



**Cristina Ruiz**

- Majors: Anthropology and Sociology
- Supplementary Major: Latino Studies
- Advisor: Calvin Zimmermann

**'A Fork in the Road': Multiracial Student Identity**

My thesis sought to find how and why multiracial students identify the way they do and how education plays a role in self-identification. I interviewed 13 undergraduate students at Notre Dame who identify as mixed-race/multiracial/biracial about their experiences in school and how race has played a part in it.

As someone who identifies as both Mexican and Chinese, I chose this topic because of my experiences regarding race in school. I wanted to learn more about other people who may have had similar experiences and decided to do this project.

*Received funding from the Institute for Scholarship in the Liberal Arts.*



### Clara Saint-Denis

- Major: Political Science
- Minor: Business Economics
- Advisor: Joshua Kaplan

## The Contentious French: The Yellow Vest Movement and its Significance to France's Protest Culture

My thesis focused on the Yellow Vests movement ("Les Gilets Jaunes") — which started in France in 2018 — and unpacked its significance to French politics and society. As a French citizen, I wanted to explore this movement because I witnessed it firsthand. After centuries of protest, the French have earned a reputation of being "contentious."

I also aimed to better understand the roots of protest culture in France. I argued that France's historical experience engrained protesting as a democratic ideal and first resort method of contention in the citizenry. I linked France's revolutionary history to modern-day protests.

Protests have remained a principal method by which citizens can express their grievances, alter political agendas, and spark debates on pressing topics. I have studied protests in various courses at Notre Dame and continue to be fascinated by the dynamics at play behind protest movements worldwide. My thesis contributes to this important area of research by shedding light on the mechanisms by which demonstrations unfold in France, with a focus on the recent Yellow Vests movement.



### Kayley Schacht

- Major: History
- Supplementary Major: Arts & Letters Pre-Health
- Advisor: Rebecca McKenna

## Swingin' with the Sweethearts: Race, Gender, and Jazz in Wartime America

My thesis contended with the multiracial all-woman jazz band— the International Sweethearts of Rhythm — as a lens through which to examine how concepts of race and gender evolved in the World War II era.

The project considered how the band, and jazz musicians in general, were presented and consumed in this time period in comparison to their intentions of self-expression. It examined how the band was received domestically, differentiating their northern and southern tour experiences. It also explored the nature of its European tour with the USO in 1945. Through all of this, I discussed the way jazz was used in the United States both to boost morale and as a diplomatic tool, while jazz musicians challenged the American racial and gender order.

I am passionate about music and am a longtime vocal performer. I stumbled across this band in a *Smithsonian* article and it immediately captured my attention. It fit perfectly with my concentration in War and Society and allowed me to engage more deeply with questions of racial equity, feminism, and internationalism.

**Grace Scheidler**

- Majors: American Studies and Economics
- Glynn Family Honors Program
- Advisors: Korey Garibaldi and Joshua Specht

## What's for Lunch? A Cultural History of the National School Lunch Program

My thesis is a cultural history of the National School Lunch Program (NSLP) from its origins following World War I through the present day. In 2022, we are at a crossroads with the NSLP, like we were in 1968. I used lessons from the near century of the program's existence to argue for the path the program should take going forward. Ultimately, the best way to achieve the program's original goals of feeding America's future is through universal free lunch.

I'm a major foodie and 20th-century America is my favorite time period to study. I knew when choosing my thesis topic that I wanted to bring together these two areas of interest, as well as write something with potential for positive social impact.



### **Kerry Schneeman**

- Major: Design (Concentration in Visual Communication Design)
- Minor: Digital Marketing
- Advisor: Neeta Verma

## **Brain Break: McWell Art as Wellness Initiative**

Brain Break offers students the opportunity to destress using tactile art. Distributed by the McDonald Center for Student Well-Being, these kits provide students with activities designed to get them out of their head. Tactile art has been used as a therapy tool, giving physical form to intangible problems. While completing these activities, a guide sheet asks students to consider how the process makes them feel, combining art with reflection to offer a new way to destress.

I find art to be a therapeutic experience, and wondered if there was a distinct area that I could explore at the intersection between mental well-being and art activities. After discovering art therapy, I extracted specific techniques to make them more accessible for students.

*Received funding from the Department of Art, Art History & Design.*

**Sophie Schroth**

- Major: Design (Concentration in Industrial Design)
- Advisor: Ann-Marie Conrado

**Altitude: Hiking Preparation + Safety**

This thesis explored a new age of hike tracking, safety, and community. With a website and GPS tracker, Altitude reduces barriers to safety and hike planning. The website allows users to join a community of outdoor enthusiasts, get up-to-date safety and trail information, and log hikes for rewards. The GPS tracker embedded in a carabiner allows hikers to create geofences for specific hikes and alerts them when they leave the customized area.

Hiking has been a passion of mine for many years, and serves as a way to get a break from our world of distractions and technology. I wanted to help more people get outdoors to enjoy nature and be safe and engaged while doing so. COVID-19 allowed me to start my research early over the summer while I was home, and do extensive immersion with consumers. It also gave me a way to think about research differently — connecting with a more global consumer because of access to, and greater understanding of, online technologies such as Zoom.

*Received funding from the Department of Art, Art History & Design's Judith A. Wrappe Memorial Award and the William and Connie Greif Art Award.*



### Christine Schulman

- Major: History
- Supplementary Major: Environmental Science
- Minor: Computing & Digital Technologies
- Glynn Family Honors Program
- Advisor: Ian Johnson

## Women's Participation and Portrayal in the Political Warfare Executive's Black Propaganda during WWII

The Political Warfare Executive (PWE) was a covert branch of the British government that distributed black propaganda — propaganda that claimed to be from a source originating among the people it intended to influence. I examined how women were portrayed in and participated in the PWE's black propaganda.

By looking at translated black propaganda and declassified government documents, I examined how stereotypes were manipulated and how women's involvement in the creation of black propaganda affected its form and effectiveness. No other scholar had examined this in depth before and the participation of women in the PWE was underreported. Additionally, it's important to understand how and why portrayals of women can be manipulated, as such manipulations still exist in the media today.

*Received funding from the Undergraduate Research Opportunity Program and the Nanovic Institute for European Studies to travel to London, England.*

**Nolan Schwefler**

- Major: Program of Liberal Studies
- Advisor: Andrew Radde-Gallwitz

## Hippocleides and the Sophist Presence in Herodotus

I built on an argument presented by Vernon Provençal in his book *Sophist Kings*. Herodotus in Provençal's reading presents the Persian rulers as Sophist philosophers in order to criticize the Sophist movement as anti-Greek and anti-Democratic. I argued the figure of Hippocleides expresses aspects of Sophist philosophy and, when read alongside the Persian kings, offers a deeper appreciation of Herodotus' psychological portrait of the Sophist tyrant.

I enjoyed reading *The Histories* in PLS Seminar I and don't often see them referenced, so I thought a thesis about Herodotus would at least be original. Learning that T.E. Lawrence had "ου φρονις" inscribed over his door made it clear there was something important in the story of Hippocleides.



### **Bella Seip**

- Major: Neuroscience and Behavior
- Minor: Education, Schooling, and Society (ESS)
- Advisor: Nicole McNeil

## **Do Parental Beliefs About Education Relate to How Well They Know Their Child's Number Knowledge?**

The goal of the study was to examine potential correlations between parental beliefs about education and the accuracy of their knowledge about their child's early math abilities. We focused on preschool-aged children and their parents' beliefs and reported practices within the home. Parents responded to a survey about their level of embracing didactic beliefs and activities, and their use of informal activities.

Another portion of the survey asked parents to estimate their child's mathematical knowledge. This information was used to analyze if the degree of embracing didactic beliefs, practicing formal activities, or the use of informal activity engagement was related to the accuracy of parental estimations of their child's numerical knowledge. The child's numeracy skills were measured by various experimenter-given tasks that assessed cardinality, counting, numeral identification and set comparison skills, and children's actual skill level was compared with parents' estimations of the skill level.

Parents' estimations of their child's knowledge is vital in order to provide appropriate stimuli (e.g. toys, conversations) and construct the child's environment to most effectively promote their development. Without the correct knowledge of the child's abilities, the parent could be working beyond what the child is capable of at a particular point, or on material and/or skills the child has already mastered.

It has been shown that parents tend to overestimate their child's mathematical knowledge, but little is known as to why this is. I chose to conduct this study to investigate a potential area of beliefs and activities that could relate to how parents form their estimations about their child's knowledge.

**Elizabeth Self**

- Major: Program of Liberal Studies
- Supplementary Major: Theology
- Minor: Constitutional Studies
- Advisor: Mary Keys

## Judgment and Political Responsibility in Michael Walzer's Essay 'Political Action: The Problem of Dirty Hands'

I studied the sources that Michael Walzer considers representative of different responses to the "dirty hands" moral dilemmas of politicians: Machiavelli, for the neoclassical; Weber, for the Protestant; and Camus, for the Catholic. I also included an exploration of Pierre Manent's writing on Machiavelli and Luther. This project bridged genres, including theory and drama, as well as the disciplines of political science and theology.

This work sprang from an interest in reconciling political theoretical realism with Catholic morality. I felt that beneath Machiavelli's hard exterior there were questions about guilt, culpability, and complicity that I needed to explore.

**Maria Sermersheim**

- Major: Theology
- Advisor: Nathan Eubank

## Exegesis of the Wedding at Cana

Writing an exegesis of the wedding at Cana, I tried to synthesize interpretations of the passage throughout history and to deduce and explain the most important message of the passage. Many prominent commentators over the past century have called for a renewal of exegesis, such that the literary investigation is lively and fruitful for the spiritual life beyond mere academic conjecture. I attempted to write an exegesis in this vein, keeping everything in the key of John 2:11.

I credit my thinking about the renewal of exegesis and about the wedding at Cana to a favorite theologian of mine — Pope Emeritus Benedict XVI. Additionally, I will be joining the Master's in Theological Studies program in the biblical concentration next year, so the three combined well for a very relevant topic.

**Francine Shaft**

- Majors: Theology and Japanese
- Glynn Family Honors Program
- Suzanne and Walter Scott Merit Scholars Program
- Advisor: Trent Pomplun

**Mizuko Kuyō: Abortion Ethics, Jizo Bodhisattva, and a Response to LaFleur**

My thesis gave an account of the history of Buddhism in Japan, the evolution of Jizō Bodhisattva in China and Japan, and Buddhist abortion ethics in order to critique William LaFleur's depiction of the mizuko kuyō ritual in *Liquid Life: Abortion and Buddhism in Japan*.

I chose to study the mizuko kuyō ritual because it allowed me to synthesize my interests in theology, Japanese history and culture, and abortion. I also chose this topic because I am interested in how non-Western cultures and non-Christian religions approach the abortion issue. I planned to travel to Japan to visit temples that perform mizuko kuyō and potentially conduct interviews. Instead, due to the pandemic, I leaned into the historical aspects of the project.



### Godiya Simon

- Major: Anthropology
- Minor: Studio Art
- Balfour-Hesburgh Scholar
- Advisors: Eric Haanstad and Brian O'Conchubhair

## Preserving My Endangered Language: Toward an Expanded Dictionary of Cibak (Kibaku)

My research project focused on the documentation and preservation of an endangered language, Kibaku, that is spoken by more than 200,000 people in Northern Nigeria. Over the last century, historical events have resulted in a rapid decline in the number of Kibaku speakers in an increasingly reduced number of communicative domains. This has resulted in lower probabilities of people passing it from one generation to the next. To address this issue, I constructed an English-Kibaku dictionary that includes basic English grammar and unique terms used by Kibaku people on social media.

In my second semester of freshman year, I was inspired to pursue this project after taking an excellent class, Fundamentals of Linguistic Anthropology, with Professor Susan Blum. I learned that about 90% of all languages may be replaced by dominant languages by the end of the 21st century. As a native speaker of Kibaku, I knew that I could make a unique contribution and I became focused on how to help the next generation learn and read in Kibaku.

*Received funding from the Institute for Scholarship in the Liberal Arts and Keough-Naughton Institute for Irish Studies to travel to the University of Hawaii Manoa's Language Documentation Training Center.*

**Luke Sisung**

- Majors: English and Political Science
- Minor: Education, Schooling, and Society (ESS)
- Advisor: Sara Marcus

## United in Anger: Pedagogical Practices and Transformations of Emotion in the ACT UP Organization

My thesis explored informal learning spaces within the ACT UP (AIDS Coalition to Unleash Power) organization, such as civil disobedience training, political funerals, and organizational meetings. I also explored the relationship between the pedagogical practices that occur during these events and the emotions of members of the organization.

I argued that ACT UP effectively used pedagogy in its organizational structure to transform emotions of grief and disillusionment into emotions of anger and pride, which served as the fuel for change for ACT UP. This topic lies at the intersection of my three fields of study at Notre Dame: English, political science, and education, schooling, and society. My interest in the study of emotion, the study of pedagogy, and the study of social organizations converge in this topic.

**Shea Smith**

- Major: Political Science
- Supplementary Major: Global Affairs
- Advisor: Darren Davis

## Assessing White Perceptions of Black Lives Matter: Racial Attitudes, Police Affect, and Ideology

Since the slogan's use in 2013, Black Lives Matter (BLM) has frequently elicited a negative response among white Americans in the United States. Paradoxically, research suggests a simultaneous decrease in explicit racial prejudice during this time. How is this explained? Using multivariate linear regression in my analysis, I argued that white Americans express negative feelings toward BLM as a result of racial attitudes, ideology, and the movement's challenge to police authority.

After the murder of George Floyd in May 2020, I found myself wondering how Americans could still oppose Black Lives Matter while another explicit instance of police brutality was clearly captured on video. I began to theorize what specifically drives opposition to BLM and whether that is a response to BLM's questioning of police behavior or an implicitly racist reaction to Black Americans demanding justice.

**Madeline Soiney**

- Majors: Spanish and Global Affairs
- Minor: Latino Studies
- Advisor: Marisel Moreno

## The Shibboleth of Subjugation: The Weaponization of Language Against Ethnic Haitians in the Dominican Republic

In the Dominican Republic, Haitian immigrants and Haitian-Dominicans are marked by an “otherness” that deprives them of both cultural and legal Dominican identity. Anti-Haitianism is ingrained in the country’s institutions, as demonstrated by the discontinuance of birthright citizenship which disproportionately targets Dominicans of Haitian origin.

For my thesis, I explored the link between language and power in the Dominican Republic, demonstrating that language has been weaponized against Haitian migrants and their descendants in an attempt to keep power in the hands of those who are deemed to be “true Dominicans.”

Throughout my undergraduate career, I have engaged in interdisciplinary study about the Dominican Republic. In various Spanish courses, I read about racial identity and anti-Haitianism. And in a global affairs course, I wrote a policy proposal that addressed the denationalization of Haitian-Dominicans. In my senior thesis project, I wanted to bridge the gap between these two approaches and analyze the situation in the Dominican Republic through both sociocultural and political lenses.



### Joey Speicher

- Majors: Political Science and English
- Minor: European Studies
- Advisor: Andrew Gould

## Football (Soccer) and the German Far-Right Since 1989

A local soccer club both reflects the community and is a projection of it to the rest of the world. Soccer is very popular in Germany and has tremendous power to impact political identities. The far-right has grown in popularity in the former East Germany, and the soccer club becomes a rallying point for these groups and, in some cases, a surrogate for their regional and national identity. The behaviors and activities of these clubs can, in turn, influence their fans' politics as well.

I traveled to Leipzig and Berlin over fall break and attended soccer matches and interviewed club officials, academics, and fans. I also accessed archival material to get a better understanding of the ways soccer and politics intersect.

I have always been a soccer fan, and I was curious about the ways soccer acts as a civic institution and impacts politics in places where it is popular. I have experience studying and researching German politics and saw an opportunity to combine these interests for my thesis.

*Received funding from the Nanovic Institute for European Studies to travel to Leipzig and Berlin, Germany.*



### Diana Spencer

- Majors: Economics, Global Affairs, and Gender Studies
- Glynn Family Honors Program
- Hesburgh-Yusko Scholars Program
- Advisor: Alejandro Estefan

## Financial Inclusion for Women Micro Entrepreneurs: A Comparative Study of Conventional and Islamic Microfinance in Senegal

My research focus combined my three majors. I examined the financial empowerment of women in developing countries where they have limited access to formal financial services, which prevents them from growing their entrepreneurial ideas and reaching their full potential.

Conventional microfinance offers a path toward financial inclusion by bridging the gap between the disadvantaged and formal financial institutions. However, microfinance may create a cycle of debt due to its relatively high-interest rates. Indeed, high-interest rates increase the cost of debt for micro-entrepreneurs and reduce their disposable income.

Some scholars believe the debt burden created by conventional microfinance also increases stress levels and negatively affects productivity and feeling of empowerment. As an alternative to conventional microfinance, Islamic microfinance presents lending in a distinct way: It prohibits interest on loans by emphasizing the religious principle of profit and loss sharing. Hence, my hypothesis stated that Islamic microfinance would better serve female micro-entrepreneurs.

I tested that hypothesis by comparing ways that conventional and Islamic microfinance affect the earned income and feelings of empowerment of female entrepreneurs in Senegal. I administered surveys to 28 female entrepreneurs in the regions of Dakar, Rufisque, and Thies, and conducted an ethnographic study to examine the way they understand and use microfinance. While results indicated no difference in either income or feeling of empowerment between the two groups, there was an interesting correlation between the level of education and the type of microfinance they chose.

*Received funding from the Glynn Family Honors Program to travel to Senegal.*



### Jessica Staggs

- Majors: Anthropology and Sociology
- Minor: Sustainability; Science, Technology, and Values (STV)
- Advisor: Donna Glowacki

## Nature and Culture at the Indiana Dunes National Park

This study used ethnographic observations and interviews at Indiana Dunes National Park to understand how visitors defined nature and humanity's role in nature. During the summer at Indiana Dunes National Park, I performed ethnographic observations and interviewed more than 200 people.

My interviews revealed how visitors viewed nature and culture at the park and how the presence and actions of humans there changed the delineation of park land as human or natural. I chose this topic to contribute to an interdisciplinary body of work investigating the way that humans think about nature and how an integrated understanding of humanity and nature can advance sustainability.

*Received funding from the Institute for Scholarship in the Liberal Arts and the Minor in Sustainability and traveled to Indiana Dunes National Park on Lake Michigan.*



### Jessica Staggs

- Majors: Anthropology and Sociology
- Minors: Sustainability and Science, Technology, and Values (STV)
- Advisor: David Gibson

## Packing for University Quarantine During COVID-19

This project used survey data to investigate what University of Notre Dame students took with them into University quarantine during the COVID-19 pandemic. Responses about what they took and how various social groups influenced their packing choices were used to better understand what kinds of environments students wanted to create during a period of high stress and uncertainty.

This project was inspired by quarantining during the pandemic. I chose it because wide-scale quarantining at universities is a new phenomenon. Not many studies had examined what students chose to have with them, the broader reflections about these choices, and the social importance the material objects held.

*Received funding from the Institute for Scholarship in the Liberal Arts.*



### Anna Staud

- Majors: Economics and English (Honors Concentration in Creative Writing)
- Minors: Theology and Latino Studies
- Advisor: Orlando Menes

## *A Prayer of Sorts: A Poetry Collection*

Through its five sections of poetry (Remembrance, Devotion, Confession, Lamentation, and Canticle), my creative thesis explored how prayer and our lives are marked by paradox. *A Prayer of Sorts* challenged the binary between the sacred and profane and attempted to answer how art and song can carry loss and create hope “in a world where grief and joy zipper like hands.”

This poetry collection is a culmination of my time at Notre Dame. My love of music and fascination with memory influenced *A Prayer of Sorts*, as did my work on the Notre Dame Folk Choir’s newly composed ritualization of Christ’s Passion.

**Claire Stein**

- Majors: Political Science and Design (Concentration in Visual Communication Design)
- Advisor: Sebastian Rosato

## What Are the Effects of Narrative on State Behavior?

I reviewed the theoretical framework of master narratives and examined China's century of humiliation master narrative and territorial disputes.

According to my analysis, whether or not the century of humiliation narrative indicted a disputant state impacted the status of its territorial disputes with China. Therefore, I submitted domestic narratives as a partial explanation for international state behavior.

My interest in Chinese politics began in my sophomore year in Karrie Koesel's Politics of China course. It grew as I researched Chinese direct investments under the direction of Jazmin Sierra. Though I took my first course in international relations as a junior, it quickly became my favorite subfield within political science.

**Colin Stoll**

- Major: Psychology
- Supplementary Major: Arts & Letters Pre-Health
- Advisors: David Watson and Catherine Bolten

## Teletherapy and the COVID-19 Pandemic

This project investigated the impact of COVID-19 on mental health services. In particular, I researched how the transition from in-person therapy to teletherapy impacted mental health outcomes, particularly in relation to substance use disorders.

This topic was chosen as a means to elucidate the impact of the COVID-19 pandemic on psychological services. The COVID-19 pandemic facilitated this project, as it prompted the transition from in-person therapy to teletherapy.

*Received funding from the Institute for Scholarship in the Liberal Arts.*

**Lily Strailey**

- Majors: American Studies and Gender Studies
- Kennedy Scholar
- Advisor: Peter Cajka

## Dropout Nation: 1960s Communes and the Construction of American Identity

My thesis was an intellectual history of 1960s American hippie communes, centering on the differing perspectives of communards and the establishment (“the silent majority”). Their debate surrounding countercultural communes reveals deep-seated anxieties about American identity. These groups both argued for their position as “true” Americans by playing on American myths, symbols, and history.

By examining these constructions of American identity, my thesis sought to understand how different narratives of what it means to be an American are constructed and simultaneously negotiated. I came to this project through my love for the Sixties. My parents played 1960s rock, folk, and pop in the house; those songs were the soundtrack of my childhood. After taking Professor Peter Cajka’s Witnessing the Sixties course my first year, I knew I wanted my thesis to focus on the decade, particularly countercultural communes.

*Received funding from the Kennedy Scholars Fellowship.*

**Lily Strailey**

- Majors: Gender Studies and American Studies
- Advisor: Perin Gürel

***Womyn Spirit: An Analysis of Identity on Womyn's Lands***

In the early 1970s, feminist and lesbian groups went back to the land in search of “womyn-identified” lives. Forming rural separatist communities, these women sought a life together on the land, far from the often violent and oppressive male gaze. Womyn’s lands were supposed to be a space to envision and build a woman’s world, asking powerful questions. How would women organize? How would women farm? How would women build? How would women write, without the pressures and violence of the patriarchy?

My capstone analyzed *Womyn Spirit*, a communitarian-produced magazine, to argue that these communes ultimately failed to imagine and create an authentic woman’s world because residents failed to include transgender, Black, straight, bisexual and other women in their vision. I came to this topic because my thesis centered on 1960s hippie communes. Researching lesbian separatist communes was a natural progression because it tied my thesis research to my second major, gender studies.

**Luke Stringfellow**

- Major: Program of Liberal Studies
- Minor: Italian
- Advisor: Theodore Cachey

**'Per seguir virtute e canoscenza': Desire and Knowledge in Dante's *Divine Comedy***

In my thesis, I explored the human desire to know in Dante's *The Divine Comedy*. I analyzed the character of Ulysses in Inferno, Virgil's discourse on love in Purgatorio, and the heaven of the wise in Paradiso. Methodologically, I conducted a textual analysis of Dante's original Italian text while considering its metaphysical and theological implications. Ultimately, I argued that in Dante's medieval vision that knowledge must be secondary to love, that which orders the entire cosmos.

I chose to write about *The Divine Comedy* after reading it in a Program of Liberal Studies class. I was fascinated by how Dante operates between abstract theory and intimate human interactions. Studying Dante also provided an opportunity to explore my varied interests in literature, theology, philosophy, and the Italian language.

**Alice Sullivan**

- Majors: Mathematics and History
- Minor: Business Administration
- Glynn Family Honors Program
- Notre Dame Stamps Scholar
- Advisor: Sarah Shortall

## The Influence of Post-Structuralist Philosophy on Contemporary Historiography

I examined the relationship between the advent of post-Structuralist philosophy in the mid-20th century and current trends in contemporary historiography. In particular, I analyzed the work of Michel Foucault and Jacques Derrida and illustrated the impact that their concepts have had on current historiographical methodology, including a discussion about pushback on post-Structuralist trends in historiography.

This topic allowed me to explore two of my main interests — philosophy and modern European history — and analyze ways in which they interact and mutually influence the trajectory of their respective disciplines.

**Robert Sveda**

- Major: Accounting
- Minor: Education, Schooling, and Society (ESS)
- Advisor: Mark Berends

## School Funding and its Impact on Student Educational Outcomes

My project was a thesis for my education, schooling, and society minor in which I sought to explain the impact that increased per pupil expenditures have on student educational outcomes in public high schools.

By evaluating test scores, in addition to curricular intensity and chronic absenteeism, I sought to find a holistic picture of the impact that increased per pupil expenditures have on students. As an accounting major, school finance is naturally intriguing to me, and I have an interest in using business skills to better student outcomes.





### **Tegan Sweeney**

- Major: Science-Business
- Minor: Musical Theatre
- Advisor: Matt Hawkins

## **Lessons Learned by Documenting Acting Process**

I took part in the Department of Film, Television, and Theatre's production of *Cyrano* and documented my acting process to answer the following question: How do I learn best? After documenting my thought process in a journal for seven weeks, I made discoveries beyond my initial research question. In my final reflection, I discussed my great experiences and life lessons during my time with *Cyrano* that I will carry forward beyond my time at Notre Dame.



**Erin Swope**

- Majors: Accounting and International Economics
- Advisor: Forrest Spence

## The Fiscal Neutrality of Reduced Post-Secondary Tuition in France

One argument for free college tuition is that, as post-secondary graduates tend to earn more, they will essentially pay back the government for their tuition through higher income taxes, making free or reduced tuition an implicit loan. My paper took an accounting approach to estimating whether reduced college tuition in France is fiscally neutral. These calculations may provide a basic understanding of how post-secondary earnings increase government tax receipts in relation to what the government spends on post-secondary tuition.

As the United States debates free public higher education, it is necessary to examine the affordability of other higher education systems that offer significantly subsidized tuition. As I am also interested in France's social mobility, I wanted to understand whether post-secondary government subsidized tuition increases post-secondary educational opportunities for students of all backgrounds there, especially those from less wealthy backgrounds.

**Nia Sylva**

- Major: Program of Liberal Studies
- Minors: History and Journalism, Ethics and Democracy
- Advisor: Christopher Chowrimootoo

## 'Matronly' Women, 'Boys with Breasts,' Enormous Hands, and Stoicism: Tom Wolfe Attacks Modernism With Embedded Realism

I analyzed Tom Wolfe's participation in cultural and aesthetic debates — most fundamentally, those between modernists and realists — that took place during the 20th century. I have always been fascinated by Wolfe's fiction and nonfiction, as well as the way he was so able to infiltrate and encapsulate subcultures from without.

When I found out that several American literary giants reacted with vitriol to the publication of Wolfe's second novel, I was baffled, and my quest to understand why led me to my topic.



**Naya Tadavarthy**

- Majors: Studio Art (Concentration in Painting) and German
- Minor: History
- Glynn Family Honors Program
- Advisors: Denise Della Rossa and Martin Lam

***Once Upon an Author: A Children's Book on Gisela von Arnim***

I wrote and illustrated a children's book about Gisela von Arnim, a 19th-century German author who published proto-feminist fairy tales and founded a female-focused literary circle as a teenager. My fairy tale-style biography with watercolor illustrations subverts traditional gender tropes.

Geared toward students in mid-to-late elementary school, I hope the book empowers young people to share their narratives through their own creative process, fostering the same sense of personal and artistic agency that von Arnim and I demonstrate by telling tales.

I have wanted to write and illustrate a children's book since elementary school, and this thesis offered the perfect opportunity to combine my majors in studio art and German and minor in history.

*Received funding from the Glynn Family Honors Program to take a children's book illustration course at the Rhode Island School of Design during summer 2020.*

**Jake Theriot**

- Majors: English and Theology
- Advisor: Romana Huk

## Embodiment and Ignatian Spirituality in the Poetry of Gerard Manley Hopkins

My thesis brought together two strands of scholarship on the poetry of the 19th-century Jesuit poet-priest Gerard Manley Hopkins. Many scholars separately study embodiment and Ignatian spirituality in Hopkins's poetry. However, my project combined the two, using Ignatian meditative and contemplative tradition to bridge them.

My goal was to point out and fill gaps in scholarship and offer my readers a simultaneously literary and prayerful way of studying and interacting with Hopkins' poetry. I chose the topic because of its interdisciplinary nature, which allowed me to utilize skills from both my English and theology majors. This project also allowed me to engage my own questions about prayer and poetic experience, all while spending time with one of my favorite poets.



### Luciana Thomas

- Major: Political Science
- Minors: Middle Eastern Studies and Journalism, Ethics, and Democracy
- Advisor: Li Guo

## Islamic Law and Legal Pluralism

My thesis took a deep look at Islamic law throughout history and now in the United Kingdom. I argued that Islamic law can exist within other law systems and adapt to current changing times, as it has throughout its history.

Islamic law during the Ottoman Empire had many adaptations and interpretations; Islamic law changed and adapted to different regions as Islam spread. Many people have misconceptions about the rigidness of Islamic law that are based on not truly understanding the fiqh tradition. Although there are some versions of strict Islamic law interpretations, by going back to the fiqh tradition, Islamic law has the potential to be flexible, fair, and equal in today's times.

I am interested in law and legal practices throughout history. Because of current immigration to Europe from the Middle East and North Africa regions, and the rhetoric surrounding Islamic Law, I wanted to explore the idea of Islamic law existing within other countries. Since the United Kingdom provides a degree of legal plurality with Islamic law, I thought this would be a good place to start to examine how religious and secular law interact and exist with each other.



## Elizabeth Todd

- Major: Political Science and Film, Television, and Theatre (FTT)
- Advisor: Ted Mandell

## Access to Early Childhood Education

This creative thesis explored access to early childhood education services through conversations with mothers and families in the South Bend area. It provided a verbal and visual account of the difficulties of parenting, the struggles of finding trustworthy child care, and the heartfelt desire of parents to provide a good education for their children.

In education-focused classes that I have taken at Notre Dame, I found myself being grateful for the information that I was receiving, and feeling concerned for those who do not have the means of accessing it. It came to my attention that early child care services are not accessible enough to the families that most need them.

**Elizabeth (Lizzie) Trense**

- Major: Political Science
- Minors: Business Economics and Digital Marketing
- Certificate in International Security Studies
- Notre Dame International Security Center Undergraduate Fellow
- Advisor: Sebastian Rosato

## Chinese (In)divisible Territory and the Likelihood of Resolution

What determines the outcomes of territorial disputes? Under what conditions do territorial disputes end with resolution and under what conditions do territorial disputes remain unresolved? In this research project, I attempted to answer these questions in the context of Chinese territorial disputes.

I traveled to China with Notre Dame in summer 2019 and became fascinated with Chinese politics, international relations, and business. I chose to study Chinese territorial disputes because they are important to the future of United States-China relations.

*Traveled to China.*

**Natalie Truscott**

- Major: History
- Minor: Art History
- Advisor: Darren Dochuk

## The American Catholic Student Encounter with Civil Rights and the New Left

My project explored the experiences of Catholic university students, particularly in the urban Midwest, and their encounters with civil rights and radical politics, as they have been largely neglected by the current historiography. I examined the role a 1964 visit from Alabama Gov. George Wallace played in the shift from a Notre Dame campus unconcerned with politics to one willing to adapt the spirit of the '60s to a Catholic university context. I also considered the Omaha DePorres Club, a radical Catholic student group founded in 1947 at Creighton University and how its civil rights advocacy reflected larger trends in American Catholicism after World War II.

I chose this topic after working during the summer in the University Archives in the Hesburgh Library and encountering primary sources related to student life and politics on campus in the 1950s and 1960s. Living in Omaha, I learned about the DePorres Club in theology class at my Catholic high school and was fascinated by it and its rarely told story. I am interested in midcentury America and religious history, so it seemed a natural choice.

*Received funding from the Institute for Scholarship in the Liberal Arts.*

**Nora Tucker**

- Major: Computer Science
- Minor: Catholic Social Tradition
- Advisor: Bill Purcell

## Applying CST at Notre Dame

My Catholic social tradition (CST) capstone project included building a website for students to share their experiences with living out and applying the seven themes of CST through courses or experiences at Notre Dame.

As a CST minor, I've had the opportunity to learn about CST in an academic context, and experience it in a more hands-on context. I struggled with putting the two together and understanding how my actions were actively applying the themes I was learning about in my classes. I thought that other students might struggle with the same thing, so I created a space for students to reflect on their experiences and hear about those of their peers, to better understand the impact of their actions.



### **Catherine Vazzana**

- Majors: Mathematics and Music
- Advisor: Stephen Lancaster

## **Senior Voice Recital**

I sang songs by Franz Schubert, Lili Boulanger, Giulio Caccini, and Claudio Monteverdi, as well as musical theatre selections, one of which was written by a friend and myself. I tried to include songs from a variety of periods and styles.

**Katrina Vogel**

- Majors: Psychology and Sociology
- Advisor: Brooke Ammerman

## The Impact of Rejection Sensitivity on the Relationship Between Aggression and NSSI

My senior thesis looked at how different forms of aggression and nonsuicidal self-injury (NSSI) present themselves in an individual and whether sensitivity to rejection from others impacts this relationship. My goal was to examine the bully instead of the victim in aggressive scenarios, and whether bullies engaged in NSSI behind the scenes.

I chose this topic because I believed there was a gap in the literature when looking at who engages in NSSI and why. Focusing on bullies could change the way that NSSI research is approached in the future. I have always found research on both aggression and NSSI interesting, so mixing them together was the perfect fit for me.

**Isabella Volmert**

- Major: English
- Minors: Theology and Journalism, Ethics and Democracy
- Advisor: Ernest Morrell

## The Spirit, the Folk, and Herself: Womanist Theology in Toni Morrison

For my thesis, I read three of Toni Morrison's novels — *Sula*, *Song of Solomon*, and *Beloved* — through the lens of womanist theology: a practical, personal, academic, and spiritual understanding of Black women's experiences with reality and the divine.

Through exploring the lives of three priestess-like characters in these novels, I argued that Morrison's women find moments of peace and salvation in living out reflections of womanist theology such as love of the community and love of the self. I often think about where religion, specifically Christianity, has failed and also where it uplifts in regards to race, gender, sexuality, and class. Morrison's prose — featuring some of the most beautiful language and descriptions of life and culture in American literature — intricately exhibits these tensions.

**Catherine Von Dohlen**

- Major: Program of Liberal Studies
- Minor: Digital Marketing
- Advisor: Katie Bugyis

## Reclaiming Pilgrimage: Embracing a Spirituality of Walking for Today

Many authors of the Christian tradition have written about a necessary pilgrimage to come to intimately know God. Walking, of course, is related to pilgrimage, but today we hold onto this word too tightly. “Pilgrimage” is not just the Camino de Santiago, the famous Way of St. James that begins in France and ends in Spain. Like walking more generally, pilgrimage signifies so much more, and we will discover this as we continue our walk together.

I have felt drawn to writing about walking since I tore my ACL in January 2020. I believe everyone has access to pilgrimage wherever they live or how they move. My goal was to share how and why pilgrimage is important.

**Madeline Ward**

- Major: Political Science
- Supplementary Major: Applied Computational and Mathematical Statistics (ACMS)
- Minors: Peace Studies and Catholic Social Tradition
- Advisors: Garrett FitzGerald and Bill Purcell

## Where Bottom-Up and Top-Down Meet: A Reading of Grassroots Appalachian Pastoral Letters and Pope Francis' Encyclicals

I examined the dynamics of Church power and hierarchy and what it means to be a member of the Catholic Church, especially through the writings of the Appalachian bishops and the Catholic Committee of Appalachia (CCA) in their three pastoral letters and Pope Francis' two encyclicals.

Questions that came up included: Where do bottom-up and top-down meet? Am I just as much a member of the Church as the bishops? The pastoral letters provide a great window into what a more egalitarian Church might look like, especially when looking at some of the most prominent issues of our time. I wanted to stay in Appalachia for my Catholic social tradition capstone project, and I had been meaning to read these pastoral letters for several months. I decided to start there and look for a strain of theology or recurring theme that could be researched and explored.

What ended up standing out the most were the circumstances through which these letters were written and produced, as joint products of the bishops and the CCA, made up of clergy and laypeople, which led me to questions of hierarchy and power.



### Madeline Ward

- Major: Political Science
- Supplementary Major: Applied Computational and Mathematical Statistics
- Minors: Peace Studies and Catholic Social Tradition
- Advisor: Garrett FitzGerald

## The Elegy from Appalachia that Matters: bell hooks, Poetry, and Responding to Conditions of Violence with Grace

To combat prominent representations of Appalachia like in *Hillbilly Elegy* by J.D. Vance, I contrasted Vance's book with bell hooks' Appalachian poetry collection *Appalachian Elegy*, as well as with poetry by Black Appalachian women before and within the Affrilachian Poetry movement.

In contrast to Vance's book, and with support from these Black women poets from Appalachia, *Appalachian Elegy* provides an effective, inclusive, and intersectional response to the structural and cultural violence experienced by residents of the region.

I am passionate about representations of regions in the United States, like Appalachia and the South, and when researching different art forms in Appalachia in pursuit of a different topic, I learned of the Affrilachian Poetry movement and became hooked. I already knew about *Appalachian Elegy*, but being able to read so much other wonderful poetry by these women was a joy and a privilege. I want to do my part to change the perceptions of regions like Appalachia.

**Ashton Weber**

- Majors: Gender Studies and Economics
- Hesburgh-Yusko Scholars Program
- Advisor: Gail Bederman

## Queer Femme Theology

My thesis project sought to expand the archive of queer femme studies by focusing on the experience of queer people who were raised Catholic. I utilized autoethnography, oral history, and literature review to construct a femme theology. I concluded that queer community-building is a form of theological praxis, as many queer people who were raised Catholic experience God now through their queer communities.

As a queer woman who grew up in a conservative sect of the Catholic Church, I have experienced a lot of pain at the hands of religion. I will be pursuing my Master of Divinity degree after graduation and focusing my studies on queer theology. This topic is therefore relevant to my lived experience and my future plans.

*Received funding from the Hesburgh-Yusko Scholars Program.*

**Elizabeth Wendel**

- Major: Neuroscience and Behavior
- Minor: Education, Schooling and Society (ESS)
- Advisor: Matthew Kloser

## The Influence of Disciplinary Policies and Practices on Students' Relational Trust with Teachers in Charter and Traditional Public High Schools

As "No-Excuses" charter schools proliferate around the country with the promise of narrowing the opportunity gap, it is important to consider how their disciplinary policies impact student well-being. In my study, 16 undergraduate students from charter schools and traditional public schools were interviewed using a semi-structured format to investigate the influence of disciplinary policies on how much students trust their teachers. Qualitative data supported that unwarranted disciplinary events negatively impact how students view their teachers in terms of competence, personal regard and integrity.

Further, charter school students reported they are more mindful of changing their classroom behavior to acclimate to teacher expectations after a disciplinary event compared to traditional public school students, and that their high schools' disciplinary policy and practices helped inform them how to interact with professors and classmates in college.

Most studies concerning "No-Excuses" charter schools primarily focus on cognitive outcomes in the measurement of academic achievement. In order to humanize these students and treat them as more than "worker-learners," it is important to focus on noncognitive outcomes, including behavior, mindset, emotions, or relationships. I chose to analyze trust because students' trust for their teachers is an indicator of student well-being and influences their sense of belonging in their community.



### Martin White

- Majors: Political Science and Economics
- Minor: Constitutional Studies
- Advisor: Ricardo Ramirez

## Welfare Politics in America During Times of Crisis

Americans have a uniquely negative perspective on social welfare policy compared to other nations. They consider programs that are too generous as damaging to the economy, as encouraging of free-loading, and unnecessary. People can get ahead through hard work, and utilizing the social safety net is considered a sign of weakness.

In times of economic crisis, however, these views may shift or change as Americans need to use welfare. My thesis explored whether crises like the COVID-19 pandemic that cause widespread unemployment and financial strife cause American perspectives on welfare to change and, if so, whether the changes are long-lasting.

Over the summer, a friend sent me a *New York Times* article discussing how the enhanced welfare benefits employed to counteract effects of the COVID-19 pandemic were associated with the largest single-year drop in poverty in American history. The writer interviewed Americans across the political spectrum: Some said we should continue to employ similar programs if they changed people's lives, while others claimed they should only be temporary and might do more harm than good.

I wanted to explore how, why, and for how long American perspectives on welfare change in times of crisis, and what lessons lawmakers can learn from these shifts. I had hoped there might be polling data related to how people felt about the welfare benefits employed during the pandemic once the crisis had ended. The COVID-19 pandemic, however, is ongoing. I adapted by finding new questions and data that still addressed what I was hoping to find.



## Tyler White

- Major: Political Science
- Minor: Education, Schooling, and Society (ESS)
- Advisor: Andrea Christensen

## Multi-grade Classrooms

This capstone aimed to discover if there is a difference in the levels of student autonomy in multi-grade classrooms and single-grade classrooms types, and how any difference can affect decisions made by school administrators. I learned in multi-grade classrooms and wanted to learn about their effects on students.





**Teddy Whiteman**

- Majors: Theology and Philosophy
- Advisor: Todd Walatka

## Modern Ecumenical Theology Through the Writings of Ratzinger and Pope Francis

The project attempted to concretize the Church's promulgated ecumenical theology through three steps: an analysis of the ecumenical theology in the texts of Vatican II, Joseph Ratzinger's own ecumenical emphases, and Pope Francis' own ecumenical emphases. Ecumenical theology seems particularly applicable to young Catholics today who struggle with knowing how to relate to those of different Christian communities.



### Clare Wieland

- Major: Science Pre-Professional Studies
- Supplementary Major: Spanish
- Minor: Latino Studies
- Advisor: Karen Richman

## COVID-19 in the Latinx Community of South Bend

My senior thesis focused on the interdependence of the Latinx community throughout the pandemic. Drawing on the concepts of familismo and collectivism present in this community, I studied the Latinx community of South Bend and its response to the pandemic.

I have loved the time that I spent in the Latinx community of South Bend, volunteering at La Casa de Amistad and engaging with West Side Wednesday, a community initiative to invigorate businesses on the West Side of South Bend. When the COVID-19 pandemic hit, the Latinx community was disproportionately affected. Given my background in Latino studies and science preprofessional studies, a project was born.



### Sienna Wilson

- Major: Studio Art (Concentration in Photography)
- Advisor: Martina Lopez

## Immaterial in the Physical World

My thesis recontextualized loss by creating a visual representation of an immaterial presence in our physical world. My images represented the space between the material and the ephemeral, turning this fleeting presence into an ethereal permanence.

While our bodies exist temporarily, our energy in this world persists. While capturing this energy is an impossible endeavor, photography allows us to create an interpretation of what is not visible to the naked eye. Through the use of the natural world, I wanted to evoke feelings of calmness and acceptance. With my photographs, I wanted to communicate a perspective on how we can imagine the fragility and temporality of our existence.

My mother — who has a significantly life-shortening genetic disease — inspired my topic. Long ago, she wrote me a note to give me comfort, knowing that even when she wasn't physically with me anymore, she'd still be by my side through the beauty in the natural world. I wanted to put these words into my own imagery to create a different perspective on loss. I did image exploration and experimentation in Lost Coast, California, and Valley of Fire, Nevada, as well as throughout Indiana and Kentucky

*Received funding from the Department of Art, Art History, and Design to travel to California, Nevada, Indiana, and Kentucky.*



### Ella Wisniewski

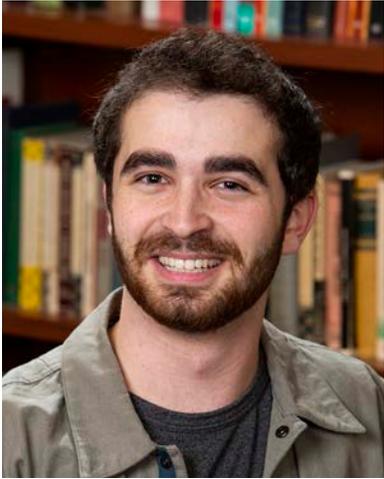
- Majors: English (Honors Concentration in Creative Writing) and Economics
- Brennan Family Scholar
- Glynn Family Honors Program
- Advisor: Joyelle McSweeney

## *things Bodies do: A Collection of Poems and Short Stories:*

My thesis is a collection of poems and short stories titled *things Bodies do*. Unsurprisingly, my work centers on women and their bodies — the beautiful, the sensual, the visceral, the grotesque. Through flash fiction, ekphrasis, and urban legend, I created and explored my own definitions of womanhood and embodiment.

My work is heavily influenced by short story author Carmen Maria Machado; individual works also drew on Salvador Dalí, Maggie Nelson, Francesca Woodman, Aimee Nezhukumatathil, and Dana Ward. I love the capability of creative writing to express emotion, and am interested in the portrayal of the female body in literature.





### Jeremy Yoder

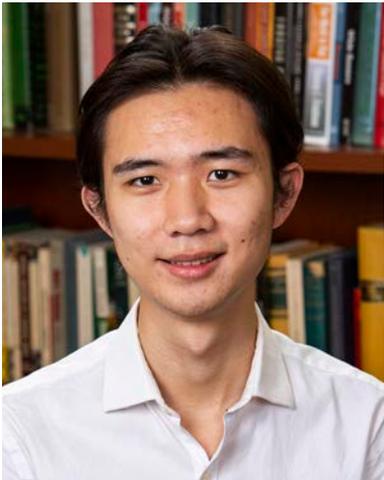
- Major: Business Analytics
- Supplementary Major: Film, Television, and Theatre (FTT)
- Minor: Musical Theatre
- Advisor: Terrance Brown

## Computer Vision for Analyzing Cinematography Trends in Film

Computer vision is a rapidly developing field with intuitive applications for visual entertainment. Yet, the commercial nature of entertainment data and the ongoing corporate streaming wars preclude public access both to media data and to pre-trained models for research and analysis. This thesis blended my technical business analytics degree with my supplementary major in television.

After training a neural network computer vision model to accurately classify shot framing, I statistically analyzed popular and award-winning films to investigate the frequency and distribution of their individual shots. In addition to revealing broader trends in popular/successful cinematography, the resulting model provided groundwork for future research regarding other forms of visual media cinematography. In December, I traveled to New York City for a week to meet with computer vision and entertainment data experts.

*Received funding from the Institute for Scholarship in the Liberal Arts to travel to New York City.*



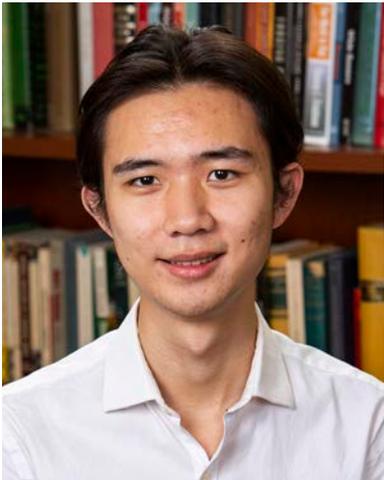
### **Xiaosong Yu**

- Majors: Mathematics, Political Science, and Philosophy
- Glynn Family Honors Program
- Kellogg International Scholars Program
- Advisor: Brian Fogarty

## **Faith in Political Participation: Are More Religious People More Likely to Vote?**

This research — based on established research about voting behavior and authoritative data from the 2020 surveys of the American National Election Studies — quantitatively analyzed and confirmed the statistically significant correlation between religiosity and voter turnout among the American electorate in the 2020 presidential election. Using rigorous statistical methods, it also sought to identify explanatory factors underlying such a phenomenon.

Religion and voting constitute two of the many major factors that shape American politics. Traditionally, a strong correlation exists between religiosity and voter turnout. But the explanations are not universally agreed upon. The majority of studies on religion and voting behavior focus on voter preference. Relatively little research has been conducted on religiosity and voter turnout.



### Xiaosong Yu

- Majors: Mathematics, Political Science, and Philosophy
- Glynn Family Honors Program
- Kellogg International Scholars Program
- Advisor: Curtis Franks

## Constructing the Constructivist Realities: Kripke Semantics for Intuitionistic Propositional Logic

This research, focusing on the philosophical aspect of Saul A. Kripke semantics, surveyed a few instances where certain propositional sentences are provable in classical propositional logic but not in intuitionistic propositional logic. It also employed Kripke semantics to construct proofs that such sentences are unprovable in intuitionistic logic, and translated the highly abstract Kripke constructions into the concrete reality, with the ultimate aim of revealing and articulating the tremendous philosophical insights afforded by Kripke semantics into the constructivist worldview underlying intuitionistic logic.

The majority of the established work on Kripke semantics and intuitionistic logic focuses on the mathematical convenience of Kripke semantics, particularly that Kripke semantics provide a contextual framework in which both soundness and completeness are preserved for intuitionistic logic. This research explored the philosophical profundity of Kripke semantics, namely that the construction of Kripke semantics inherently encompasses the constructivist philosophy of mathematical intuitionism, which remains relatively scarcely studied.

**Caroline Zlaket**

- Major: Sociology
- Minors: Sustainability and Education, Schooling, and Society (ESS)
- Advisor: Mim Thomas

## Representation of Sexualities in Young Adult Media

For my thesis, I analyzed high school prom scenes on television and in movies during the past few decades to examine how non-straight characters were represented or interacted with (if at all). I sought to research how certain individuals (often straight) earn the cultural capital to move fluidly throughout their young adulthood, while others (often non-straight) might not. I grappled with the idea that perhaps the lack of LGBTQ+ representation in young adult television and film has led to a lack of resources for one's presentation of self in public spaces such as school.

Young adulthood is full of uncertainty; in the media, kids can feel seen and heard. I was inspired by the idea that visual media may reflect societal opinions about certain groups of people, and wanted to explore how that has changed (or not changed) over time. My project also represented how school is a place where students learn how to present themselves and gain access to an often unspoken code of behavior during the coming-of-age process.



### **Caroline Zlaket**

- Major: Sociology
- Minors: Sustainability and Education, Schooling, and Society (ESS)
- Advisor: Julie Dallavis

## **To IB or Not to IB? Examining Differences in Higher-Level English Course Frameworks**

The Advanced Placement (AP) curriculum has been a long-standing option for high school students who want to earn college credit, while the International Baccalaureate (IB) program has recently gained popularity for its more holistic approach to higher-level education. I conducted an ethnographic study of two senior classrooms at Adams High School in South Bend, Indiana. After comparing the framework of the courses through a content analysis of their syllabuses, I observed one section of AP English and one section of IB English, taught by the same instructor. Additionally, I interviewed the instructor to examine each program's different pedagogical approaches or instructional methods.

There's a unique opportunity for comparison in schools where multiple higher-level academic paths are offered and students have a choice between them. If only one of these options is offered, any high-achieving, motivated student can pursue that path if they want. However, when multiple forms of advanced level classes are offered, choice and motivation become important factors in determining which track students pursue. I was particularly interested to explore this dynamic and research the nuances of what motivates families to choose certain academic paths over others.

*Traveled to Adams High School in South Bend, Indiana.*