

# Welcome to the **SYMPOSIUM!**

Dear Students, Faculty, Staff, Family, and Friends,

Welcome to the 2026 Steven Galovich Memorial Student Symposium. I hope you are ready to witness the brilliance of our Lake Forest College community in action at this annual gathering which is a celebration of our students' incredible achievements and talents. It will be a day filled with rich scholarly discussions, creative presentations, and musical performances.

The symposium highlights the very best of student research and creative work across disciplines. Undergraduate research is a significant academic initiative that makes the Lake Forest College experience so special, and we are proud to share students' work with the entire College community and friends.

My sincere thanks to those who have worked tirelessly to make this year's Symposium an unforgettable experience. Your dedication and passion have truly made a difference.

Let's come together as one vibrant community and celebrate our accomplishments at Lake Forest College.

Warmly,

Tara Natarajan, Ph.D.  
Krebs Provost and Vice President for Academic Affairs  
Dean of the Faculty

**Tuesday, April 7**

**9 a.m.–4 p.m.**

Brown Hall

**4–5:30 p.m.**

Student Art Exhibit and Choir Performance  
Durand Art Institute



**LAKE FOREST  
COLLEGE**

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## Symposium Overview

### Morning session (9:00-12:00)

Light refreshments served at 8:30 am in Brown Hall lobby

	Room 252	Room 253	Room 254	Room 352	Room 353	Room 354
<b>Block A</b> 9:00-10:20	<i>Policy &amp; People</i>	<i>Energy &amp; Financial Markets</i>	<i>Inquiries in Biology, Medicine, and Predictability</i>	<i>Power, Culture, and Global Order: East Asia in International Perspective</i>	<i>Selections from Collage Magazine</i>	<i>The Emotional, Social, Cognitive, Linguistic, and Civic Dimensions of Writing...</i>
	Jim Marquardt	Muris Hadzic	Rebecca Delventhal	Shiwei Chen	Kyle Nicola Lee & Runtiah Qatami	Daniel Henke
<b>10:20-10:40</b>	<i>Music Intermission</i> Jude Prendergast and Bishrel Batzaya <b>Brown Hall Lobby</b>					
<b>Block B</b> 10:40-12:00	<i>Developing Economies: Finance, Production, and Aid in Sub-Saharan Africa</i>	<i>Determining the Economy's Interest Rate: The workings of the FOMC</i>	<i>Curation &amp; Creation with Artificial Intelligence</i>	<i>Empire, Slavery, Freedom: Micro Histories of the United States in 1850</i>	<i>Horror, Society, and Agency in Literature &amp; Theater</i>	<i>Social Science Research: Emotion, Bias, and Perception</i>
	Kent Grote	Dimitra Papadovasilaki	Kimiko Matsumura	Rudi Batzell	Benjamin Goluboff	Emily Dix

Light refreshments served at 11:30 am in Brown Hall lobby

### Poster session (12:00-1:00)

Location: Tarble Room

### Plant Sales (12:00-1:00)

**Location:** Brown Hall Lobby

### Undergraduate Student Journals and Periodicals (12:00-1:00)

**Collage** (multilingual literature and art) | **Eukaryon** (life sciences) | **Inter-Text** (social sciences and humanities) | **the Stentor** (newspaper) | **Tusitala** (literature and art)

**Location:** Brown Hall 234

### Afternoon sessions (1:00-5:30)

	Room 252	Room 253	Room 254	Room 352	Room 353	Room 354
<b>Block C</b> 1:00-2:20	<i>Interdisciplinary Perspectives on Latin American Studies</i>	<i>Financial Research in Practice: Translating Academic Frameworks into Real-World Decision-Making</i>	<i>Ars Machina Vitae: Creating a Serious Game</i>	<i>Comparative Perspectives on Democracy and Authoritarianism</i>	<i>Ethics, Religion, and Humanity</i>	<i>Black Resistance: Law, Literature, and Liberation</i>
	João Gregoire	Nancy Tao	Tracy Marie Taylor	Ajar Chekirova	Janet McCracken	Aundrey Jones
<b>2:20-2:40</b>	<i>Music Intermission</i> Kiera McKee <b>Brown Hall Lobby</b>					
<b>Block D</b> 2:40-4:00	<i>Culture, Illness, and Public Health in Latin America (Presentations in Spanish)</i>	<i>Economics, Politics, &amp; Society</i>	<i>AI in Action: From Classrooms and Clinics to Campaigns and Markets</i>	<i>State Violence &amp; Its Victims: Perspectives from History, Literature &amp; Politics</i>	<i>A Showcase of New Student Plays</i>	<i>Culture, Identity, and Community</i>
	Marién Loyola	Rob Lemke	Sara Jamshidi	Tessa Sermet	Chloe Johnston	Lia Alexopoulos
<b>4:00-5:30</b>	SENIOR ART EXHIBIT AND FINAL RECEPTION (4:00 PM - 5:30 PM) CHAMBER CHOIR (4:30 PM) <b>Durand Art Institute</b>					

# Detailed Symposium Program

## Block A: 9:00 – 10:20 AM

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Room 252 | 9:00-10:20

### Policy & People

Faculty Moderator: Jim Marquardt

#### Presentations

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#### 1. Making Canada Great Again: Canada's Strategic Trade in the Trump Era

**Presenter(s):** Theodore Puccini

**Faculty Sponsor:** James Marquardt

**Abstract:**

The U.S. is implementing an “America First” approach to international trade under the Trump II administration. Canada has been most negatively affected by U.S. tariffs given that over the past thirty-plus years especially it has been highly dependent on the U.S. market for its exports. Consequently, Canada is reorienting its trade relations, reducing its trade dependence on the U.S. and pursuing new trade opportunities with other countries. By doing so, Canada aspires to develop more stable, predictable, and mutually beneficial trade relations globally with more reliable trade partners, and thereby better ensure a more prosperous economic future for itself.

#### 2. The Constitutional Tension in *NSRC v FEC*

**Presenter(s):** Medhaansh Ghosh

**Faculty Sponsor:** Zachary Cook

**Abstract:**

This paper assesses the *National Republican Senatorial Committee v. Federal Election Commission* (2025) as a critical litmus test of the constitutional balance between free speech and fair elections in U.S. campaign finance law. Tracing Supreme Court jurisprudence all the way from *Buckley v. Valeo* to *Citizens United*, this paper argues that the Court has progressively narrowed corruption as a constitutional concept while rejecting electoral fairness as a legitimate regulatory goal. This case, i.e. *NRSC v. FEC*, challenges federal limits on party coordinated expenditures, raising the question of whether such coordination should continue to be treated as a contribution subject to regulation. Through doctrinal analysis and engagement with contemporary scholarship, the paper submits the argument that removing coordination limits would effectively undermine contribution caps and accelerate the concentration of political influence. The case thus represents a pivotal moment for determining whether democratic integrity retains constitutional significance within an increasingly First Amendment framework.

#### 3. Protecting the Innocent, Guarding the Free: The EU's Justice Dilemma in Regulating Online Pornography

**Presenter(s):** Medhaansh Ghosh

**Faculty Sponsor:** Siobhan Moroney

**Abstract:**

This presentation examines the European Union (EU) and its legal and moral dilemma in regulating online pornography. The question that lies is how to effectively protect children from demonstrable harm while preserving the rights of adults' rights from freedom of expression and privacy. Drawing on the EU Charter of Fundamental Rights, the European Convention on Human Rights, and the Digital Services Act (DSA), this research analyses how principles such as proportionality, harm prevention, and positive state obligations are translated into digital

governance. Through legal doctrine and case law, in particular cases such as *Handyside v. United Kingdom* and *K.U. v. Finland*, the presentation argues that the current EU regulatory framework represents a cautious balancing act that risks both over and under-restriction. As a result, this research highlights the ongoing challenge of safeguarding children without attacking adults' freedom of expression or undermining democratic freedoms.

#### 4. The PISA Shock: Neoliberal Reform and the Marketization of Global Education

**Presenter(s):** Valeria Gómez Corzo

**Faculty Sponsor:** Desmond Odugu

**Abstract:**

Large-scale international assessments, such as PISA, TIMSS, and PIRLS, have transformed education into a global market governed by standardized data. Neoliberal reforms utilize these metrics to push for development and governance dictated by numbers. Through the “PISA Shock” phenomenon, international rankings create national crises that allow governments to justify policy changes and reforms. This raises the question of whether universal quality is a necessary global standard or a form of neocolonialism where Northern economic values are imposed on the Global South. Furthermore, the emphasis on standardized testing often impacts cultural relevance and local school curricula. Standardized education policies often prioritize economic productivity over learning, leading to the marketization of public education. A comparison between Mexico’s 2013 Reforma Educativa and Germany’s response to the 2001 PISA results illustrates a global shift toward accountability and standardization. These frameworks frequently frame teachers as the primary problem while forcing schools to abandon diverse curricula in favor of defined 21st-century skills. Ultimately, the reliance on these metrics creates a market where educational success can be purchased through private tutoring, effectively measuring parental wealth rather than student ability.

#### 5. Silenced Stakeholders: Why Middle-Class Mothers Deserve a Voice in Higher Education Reform

**Presenter(s):** Patricia Sprenger

**Faculty Sponsor:** Dawn Abt-Perkins

**Abstract:**

Middle-class mothers sustain higher education through financial, emotional, and moral investment, yet their perspectives remain absent from reform discourse even as frustration and perceived exclusion fuel growing distrust in colleges. This autoethnographic study examines maternal disillusionment as an overlooked cultural phenomenon with significant implications for institutional reform. Findings from this autoethnographic study identifies structural disconnections between institutions and the families they rely upon, marked by the absence of a shared discourse. This thesis demonstrates why higher education reform will remain incomplete without sustained engagement with the maternal voice as cultural expertise essential to rebuilding institutional trust.

Room 253 | 9:00-10:20

### Energy & Financial Markets

**Faculty Moderator:** Muris Hadzic

#### Presentations

##### 1. OPEC News and Clean Energy Markets

**Presenter(s):** One Kenosi; Seneme Mashaba; Artur Petrosyan

**Faculty Sponsor:** Linh Pham

**Abstract:**

This paper analyzes the reactions of clean energy stock markets to OPEC's production decisions (cuts, boosts, agreements to maintain production (ATM), and failures to agree on production

levels (FTA)) between 2007 and 2024. To this end, we apply the event study methodology combined with the Fama-French factor model. Our data sample includes the WilderHill Clean Energy Index (ECO) and the WilderHill Global Innovation Index (NEX), together with their 147 components. Our results show that the responses of clean energy stocks vary across the OPEC decisions and the nature of individual clean energy stocks. Our results are valid under a number of robustness tests. Finally, we discuss the implications of our findings for investors and policymakers.

## **2. What triggers oil price jumps?**

**Presenter(s):** Oliver Francis

**Faculty Sponsor:** Linh Pham and Dimitra Papadovasilaki

**Abstract:**

We examine next-day newspaper accounts of large daily jumps in oil prices to assess their proximate cause, clarity as to cause, and geographic source. Our sample covers 180 jumps between 2008 and 2025. We compare and contrast the interpretations of the news by human coders and by popular AI apps such as ChatGPT and Gemini. The presentation will be interactive, and the audience will have the opportunity to interpret news articles themselves.

## **3. Driving Renewable Energy Adoption in the United States' Electricity Sector: Evidence from a State-Level Analysis**

**Presenter(s):** Zofia Marjanska

**Faculty Sponsor:** Tilahun Emiru

**Abstract:**

The transition towards renewable energy sources has been gaining greater recognition amongst the arguments relating to climate change mitigation and energy security. In the U.S., the electric power sector remains the largest consumer of renewable energy, with the share of renewables in total electricity generation having increased in recent years. While research on country-level renewable energy determinants is well-developed, inquiry into state-level drivers remains limited. This paper employs fixed effects model to study determinants of renewable energy generation in the electricity sector using a panel of 51 U.S. states/districts from 1994 to 2023. It is found that population has a negative effect on renewable electricity share in total electricity generation, while electricity sales, renewable electricity generation capacity and electric market concentration have positive effects on renewable electricity share in total electricity generation.

## **4. Short-Sale Restrictions and Market Quality: Stock-Level Evidence from the 2008 U.S. Ban**

**Presenter(s):** Ebtsam Abdelghani

**Faculty Sponsor:** Tilahun Emiru

**Abstract:**

This paper examines how the SEC's 2008 short-sale ban affected market quality for U.S. financial stocks. Short-sale restrictions are often implemented to stabilize prices during crises, yet prior research shows that such policies can reduce liquidity and slow price discovery. While existing studies focus on broad cross-country effects, less work isolates the stock-level impact of the U.S. ban using simple, transparent empirical tools. Using daily data for S&P 500 firms from June to December 2008 and a difference-in-differences model with firm and day fixed effects, I study changes in liquidity, trading activity, and volatility. The results show that banned stocks experienced significantly wider spreads, higher Amihud illiquidity, lower trading volume, and higher realized volatility. These findings suggest that the ban weakened market quality for the affected firms.

**Room 254 | 9:00-10:20**

## **Inquiries in Biology, Medicine, and Predictability**

**Faculty Moderator:** Rebecca Delventhal

### **Presentations**

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#### **1. Investigating the effects of gut microbiome on appetitive and consummatory stages of alcohol self-administration**

**Presenter(s):** Olivia Pandazi**Faculty Sponsor:** Hannah Carlson**Abstract:**

According to the 2021 Global Burden of Disease Study, the prevalence of alcohol use disorder (AUD) has increased by 130% since 1990. One recent therapeutic target is the gut microbiome. Chronic alcohol use can induce intestinal dysbiosis, and several recent studies suggest that the disruption of gut microbiota produces alterations in alcohol self-administration in rodents. The antibiotic tigecycline, a tetracycline derivative, has been specifically implicated. Prior research suggests that tigecycline administration alters alcohol intake, but no studies to date have assessed the impact of tigecycline on the appetitive aspects of alcohol self-administration. In the present study, six adult male Long-Evans rats were trained to perform a biphasic alcohol-self administration task that functionally separates appetitive and consummatory behavior. Rats have 20 minutes to complete a response requirement of 20 lever presses, reinforced by 20 minutes of access to a sipper containing 10% alcohol. Extinction probe trials, in which the lever pressing during the 20-minute appetitive interval is not reinforced, are interleaved to assess discrete appetitive responding. Tigecycline (0, 1, 5, 10 mg/kg; i.p.) and/or Bene-Bac, a probiotic that promotes *Lactobacillus* species, was administered one hour prior to behavioral sessions.

#### **2. The role of glial ER membrane protein complex subunit 4 (EMC4) in larval development and behavior**

**Presenter(s):** Inés Riojas**Faculty Sponsor:** Rebecca Delventhal**Abstract:**

The endoplasmic reticulum (ER) is involved in the modification, packaging, and insertion of membrane proteins in the cell. The ER membrane protein complex (EMC) is a protein complex in the endoplasmic reticulum composed of 8-10 subunits that work together to facilitate protein biogenesis. Our lab observed that *Drosophila melanogaster* exhibited dramatically shortened lifespans of 5-6 days with an RNAi knockdown of EMC subunit 4 in glia. These flies also exhibited severe locomotion impairments (weakened climbing), an increase in protein aggregation, a decrease in developmental viability, and delayed development. The larval stage is a critical developmental period to obtain energy necessary for pupation. Chemosensory perception guides larvae to food sources through neural protein signaling. Since the EMC is involved in membrane protein insertion and folding, we hypothesize that it plays a role in chemosensory processing. We examined olfactory-driven behavior in larvae with a glial-specific knockdown of EMC4 and observed no significant differences in olfactory preference index to ethyl acetate. These results suggest that the observed developmental delay may be due to other alterations in glial function besides olfaction. To investigate possible locomotive impairments due to the glial EMC4 knockdown, we used video tracking software to analyze larval locomotion parameters, such as speed and direction.

#### **3. Investigatin**

##### **g mycP3 as a therapeutic target for tuberculosis**

**Presenter(s):** Alvaro Arroyo**Faculty Sponsor:** William Conrad

**Abstract:**

Tuberculosis remains one of the top 10 deadly diseases worldwide. Antibiotic resistance is a major complicating factor. There exists a need for new treatments and new targets for antibiotic chemotherapy. The bacterium that causes TB needs MycP3 to survive in the host and in vitro because it is involved in iron acquisition as part of the ESX-3 secretion system. MycP3 is part of a very druggable class of proteins called proteases (protein-cleaving enzymes). I seek to express and purify milligram quantities of tuberculosis MycP3 from recombinant *e. coli* to test its enzyme kinetics, to test inhibition by known protease inhibitors, and to gather structural information. I will also model the binding of inhibitors to MycP3 in silico.

**Room 352 | 9:00-10:20**

## Power, Culture, and Global Order: East Asia in International Perspective

**Faculty Moderator:** Shiwei Chen**Panel Abstract:**

This panel examines East Asia's modern engagement with global systems of power, culture, and ideology through three case studies spanning Japan, China, Russia, and the West. Jacob Hayden Bennett analyzes the Japanese zaibatsu—particularly Mitsubishi—as critical economic and political actors that underpinned Japan's industrialization, wartime mobilization, and state power. Donovan Dearmin places contemporary Sino-Russian relations in a historical context, arguing that the current partnership mirrors the opportunistic and unstable nature of the twentieth-century Sino-Soviet alliance. Sebastian Ellis explores Japonisme as a transformative cultural exchange, showing how Japanese visual aesthetics reshaped Western art and contributed to the emergence of modernism amid unequal power relations. Together, these papers highlight how economic structures, geopolitical alliances, and cultural encounters have shaped—and continue to shape—East Asia's role in the modern world.

**Presentations**

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**1. Presentation #1:****Presenter(s):** Jacob Hayden Bennett**Faculty Sponsor:** Shiwei Chen**Abstract:**

The Japanese zaibatsu played a decisive political and economic role in Japan's rapid industrialization and imperial expansion by concentrating immense power in the hands of a small corporate elite. An examination of Mitsubishi—one of the earliest and most influential zaibatsu—demonstrates that these conglomerates functioned not merely as economic enterprises but as integral components of the Japanese state before and during the Second World War. Drawing on a wide range of sources, particularly postwar surveys conducted by American occupation authorities assessing the effects of Allied air campaigns, this study shows that the zaibatsu operated as a critical arm of the imperial system. They controlled the production and distribution of essential materials while exerting significant influence within the Imperial Diet and cabinet. Through this symbiotic relationship, the state protected zaibatsu dominance, while the zaibatsu actively supported Japan's industrial, military, and imperial ambitions.

## 2. Presentation #2:

**Presenter(s):** Donovan Dearmin

**Faculty Sponsor:** Shiwei Chen

**Abstract:**

In the last ten to fifteen years, China has surged onto the world stage, boasting a diverse and immensely productive economy and growing military power, while Russia has flexed its military muscles by involving itself in wars in Africa, the Middle East, and most recently, Europe. Many Western onlookers have expressed concern that these two massive autocracies are aligning interests to square off against the West, but others believe that these concerns are overstated. History lends its support to the latter perspective. The recent Russia-China axis bears numerous similarities to the Sino-Soviet Treaty of the 20th Century, sharing many of the same characteristics and weaknesses. The current Chinese-Russian axis will be opportunistic and doomed to collapse because it shares many of the same characteristics, shortcomings, and underlying issues as the short-lived Sino-Soviet Treaty, by far most importantly the fact that both relationships were founded purely on mutual self-interest.

## 3. Presentation #3:

**Presenter(s):** Sebastian Ellis

**Faculty Sponsor:** Shiwei Chen

**Abstract:**

In this paper, I examine Japonisme as a transformative cultural process that reshaped Western visual culture and laid important foundations for modernism. Rather than treating Japonisme as a fleeting exotic trend, I argue that Japanese art- particularly ukiyo-e prints- introduced radical alternatives to Western conventions of perspective, subject matter, and artistic hierarchy, blurring distinctions between fine art, decorative art, and craft. Situating Japonisme within the framework of Orientalism, this paper explores the power imbalances, romanticization, and cultural misappropriation that shaped Western engagements with Japan. It traces the historical conditions that enabled this exchange, including Japan's isolation under the Tokugawa shogunate, its forced opening by Commodore Perry in 1853, and the circulation of Japanese objects through world's fair and private dealer networks. Through case studies of Impressionist and Post-Impressionist artists such as James Whistler and Vincent van Gogh, the paper demonstrates how Japanese visual strategies transformed Western artistic practices. It concludes by examining Japonisme's influence on Art Nouveau and decorative design, emphasizing its lasting impact on modern visual culture.

**Room 353 | 9:00-10:20**

## Selections from Collage Magazine

**Faculty Moderator:** Kyle Nicola Lee and Runtiah Qatami

**Panel Abstract:**

Collage Magazine represents the cultural and linguistic diversity within the Lake Forest College community, providing an opportunity for students of any language other than English to use their abilities in a creative medium. The magazine also encourages any members of the College community (students, faculty, and staff) to express in words their cultural perspectives.

### Presentations

**Presenter(s):** Isable Yee, Maryja Dzemyachenka, Jesus Villagrana, Jonathan Luke Chao, Maggie Fields, Emil Louis Jones, Lizi Sharadze, Daniel Eduardo Cano, Paola Giovanna Rosiles, René Aguilar Monge, Peter Piper Huizenga, Inessa Kaufman, Lexi Adams

**Faculty Sponsor:** Ying Wu

**Room 354 | 9:00-10:20**

## The Emotional, Social, Cognitive, Linguistic, and Civic Dimensions of Writing: The Interdisciplinary Work of the Lake Forest College Writing Center

**Faculty Moderator:** Daniel Henke**Panel Abstract:**

This panel highlights the Lake Forest College Writing Center as an interdisciplinary space where writing is shaped by emotional, social, cognitive, linguistic, and civic dimensions rather than by institutional academic standards alone. The presenters collectively challenge the concept of “good” writing by examining how language practices evolve across personal, academic, and public contexts. Sammie considers how personal journaling creates reflective space that supports students’ transition to formal academic writing. Jillian links literacy to democratic participation, noting how disparities in writing and reading can shape civic voice. Daniela explores how contemporary language trends influence cognition and linguistic self-expression, while Niousha argues that scientific writing can lead to a more clear and rhetorically aware access to knowledge. Finally, Jimena examines bilingual and multilingual writers revealing complex metacognitive strategies that complicate deficit-based assumptions. All in all, these projects invite the campus community to rethink writing instruction as a deeply human and multidimensional practice that stretches well beyond the tutoring sessions in the Lake Forest College Writing Center.

**Presentations****Presenter(s):** Sammie Ross; Jillian Beaster; Daniela Angel Vivas; Niousha Akbari; Jimena Angel**Faculty Sponsor:** Daniel Henke

## Morning Intermission: 10:20 AM – 10:40 AM

Please enjoy the music by Jude Prendergast and Bishrel Batzaya  
**Brown Hall Lobby**

## Block B: 10:40 AM – 12:00 PM

**Room 252 | 10:40-12:00**

## Developing Economies: Finance, Production, and Aid in Sub-Saharan Africa

**Faculty Moderator:** Kent Grote**Presentations****1. Bayesian risk modeling for emerging financial threats in sub-Saharan Africa****Presenter(s):** One Kenosi**Faculty Sponsor:** Andrew Gard**Abstract:**

This thesis uses Bayesian hierarchical and time-varying risk models to estimate and forecast sovereign and financial risk stress across Sub-Saharan Africa, often under data limitations, producing early-warning signals and policy counterfactuals that identify domestic levers for macro-financial resilience and reduced external financing dependence.

## **2. A Blessing or a Curse? International Food Aid and Its Impact on Food Security in Mozambique**

**Presenter(s):** Eliane d Fenita

**Faculty Sponsor:** Danielle Cohen

**Abstract:**

This senior research project paper analyzes whether food aid has functioned as a blessing or a curse for food security in Mozambique. The study examines food aid as both a humanitarian tool and a political instrument drawing on International Relations theories such as soft power and dependency theory. The paper explores how food aid reflects global power dynamics and development ideologies. It then explores the structure of international food aid systems and the role of major donors and institutions. Using Mozambique as a case study, the paper evaluates the effects of food aid during climate shocks and conflict, as well as its impact on local markets. Ultimately, the main objective is to evaluate whether food aid has functioned as a blessing or a curse for food security in Mozambique.

## **3. Seeds of Inequality: Gender Factors Shaping Agricultural Productivity in Tanzania**

**Presenter(s):** Tiyandza Mngomezulu

**Faculty Sponsor:** Kent Grote

**Abstract:**

Female farmers in Tanzania face persistent constraints that limit agricultural productivity, including smaller plot sizes and unequal access to inputs, credit, and extension services. Using econometric analysis, this study estimates productivity differentials at both the plot and household levels between male- and female-managed production. The analysis examines how household, plot, and input characteristics, including labor allocation, microfinance participation, and access to extension services, contribute to observed gender gaps. Results indicate that disparities in resource access and decision-making authority account for a substantial share of lower output associated with female-managed farms. By isolating the structural drivers of productivity differences, this research provides policy-relevant evidence to support interventions that expand women's access to productive inputs, financial services, and agricultural support systems, advancing gender equity and inclusive growth in Tanzania.

## **4. External inflows and Macroeconomic Outcomes: The Effects of Aid, Remittance, and FDI on Economic Growth and Inflation in Sub-Saharan Africa**

**Presenter(s):** Blen Seyfu

**Faculty Sponsor:** Tilahun Emiru

**Abstract:**

This paper explores how external inflows like aid, remittances, FDI, and exports affect GDP growth and inflation in Sub-Saharan Africa, and whether these effects differ between export-driven and aid-dependent economies using pooled and categorized analysis. This is crucial for policymakers and governments seeking to maximize benefits while minimizing destabilization like Dutch Disease, according to their economies and absorptive capacities. While the existing literature examines the effects of inflows individually, there is a gap in integrated analysis comparing their combined effects across different economic structures. Using panel data for 38 Sub-Saharan African countries from 2000 to 2023, I estimate fixed effects regressions with clustered standard errors. Exports boost growth in export-driven countries, while remittances show stronger positive effects in aid-dependent countries. FDI has a negative relationship with growth in both groups, reflecting impact failure in primary sectors. These findings demonstrate that inflow effects depend on economic structure.

**Room 253 | 10:40-12:00**

## Determining the Economy's Interest Rate: The Workings of the FOMC

**Faculty Moderator:** Dimitra Papadovasilaki**Panel Abstract:**

Classroom Presentation that replicates the Federal Open Market Committee determining the economy's interest rates based on recent developments in inflation and unemployment. Students present current developments in the economy and discuss how to maintain maximum employment and low inflation using the federal funds rate.

**Presentations**

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**Presenters:** Maria Gomez, Ignacio Pavon, Diya Mokha, Alejandro Erazo, Max Bertrand**Room 254 | 10:40-12:00**

## Curation & Creation with Artificial Intelligence

**Faculty Moderator:** Kimiko Matsumura**Presentations**

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### 1. ChiBot: An AI for the Chicago History Museum

**Presenter(s):** Isis Correa**Faculty Sponsor:** Justin Kee**Abstract:**

ChiBot is a project shared with the Chicago History Museum. It is a mapping representation of one of the Museum's photo collections with a chat interface for the user to discuss Chicago history.

### 2. Seeing Through AI: Designing a HUMAN Project Website

**Presenter(s):** Millie Velez**Faculty Sponsor:** Kimiko Matsumura**Abstract:**

Is artificial intelligence an effective partner for interactive web design? This presentation discusses the use of AI in the creation of a companion website for the faculty HUMAN project "Seeing Through AI," an art history study that uses computer vision for research and curation. I address how I used AI in my design process, the advantages and disadvantages of the current technology, and the design philosophies that guided the final outcomes. Attendees will have the opportunity to beta test the website.

### 3. Seeing Through AI: Computer Vision for Art Historical Analysis

**Presenter(s):** Avel Ford**Faculty Sponsor:** Kimiko Matsumura**Abstract:**

As AI begins to pervade all aspects of our lives, and in some cases, replace search engines, it is of importance for museum professionals and art enjoyers alike to critically interrogate how we use technology to interpret and understand art history. Thanks to the Mellon Foundation's HUMAN grant, the Lake Forest College community is uniquely suited to examine what it means to be human and the role of humanities in the age of AI through an ethical, equitable, multidisciplinary perspective. This digital humanities project analyzes the college's eclectic collection of art, artifacts, and even fakes using computer vision. These examples illustrate how AI can be a useful

tool for connoisseurship, as well as where it hallucinates, lies, and narrows its study based on Western biased training data.

#### **4. The Worry Wizard and the Brave Knight**

**Presenter(s):** Kelsey Elman

**Faculty Sponsor:** Tracy Marie Taylor

**Abstract:**

This children's book was written and illustrated by Kelsey Elman in collaboration with ChatGPT. The story was written as a way to introduce the concept of 'parts work' to children. We all have parts in our mind; different perspectives, personalities, and opinions. Parts were created as a way to protect us, and sometimes that protection is no longer needed, or there is conflict within the parts of ourselves. The goal of parts work is to integrate the parts of ourselves into a whole working system. The Worry Wizard and the Brave Knight are two parts of the main character, Jordan, who have a conflict that causes a strain in Jordan's mind. He uses coping mechanisms to calm himself down and, with an added weight of peer pressure, Jordan takes time to have a discussion with his conflicting parts to find the problem as well as a compromised solution. Kelsey Elman and ChatGPT

#### **5. Statistical measurement of unpredictability in pseudo and true random number generators**

**Presenter(s):** Sepehr Akbari

**Faculty Sponsor:** Andrew Gard

**Abstract:**

Randomness is everywhere; but not all randomness is equal. While classical pseudo-random number generators (PRNGs) rely on deterministic algorithms, true random numbers (TRNs) are generated by harnessing the inherent unpredictability of natural phenomena. In this study, we designed a quantum random number generator (QRNG) to produce TRNs using single-qubit measurements and compared its output to industry-leading PRNGs. We evaluated randomness across uniformity, structural patterns, and periodicity, using statistical tests and machine learning to identify the most discriminative metrics and construct a composite randomness score. Our results demonstrate that TRNs generated by QRNG exhibit superior unpredictability, with important implications for high-entropy applications such as cryptography and scientific modeling. To support further research and practical implementation, we also developed a Python package for algorithmic randomness assessment.

**Room 352 | 10:40-12:00**

### **Empire, Slavery, Freedom: Micro Histories of the United States in 1850**

**Faculty Moderator:** Rudi Batzell

**Panel Abstract:**

This panel brings together outstanding "micro history" research projects on the United States in 1850. Students selected a particular town or county of their choosing and then used a variety of sources including a local newspaper and the census to explore life, society, and politics. The year 1850 was particularly important as the debates and divisions over the Compromise of 1850 and the expansion of slavery into Western territories conquered from Mexico foreshadowed the tensions and divisions that would result in Civil War a decade later.

## Presentations

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### **1. On the Borders of Slavery: A Riverine History of Kidnapping, Judicial Enslavement, and Reconstruction Politics in the Civil War Era**

**Presenter(s):** Adriana Voloshchuk

**Faculty Sponsor:** Rudi Batzell

**Abstract:**

This article offers a riverine history of two African American brothers, Charles and George Wedley, as they navigated the tumultuous currents of the Civil War era from the 1850s to the 1870s in Pittsburgh, New Orleans, and St. Louis. After exploring Charles Wedley's encounters with kidnapping in Pittsburgh and judicial enslavement in New Orleans, the project examines George Wedley's political rise, considering how the experience of having an older sibling kidnapped into slavery shaped his approach to politics in St. Louis. Using census records, newspaper coverage, city directories, and other archival materials, the article examines the world of free black men in the borderlands of slavery. We use this history to show the profound vulnerability of free Black residents to enslavement in the antebellum era, the centrality of certain key occupations in the Black community, in particular riverboat work and barbering, and the importance of boundaries of respectability within the Black community after emancipation. While most studies of the antebellum free Black experience have focused on a single town or region, this riverine history challenges the usual sectional geography of the Civil War era, revealing how the Mississippi River system connected these three disparate ports.

### **2. The Ottawa Free Trader, Progressivism, and Anti-Slavery Sentiment in 1850**

**Presenter(s):** Cas Badovinac

**Faculty Sponsor:** Rudi Batzell

**Abstract:**

As the Compromise of 1850 and the eventual civil war loomed on the historical horizon, newspapers of towns such as Ottawa, Illinois acted as time capsules for moral and political outlooks before the boiling over of societal unrest in succession. *The Ottawa Free Trader* reflects the realities of social change in a town positioned between slave holding border states and the Northern stronghold of Chicago. Using local and national news through the lens of *The Ottawa Free Trader* as well as published and manuscript census data, a cohesive narrative on the evolving moral positioning of small-town Illinois citizens can be established. Additionally, this micro history shows that anti-slavery papers such as the *Free Trader* illustrate the inevitable trajectory of conflict between the free-labor and slave systems towards disunion, and centralizes the issue of slavery as the focal point on which social conflict centered at the time, not state's rights.

### **3. Hillsdale, Michigan: Technology, Politics and the Expansion of Slavery in 1850**

**Presenter(s):** Alois Stevens

**Faculty Sponsor:** Rudi Batzell

**Abstract:**

In the year 1850, the United States was undergoing many distinct changes that would lead to the eventual Civil War a decade later. It was a year of great technological and social shifts, such as the influence of industrialization and the growth of workers' rights movements. The year 1850 also brought many prominent political shifts, such as the introduction of the Compromise of 1850 and the failure of the Omnibus bill. This article assesses these major historical events primarily through publications of the Hillsdale, Michigan's newspaper, the Hillsdale Whig Standard. It also uses a variety of other primary sources to provide context on prominent events and people of the time. This microhistory will highlight the important technological, social, and political shifts of the year 1850 and use them to more deeply analyze the ways in which people reacted to the events of 1850 on a smaller scale.

#### 4. 'The Rough Country:' An Examination of Washington, Arkansas in a Time of Change

**Presenter(s):** Nate Frank

**Faculty Sponsor:** Rudi Batzell

**Abstract:**

1850 was a time of division in the United States, where a difference of opinion could truly mean disaster. The nuance of this time is often forgotten. For border states, like Arkansas, the divisions were not a black-and-white issue. Not only was Arkansas a border state, but it was also a frontier state. Both published and manuscript censuses, as well as slave schedules, show what life truly was like on the frontier. *The Washington Telegraph*, a weekly paper for Washington, Arkansas, shows both local news and reactions to national news regarding the upcoming and hotly debated Compromise of 1850. These sources show that Washington (and the rest of Hempstead County) was a true frontier town. They were concerned about keeping their slaves but had no interest in the greater politics of the rest of the states, and were more interested in getting access to mail and keeping their crops alive.

**Room 353 | 10:40-12:00**

### Horror, Society, and Agency in Literature & Theater

**Faculty Moderator:** Ben Goluboff

#### Presentations

##### 1. Intuition in the Construction of Poe's Detective Fiction

**Presenter(s):** Giovanni Bernardi

**Faculty Sponsor:** Ben Goluboff

**Abstract:**

Edgar Allan Poe's "tales of ratiocination" ("The Murders in the Rue Morgue," "The Mystery of Marie Roget," and "The Purloined Letter") implemented many devices that would define the detective genre. The components of Poe's detective fiction were constructed to emphasize Dupin's analytical and intuitive abilities. They include the diegetic and ephemeral accounts of the crimes; a detective with a Flaneur-like attitude; the lengthy monologues that detail how the detective solved the crime through his unique intuitive capabilities; the detective's partner whose first-person narration prohibits the reader from directly experiencing intuition, therefore creating a distance between reader and detective. By examining these narrative components in the context of Poe's metaphysical cosmology "Eureka: A Prose Poem", I argue that Poe's view of the Flaneur-like detective is innately intertwined with the belief that intuition is a metaphysical and individualistic experience that exists far beyond simple intellect.

##### 2. Edgar Allan Poe's Dark Ladies

**Presenter(s):** Mikayla Arenson

**Faculty Sponsor:** Benjamin Goluboff

**Abstract:**

Within gothic tales, women often play the role of the 'other.' Whether she is feared, forbidden, or dead, The Gothic Woman's otherness is threatening, and must be narratively neutralized through destruction. The Gothic Woman is beautiful in life, but she is even more beautiful in death. Both her life and her death belong to her male counterpart, her tragic beauty, a catalyst for male desire. The 'Dark Ladies' of Edgar Allan Poe, Berenice, Ligeia, and Morella, however, do not die beautifully—instead, their beauty is destroyed by the corruption of death. They return, monstrous and uncanny, achieving agency outside of the objectifying gaze of their male lovers. They provoke feelings of disgust and fear through their uncanny beauty, allowing them to reclaim their beauty after the debeatification of death while simultaneously escaping the lustful male gaze.

### 3. It's a Double-Edged Sword: Masculinity and Its Constraints in the Works of Franz Kafka

**Presenter(s):** Sarah Faller

**Faculty Sponsor:** Josh Corey

**Abstract:**

Throughout Kafka's fictional and personal writings, he explored different archetypes and performances of masculinity in relation to one another. His short story "A Report to an Academy" shows gender, or more specifically masculinity, as a mandatory performance which restricts one's individual freedoms to societal expectations. In "The Metamorphosis" as well as "Judgement" Kafka displays patriarchal authority in relation to a son's weakness. In "The Hunger Artist" and "The Penal Colony" masculinity offers an avenue for pain and degradation which offers pleasure perhaps both moral and sexual. These displays of masculinity explore gender as a double edged sword in which no actor of masculinity truly wins or comes away without having to or failing to conform to painful expectations, the consequences of which can be either humiliation or death.

### 4. Digital Madness: What Creepypastas Can Tell Us About Social Trends

**Presenter(s):** Sawyer Kuzma

**Faculty Sponsor:** Rebecca Graff

**Abstract:**

Creepypastas, or short horror stories shared online, have been one of the internet's favorite past times for over two decades. Originally spread on forum sites like 4chan and Reddit, the stories have now spread into the real world. However, minimal research has been conducted into the shifting tropes of this literature genre and what they may reflect about our society. Using a social scientific lens, my research examines what types of horror stories have dominated the creepypasta genre, and how the most popular themes have changed in recent years. This, in turn, can reveal larger trends in social anxieties and fears, from the corruption of children to the loss of identity.

**Room 354 | 10:40-12:00**

## Social Science Research: Emotion, Bias, and Perception

**Faculty Moderator:** Emily Dix

### Presentations

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#### 1. Affective Instability and Interoceptive Accuracy in Daily Life

**Presenter(s):** Margarida Carreira

**Faculty Sponsor:** Benjamin Swerdlow

**Abstract:**

Interoception, or the perception of internal bodily states, plays an important role in emotional experience and regulation. Interoceptive dysfunction has been theorized to contribute to affective instability; however, little research has examined ties between interoceptive accuracy and affective instability in daily life. To address this gap, we combined ecological momentary assessment (EMA) and ambulatory physiology. Participants completed seven days of EMA surveys, including a heart rate estimation task, paired with continuous heart rate monitoring via wrist-worn devices. Affective instability was quantified from repeated momentary mood ratings, capturing both overall variability across the study period and momentary deviations. Interoceptive accuracy was calculated as differences between estimated and recorded heart rates. Mixed effects models were used to test associations between affective instability and interoceptive accuracy at both the between-person and within-person levels.

## 2. Increasing Receptivity to Bias Concerns in a Politically Balanced Sample

**Presenter(s):** Alyssa Dyson; Nicole Pido; Sarah Tahir; Sara Rush

**Faculty Sponsor:** Emily Dix

**Abstract:**

Despite irrefutable evidence that racial disparities remain pervasive, White people often discount Black people's bias concerns; these dismissive responses undermine Black people's well-being and interracial relations. We tested an educational intervention that aims to increase receptivity to Black people's bias concerns. The Reality of Bias Intervention communicates that 1) Black people experience a cumulative burden from repeated bias encounters and 2) White people have a limited perspective on bias frequency and impact. We conducted a longitudinal experiment with a politically balanced sample of White adults. At Time 1, participants were randomly assigned to the intervention or control condition. At Time 2, participants reacted to a simulated social media post dismissing Black people's bias concerns. Consistent with predictions, the intervention (vs. control) group evaluated the problematic post more negatively, indicating increased receptivity to Black people's bias concerns. Importantly, the intervention increased concern about discrimination regardless of participants' political leaning.

## 3. When the Campus Talks: Cues, Identity Threat, and Social Connection

**Presenter(s):** Sarah Tahir

**Faculty Sponsor:** Emily Dix

**Abstract:**

Despite narratives framing racism as a problem of the past, it remains a persistent reality for students of color (SOC). SOC at predominantly White institutions often experience identity threat concerns that their social identity is devalued. Strong social networks can buffer against identity threat, yet identity threat may reduce motivation to connect socially. This senior thesis project examines relationships among Lake Forest students' sense of belonging, motivation to connect socially, and experiences of identity threat. We test whether belonging and social motivation differ among SOC vs. White students. Focusing on experiences of SOC, we explore how specific cues in the campus environment relate to identity threat and test whether identity threat predicts reduced belonging and social motivation. We discuss implications for improving support for students of color on college campuses.

## 4. Anonymous Confessions; What YikYak Reveals About Campus Life

**Presenter(s):** Giota Bouterakou

**Faculty Sponsor:** Holly Swyers

**Abstract:**

This project examines the anonymous social media app YikYak as a case study of unaccountable speech within a small liberal arts college. Drawing on semi-structured interviews with Lake Forest College students, the study explores how anonymity functions as a double-edged social tool: creating closeness, humor, and a sense of belonging while simultaneously enabling rumor-spreading, stereotyping, and hostility. The findings show that students actively negotiate YikYak's dual nature, using it to assess campus climate, find belonging, or disengage from toxic content. More broadly, the project argues that anonymous platforms shape and are shaped by campus culture, revealing underexplored tensions around accountability and community in closely bounded social environments.

## 5. Reducing the Post-Hoc Fallacy

**Presenter(s):** Jenna Rose Thomas

**Faculty Sponsor:** Paul Henne

**Abstract:**

People often commit the post hoc ergo propter hoc fallacy—the mistaken assumption that because one event happened after another, the first caused the second. We aimed to replicate work on the post-hoc fallacy in recommendation judgments, extend it to causal judgments, and

reduce the rate of the mistake by using the tools of counterfactual models of causal judgment. In Experiment 1, participants (N = 1500) read 15 vignettes in which a person tried a treatment for a medical condition and then the patient's condition either improved or did not. When the condition improved, participants tended to show the post-hoc fallacy for causal judgments and recommendation judgments. In Experiment 2 (N = 1500), we tested whether we could reduce the post-hoc fallacy by prompting participants to imagine background events happening differently. We found that participants who imagined background events happening differently were less inclined to show the post-hoc fallacy.

## Noon session: 12:00 PM – 1:00 PM

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### Brown Hall Lobby

#### Plant Sales

### Brown Hall 234

#### Undergraduate Student Journals and Periodicals

**Collage** (multilingual literature and art) | **Eukaryon** (life sciences) | **Inter-Text** (social sciences and humanities) | **the Stentor** (newspaper) | **Tusitala** (literature and art)

### Table Room

#### Poster Session

##### 1. Evaluation of Factors that Drive Potential Toxicity of $\gamma$ -Synuclein using a Yeast Model

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**Student(s):** Leslie Casares

**Faculty Sponsor:** Shubhik DebBurman

#### Abstract

Synucleinopathies are neurodegenerative disorders characterized by the abnormal folding and aggregation of synuclein proteins. While  $\alpha$ -synuclein's role in PD is well-researched, less is known about  $\beta$ - and  $\gamma$ -synuclein. Previously, our lab reported that  $\alpha$ - and  $\beta$ -synuclein are differentially toxic, whereas  $\gamma$ -synuclein is non-toxic in our *Saccharomyces cerevisiae* PD model. Here, we further evaluated the toxicity potential of  $\gamma$ -synuclein through toxicity, localization, and expression assays. We assessed familial swap mutations from  $\alpha$ -synuclein and  $\beta$ -synuclein and conserved post-translational modification mutants; we found that putative acetylation site K6 increases toxicity. Then, using genetically altered yeast strains, we found that high nitrate stress and low SUMOylation increased  $\gamma$ -synuclein toxicity, whereas altered glycation, acetylation, and endocytosis did not. This study provides molecular insight into  $\gamma$ -synuclein's potential in neurodegeneration and pathogenicity.

##### 2. Insight into Synucleinopathies: Several molecular factors influence disease-associated b-synuclein mutant toxicity in a yeast model

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**Student(s):** Holly Kiernan

**Faculty Sponsor:** Shubhik DebBurman

#### Abstract

The synucleinopathies are a group of neurodegenerative disorders characterized by the misfolding and aggregation of a protein known as  $\alpha$ -synuclein. Recent attention, though, has focused on the closely

related protein  $\beta$ -synuclein and its disease-associated familial mutations V70M and P123H. Here, we characterized several factors that may specifically drive  $\beta$ -synuclein familial mutant toxicity. 1) Substitution mutant analysis revealed level of hydrophobicity to be key for toxicity and aggregation at the V70 position, while P123 toxicity mostly reflects loss of proline rather than gain of histidine. 2)  $\beta$ V70M and  $\beta$ P123H toxicity was differentially affected by both conserved post-translational modification sites and altered cellular conditions. 3) V70M and P123H toxicity is additive. 5) AlphaFold predicted protein models show wildtype  $\beta$ -synuclein and some  $\beta$ V70M hydrophobic substitutions to polymerize like  $\alpha$ -synuclein.

### **3. Does deleting LRK-1 Protect Dopaminergic Neurons from the Degenerative Effects of a Chronic MitUPR Response?**

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**Student(s):** Dylan Forsythe

**Faculty Sponsor:** Shubhik DebBurman

#### **Abstract**

A key pathology of Parkinson's disease is dopaminergic degeneration, as well as an upregulation of activating transcription factor 4 and leucine-rich repeat kinase 2. The *C. elegans* ATF4 homolog, ATFS-1, is involved in the mitochondrial unfolded protein response. ATFS-1 upregulation causes a chronic mitUPR implicated in dopaminergic neuron death. Studies have demonstrated that LRRK2 inhibition reverses mitophagy defects in GoF LRRK2 mutants. We hypothesized that deleting LRK-1, the *C. elegans* LRRK2 homolog, would protect dopaminergic neurons from a chronic mitUPR through improved mitophagy. We paralyzed and imaged GoF ATFS-1 LRK-1 deletion nematodes 48 hours after the L4 larval stage, along with control groups. We observed no significant neuronal protection. These results support the idea that future studies should aim to identify the specific dysfunctional point in the chronic mitUPR pathway, to hypothesize alternative solutions and other potential gene targets.

### **4. Biocompatible Degradation of Environmentally Persistent Pharmaceuticals in Water Treatment Systems**

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**Student(s):** Anna Garry

**Faculty Sponsor:** Erica Schultz

#### **Abstract**

We often see or hear about oceans being filled with trash and cities covered in smog. However, there are other pollutants that we don't see and sometimes don't think about. There are many sources of pollution, specifically micro pollutants: fertilizer, pesticide, and synthetic organic chemicals from pharmaceuticals. These compounds get into our water supply when people take medications, like antibiotics, or through farming agrochemicals. Environmentally persistent compounds in our water cause many ecological effects. The current waste-water treatment system uses bacteria to remove organic compounds, but many pharmaceuticals and agrochemicals evade degradation. Our goal is to run a chemical reaction in the presence of bacteria that will encourage degradation of these environmentally persistent compounds.

### **5. Aqueous Hydroxylation of Aryl Halides and Optimization of Tandem Oxidation of Benzyl Alcohols Under Air**

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**Student(s):** Mariam Beshara, Haylee Christopher

**Faculty Sponsor:** Erica Schultz

#### **Abstract**

This research project aims to optimize an oxidation-hydroxylation one-pot procedure to convert halobenzyl alcohols into hydroxybenzaldehyde derivatives under aerobic conditions using water as the primary solvent. The products produced by this reaction are important for pharmaceuticals, agrochemicals, and other industrial applications. By using Green Chemistry Principles, this study explores reaction conditions, to yield desired products with a decreased environmental impact. A comprehensive hydroxylation substrate scope was investigated, probing electronic and steric parameters. Additionally, mechanistic studies were conducted on both the hydroxylation and oxidation reactions to better

parameterize the transformations. High-performance liquid chromatography and  $^1\text{H}$  nuclear magnetic resonance spectroscopy provide quantitative data and structural analysis. The optimized hydroxylation conditions give phenols in up to >95% yield.

## 6. Deep-learning for Pneumonia Detection in Chest X-ray Images

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**Student(s):** Gavela Maculuve

**Faculty Sponsor:** Sugata Banerji

### **Abstract**

Pneumonia is an inflammatory condition that affects the lungs. It may be caused by bacteria, viruses, or fungi. Doctors can diagnose it from abnormalities visible in chest X-ray images. In this project, our goal is to build a program that automates this diagnostic process. We propose an image classification technique that uses Convolutional Neural Networks to analyze chest X-ray images and make this decision. This task is challenging due to the lack of color and fine detail in X-ray images. Additionally, anatomical differences across individuals add to the complexity of detection. We test our technique on a publicly available image dataset with more than 5000 chest X-rays.

## 7. Context-Aware Object Detection for Enhanced Neural Network Training in Limited-Data Scenarios

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**Student(s):** Sepehr Akbari

**Faculty Sponsor:** Sugata Banerji

### **Abstract**

We present Objectness, a modular framework for generating context-aware, semantically meaningful image crops to enhance neural network training in data-limited scenarios where context is critical. In applications such as fine-grained classification or rare object detection, traditional augmentation methods often fail to capture the contextual relationships that define each class when training examples are scarce. Our approach integrates Faster R-CNN with a Region Proposal Network (RPN) for deep learning-based saliency detection and Binarized Normed Gradients (BING), a fast Objectness estimation method. By focusing on the most informative and contextually relevant regions, Objectness produces crops that preserve the semantic integrity of the original images, enriching limited training sets with representative samples. Domain-agnostic and adaptable, Objectness enables more effective training and improved classification performance under data and context constraints.

## 8. PMA stimulation shifts APP proteolysis toward the non-amyloidogenic pathway in an APP expression-dependent manner

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**Student(s):** Aaron Oster

**Faculty Sponsor:** D. Blaine Moore

### **Abstract**

Prior literature suggests that sAPP $\alpha$  may regulate alpha-secretase activity through a positive feedback loop that activates extracellular receptor kinase  $\frac{1}{2}$  (ERK1/2), which in turn activates ADAM17, and that it also inhibits BACE1. We hypothesized that shifting APP proteolysis toward non-amyloidogenic processing depends on APP expression levels, due to differential sAPP $\alpha$  secretion, and that BACE1 overexpression would diminish said shift. Low, moderate, and high APP expression levels in CHO cells were treated with a known ADAM17 stimulant, PMA, for two to three hours. Conditioned media were harvested and analyzed using a human A $\beta$  ELISA. These data were normalized to the total protein content of the cell lysates, analyzed via BCA protein assay. The same procedures were performed in cells transiently transfected with BACE1:GFP. We found that the ability to shift APP proteolysis towards the non-amyloidogenic pathway increased as APP expression levels increased, and the BACE1 overexpression attenuated that shift.

## 9. Multimodal communication in gladiator meadow katydids

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**Student(s):** Chante Jacobs, Thalia Leon Rodriguez, Jared Swensen

**Faculty Sponsor:** Flavia Barbosa

### **Abstract**

Multimodal communication occurs when signals are conveyed across multiple sensory modalities, which may provide redundant or different information to receivers. Katydid (Orthoptera: Tetigoniidae) communicate through acoustic signals generated when they rapidly rub their wings together. Some species exhibit multimodal communication, also producing tremulations, where vibrations are produced that move along the plant. Tremulation behavior is much less studied, partly due to it not being audible and often being difficult to detect. It was previously unknown whether the gladiator meadow katydid, *Orchelimum Gladiator*, engaged in tremulation behavior, but they were known to call. We hypothesize that calls and tremulations contain different information and will therefore be used in different contexts. We collected *O. gladiator* from Middlefork Savanna Forest Preserve (Lake Co., IL) and recorded while on a plant extracted directly from the field. There were three treatments for trials: males with other males, males with females, and solitary males. Each male was recorded as the focal for each treatment in randomized order. During trials, both males and females performed tremulations, which is the first record of this behavior in this species. We expect tremulations to be observed primarily during courtship ritual behaviors, and we observed this behavior in both male-female and male-male trials. We also expect calling behaviors to differ based on the social context.

## 10. Development of a Multi-Directional Haptic Feedback System for Mobility Canes

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**Student(s):** Nicholas Abraham

**Faculty Sponsor:** Frederick Prete

### **Abstract**

Approximately 23 million people worldwide who are blind or visually impaired (B/VI) use mobility canes. While effective, traditional canes cannot detect obstacles beyond the reach of the cane's tip. This project explores increasing cane effectiveness by incorporating tip-mounted distance sensors that trigger haptic (vibratory) feedback in the handle when nearby objects are detected. Previous work has shown that haptic-enhanced canes can improve a user's spatial awareness; however, earlier designs relied on a single haptic output. This project builds on that work by integrating three distance sensors, each independently linked to its own haptic actuator. This design allows users to distinguish whether an obstacle is located to the left, right, or directly in front of them. Preliminary data suggest that this multi-sensor, multi-haptic arrangement has the potential to further improve obstacle localization and spatial awareness in complex environments.

## 11. Arm-Based Haptic Feedback Enables Intuitive Object Perception in Absence of Vision

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**Student(s):** Paul Benjamin

**Faculty Sponsor:** Frederick Prete

### **Abstract**

Approximately 8.6 million North Americans are blind or low vision (B/LV), with 1.5–2.0 million relying on mobility aids. Haptic vibrations, which stimulate somatosensory receptors, can convey object proximity. We investigated a hands-free, upper-arm-mounted assistive device that provides distance-dependent vibrational feedback. In Experiment 1, participants ( $N = 14$ ) reported perceived distance of a card placed at five ranges (<1, 1–2, 2–3, 3–4, and >4 ft), each mapped to a predetermined haptic intensity inversely correlated with distance. Pre- and post-tests separated by a familiarization period did not differ in perceived distance estimates; however, perceived distance strongly correlated with stimulus intensity ( $R^2 = 0.977$ ,  $p < 0.001$ ), indicating reliable proximity discrimination. In Experiment 2, integrated motion sensing constrained feedback during stationary periods, limiting output below 14 steps/min under realistic mobility conditions. These findings support upper-arm vibrational feedback as a viable strategy for object perception in low-vision users.

## 12. Performance of Haptic-Enhanced Canes with Varying Sensor Configurations in Real-World Navigation

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**Student(s):** Amal Khan

**Faculty Sponsor:** Frederick Prete

### **Abstract**

Approximately 23 million blind or low-vision individuals (B/VI) use mobility canes, but traditional canes cannot detect obstacles beyond the tip. We evaluated three haptic-enhanced cane prototypes using infrared time-of-flight sensors (ToF) that triggered vibratory feedback. Six volunteers wearing sleep shades (N = 6) navigated obstacle pathways under four conditions: no haptics and three haptic canes (1-sensor, 2-sensor, 3-sensor). Performance was scored as identify (detected before contact), touch/bump (contact after late detection), or collision (direct contact). Without haptics, identification was 0%. With haptics, identification increased to 98.6% (1-sensor), 79.0% (2-sensor), and 81.6% (3-sensor), with corresponding reductions in touch/collision rates. Overall, haptic feedback significantly improved obstacle detection and navigation safety, with the single forward-sensor configuration providing the most consistent performance.

## 13. Effects of intraspecific diversity on the reproductive output of *Silphium integrifolium*

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**Student(s):** Vivian Kennedy, Cecil Vojnikovic

**Faculty Sponsor:** Lynn Westley

### **Abstract**

Studying the influences of intraspecific trait variation is an increasingly critical field for biodiversity and plant community research. Here, we investigate the intraspecific functional diversity and genotypic richness of a focal species, *Schizachyrium scoparium*, and how it influences overall community productivity in *Dalea purpurea* and *Silphium integrifolium*. Simulated three-species prairie communities were established under contrasting soil conditions, mixture and monoculture treatments, and varying genotypic and functional richness of *S. scoparium* to measure reproductive output and seed viability in *S. integrifolium*. We demonstrate the various effects of intraspecific trait variation on surrounding plant species, revealing novel plant community dynamics, and informing restoration planning for local prairies.

## 14. Ionic Liquids as Reaction Medium: Will Bismuth Behave?

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**Student(s):** Atlas Gregory

**Faculty Sponsor:** Jason Cody

### **Abstract**

Ionic liquids (ILs) are green and renewable solvents that have become more widely used due to their low vapor pressure, high ionic conductivity, and high thermal stability. The ionic liquid 1-ethyl-3-methylimidazolium triflate ([EMIM][CF<sub>3</sub>SO<sub>4</sub>]) was used as a solvent for reactions of different ratios of elemental bismuth, red phosphorus, and sulfur with the goal of synthesizing a new bismuth thiophosphate. Previously, our research group prepared new compounds with Ni, Sn, Cr, Co, Mn, and Fe using this unusual synthetic scheme. The synthesis process and results of the bismuth trials will be presented.

## 15. Computational Modeling of Zirconocene Catalysts for Polyolefin Polymerization

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**Student(s):** Ilana Berlin

**Faculty Sponsor:** Dawn Wiser

### **Abstract**

Zirconocene catalysts are used to produce polyolefins, an important class of thermoplastic polymers. The properties of polyolefins are controlled by the structure of the zirconocene catalyst. The industrial synthesis of zirconocene catalysts leads to the formation of a mixture of three isomers (two enantiomers and 1 diastereomer). The mixture of isomers must be separated because polyolefins with the most useful properties are produced by the enantiomers, not the diastereomer. Richard Jordan, et al at the University of Chicago demonstrated that synthesis of zirconocenes under “chelate-control” leads to selective formation of the desired enantiomer products. The structure of large organic groups attached to the zirconium (ligands) along with the structure of the chelate ring affects the isomer distribution of the product. We will report results of density functional theory calculations designed to determine the structural features of the ligand systems and chelate ring that influence the isomer distribution.

## 16. Modeling Glutamate Excitotoxicity in N2a Neuroblastoma Cell Line

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**Student(s):** Tamara Viquez

**Faculty Sponsor:** D. Blaine Moore

### **Abstract**

Glutamate is an excitatory neurotransmitter that plays a critical role in the central nervous system as a key regulator of learning, memory, and overall brain function. However, following acute brain injury, elevated glutamate release can lead to excitotoxic neuronal death. We had two main objectives related to modeling this phenomenon in vitro. First, we established the Neuro2a (N2a) neuron-like cell line in our laboratory and optimized culture conditions. Once established, the cells were exposed to increasing glutamate concentrations (0–500 mM) for 24 hours. Cell viability was measured using the MTT assay and analyzed with a one-way ANOVA followed by Tukey’s post hoc test. Exposure to 10–100 mM glutamate induced minimal toxicity, whereas 200–250 mM produced approximately 50% cell death and 500 mM caused severe loss of viability. Our findings demonstrate a successful development of an N2a glutamate excitotoxicity model and provide an experimental baseline (LD50) for evaluating neuroprotective serotonergic modulators.

## 17. The Effect of B1 Lymphocytes on the Anti-Plasmodium Immune Response

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**Student(s):** Laney Thumser

**Faculty Sponsor:** Jason Cody

### **Abstract**

Malaria remains a global health crisis, with over half the world’s population at risk of infection. While it is well established that CD4+ T cell-dependent B2 B cells are essential for clearing the Plasmodium pathogen that causes the disease through the secretion of neutralizing antibodies, natural infection rarely confers long-lasting immunity, leading to frequent chronic reinfection. To identify the factors hindering durable protection, we investigated B1 B cells, a distinct lymphocyte subset that typically functions independently of T-cell help. Although B1 cells are known to secrete natural antibodies and can exercise immunosuppressive functions, their role in anti-malarial immunity remains poorly defined. This study using mice seeks to determine the precise function of B1 lymphocytes during malaria and whether modulating these cells could enhance long-term immune memory.

## 18. Testing the Post Hoc Fallacy in Negative Outcomes

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**Student(s):** Michael Nsibande

**Faculty Sponsor:** Paul Henne

### **Abstract**

The post hoc ergo propter hoc fallacy is the phenomenon in which, simply because one event happens after another, people tend to think that the first event caused the second. In a previous experiment, we had participants read vignettes describing scenarios in which individuals tried a treatment for medical conditions, and their conditions improved or remained unchanged. When the conditions improved, participants tended to commit the post hoc fallacy. The present study is a follow-up to that experiment. We developed new vignettes in which individuals' conditions either worsened or remained unchanged. This change allows us to test whether there is a post hoc fallacy for negative outcomes. If we find the fallacy in these cases, we will then aim to test whether the tools of counterfactual models of causal judgment can reduce the rate of the fallacy for negative outcomes, too.

## 19. Detection of Pigments for Cultural Heritage Applications Using Surface-Enhanced Raman Spectroscopy

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**Student(s):** Elsa Carlson, Asad Ali

**Faculty Sponsor:** Nilam C. Shah

### **Abstract**

Preserving cultural heritage materials requires tools to identify pigments without damaging artwork. This project aims to optimize conditions for detecting trace pigments in historical materials using Surface-Enhanced Raman Spectroscopy (SERS), while also advancing our understanding of dye-nanoparticle surface interactions for analytical chemistry and material science applications.

## 20. Mismatch Negativity as Prediction Error and Predictive Smooth Pursuit: Literature Review and Research Proposal

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**Student(s):** Mio Takata

**Faculty Sponsor:** Naomi Wentworth

### **Abstract**

Mismatch Negativity (MMN) is a brain response that is often seen when there is a violation of a rule that has been established by a sequence of sensory stimuli (typically in the auditory domain). MMN can be detected through non-invasive methods such as MEG or EEG. Recent theoretical and empirical work has interpreted MMN within a predictive coding framework, proposing that it reflects prediction error signals generated when sensory input deviates from internal models. Smooth pursuit eye movements allow the visual system to track moving objects and are known to rely heavily on predictive mechanisms. Smooth pursuit is less a reaction to immediate sensory motion and more a predictive forecast of an expected state. In this project, we aim to investigate whether prediction errors derived from smooth pursuit eye movements are associated with MMN-like neural responses measured using EEG.

## 21. Investigating ER stress caused by glial-specific knockdown of the ER membrane complex, subunit four (EMC4)

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**Student(s):** Monique Dirzo

**Faculty Sponsor:** Rebecca Delventhal

### **Abstract**

The endoplasmic reticulum (ER) plays a crucial role in ensuring the quality control, folding, and insertion of membrane proteins, while also maintaining cellular homeostasis in eukaryotic cells. Within the ER

membranes, the endoplasmic reticulum membrane complex (EMC), composed of 8-10 subunits, supports key ER functions. This complex is highly conserved between yeast and humans, but its functional range across specific cell types remains poorly understood. Using RNA interference, we knock down EMC4 in glial cells, resulting in severe phenotypes, including delayed development, locomotor impairment, and a shortened lifespan of 5-6 days. To further understand the impact of the knockdown in glial cells, we measured protein aggregation using western blot analysis of both insoluble and soluble samples, indicating the presence of ER stress. Using additional analytical measures, we quantified protein levels and gene expression of ER stress markers indicative of stress pathways regulating ER stress, such as the unfolded protein response (UPR), autophagy, and heat shock protein pathways.

## **22. Glial EMC4 expression levels during development determine the severity of adult-stage physiological and behavioral phenotypes in *Drosophila melanogaster***

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**Student(s):** Martin Ettlin Cuitino

**Faculty Sponsor:** Rebecca Delventhal

### **Abstract**

The endoplasmic reticulum (ER) is a central site for membrane protein biogenesis, where nascent transmembrane proteins undergo folding, modification, and insertion. The endoplasmic reticulum membrane protein complex (EMC), composed of eight to ten subunits, mediates these processes. To assess the cell type-specific function of this complex, we reduced expression of EMC subunit four specifically in glial cells of *Drosophila melanogaster*. Glial-specific EMC4 knockdown caused severe phenotypes, including an approximately one-day delay in developmental timing, reduced developmental viability, complete loss of climbing ability, and a shortened adult lifespan of only 5-6 days. To determine whether adult phenotypes result from acute loss of EMC4 in glia, we restricted the knockdown to adulthood and found that lifespan was nearly normal and climbing ability was fully rescued, indicating that glial EMC4 depletion is most detrimental during development. To test this, we performed a development-only glial EMC4 knockdown and found that the outcomes appear to be dependent on the strength of the knockdown and did not exactly reproduce the adult-stage phenotypes. When we knocked down other EMC subunits, we observed varied phenotypes, presumably due to differences in RNAi construct targeting efficiency, further supporting a dose-dependent role for EMC.

## **23. Investigating the Role of Oxidative Stress in Traumatic Brain Injury in *Drosophila melanogaster***

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**Student(s):** Shannon Gibbons

**Faculty Sponsor:** Rebecca Delventhal

### **Abstract**

Traumatic brain injuries (TBI) occur from a severe impact to the brain causing damage and are a leading cause in morbidity and mortality, leading to structural and biomolecular dysfunction in the body. Many mechanisms of human TBI can be modeled using *Drosophila melanogaster*. Previous research shows that a TBI disrupts sleep, and that sleep helps clear reactive oxygen species (ROS), protecting against oxidative stress. We wanted to investigate whether oxidative stress is detrimental to TBI outcomes and whether it represents a key mechanism underlying injury progression and recovery. To investigate this question, we modified the oxidative stress levels in flies genetically and pharmacologically to see how it impacted short- and long-term outcomes of a TBI. We also measured expression of oxidative stress response genes and found that members of the glutathione-S-transferase (GST) family were differentially expressed acutely and in the long term after injury. Future research will investigate the GST gene family and how related stress response pathways interact with TBI. Increasing the understanding of the role of oxidative stress in TBI could help develop new TBI treatment or recovery methods.

## 24. Examining The Effects of Concurrent Teacher and Student Mindset Interventions: Testing a “Double-Dose” Hypothesis

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**Student(s):** Maggie Fields, Sarah Tahir, Ena Sehic, Mariia Machalina, Katherine Zamudio, Nicole Pido

**Faculty Sponsor:** Elayne Vollman

### **Abstract**

Prior research demonstrates positive effects of growth mindset interventions on student motivation and academic performance, and how teachers' own mindsets shape students' beliefs and achievement. However, little research has examined the possible compounding effects of student and teacher growth mindset interventions on student achievement. According to the mindset-plus-supportive-context hypothesis, growth mindset interventions are most effective when embedded within contexts that also endorse a growth mindset, with teachers playing a critical role (Yeager et al., 2022). The present study examines whether interventions that simultaneously educate and measure mindset change among both teachers and students have effects on student achievement. Using research–practice partnership model with a middle school serving primarily low-income, immigrant students from Mexico and Central America, 43 teachers completed values-aligned professional development modules focused on growth mindset principles and instructional practices. Approximately 600 students were randomly assigned to either a growth mindset or metacognitive understanding intervention within classrooms. Student achievement outcomes will be compared across conditions to evaluate the effectiveness of simultaneous teacher and student growth mindset interventions.

## 25. Measuring protease activity, inhibition, and kinetics to find new protease inhibitor therapies

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**Student(s):** Martius Bautista

**Faculty Sponsor:** Will Conrad

### **Abstract**

Tuberculosis (TB) remains one of the top 10 most deadly diseases worldwide. Due to antibiotic resistance by *Mycobacterium tuberculosis*, which causes TB, and the lack of an effective vaccine against pulmonary TB, there is a consistent need for new antibiotic chemotherapies. Tuberculosis' secreted proteases are promising drug targets because (1) they are secreted outside the bacterium and are therefore more accessible, (2) they are required for bacterial survival in the host, and (3) therapeutic protease inhibitors have been discovered against organisms from viruses to humans. Towards the development of novel protease inhibitors, I optimized a PNPA kinetics assay and inhibitor assay for two model proteases, chymobrypsin and subtilisin. The optimized assays I developed will serve as a template for future assays using mycobacterial proteases. In the future, I will develop assays against new substrates and use new inhibitors.

## 26. CO on Rh(111)

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**Student(s):** Sofia Strupovets

**Faculty Sponsor:** Veronika Walkosz

### **Abstract**

The adsorption of CO and CO<sub>2</sub> on transition metal surfaces has attracted considerable attention in surface science, as these molecules serve as important probes for characterizing electronic structure and surface reactivity. In this study, we employed Density Functional Theory (DFT) to investigate the binding energies of CO at various adsorption sites on the Rh(111) surface. To assess the role of electron-electron interactions, we compared three exchange-correlation functionals: Perdew-Burke-Ernzerhof (PBE), vdW-DF2, and optB86b-vdW. The latter two functionals incorporate non-local correlation effects to account for dispersion interactions. To verify the stability of our structures, we performed vibrational frequency calculations for the adsorbed CO. We compared these frequencies with experimental spectroscopy data and previous computational results to validate our theoretical methods.

## 27. "Soiled" Resistance: Detection of Antibiotic Resistance at Gallery Park

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**Student(s):** Andrea Fernandez, Bethany Rasho, Isabella Dacquisto, Simisola Osinaike

**Faculty Sponsor:** Adina Stanculescu

### **Abstract**

Antibiotic resistance is a growing global health concern that reduces the effectiveness of treatments for bacterial infections. The purpose of the project was to determine the prevalence of antibiotic resistance in the environment. Soil from Gallery Park in Glenview, IL was assessed for the presence of tetracycline-resistant bacteria. Serial dilutions of the soil were plated on tetracycline-containing agar plates to isolate resistant bacterial colonies. Our analysis yielded a frequency of 13% among culturable isolates. Further genomic experiments identified the presence of the bacterial genus *Pseudomonas*, which is a well-known opportunistic pathogen associated with hospital-acquired infections. These findings contribute to the ongoing efforts to track environmental antibiotic resistance.

## 28. Consumption: The Pomegranate is the Body We Practice On

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**Student(s):** Isabel Yee

**Faculty Sponsor:** Margaret Coleman

### **Abstract**

This typographic work uses the pomegranate as a visual analogue for cannibalism, positioning the fruit as a surrogate body that can be broken, exposed, and consumed. The act of eating a pomegranate: forcing open its thick skin, extracting its red flesh by hand, and staining the body with juice, mirrors the intimacy and violence associated with cannibalism. Its anatomy recalls the human form: skin, tissue, and clustered organs. Cannibalism is reframed not as literal violence, but as a metaphor for extreme devotion and desire, in having the urge to absorb another being for emotional sustenance. Inspired by Pomegranates by Amberlmu (Hello Poetry, 2018), the poem was selectively altered to suit the visual scale of the work. Through material process and typographic destruction, affection, and violence collapsed into a single embodied language of intimacy.

## 29. Exhibiting Religion at Lake Forest College

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**Student(s):** Amelia Bednard, Delia Kitzman, Zoey Godnik

**Faculty Sponsor:** Ben Zeller

### **Abstract**

In Fall 2025, students in the Religion and Museum Studies course Exhibiting Religion in the Museum (RELG 355) curated an exhibit titled Religions at LFC. Religions at LFC aimed to represent the myriad of faiths, beliefs, and practices of the Lake Forest College staff and student body by displaying objects of religious, spiritual, and ritual significance. The class spent the semester discussing and debating how religion is represented in museum institutions from display cases to hands-on interaction, concerning all matter of artifacts. Harnessing this experience, these students designed Religions at LFC to extend visitors' knowledge of religious practices and expand their idea of what religion looks like. This poster presentation describes the exhibit and curatorial practices of the Religions at LFC exhibit.

## Block C: 1:00 – 2:20 PM

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Room 252 | 1:00-2:20

### Interdisciplinary Perspectives on Latin American Studies

Faculty Moderator: Joao Batista Nascimento Gregoire

**Panel Abstract:**

Students from diverse disciplines will present research on Latin America to demonstrate the centrality of interdisciplinary studies.

#### Presentations

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##### 1. Presentation #1:

**Presenter(s):** Isabella Nuñez

**Faculty Sponsor:** Joao Batista Nascimento Gregoire

**Abstract:**

El tráfico de personas por medio del narcotráfico en Colombia se han visto profundamente impactados por el avance de la inteligencia artificial (IA), lo que ha intensificado este fenómeno como un problema humanitario al igual que migratorio. Primero es crucial entender de lo que constituye como el tráfico de personas. Según el sitio web de la ciudad de Nueva York, se trata de una forma moderna de esclavitud. Involucra la explotación laboral o sexual de una persona mediante fuerza, fraude o coacción. En el caso de menores de 18 años, cualquier acto sexual comercial se considera tráfico sin importar el consentimiento (NYC). La IA ha facilitado estos delitos al permitir que redes criminales operen con facilitación y eficiencia. En Colombia existen factores sociales como la pobreza, la desigualdad, la explotación de mujeres y niños, la falta de acción gubernamental y las jerarquías de contribuyen al problema. Por medio de la película María llena eres de gracia y el reportaje de SBS Dateline “Inside Colombia's Fight Against Child Trafficking for Sex Tourism”, el narcotráfico ha utilizado la IA como una herramienta para facilitar su negocio de trato de personas, poniendo en riesgo a mujeres y menores.

##### 2. Presentation #2:

**Presenter(s):** Valeria Gómez Corzo

**Faculty Sponsor:** Joao Batista Nascimento Gregoire

**Abstract:**

Through which mechanisms do the colonial past continue to dictate standards of romantic love? How is the reconstruction of a stolen heritage used as a tool for navigating the complexities of transnational belonging? The intersection of colonial legacies and contemporary intimacy defines the transnational experience in Gabriela Wiener's *Huaco Retrato*. This research examines the exploration of a fractured identity between Peru and Spain while confronting the colonial past. By analyzing the metaphor of the huaco (an indigenous ceramic), the study explores how historical hierarchies influence modern perceptions of the self and the construction of desire. Central to this analysis is the practice of polyamory as a space for decolonial resistance, questioning if non-monogamy can exist outside of Eurocentric social structures. The construction of love for the marginalized subject is a political act of decolonization that requires unlearning inherited beauty standards and power dynamics. Through a literary analysis of Wiener's narrative, the historical context of archaeological extraction, and theories on transnationalism, this study illustrates how reclaiming indigenous heritage is essential for emotional autonomy.

### 3. Bridging Two Cultures: Tonatico and Waukegan

**Presenter(s):** María Díaz

**Faculty Sponsor:** Joao Batista Nascimento Gregoire

**Abstract:**

Two small towns from two different countries, and the people who have migrated from Tonatico, Estado de México, to Waukegan, Illinois, over generations, have established a transnational community. In the last hundred years, migrants from Tonatico have made Waukegan their home. As both a researcher and participant in this transnational community, I analyze why and how this connection developed. The people from Tonatico brought their food, businesses, traditions, religious practices, etc. Even the presence of the Patron Saint of Tonatico is evident in Waukegan. Restaurants, such as Antojitos Tonatico, demonstrate the vibrant food culture in the area. Why have the people from Tonatico migrated to Waukegan and continue to do so even now? How is Tonatico's unique culture both present and being transformed in Waukegan? This project argues that migration from Tonatico to Waukegan has created a transnational community maintained through religious practices, family networks, and cultural institutions. The analysis of primary sources, news articles, books, and oral history interviews will show the strong connection that has been established over time. First, I present the historical/cultural background of each town, then I address migration and the current political climate, and finally I analyze three sets of oral history interviews to understand how community members see and experience the connection between Tonatico and Waukegan.

### 4. Systematic Violations of Women's Rights Under the Maduro Regime in Venezuela

**Presenter(s):** Medhaansh Ghosh

**Faculty Sponsor:** Joao Batista Nascimento Gregoire

**Abstract:**

The presentation critically examines the progressive erosion of women's rights in Venezuela under the Maduro regime, which framed gender-based violence as part of a larger landscape that is characterized by political repression, economic destabilization and institutional decay. Through reports from established international human rights organizations, pertinent legal frameworks, and empirical case studies, the analysis reveals that women - in particular political activists, dissidents, and various marginalized groups face risks of arbitrary detention, sexual violence, limited access to healthcare services, as well as forced migrations. My research argues that the Venezuelan state not only neglects its responsibility to safeguard women's rights but also exacerbates their decline through authoritarian practices and systematic impunity. This study further illustrates how gendered violence functions as a tool for political control and advocates for immediate international accountability as well as comprehensive structural reforms to effectively address these critical challenges.

**Room 253 | 1:00-2:20**

## Financial Research in Practice: Translating Academic Frameworks into Real-World Decision-Making

**Faculty Moderator:** Nancy Tao

**Panel Abstract:**

This panel examines how financial research frameworks developed in academic settings are applied to real-world financial decision-making. Drawing on student research and internship experiences across economic research, investment management, investment banking, and wealth management, the presentations illustrate how systematic analysis informs professional judgment in diverse financial contexts. Panelists explore the use of macroeconomic indicators, firm-level equity research, valuation analysis, and evaluation of market narratives to support investment strategies, deal origination, and portfolio decisions. Together, the presentations highlight how research-driven approaches—grounded in data, theory, and disciplined analysis—bridge academic inquiry and professional practice. The

panel emphasizes the role of financial research as a foundation for evidence-based decision-making and demonstrates how undergraduate research skills translate into applied financial careers.

## Presentations

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### 1. Economic Research and Investment Management at Piraeus Bank

**Presenter(s):** Georgios N. Giannopoulos

**Faculty Sponsor:** Nancy Tao

**Abstract:**

This presentation examines applied economic and financial research conducted during my summer internship at Piraeus Bank. I analyze how macroeconomic indicators and financial market data are systematically evaluated to inform investment management decisions. I outline my main responsibilities, including reviewing research reports, analyzing macroeconomic indicators and financial data, and supporting the development of investment strategies such as sector and asset-class allocation decisions. I also discuss how equity research methodologies developed in coursework directly supported my work during the internship, demonstrating how academic research tools can contribute to real-world investment decision-making.

### 2. Applied Equity Research in Investment Banking: From Firm Analysis to Deal Origination

**Presenter(s):** Ako Ogihara

**Faculty Sponsor:** Nancy Tao

**Abstract:**

This presentation examines how equity research is applied in investment banking to support valuation and deal-related decisions. I discuss the research process used to analyze firms, including interpretation of financial statements, assessment of industry conditions, and synthesis of financial and economic information. During my summer internship as an investment banking analyst, I applied these research skills by supporting deal origination through analysis of potential buyers and sellers and contributing to valuation work using comparable firms and prior transactions. These experiences illustrate how equity research informs investment banking analysis and real-world financial decision-making.

### 3. Hype, Fundamentals, and Judgment: How Equity Research Helps Us See Through Market Narratives

**Presenter(s):** Andiswa Mmema

**Faculty Sponsor:** Nancy Tao

**Abstract:**

Recent debates surrounding a potential “AI bubble” highlight how financial markets are often shaped by narratives and media-driven excitement. During my internship in Wealth Management at Morgan Stanley, discussions frequently contrasted today’s AI enthusiasm with the dot-com bubble, emphasizing that many market leaders are supported by strong fundamentals rather than speculative excess. This presentation builds on that insight by examining how equity research provides a disciplined framework for evaluating investments beyond headlines. Using a fundamental equity analysis of Rockwell Automation as a case study, I show how a stock can appear slightly overvalued while still justifying a hold recommendation due to strong cash flows, dividend sustainability, and reinvestment discipline. The presentation argues that equity research teaches investors—academic and everyday alike—how to assess business strength, manage uncertainty, and make informed decisions grounded in fundamentals rather than hype and headlines.

#### 4. A Dual-Engine Strategy: Multi-Asset Trend Following with a Cross-Sectional Equity Factor Overlay

**Presenter(s):** Fareed Ghouse; Ryan Dousevicz; Parker Heves

**Faculty Sponsor:** Muris Hadzic

**Abstract:**

We examine a systematic investment strategy that combines time-series momentum across multiple asset classes with a contextual cross-sectional factor model in U.S. equities. The strategy applies a 12-month momentum signal to a diversified set of liquid ETFs and overlays a dynamically weighted equity factor portfolio based on value, quality, momentum, and low-volatility signals, with factor weights determined by recent Information Coefficient performance. Using monthly rebalancing and volatility targeting, the combined framework is evaluated over the 2017–2025 period. The strategy achieves a 10.06% compound annual growth rate with realized volatility near 12%, demonstrating resilience during major market disruptions. Results suggest that integrating adaptive momentum and factor-based signals can improve diversification and risk-adjusted performance in systematic portfolio construction

**Room 254 | 1:00-2:20**

#### Ars Machina Vitae: Creating a Serious Game

**Faculty Moderator:** Tracy Marie Taylor

**Panel Abstract:**

Ars Machina Vitae: A Reproductive Odyssey is an interactive pixel-art game that weaves together authentic medical diagnoses, narrative storytelling, and AI technology to offer a "choose your own adventure" experience exploring infertility journeys. Four students collaborated to bring this project to life: one created pixel-based art assets and character designs, another focused on story development and narrative writing, a third handled game programming and interactive mechanics, and the fourth designed the audio voiceovers. Drawing inspiration from Donna Haraway's "A Cyborg Manifesto," the game emphasizes blurred boundaries between natural and artificial, human and machine. Participants navigate the lives of distinct characters confronting challenges related to reproductive technologies, societal expectations, and personal dilemmas. Through AI-assisted tools and student contributions, the project represents a synthesis of human creativity and artificial intelligence, challenging players to reflect on technology's role in shaping intimate human experiences and the future of reproduction.

#### Presentations

**Presenter(s):** Adnan Demirovic; Eliana Wolf; Milo Urban; Sammie Ross

**Faculty Sponsor:** Tracy Marie Taylor

**Room 352 | 1:00-2:20**

#### Comparative Perspectives on Democracy and Authoritarianism

**Faculty Moderator:** Ajar Chekirova

**Panel Abstract:**

This panel examines the limits and possibilities of democratization by bringing together comparative research on participation, institutions, and regime trajectories across regions. The papers analyze how everyday political action, social movements, constitutional design, and modes of transition shape democratic outcomes in hybrid, postcolonial, and unevenly democratic contexts. Drawing on cases from Turkey, Southeast Asia, the Caribbean, the Philippines, and Latin America, the panel shows that civic engagement and political transitions do not automatically produce democratic consolidation. Instead, participation is often managed, co-opted, or constrained, while institutional arrangements

condition whether democracy endures, reverses, or remains fragile. Together, the papers highlight democracy as a negotiated and contested process rather than a linear outcome.

## Presentations

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### **1. Regime Transitions in Latin America: A Comparative Study of Democratic Development in Brazil and Nicaragua**

**Presenter(s):** Emília de Paula Fonseca

**Faculty Sponsor:** Ajar Chekirova

**Abstract:**

This research examines the consequences of negotiated and revolutionary transitions for democratic development in Latin America through a comparative analysis of Brazil and Nicaragua. Despite experiencing divergent modes of transition, both cases reveal that the relationship between transition type and democratization outcomes is more complex than classical transition theory suggests. Using V-Dem democratization indices alongside historical analysis, the study traces each country's trajectory from transition to its contemporary regime. The findings show that Nicaragua's short-term democratic gains and Brazil's long-term authoritarian vulnerabilities cannot be explained by transition mode alone. Instead, the consolidation of democratic institutions emerges as the decisive factor shaping democratic durability, challenging assumptions that negotiated transitions inherently produce higher levels of democratization.

### **2. Contesting Global City Aspirations: Grassroots Politics and State Response in Manila, Philippines**

**Presenter(s):** Dominik Datangel

**Faculty Sponsor:** Ajar Chekirova

**Abstract:**

As Metro Manila pursues global city status, tensions between neoliberal development and grassroots demands for inclusion have intensified. This research examines how Filipino urban social movements shape, and are shaped by, the state's aspiration to modernize and compete globally. Drawing on the Right to the City framework and global city theory, the study situates contemporary activism within the Philippines' long history of collective struggle. Using a comparative case study approach, it analyzes three movements between 2017 and 2024: the Kadamay housing occupation, protests against the Jeepney Modernization Program, and the SONAgKAISA human rights mobilizations. Findings suggest that movements framed around housing and human rights are more likely to receive accommodation due to international scrutiny, while protests that challenge modernization projects central to global competitiveness face heightened repression. By centering Filipino experiences, this research highlights how global ambitions intersect with everyday struggles and asks who has the right to shape Manila.

### **3. Co-opted Consumer Activism and Authoritarian Responsiveness in Turkey**

**Presenter(s):** Giota Bouterakou

**Faculty Sponsor:** Ajar Chekirova

**Abstract:**

This paper analyzes the 2020 boycott of French goods in Turkey as a case of everyday political participation in a hybrid regime. Sparked by reactions to French President Emmanuel Macron's defense of secularism after the killing of Samuel Paty, the boycott initially reflected bottom-up moral and religious outrage. Drawing on political consumerism and hybrid regime theory, the paper shows how the Turkish government rapidly co-opted this consumer activism, reframing it as a nationalist-populist project. Based on media analysis, social media discourse, corporate responses, and trade data, the study argues that informal civic participation can simultaneously express citizen agency and reinforce authoritarian legitimacy under conditions of constrained democracy.

#### 4. 21st Century Caribbean Republicanism and its Effects on Democracy: The Case of Barbados

**Presenter(s):** Shellane Shettleworth

**Faculty Sponsor:** Ajar Chekirova

**Abstract:**

This paper examines Barbados's 2021 transition from a constitutional monarchy to a republic and its effects on democratic legitimacy and citizen participation. As the first Caribbean republic established in the 21st century, Barbados offers a critical case for evaluating whether removing the British monarch as head of state enhances civic engagement and state legitimacy in postcolonial democracies. Using a mixed-methods approach combining electoral data, civil society and trust indicators, and qualitative analysis of public discourse, the study finds a dual democratic outcome. While the transition enhanced symbolic and institutional legitimacy and increased trust in governance, it coincided with declining voter turnout and persistent critiques over public consultation and transparency. The paper argues that republicanism can bolster democratic legitimacy, but this change alone is insufficient without participatory and procedural inclusion.

#### 5. Constitutionalizing the Barracks: How Militaries Entrench Power in Thailand and Burma

**Presenter(s):** Min Thant Kyaw

**Faculty Sponsor:** Ajar Chekirova

**Abstract:**

This paper examines why constitutional arrangements that formalize military power do not always lead to durable democratic transitions. While negotiated guarantees have facilitated military withdrawal in cases such as Indonesia and South Korea, this pattern does not hold universally. Focusing on Burma and Thailand as counterexamples, the study asks why constitutionally entrenched militaries continue to dominate politics despite elections and reforms. This paper argues that constitutional mechanisms enabling military persistence do not operate uniformly across cases; rather, their effects depend on distinct political conditions. In Burma, entrenched military economic interests and accelerated civilian reforms generated conditions for intervention, whereas in Thailand, the institutionalized alliance between the monarchy and military, reinforced by deep societal polarization, normalized recurrent coups and obstructed democratic consolidation. Using comparative case analysis, the paper shows how institutional design interacts with broader political conditions to shape (non)democratic outcomes.

Room 353 | 1:00-2:20

### Ethics, Religion, and Humanity

**Faculty Moderator:** Janet McCracken\*

#### Presentations

##### 1. Qur'anic Modesty and the Social Regulation of Women's Dress

**Presenter(s):** Paige Humphrey

**Faculty Sponsor:** Anya Golovkova

**Abstract:**

This presentation examines how Qur'anic teachings on modesty have been interpreted and institutionalized in ways that shape contemporary expectations of Muslim women's dress. While the Qur'an presents modesty as an ethical responsibility shared by men and women, modern practices often place disproportionate emphasis on regulating women's bodies and appearance. By distinguishing between scriptural texts, classical and modern interpretations, and lived social realities, this study explores whether prevailing norms of modest dress derive from religious doctrine or from cultural, patriarchal, and political forces. Drawing on close Qur'anic analysis and

scholarly interpretations, it argues that many contemporary expectations exceed the mandate articulated in scripture. This analysis contributes to broader discussions of gender, religion, and authority by showing that meanings of modesty are historically contingent and socially negotiated rather than fixed or purely theological.

## **2. Affirming the World: Consciousness, Liberation, and Reality in Kashmirian Shaivism**

**Presenter(s):** Arnav Bajpai

**Faculty Sponsor:** Anya Golovkova

**Abstract:**

Hinduism is a globally influential religious tradition whose philosophical frameworks shape the lives of millions. Within it, emerged distinct schools with differing accounts of reality and consciousness. Among them, Kashmirian Shaivism—shaped by Trika and Krama—stands out for its unified account of reality, consciousness, and liberation. As a tantric philosophical tradition, Kashmirian Shaivism contrasts sharply with Advaita Vedānta in its treatment of Śakti, its path to liberation, and its understanding of the world. Through analysis of prakāśa–vimarśa (consciousness and manifestation), the thirty-six tattvas, tantric practice, and the contributions of Abhinavagupta, this presentation argues that its affirmation of the world as real, rather than illusory (māyā), produces a different approach to practice and liberation. This shows that non-dual Hindu philosophies are not monolithic and that metaphysics shape lived religious practice.

## **3. God's Daughter: A Butch-Christ Dichotomy in The Locked Tomb Series**

**Presenter(s):** Mikayla Arenson

**Faculty Sponsor:** Ben Zeller

**Abstract:**

In the award-winning sci-fi series, *The Locked Tomb*, author Tamsyn Muir directly confronts the reader with queerness in a transgressive adaptation of the crucifixion of Christ, blending classic literature, pop-culture references, Biblical themes, and explorations of queer trauma. Christianity has always had a tumultuous relationship with queerness, queer people among the church's primary scapegoats. This is especially so for butch lesbians. Muir's Jesus figure, Gideon Nav, is a defiant, loyal butch lesbian whose lesbian love defines her role as a Christ figure. Muir fearlessly challenges the notion that the butch lesbian by the nature of her existence has no place in God's kingdom, and is in fact God's beloved daughter, cherished by her father. But Muir's Butch Jesus does not embrace the patriarchal God in return. Instead, she defiantly devotes herself, wholly and completely, to the love of a woman.

## **4. Living Underground: Invisible Man and the Existential Novel as Ethical Practice**

**Presenter(s):** Kyle Moyo

**Faculty Sponsor:** Carla Arnell

**Abstract:**

This paper examines Ralph Ellison's *Invisible Man* through the lens of what I describe as a tragic inheritance within existential literature — one that resists modern demands for clarity, coherence, and ideological resolution, and instead treats contradiction as a condition of ethical life. While Ellison is often read in relation to European existentialists such as Sartre and Camus, I argue that his vision more closely resembles Miguel de Unamuno's concept of the "tragic sense of life": a refusal of resolution that holds faith and doubt, hope and despair, in permanent tension. Focusing on Ellison's treatment of ambivalence, blues aesthetics, and narrative irony, I show *Invisible Man* rejects both liberal humanist "neatness" and revolutionary absolutism. The novel's protagonist does not achieve freedom by transcending contradiction, but by learning to inhabit it creatively and responsibly. By situating Ellison alongside Unamuno — and gesturing toward a broader existential genealogy that includes Kierkegaard and Dostoevsky — this paper reframes *Invisible Man* as a work of tragic existentialism whose ethical force lies not in prescription, but in sustained moral tension.

## 5. Ethics of an Animal Caretaker

**Presenter(s):** Nancy Perez Salgado

**Faculty Sponsor:** Janet McCracken

**Abstract:**

Through my experience at the DuPage Wildlife Conservation Center, I examined the ethical challenges faced by many wildlife caretakers. Using real life cases—from raccoon intake restrictions to capacity crises during the 2024 cicada emergence—I explore how conservation goals, public expectations, and limited resources create tension in daily decision making at the hospital. I analyze these problems through the ethical framework of virtue ethics to argue that wildlife rehabilitation contributes not only to animal welfare but also to the cultivation of human character. While the broader conservation impact of wildlife rehabilitation remains debated, I suggest that its value lies in fostering public education, compassion, and responsible stewardship of the natural world through rehabilitation efforts.

**Room 354 | 1:00-2:20**

## Black Resistance: Law, Literature, and Liberation

**Faculty Moderator:** Aundrey Jones

### Presentations

#### 1. Uncovering the Philosophical Mysteries of Pan African Thought

**Presenter(s):** Doyinsola Ogunshola

**Faculty Sponsor:** Aundrey Jones

**Abstract:**

This project explores the philosophical ideas of Pan-Africanism embedded within Black literary fiction, with particular attention to how literary narratives articulate conceptions of identity, liberation, community, and self-determination. Situated within Africana Studies, the study examines how fiction functions not only as artistic expression but also as a site of philosophical inquiry and political thought, often reflective of the time it's written in. Through close analysis of three primary literary texts and three secondary scholarly sources, this project traces recurring themes and conceptual frameworks that reflect Pan-Africanist worldviews and Black intellectual thought. By engaging with literature, the research seeks to extrapolate philosophical concepts that are preserved, reinterpreted, and transmitted throughout history. Ultimately, this study aims to highlight the role of Black fiction as a critical medium for philosophical pan-African reflection, offering insight into how Black writers use storytelling to theorize freedom, belonging, and resistance within global contexts.

#### 2. A Foundation of Love: An Evolving Praxis of Black American Movements and their Responses to State Violence

**Presenter(s):** DeJanae Harges; Preye Indiamawe

**Faculty Sponsor:** Aundrey Jones

**Abstract:**

Love is commonly thought of as primarily an affective emotion. People “fall” in love. Love is something that we feel. Using historical case studies such as the Civil Rights Movement and the Black Panther Party, alongside contemporary case studies, such as the communal response to the police murder of Laquan McDonald in 2014, this paper explores how love has been and can be foundational in the fight for liberation. While some Black American movements have already embedded a praxis of love in their responses to the state, this paper argues that prioritizing a love praxis will create a strong, sustainable foundation for combating forms of state violence via police brutality, mass incarceration, and poverty. Furthermore, this paper argues that Black American movements must reject domination-based tools such as traditional power dynamics (that surface

as classism, sexism, and ableism) in their organizing in order to disrupt violent systems of oppression that are internally and externally perpetuated.

### **3. Understanding the Relationship between Authoritarian Policing and Immigration and National Security in the U.S.**

**Presenter(s):** Preye Indiamawe; DeJanae Harges

**Faculty Sponsor:** Aundrey Jones

**Abstract:**

The recent killings of several U.S citizens by Immigration Customs Enforcement agents have brought global attention to ICE activity– and has made the agency the subject of mass outrage. The discourse surrounding these events has varied wildly from people expressing utter disbelief at the actions of ICE agents, to comparisons to the Gestapo police, to increased support for immigration officers and law enforcement in general. These reactions are no surprise–law enforcement as an institution has always been highly controversial for various reasons. In this project, I argue that immigration enforcement in the U.S is directly influenced by authoritarian policing by historicizing the role of police, by highlighting how it brought us to this moment of mass deportations and illegal killings. I will also synthesize quantitative and qualitative data to display the symbiotic relationship between authoritarian policing and the current developments in immigration enforcement– both legally and extralegally.

## **Afternoon Intermission: 2:20 PM – 2:40 PM**

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Please enjoy the music by Kiera McKee  
**Brown Hall Lobby**

## **Block D: 2:40 – 4:00 PM**

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**Room 252 | 2:40-4:00**

### **Culture, Illness, and Public Health in Latin America (Presentations in Spanish)**

**Faculty Moderator:** Marilén Loyola

#### **Presentations**

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##### **1. Childhood Obesity in Mexico**

**Presenter(s):** Gabriel Calderón Flores

**Faculty Sponsor:** Marilén Loyola

**Abstract:**

Childhood obesity in Mexico is a serious public health problem influenced by cultural, family, socioeconomic, and environmental factors. This presentation argues that cultural beliefs, economic conditions, and the limitations of public policies contribute to the rising number of children with obesity. Approximately 10% of Mexican children are affected, and studies show that 40% of their caloric intake comes from high sugar, high fat, and high salt products. Children are further influenced by targeted advertising and the proximity of unhealthy foods to schools. Family practices like using food as a reward and cultural beliefs about body size also reinforce unhealthy habits. Socioeconomic and environmental factors, including the limited time for physical activity and urban safety issues, add to the problem. Existing interventions, such as school nutrition

programs and public policies on sugary beverages, show promise. However, education, community support, and family involvement are essential to prevent childhood obesity and improve long-term health outcomes.

**Título en español:** La Obesidad Infantil en México

**Resumen en español:** La obesidad infantil en México es un grave problema de salud pública influenciado por factores culturales, familiares, socioeconómicos y ambientales. Esta presentación sostiene que las creencias culturales, las condiciones económicas y las limitaciones de las políticas públicas contribuyen al aumento del número de infantes con obesidad. Aproximadamente el 10 % de los niños mexicanos se ven afectados, y los estudios muestran que el 40 % de su consumo de calorías proviene de productos con alto contenido de azúcar, grasa y sal. Las prácticas familiares, como usar la comida como recompensa, y las creencias culturales sobre el tamaño corporal refuerzan hábitos poco saludables. Los factores socioeconómicos y ambientales agravan el problema. Intervenciones existentes, como programas de nutrición escolar y políticas públicas, muestran resultados prometedores. Sin embargo, la educación, el apoyo comunitario y la participación familiar son esenciales para prevenir la obesidad infantil y mejorar los resultados de salud a largo plazo.

## **2. The Psychological Well-Being of Colombia's Migrant Population in the U.S. in Contexts of Political Risk**

**Presenter(s):** Thalía León Rodríguez

**Faculty Sponsor:** Marilén Loyola

**Abstract:**

This presentation explores the psychological well-being of Colombian immigrants in the United States, viewing migration as a process deeply shaped by historical and political contexts. Drawing on the background of Colombian migration, I examine major migratory waves driven by violence, drug trafficking, and economic crises, as well as mental health conditions in Colombia, where stigma and access barriers remain central. This study uses a qualitative analysis of academic literature, institutional reports, and a theoretical framework of acculturation and psychosocial well-being. Findings show that many migrants arrive with unmet mental health needs and face new obstacles in the U.S., including financial limitations, lack of Spanish-language services, and a shortage of culturally competent care. In addition, the current political climate intensifies fear, stress, and uncertainty. I argue that the mental health of Colombian migrants reflects an accumulation of historical, social, and political factors that require structural responses and dignified access to mental health care.

**Título en español:** El Bienestar Psicológico de la Población Colombiana Migrante en los Estados Unidos Bajo Contextos de Riesgo Político

**Resumen en español:** Esta presentación explora el bienestar psicológico de los inmigrantes colombianos en los Estados Unidos, entendiendo la migración como un proceso profundamente marcado por la historia y el contexto político. A partir de los antecedentes de la migración colombiana, se analizan las principales olas migratorias impulsadas por la violencia, el narcotráfico y las crisis económicas, así como las condiciones de la salud mental en Colombia, donde el estigma y las barreras de acceso siguen siendo centrales. El estudio se basa en un análisis cualitativo de literatura académica, informes institucionales y un marco teórico de aculturación y bienestar psicosocial. Los resultados muestran que muchos migrantes llegan con necesidades de salud mental ya desatendidas y enfrentan nuevos obstáculos en Estados Unidos, como limitaciones económicas, falta de servicios en español y escasez de atención culturalmente competente. Además, el clima político actual intensifica el miedo, el estrés y la incertidumbre. En conclusión, la salud mental de los migrantes colombianos refleja una acumulación de factores históricos, sociales y políticos que requieren respuestas estructurales y un acceso digno a la atención en salud mental.

### 3. Neglected Tropical Diseases (NTDs): Chagas Disease and the Case of Bolivia

**Presenter(s):** Mary Ann Andonova

**Faculty Sponsor:** Marilén Loyola

**Abstract:**

As developing countries in South America continue to excel and make progress in areas such as medicine, many ignore a persistent and recurring problem: neglected tropical diseases (NTDs), aggravated by insufficient government funding and efforts. Despite their collective disease burden exceeding that of better-known illnesses, NTDs primarily affect populations living in poverty and continue to be overlooked. As a result of limited government action, countries such as Bolivia continue experiencing an increase in cases, especially those of Chagas disease. Given that Chagas disease is shaped by poverty, inadequate housing, and a weak healthcare system, effective control of the spread requires government intervention that addresses the underlying socioeconomic problems that allow for its persistence and transmission. This presentation analyzes the situation in Bolivia, modes of transmission, available treatments, the experiences of affected populations, and government efforts.

**Título en español:** Las Enfermedades Tropicales Desatendidas (ETD): La enfermedad de Chagas y el caso de Bolivia

**Resumen en español:** A medida que los países en desarrollo de Sudamérica continúan destacando y avanzando en áreas como la medicina, muchos ignoran un problema persistente y recurrente: las Enfermedades Tropicales Desatendidas (ETD), agravadas por la falta de financiación y esfuerzos gubernamentales insuficientes. A pesar de que su carga colectiva de enfermedades supera la de las enfermedades más conocidas, las ETD afectan principalmente a las poblaciones que viven en la pobreza y siguen siendo ignoradas. Como resultado de la limitada acción gubernamental, países como Bolivia siguen experimentando un aumento en casos, especialmente los de la enfermedad de Chagas. Dado que la enfermedad de Chagas está conformada por la pobreza, la vivienda inadecuada un sistema de salud débil, el control efectivo de la propagación requiere una intervención gubernamental que aborde los problemas socioeconómicos subyacentes que permiten su persistencia y transmisión. Esta presentación analiza la situación en Bolivia, incluyendo los modos de transmisión, los tratamientos disponibles, las experiencias de las poblaciones afectadas y los esfuerzos gubernamentales.

### 4. Tuberculosis and Urban Inequality among Latin American Men: Comparing Structural Factors in Montevideo, Uruguay, and Lima, Peru

**Presenter(s):** Martín Ettlín Cuitiño

**Faculty Sponsor:** Marilén Loyola

**Abstract:**

Tuberculosis (TB), often perceived as a disease of the past, remains a major public health and social issue closely linked to urban inequality. This paper presents a comparative analysis of TB incidence among Latino men aged 25 to 45 in Montevideo, Uruguay, and Lima, Peru, two cities with markedly different urban conditions and health care systems. Using a social determinant of health (SDOH) and structural violence framework, I argue that TB disproportionately affects this population due to overcrowding, precarious housing, informal labor, and unequal access to health care. While Uruguay's universal and integrated health system contributes to lower TB incidence in Montevideo, Lima experiences significantly higher rates driven by extreme urban density, labor informality, and barriers to timely diagnosis and treatment. My investigation is structured in four sections: a global and regional overview of TB, country-specific analyses, a comparative discussion of structural determinants, and proposed policy interventions and directions for future research.

**Título en español:** Tuberculosis y desigualdad urbana entre hombres latinoamericanos: una comparación de factores estructurales en Montevideo, Uruguay, y Lima, Perú

**Resumen en español:** La tuberculosis (TB), a menudo percibida como una enfermedad del pasado, sigue siendo un importante problema de salud pública y social estrechamente vinculado a la desigualdad urbana. Este trabajo presenta un análisis comparativo de la incidencia de la TB

entre hombres latinoamericanos de 25 a 45 años en Montevideo, Uruguay, y Lima, Perú, dos ciudades con condiciones urbanas y sistemas de salud marcadamente diferentes. Utilizando un marco de determinantes sociales de la salud (DSS) y de violencia estructural, sostengo que la TB afecta de manera desproporcionada a esta población debido al hacinamiento, la vivienda precaria, el trabajo informal y el acceso desigual a la atención sanitaria. Mientras que el sistema de salud universal e integrado de Uruguay contribuye a una menor incidencia de TB en Montevideo, Lima presenta tasas significativamente más altas impulsadas por la extrema densidad urbana, la informalidad laboral y las barreras para el diagnóstico y tratamiento oportunos. La investigación se estructura en cuatro secciones: una visión general global y regional de la TB, análisis específicos por país, una discusión comparativa de los determinantes estructurales y propuestas de intervenciones de política pública y líneas para futuras investigaciones.

**Room 253 | 2:40-4:00**

## **Economics, Politics, & Society**

**Faculty Moderator:** Rob Lemke

### **Presentations**

#### **1. Personality Effects on Labour Market Outcomes for First Nations Australians**

**Presenter(s):** Miriam Arnold-Nott

**Faculty Sponsor:** Rob Lemke

**Abstract:**

I examine whether personality traits such as conscientiousness and extraversion have different effects on the probability of being employed and wage levels for First Nations Australians compared to non-First Nations Australians. The First Nations people of Australia experience a host of poorer outcomes compared to their non-First Nations counterparts stemming from a history of colonisation and discrimination. The psychology research on personality has found a strong link between various personality traits including conscientiousness (how efficient, organised and reliable a person is) and extraversion (assertive, energetic, outgoing), and a person's labour market outcomes such as their income. Results show far stronger effects for the First Nations peoples' personalities, suggesting that it is more important for them to have an 'optimal' personality to succeed in the workforce than their non-First Nations counterparts.

#### **2. Local Economics and Voter Choice: How Local Economic Conditions and Attitudes Influence Presidential Vote Choice**

**Presenter(s):** Austin Hewes

**Faculty Sponsor:** Rob Lemke

**Abstract:**

I examine how changes in local economic conditions affect voter choice using county-level election data from 2004 to 2020 and individual-level survey data from American National Election Study (ANES). The ANES survey offers panel data at the individual level when looking at how attitudes about the economy and unemployment impact voters' decisions at the polls. This project asks the question "How do changes in economic factors, such as the unemployment rate and income, impact voter choice?" The county-level model compares elections based on the incumbent party, as well as pre- and post-Trump elections, using a fixed-effects model that estimates the effect of each variable on Republican vote share in each county. The ANES survey data estimates the effects of economic attitudes on an individual's vote choice. These separate analyses explore the contrast between how hard economic data and individual economic attitudes impact election results.

### 3. The Impact of Medicaid Expansions on Health Outcomes

**Presenter(s):** Judith Johnson

**Faculty Sponsor:** Rob Lemke

**Abstract:**

This study examines the impact of the Affordable Care Act (ACA) Medicaid expansions on the health of beneficiaries using linked Health and Retirement Study and Medicare and Medicaid Claims (HRS-CMS) data. While the Medicaid expansions were designed to improve access to and quality of health care, limited research has assessed their effects on objective health outcomes. This study contributes to that gap by evaluating whether insurance coverage under the expansions is associated with measurable improvements in beneficiaries' health. Unlike much prior work that relies on self-reported health measures, this analysis uses physician-diagnosed conditions from administrative claims data, enabling more accurate and reliable assessments of health status. Findings from this research provide evidence on the extent to which expanded insurance coverage translates into improved health outcomes.

### 4. Technology and the United States' Falling Fertility

**Presenter(s):** Anna Hoffman

**Faculty Sponsor:** Tilahun Emiru

**Abstract:**

This study examines how technological factors and standard socioeconomic determinants influence women's fertility decisions in the United States. Motivated by consistent declines in fertility in recent decades alongside the increasing presence of technology in daily life, this study aims to study this relationship and how fertility decisions are shaped. Using data from the National Survey of Family Growth and the Survey of Working Arrangements and Attitudes from 2020 to 2025, this analysis employs negative binomial models to estimate the determinants of fertility as well as logistic regression to examine the probability of childbearing. The findings indicate that income, educational attainment, marital status, insurance coverage, and internet quality play a significant role in women's fertility decisions. These results aim to help bridge the gap in understanding that exists in the choice framework of women's childbearing decisions given the serious implications that declining rates will have in the coming decades.

### 5. When Systems Fail: Migration, Institutional Fragility and the Rise of Crime in Latin America

**Presenter(s):** Nicolle Sosa Diquez

**Faculty Sponsor:** Tilahun Emiru

**Abstract:**

This paper examines whether migration has influenced homicide trends in Latin America between 1999 and 2023 and how institutional quality shapes this relationship. While public discourse often links migration to rising crime, existing research offers mixed evidence and rarely centers institutional fragility as the core mechanism. Using a balanced panel of twelve Latin American countries and estimating fixed effects models, I analyze the impact of migration flows and governance indicators on intentional homicide per 100,000 inhabitants. Across specifications, migration shows no meaningful effect on homicide, while institutional quality, especially rule of law, emerges as the strongest and most consistent predictor of violence. These findings suggest that crime is driven not by migrant inflows but by longstanding structural weaknesses within states.

**Room 254 | 2:40-4:00**

## AI in Action: From Classrooms and Clinics to Campaigns and Markets

**Faculty Moderator:** Sara Jamshidi**Panel Abstract:**

This panel showcases innovative student projects at the intersection of AI, computer science, and society, demonstrating how algorithmic techniques inform answers to real-world questions across education, health, democracy, and economics. Projects include predicting higher education institutional resilience using Bayesian models, designing privacy-preserving iOS apps for cognitive wellness, analyzing election discourse on social media with unsupervised topic modeling, forecasting market responses to tariffs with hierarchical Bayesian methods, developing tools for detecting LLM-generated text to ensure academic integrity, and using MRI imaging and predictive modeling to diagnose mild traumatic brain injuries. Together, these projects highlight the transformative potential of AI—from informing policy and improving individual well-being to enhancing diagnostic accuracy and understanding public sentiment. Emphasizing ethical data use, interdisciplinary collaboration, and actionable insights, the panel reflects Lake Forest College's commitment to leveraging AI for societal good.

### Presentations

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#### 1. Why are colleges closing? Unpacking closures since the COVID pandemic

**Presenter(s):** Sepehr Akbari**Faculty Sponsor:** Sara Jamshidi**Abstract:**

The "enrollment cliff"—a wave of higher education institutional closures driven by declining birth rates following the 2008 financial crisis—is poised to reshape higher education beginning this year. To anticipate its impact, we analyze closures triggered by the COVID-19 pandemic as a case study, recognizing that while these events stem from distinct causes, they reveal critical patterns of institutional vulnerability and regional disparities. By integrating institutional attributes, regional demographics, and public discourse, we identify distinct segments of higher education institutions and their unique risks. Through statistical and machine learning methodologies, we critically assess official closure rationales and extract recurring themes from public narratives. Bayesian hierarchical models are then employed to quantify closure risk, generating probabilistic forecasts at state and regional levels. Our findings highlight that institutional resilience depends on a dynamic interplay of demographic trends, financial sustainability, and strategic adaptability. This research provides actionable, evidence-based insights for policymakers and institutional leaders, equipping them to navigate the challenges of a rapidly evolving higher education landscape.

#### 2. MindScribe: Authoring Cognitive Wellness through User-Centric, On-Device iOS Architecture

**Presenter(s):** Christopher Zimbizi**Faculty Sponsor:** Sara Jamshidi**Abstract:**

Adults are increasingly seeking to become active participants in their cognitive health, yet the digital tools available are often inadequate. Commissioned by Lake Forest College Trustee, Vicki Hagan, LCSW, a specialist in dementia care, this project develops a comprehensive, private, and intuitive iOS application that empowers users to track and understand the key lifestyle factors supporting cognitive well-being. MindScribe integrates five research-backed pillars—sleep, exercise, nutrition, stress management, and cognitive/social engagement—into a user-centric design. The app's on-device architecture ensures privacy while delivering personalized insights grounded in neuroscience and psychology. This project demonstrates how technology can bridge the gap between scientific research and everyday cognitive wellness.

### **3. Media Ownership, Tweets and Votes: An Unsupervised Topic Analysis of 2016 and 2024 Election Tweets on Twitter/X**

**Presenter(s):** Shellane Shettlesworth

**Faculty Sponsor:** Sara Jamshidi

**Abstract:**

This study analyzes tweets from a single day during the 2016 and 2024 U.S. elections on Twitter/X, using Latent Dirichlet Allocation (LDA) to uncover shifts in public discourse with changes in platform policies. By comparing the characteristics and themes of election-related content across these two points in a presidential election, we reveal how digital media and political communication have evolved. Our unsupervised topic modeling approach provides a data-driven lens to examine this social media platform in the context of the democratic processes, offering potential insights into the changing dynamics of public sentiment and media ownership in the digital age.

### **4. The Topic is Tariffs: Predicting Market Volatility through NLP and Bayesian Modeling"**

**Presenter(s):** Sakhile Mathunjwa

**Faculty Sponsor:** Sara Jamshidi

**Abstract:**

This project explores how tariff-related titles in financial news and reports can improve predictions of S&P 500 market movements amid economic uncertainty. By applying Hierarchical Dirichlet Processes (HDP), Bayesian regression, and natural language processing (NLP), we systematically analyze the tone, frequency, and thematic content of tariff announcements to extract sentiment and linguistic patterns. Our models quantify the relationship between tariff-based narratives and market volatility, bridging the gap between qualitative news analysis and quantitative forecasting. This work introduces a novel framework that integrates sentiment analysis, time-series modeling, and machine learning to enhance the accuracy of market predictions.

### **5. Detecting LLM Fingerprints: Stylometry in AI-Generated Text**

**Presenter(s):** Sergei Vorobev

**Faculty Sponsor:** Sara Jamshidi

**Abstract:**

This project evaluates stylometry techniques for detecting the distinctive "voices" of commonly used Large Language Models (LLMs). By extracting linguistic markers and applying Natural Language Processing (NLP) alongside supervised machine learning, we analyze the writing styles of selected LLMs to identify artifacts not typically captured by traditional stylometry. The research comprises two phases: extracting relevant markers from a curated dataset and training/testing a classification model. The planned deliverable is a tool that assesses the similarity of a given text to studied LLM outputs, offering insights into authorship style.

### **6. Detecting the Invisible: Using an Intermediary Diagnostic Tool to Predict Mild Traumatic Brain Injury in MRI Imaging**

**Presenter(s):** Aaron Oster

**Faculty Sponsor:** Sara Jamshidi

**Abstract:**

Mild traumatic brain injuries (mTBI) are often symptomatic yet invisible to standard diagnostic tools, forcing clinicians to rely heavily on subjective questionnaires. This project aims to predict questionnaire responses—and indirectly mTBI—using MRI imaging and machine learning. By analyzing which questions and brain regions are most predictive, our models offer a data-driven approach to diagnosing "invisible" injuries. A successful tool could transform mTBI assessment, providing objective support for clinical decision-making and improving patient outcomes.

**Room 352 | 2:40-4:00**

## State Violence & Its Victims: Perspectives from History, Literature & Politics

**Faculty Moderator:** Tessa Sermet

### Presentations

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#### 1. Water, Poison, Blood: The Persecution of Jewish Populations during the Black Plague

**Presenter(s):** Julieta Rodarte**Faculty Sponsor:** Anna Jones**Abstract:**

Jewish communities in Europe were the victims of a surge in persecutions and scapegoating during the Black Plague outbreak of the mid-14th century. A conspiracy theory spread across various regions of Europe, whereby Christians made the false accusation that Jewish people had poisoned water sources to cause the plague and eradicate the Christian population. Medieval Christians, faced with the unparalleled mortality of the Black Death, turned upon a group of people that were already marginalized and hated for religious reasons. This paper will explore the imagery and methods found in documents related to the persecution of Jewish communities in Europe at this time of crisis, and it will consider the ways in which populations assign blame for deadly epidemics.

#### 2. Contested Sovereignties: International Relations Perspectives on the Kashmir Conflict

**Presenter(s):** Medhaansh Ghosh**Faculty Sponsor:** James Marquardt**Abstract:**

Why has the Kashmir conflict endured for more than seven decades? This thesis investigates the Kashmir dispute as a problem of contested sovereignty and argues that the persistence of this conflict reflects both longstanding regional rivalries and deeper structural forces at play in the international system. With a historically grounded and theoretically pluralist approach, the thesis examines how colonial legacies, post-Partition state formation, Cold War geopolitics, insurgencies and rampant militarization since 1989, along with the revocation of Article 370 in 2019, have shaped a durable yet unstable structure and political order in Kashmir. The thesis employs a four-fold theoretical framework (realism, liberalism, constructivism, and postcolonialism) to analyze the conflict. It demonstrates the limitations of existing IR frameworks, while underscoring the need for more context-sensitive and theoretically inclusive approaches to conflict analysis. In addition, through historical analysis the conflict is revealed as an example of geopolitical interests in contemporary international politics.

#### 3. Who's Afraid of the Big Bad Book? Language and Literature as Resistance in Wendy Delorme's *Viendra le temps du feu*.

**Presenter(s):** Atlas Gregory**Faculty Sponsor:** Tessa Sermet**Abstract:**

In the French dystopian novel *Viendra le temps du feu* (2021), Wendy Delorme depicts a totalitarian, heteropatriarchal society bordered by a utopic community of "sisters." The government bans books from the world before and relies on lack of knowledge to maintain their control, and the production of subjugated knowledge by the protagonist's writings is shown as the most effective form of resistance. This talk will explore how Delorme uses intertextual references, like Wittig's *Les Guérillères*, writings by the protagonists, and the self-definition of marginalized

groups as tools for liberation. Writing allows the protagonists to preserve their histories and inspire others to perform both small and large acts of resistance.

**Room 353 | 2:40-4:00**

## A Showcase of New Student Plays

**Faculty Moderator:** Chloe Johnston

### Presentations

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#### 1. The Rob Lowe Experience

**Presenter(s):** Charleigh Justice

**Faculty Sponsor:** Chloe Johnston

**Abstract:**

The Rob Lowe Experience, by Charleigh Justice, is a map to understanding oneself—confronting one's fears, building one's community, and ultimately reaching the realization that one's inner and outer demons are survivable. The play dedicates itself to a truthful illumination of OCD as a debilitating disorder as opposed to a cutesy quirk, as it is often portrayed in a problematically substantial fraction of media.

#### 2. Ordinary Streets, Sacred Hands

**Presenter(s):** Tiyandza Mngomezulu

**Faculty Sponsor:** Chloe Johnston

**Abstract:**

Ordinary Streets, Sacred Hands, by Tiyandza Mngomezulu, is a short play that explores labor, belonging, and memory in the life of the city. Presented as a script reading, the piece draws from personal and intergenerational reflections on working-class experience, and asks: Who has the right to the city? How do unseen hands shape the spaces we move through? And what does it mean to be human beyond productivity? Through poetic dialogue and rhythmic structure, sweeping, carrying, selling, and making music become a sacred language of survival and dignity. The Rob Lowe Experience, by Charleigh Justice, is a map to understanding oneself—confronting one's fears, building one's community, and ultimately reaching the realization that one's inner and outer demons are survivable. The play dedicates itself to a truthful illumination of OCD as a debilitating disorder as opposed to a cutesy quirk, as it is often portrayed in a problematically substantial fraction of media.

**Room 354 | 2:40-4:00**

## Culture, Identity, and Community

**Faculty Moderator:** Lia Alexopoulos

### Presentations

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#### 1. Examining tensions between Mexican and Mexican American identities

**Presenter(s):** Andrea Sandolval-Torres

**Faculty Sponsor:** Ajar Chekirova

**Abstract:**

This thesis investigates the tensions that exist between Mexican and Mexican American communities in the United States, with a focus on the Chicagoland area. Despite their shared heritage, these communities often experience division, with misunderstandings and stereotypes shaping perceptions of one another. Such tensions raise questions about belonging, identity, and assimilation in a multicultural society. The research explores how Mexican and Mexican-

American individuals navigate identity, belonging, and cultural memory. There is a special focus in how people articulate “Mexicanness” across borders and generations, and how identity shifts depending on social, political, and cultural environments. By analyzing these dynamics, this project will shed light on broader processes of cultural negotiation and social division in the United States.

## **2. The Survival and Revival of Indigenous Languages in the Philippines**

**Presenter(s):** Kyle Nicola Lee

**Faculty Sponsor:** Aundrey Jones

**Abstract:**

This research investigates the link between state language policies and the survival of indigenous languages in the postcolonial Philippines. Despite formal recognition, a paradox exists where colonial languages, primarily English, dominate the economy and education. Using a constructivist approach, the study examines historical power hierarchies and social attitudes affecting the vitality of groups like the Manobo Pulangion tribe. It tests the hypothesis that stronger, well-funded policies lead to higher intergenerational transmission. However, a gap exists between symbolic policy and practice. The neoliberal valuation of English as a global commodity pressures people, especially families, to prioritize it for economic mobility. By exploring indigenous-led reclamation as a “medicine” for healing intergenerational trauma, this research identifies the mechanisms determining whether languages thrive or remain marginalized in a globalized society.

## **3. Autistic Literature and Self Discovery**

**Presenter(s):** Holly Mulhall

**Faculty Sponsor:** Catherine Reedy

**Abstract:**

This paper explores what autistic and neurodiverse literatures offer readers: texts that are too often dismissed. By analyzing a variety of texts, from the children's book *Why Johnny Doesn't Flap* to contemporary literary fiction *All the Little Bird-Hearts*, I show how autistic stories depict how many neurodiverse people experience the world; moreover, they bring to light how stigma affects our lives. Reading autistic literature has allowed neurodiverse writers like me the chance to develop my own writing, learn about my autism and the autistic community, and most importantly, find a safe space to be myself.

## **4. Exhibition Analysis. The First Homosexuals: The Birth of a New Identity, 1869-1939**

**Presenter(s):** Cordelia Wolf

**Faculty Sponsor:** Lia Alexopoulos

**Abstract:**

The art exhibition, *The First Homosexuals: The Birth of a New Identity, 1869-1939* (Wrightwood 659, Chicago, May 2 - August 2, 2025) curated by Jonathan D. Katz and Johnny Willis, depicts queer identities and art made by queer artists from the first known use of the word ‘homosexual’ in the 19th c. to the burning of queer research and literature in Nazi Germany. In accessing popular and academic sources across disciplines, including curation, art history, and queer history, this discussion applies an interdisciplinary methodology to addressing the exhibition's controversies, urgency, and some of the artworks featured. Despite (recent) historical changes in the perception and rights of queer people, we can always be set back. Displays of queer history and identity throughout time, like *The First Homosexuals*, are crucial in moments of political turmoil, as visual art is at the head of the effort to affirm and celebrate queer existence outside the confines of written and spoken language.

## 5. Rice and Beans: Recounting the Japanese-Mexican Relationship

**Presenter(s):** Rene Garcia

**Faculty Sponsor:** Ying Wu

**Abstract:**

America has had prominent intervention throughout Japanese and Mexican history. They have reshaped both countries numerous times throughout history out of self-interest yet rarely had meaningful impacts on how other nations interact. By going through Japan's transformation after its isolation, war efforts, and rebuilding, along with the struggles Mexico has had with independence, territory, and migration, we understand the external pressures and need for adaptation. This research contrasts the pressures from American relationships to change with the lax Japanese-Mexican relationship of existing as their identity sees fit. Early interactions between the two countries set the foundation for post-WWII partnerships and cultural exchanges. The Japanese-Mexican relationship shows that international engagement can happen under co-existence as opposed to domination. Their history is a reminder of the possibilities among nations when we treat each other with respect, no matter our differences.

## Choir Performance and Senior Arts Exhibition: 4:00 PM – 5:30 PM

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**Durand Art Institute | 4:00-5:30**

### Senior Arts Exhibition

**Faculty Sponsor:** Tracy Marie Taylor

#### 1. Title: Free Our People

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**Student:** Mac Chan

**Materials:** Mixed Media

**Artist Statement:** Authoritarian governments erase traces of rebellion. As a Hong Konger and Cantonese speaker, political art speaks closest to my heart. Growing up in a journalist family, my inspirations come from provoked emotions: sorrow, anger, and hope for justice. Particularly from Hong Kong street art made during the 2019 Anti-Extradition Bill Protests, where the Lennon Wall became connection and expression for wounded souls.

My recent collection addresses cultural erosion. A helmet—symbol of resistance—melts under acetone as a metaphor for our struggle. I create art for silenced, marginalized communities. Everyone deserves a platform to channel their voices. Through emotional advocacy, I invite viewers to find healing within my work. I hope to engage diverse communities through my art, ensuring the world hears their stories. As my grandpa said, "We must taste all 5 flavors of life to grow." I capture sweetness, sourness, bitterness, spiciness, and savoriness in my storytelling—joy and tears for my people.

#### 2. Title: The Room of Sadness

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**Student:** Jackie Christiansen

**Materials:** Mixed Media

**Artist Statement:** *The Room of Sadness* is a deeply personal, immersive installation exploring the universal experience of sadness and despair. Unlike my previous works centered on happiness, vibrant colors, and joyful imagery inspired by Walt Disney and personal passions, this piece marks a deliberate departure from my comfort zone.

The mixed-media installation uses wood construction, digital sound, and imagery. The interior is painted black, creating a closed-in feeling that can be either comforting or intrusive. Inspired by Michael Kelley's *Deodorized Central Mass with Satellites*, where personal experiences drive the work, I compiled imagery from my own life—my grandmother's death, disappointment in my beloved Bears, feelings of loneliness during difficult times. Viewers enter a darkened room to sit or stand, enveloped by visual and auditory stimuli designed to evoke visceral emotions. By manipulating visuals that reflect my experiences, I aim to create a universal emotional response that connects us on a human level.

### 3. Title: Creating My Own Comfort

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**Student:** Jacob De La Bruere

**Materials:** Mixed Media

**Artist Statement:** Growing up as a Neurodivergent individual brought its struggles, one of the most prominent ones being the difficulty to communicate effectively with my peers. When I discovered art as a child, I was able to use it as a gateway to let people understand me and who I am as a person without having to rely on verbiage.

I am interested in the concept surrounding family and power dynamics and how they can be correlated. Specifically, I want to draw attention to how grandparents can be abusive to their grandchildren without the mother and father being abusive to their children. I want to explore this concept as I have never seen this representation. A common material that is used in my work is string. This piece, *Creating My Own Comfort* (2025), will include both red and white strings. I wanted to visually show that I am creating my own comfort by crocheting a blanket out of white yarn. My mother has been an inspiration for my artwork in the past, and this work also plays into my mother's past experiences. My mother has also had to create her own comfort to get through the abuse she faced from her family.

### 4. Title: Entre dos Mundos

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**Student:** Kimberly Garcia

**Materials:** Ink, Color Pencil + Watercolor paper

**Artist Statement:** My project is about how *marianismo*, a cultural norm existing in many Latin American communities, shapes how women are expected to behave. *Marianismo* emphasizes modesty, obedience, self-sacrifice, and prioritizing family and tradition over personal ambition. In my illustrations I focus on how *marianismo* shows up across three generations of women. The grandmother represents traditional adherence to these expectations. The mother embodies resistance and tension against cultural norms. And the child symbolizes a new generation beginning to question and redefine inherited roles. The colorful paper flowers symbolize expectations of *marianismo*; the flowers are white lilies, a symbol of purity alluding to the grandmother's expectations. The goal of this piece is to visualize the emotional and generational tension behind *marianismo*, showing how these expectations are passed down, challenged, and transformed.

## 5. Title: Home for the Holidays

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**Student:** Grace Griffin

**Materials:** Oil on canvas

**Artist Statement:** Queerness is a blurry box shaped by social norms; gender and sexuality are two of the colors that mix to create a person as a piece of art. The most important contributors to my work are my identities as a masculine woman and a lesbian. These two colors blend to form who I am, and I reflect that in my art—examining my femininity as it diverges from expectations and my sexuality as a lesbian. I evoke these experiences through a post-impressionist, gestural, and textured painting style. Gender and identity are central themes that flow through my conceptual approach.

Painting is both physical and mental escapism for me—working with paint, watching brushstrokes become an image. My work often consists of whimsical scenes, colorful palettes, and visually rendered memories. As a queer artist in a space historically dominated by men, my presence matters. I will continue to create, portray identity, and showcase queerness.

## 6. Title: Recipes

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**Student:** Hao Tong

**Materials:** Digital Animation

**Artist Statement:** During my study abroad program, I discovered that food is more than sustenance. It tells stories, carries memories, and reflects historical perspectives. Traveling through Malaysia, South Africa, Portugal, and Morocco, I observed how each meal embodies distinct cultural identities and traditions yet still connects us across differences.

Through motion graphics and 3D modeling, I translate everyday culinary practices into playful, interactive visual forms that reveal the deep ties between what we eat and who we are. By reimagining food as a narrative medium, this exploration reconnects me to my childhood dream of becoming a chef. Inspired by *Salt, Fat, Acid, Heat* by Samin Nosrat, I approach food through its four foundational elements: salt, fat, acid, and heat, combined with texture, technique, and transformation, which shape both cooking and visual storytelling.

## 7. Title: Becoming Animal + Look at Me

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**Student:** Ari Kazantceva

**Materials:** Ink + interactive website/sequential digital collage

**Artist Statement:** *Becoming Animal* and *Look at Me* are my attempts to answer a question with a question: how does one make sense of being a human animal?

*Look at Me* is an interactive website experience inviting viewers to reflect on their humanity through a lens of the abstracted kaleidoscope of my memories. Choosing one of four thematic paths — the Rat, the Trout, the Osprey, and the Cockroach — viewers receive a custom selection of animated visual poetry that explores feelings of belonging, embodiment, and connection. Each viewer's experience is unique to them — your name becomes the key to which memories you encounter. *Becoming Animal* is a supplementary series of 4 inked blends of myself and the four thematic creatures, each symbolizing the moments at which I feel either most human or most animal.

## 8. Title: The Little Light

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**Student:** Serena Kramp (writing by Mikayla Arenson)

**Materials:** Illustrated children's book and sculpture

**Artist Statement:** *The Little Light* is a two-part work consisting of a children's book and an accompanying sculpture that explores environmentalism through the lens of pollution. Growing up, I spent a lot of time outside in the Midwest, camping in the summers and sledding in the winters. This work aims to merge my childhood love of nature and the growing need for environmental sustainability.

Set deep in the woods, the narrative follows Little Light and a cast of animal characters who each respond differently to a changing, polluted environment. Through their fears, resistance, and eventual embrace of community, the story highlights both the emotional and ecological consequences of environmental neglect. Inspired by illustrators like Eric Carle and conservation-focused creators, the project balances whimsy with urgency. Created using Adobe Illustrator and InDesign, the book pairs vibrant visuals with storytelling to educate and empower younger audiences, encouraging community, empathy, and care for the planet.

## 9. Title: Untitled

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**Student:** Grace Mitchell

**Materials:** Acrylic paint on laser-cut MDF

**Artist Statement:** My work explores nature and the impact of human intervention on the environment. In this three-dimensional installation, I focus on land pollution and the role individual choices play in shaping our world. The piece depicts a wooded forest, carefully constructed to highlight both its lush presence and the negative space within it.

Using laser-cut silhouettes, I carved forms of common pollutants into the landscape. When illuminated, these small cutouts cast enlarged shadows, symbolizing how seemingly minor decisions can create significant environmental consequences. Through light and distortion, I emphasize accountability—challenging viewers to reflect on their personal contributions to pollution in a world often dominated by large institutions. Inspired by artists who visualize ecological disappearance, I aim to make environmental harm both visible and tangible. By combining precision technology with hand-painted elements, I create an immersive space that invites contemplation and encourages sustainable responsibility.

## 10. Title: Abreast I Must Continue My Quest

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**Student:** Julia Murman

**Materials:** Wood, ceramics, textiles

**Artist Statement:** *Abreast I Must Continue My Quest* is an unconventional self-portrait that re-enters spaces of comfort, trauma, and deep-rooted memory. Through layered elevations and shifting spatial relationships, the work pushes and pulls between safety and unease. I draw from personal archives, scrapbooks, home movies, and remembered places, understanding memory not as fixed evidence of the past, but as an active force shaping identity and emotional resilience.

Working with wood, ceramic, and textile, I explore the tension between clarity and distortion: what I remember vividly, what becomes blurred, and what lingers in the body. Soft fabrics evoke childhood warmth and familiarity, while sharp ceramic architectural forms embody abrupt experiences that left lasting impressions. Scaled objects and tactile contrasts create a psychological landscape viewers can

physically navigate. Through mixed media installation, I attempt to capture the shifting terrain of memory, where joy, fear, nostalgia, and responsibility coexist.

### 11. Title: Fasshon

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**Student:** Namtso Norbu

**Materials:** Digital Illustration and Interactive Media

**Artist Statement:** I sit in the backseat and conceptualize the map of a project, while others sit in the passenger and driver's seats and steer the course. My art is the catalyst through which oral and written become visual, reaching audiences in a way that anyone can interpret and relate to.

*Fasshon* is a multimedia interactive installation that explores J-fashion and how people across borders utilize and involve themselves in fashion subcultures as a practice of self-expression, realization, stereotype breaking, and trauma healing, all through interviews with members of internet J-fashion communities. Using printed media, digital illustrations, and interactive media, I allow people to look through a window into the lives of 15 netizens and a world of creative self-expression that may be unfamiliar to a wider audience. I also ask of us the question, "What do I really look like? When I dress the shell, does it reflect the innards?"

### 12. Title: One Day, I'll Wake Up and Be Free

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**Student:** Skye Perkofski

**Materials:** Porcelain and Newsprint

**Artist Statement:** The work seeks to ask the viewer to consider their own physicality in relation to the environment they inhabit. It reflects ourselves as humans through the fish, but also a reflection of what the fish hold as a collective. In such an overwhelming swarm, the focus isn't on the ugliest ones or the most beautiful ones either; it is seen as a whole.

It is a conversation of good and bad, but instead of hiding the struggle and success, it is the start and end brought together. It reflects the self-imposed limitation of waiting to be able to express yourself and learning that even if all you can create is a rough idea, it's only limited to that for as long as you keep it that way. "One day, when the sky is as blue as the sea. One day, I'll wake up and be free."

### 13. Title: The Enigmatic Series

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**Student:** Brianna Sanchez

**Materials:** Mixed media

**Artist Statement:** *The Enigmatic Series* features a series of three-dimensional wooden flower puzzles; each built around a specific memory. Every petal represents a visual detail or emotion from that moment. When assembled, the bouquets visualize how memories are pieced together: fragmented, layered, and sometimes imperfect. As a puzzle, it highlights how remembering is an active process: pieces must be held, examined, and fitted together before they make sense. These wooden flowers invite viewers to consider their own fragmented recollections and to see beauty in the process of piecing ourselves together over time, much like the artist is.

## 14. Title: Pumping Engine

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**Student:** Jared Thomas

**Materials:** Single channel video and mixed media

**Artist Statement:** My senior project adapts "Pumping Engine," a Thomas the Tank Engine horror story by YouTube creator 22Tesla. This adaptation represents a childhood dream: bringing beloved railway tales to life through model filmmaking.

The narrative follows Stanley, a disgraced American locomotive converted to a pumping engine at the Cas-Ny-Hawin lead mines. Seeking revenge against those who mocked him, Stanley orchestrates his own breakdown during heavy rains, flooding the mines and killing trapped workers. Overnight, the mine collapses entirely, swallowing Stanley himself—a dark tale of vengeance and comeuppance. Using handmade sets, practical effects, and existing toy locomotives, I crafted this adaptation with shoestring resources but boundless enthusiasm. The project recalls early YouTube Thomas adaptations that inspired me, proving that passion and creativity matter more than technical perfection. This work marks my creative legacy at Lake Forest College.

## 15. Title: Abarrotes

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**Student:** Milagros Velez

**Materials:** Mixed Media

**Artist Statement:** Every year, Mother Nature releases her fury by intensifying or increasing the frequency of her wrath because of climate change. I often hear that people care about saving the planet, but do they really? As a designer, I ask myself: How can I have a greener footprint in my design practice to alleviate the impacts of climate change?

Deeply interested in combining sustainability with design, I use newspaper, air-dry clay, and other recycled materials to model a small-scale Mexican grocery store, *Abarrotes*. *Abarrotes* intersects identity, craft, and architecture to address sustainability issues in Mexico that permeate a striving for high-quality living. I witnessed firsthand how rural communities struggle making it day-to-day after visiting my mother's home country a few times. Everything on the outside appears normal, but the inside foreshadows a concerning and dull future where we will struggle to survive: *Abarrotes* hosts rotten, impure, and out-of-stock products.

## 16. Title: Meals with Strangers

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**Student:** Sisi Wattanagool

**Materials:** Dual-channel video, computer monitors, table, 2 chairs

**Artist Statement:** I am a Robinhood with a camera as my weapon. As a multimedia creative from Bangkok, Thailand, I explore the intimacy of human connection and the quiet beauty of everyday life, especially within communities that are overlooked or misunderstood. I believe art can be a safe, transformative space.

This project, *Meals with Strangers*, stems from my curiosity about how people create belonging through food and conversation. Growing up between cultures, I blend documentary realism with poetic storytelling through film and photography. My camera is both an observer and a bridge, allowing me to listen, witness, and honor stories in their rawest form, capturing the emotional texture where identity, diversity, and community meet.

**Durand Art Institute | 4:30**

## **Choir Performance**

**Faculty Sponsor:** Anne Barry

**Performers:**

Lexi Adams, Walter Aldrich, Sardar Atayev, Emily Bailey, Bishrel Batzaya, Josh Bharadwaj, Tobi Ellis, Ryan Escobar, Sarah Faller, Gabe Fernandez-Tyson, Greg Hernandez, Catherine Holt, Cian Hyde, Peter Piper Huizenga, Sinduja Kaja, Louis Leone, Trinity Look, Maddie Mann, Arno Martiosyan, Joanna Nguyen, Kiera McKee, Abby Rice, Kate Taylor, Jaz Williams

The choir will sing *To the Mothers in Brazil*, *Ta Na Solbici*, and *Blessing*.

## A-Z List of Student Participants in Panel Sessions

Presenter Last Name	Presenter Full Name	Faculty Sponsor	Session Name	Room	Time
Abdelghani	Ebtsam Abdelghani	Tilahun Emiru	Energy & Financial Markets	253	9:00 – 10:20 AM
Adams	Lexi Adams	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Aguilar Monge	René Aguilar Monge	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Akbari	Niousha Akbari	Daniel Henke	The Dimensions of Writing	354	9:00 – 10:20 AM
Akbari	Sepehr Akbari	Andrew Gard	Curation & Creation with AI	254	10:40 AM – 12:00 PM
Akbari	Sepehr Akbari	Sara Jamshidi	AI in Action	254	2:40 – 4:00 PM
Andonova	Mary Ann Andonova	Marilén Loyola	Culture, Illness... in Latin America	252	2:40 – 4:00 PM
Angel	Jimena Angel	Daniel Henke	The Dimensions of Writing	354	9:00 – 10:20 AM
Angel Vivas	Daniela Angel Vivas	Daniel Henke	The Dimensions of Writing	354	9:00 – 10:20 AM
Arenson	Mikayla Arenson	Benjamin Goluboff	Horror, Society, and Agency	353	10:40 AM – 12:00 PM
Arenson	Mikayla Arenson	Ben Zeller	Ethics, Religion, and Humanity	353	1:00 – 2:20 PM
Arnold-Nott	Miriam Arnold-Nott	Rob Lemke	Economics, Politics, & Society	253	2:40 – 4:00 PM
Arroyo	Alvaro Arroyo	William Conrad	Inquiries in Biology, Medicine, and Predictability	254	9:00 – 10:20 AM
Badovinac	Cas Badovinac	Rudi Batzell	Empire, Slavery, Freedom	352	10:40 AM – 12:00 PM
Bajpai	Arnav Bajpai	Anya Golovkova	Ethics, Religion, and Humanity	353	1:00 – 2:20 PM
Beaster	Jillian Beaster	Daniel Henke	The Dimensions of Writing	354	9:00 – 10:20 AM
Bennett	Jacob Hayden Bennett	Shiwei Chen	Power, Culture, and Global Order	352	9:00 – 10:20 AM
Bernardi	Giovanni Bernardi	Ben Goluboff	Horror, Society, and Agency	353	10:40 AM – 12:00 PM
Bertrand	Max Bertrand	Dimitra Papadovasilaki	The Workings of the FOMC	253	10:40 AM – 12:00 PM
Bouterakou	Giota Bouterakou	Holly Swyers	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Bouterakou	Giota Bouterakou	Ajar Chekirova	Democracy & Authoritarianism	352	1:00 – 2:20 PM
Flores	Gabriel Calderón Flores	Marilén Loyola	Culture, Illness... in Latin America	252	2:40 – 4:00 PM
Cano	Daniel Eduardo Cano	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM

Carreira	Margarida Carreira	Benjamin Swerdlow	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Chao	Jonathan Luke Chao	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Correa	Isis Correa	Justin Kee	Curation & Creation with AI	254	10:40 AM – 12:00 PM
Fenita	Eliane d Fenita	Danielle Cohen	Developing Economies	252	10:40 AM – 12:00 PM
Datangel	Dominik Datangel	Ajar Chekirova	Democracy & Authoritarianism	352	1:00 – 2:20 PM
de Paula Fonseca	Emília de Paula Fonseca	Ajar Chekirova	Democracy & Authoritarianism	352	1:00 – 2:20 PM
Dearmin	Donovan Dearmin	Shiwei Chen	Power, Culture, and Global Order	352	9:00 – 10:20 AM
Demirovic	Adnan Demirovic	Tracy Marie Taylor	Ars Machina Vitae	254	1:00 – 2:20 PM
Díaz	María Díaz	J. B. N. Gregoire	Latin American Studies	252	1:00 – 2:20 PM
Dousevicz	Ryan Dousevicz	Muris Hadzic	Financial Research in Practice	253	1:00 – 2:20 PM
Dyson	Alyssa Dyson	Emily Dix	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Dzemyachenka	Maryja Dzemyachenka	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Ellis	Sebastian Ellis	Shiwei Chen	Power, Culture, and Global Order	352	9:00 – 10:20 AM
Elman	Kelsey Elman	Tracy Marie Taylor	Curation & Creation with AI	254	10:40 AM – 12:00 PM
Erazo	Alejandro Erazo	Dimitra Papadovasilaki	The Workings of the FOMC	253	10:40 AM – 12:00 PM
Ettlín Cuitiño	Martín Ettlín Cuitiño	Marilén Loyola	Culture, Illness... in Latin America	252	2:40 – 4:00 PM
Faller	Sarah Faller	Josh Corey	Horror, Society, and Agency	353	10:40 AM – 12:00 PM
Fields	Maggie Fields	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Ford	Avanel Ford	Kimiko Matsumura	Curation & Creation with AI	254	10:40 AM – 12:00 PM
Francis	Oliver Francis	Linh Pham & Dimitra Papadovasilaki	Energy & Financial Markets	253	9:00 – 10:20 AM
Frank	Nate Frank	Rudi Batzell	Empire, Slavery, Freedom	352	10:40 AM – 12:00 PM
Garcia	Rene Garcia	Ying Wu	Culture, Identity, Community	354	2:40 – 4:00 PM
Ghosh	Medhaansh Ghosh	Zachary Cook	Policy & People	252	9:00 – 10:20 AM
Ghosh	Medhaansh Ghosh	Siobhan Moroney	Policy & People	252	9:00 – 10:20 AM
Ghosh	Medhaansh Ghosh	J. B. N. Gregoire	Latin American Studies	252	1:00 – 2:20 PM
Ghosh	Medhaansh Ghosh	James Marquardt	State Violence & Its Victims	352	2:40 – 4:00 PM

Ghouse	Fareed Ghouse	Muris Hadzic	Financial Research in Practice	253	1:00 – 2:20 PM
Giannopoulos	Georgios N. Giannopoulos	Nancy Tao	Financial Research in Practice	253	1:00 – 2:20 PM
Gomez	Maria Gomez	Dimitra Papadovasilaki	The Workings of the FOMC	253	10:40 AM – 12:00 PM
Gómez Corzo	Valeria Gómez Corzo	Desmond Odugu	Policy & People	252	9:00 – 10:20 AM
Gómez Corzo	Valeria Gómez Corzo	J. B. N. Gregoire	Latin American Studies	252	1:00 – 2:20 PM
Gregory	Atlas Gregory	Tessa Sermet	State Violence & Its Victims	352	2:40 – 4:00 PM
Harges	DeJanae Harges	Aundrey Jones	Black Resistance	354	1:00 – 2:20 PM
Harges	DeJanae Harges	Aundrey Jones	Black Resistance	354	1:00 – 2:20 PM
Heves	Parker Heves	Muris Hadzic	Financial Research in Practice	253	1:00 – 2:20 PM
Hewes	Austin Hewes	Rob Lemke	Economics, Politics, & Society	253	2:40 – 4:00 PM
Hoffman	Anna Hoffman	Tilahun Emiru	Economics, Politics, & Society	253	2:40 – 4:00 PM
Huizenga	Peter Piper Huizenga	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Humphrey	Paige Humphrey	Anya Golovkova	Ethics, Religion, and Humanity	353	1:00 – 2:20 PM
Indiamaoewei	Preye Indiamaoewei	Aundrey Jones	Black Resistance	354	1:00 – 2:20 PM
Indiamaoewei	Preye Indiamaoewei	Aundrey Jones	Black Resistance	354	1:00 – 2:20 PM
Johnson	Judith Johnson	Rob Lemke	Economics, Politics, & Society	253	2:40 – 4:00 PM
Jones	Emil Louis Jones	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Justice	Charleigh Justice	Chloe Johnston	New Student Plays	353	2:40 – 4:00 PM
Kaufman	Inessa Kaufman	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Kenosi	One Kenosi	Linh Pham	Energy & Financial Markets	253	9:00 – 10:20 AM
Kenosi	One Kenosi	Andrew Gard	Developing Economies	252	10:40 AM – 12:00 PM
Kuzma	Sawyer Kuzma	Rebecca Graff	Horror, Society, and Agency	353	10:40 AM – 12:00 PM
Lee	Kyle Nicola Lee	Aundrey Jones	Culture, Identity, Community	354	2:40 – 4:00 PM
León Rodríguez	Thalía León Rodríguez	Marilén Loyola	Culture, Illness... in Latin America	252	2:40 – 4:00 PM
Marjanska	Zofia Marjanska	Tilahun Emiru	Energy & Financial Markets	253	9:00 – 10:20 AM
Mashaba	Seneme Mashaba	Linh Pham	Energy & Financial Markets	253	9:00 – 10:20 AM
Mathunjwa	Sakhile Mathunjwa	Sara Jamshidi	AI in Action	254	2:40 – 4:00 PM

Mmema	Andiswa Mmema	Nancy Tao	Financial Research in Practice	253	1:00 – 2:20 PM
Mngomezulu	Tiyandza Mngomezulu	Kent Grote	Developing Economies	252	10:40 AM – 12:00 PM
Mngomezulu	Tiyandza Mngomezulu	Chloe Johnston	New Student Plays	353	2:40 – 4:00 PM
Mokha	Diya Mokha	Dimitra Papadovasilaki	The Workings of the FOMC	253	10:40 AM – 12:00 PM
Moyo	Kyle Moyo	Carla Arnell	Ethics, Religion, and Humanity	353	1:00 – 2:20 PM
Mulhall	Holly Mulhall	Catherine Reedy	Culture, Identity, Community	354	2:40 – 4:00 PM
Nuñez	Isabella Nuñez	J. B. N. Gregoire	Latin American Studies	252	1:00 – 2:20 PM
Ogihara	Ako Ogihara	Nancy Tao	Financial Research in Practice	253	1:00 – 2:20 PM
Ogunshola	Doyinsola Ogunshola	Aundrey Jones	Black Resistance	354	1:00 – 2:20 PM
Oster	Aaron Oster	Sara Jamshidi	AI in Action	254	2:40 – 4:00 PM
Pandazi	Olivia Pandazi	Hannah Carlson	Inquiries in Biology, Medicine, and Predictability	254	9:00 – 10:20 AM
Pavon	Ignacio Pavon	Dimitra Papadovasilaki	The Workings of the FOMC	253	10:40 AM – 12:00 PM
Perez Salgado	Nancy Perez Salgado	Janet McCracken	Ethics, Religion, and Humanity	353	1:00 – 2:20 PM
Petrosyan	Artur Petrosyan	Linh Pham	Energy & Financial Markets	253	9:00 – 10:20 AM
Pido	Nicole Pido	Emily Dix	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Puccini	Theodore Puccini	James Marquardt	Policy & People	252	9:00 – 10:20 AM
Riojas	Inés Riojas	Rebecca Delventhal	Inquiries in Biology, Medicine, and Predictability	254	9:00 – 10:20 AM
Rodarte	Julieta Rodarte	Anna Jones	State Violence & Its Victims	352	2:40 – 4:00 PM
Rosiles	Paola Giovanna Rosiles	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Ross	Sammie Ross	Daniel Henke	The Dimensions of Writing	354	9:00 – 10:20 AM
Ross	Sammie Ross	Tracy Marie Taylor	Ars Machina Vitae	254	1:00 – 2:20 PM
Rush	Sara Rush	Emily Dix	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Sandolval-Torres	Andrea Sandolval-Torres	Ajar Chekirova	Culture, Identity, Community	354	2:40 – 4:00 PM
Seyfu	Blen Seyfu	Tilahun Emiru	Developing Economies	252	10:40 AM – 12:00 PM
Sharadze	Lizi Sharadze	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Shettlesworth	Shellane Shettlesworth	Sara Jamshidi	AI in Action	254	2:40 – 4:00 PM

Shettleworth	Shellane Shettleworth	Ajar Chekirova	Democracy & Authoritarianism	352	1:00 – 2:20 PM
Sosa Diquez	Nicolle Sosa Diquez	Tilahun Emiru	Economics, Politics, & Society	253	2:40 – 4:00 PM
Sprenger	Patricia Sprenger	Dawn Abt-Perkins	Policy & People	252	9:00 – 10:20 AM
Stevens	Alois Stevens	Rudi Batzell	Empire, Slavery, Freedom	352	10:40 AM – 12:00 PM
Tahir	Sarah Tahir	Emily Dix	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Tahir	Sarah Tahir	Emily Dix	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Thant Kyaw	Min Thant Kyaw	Ajar Chekirova	Democracy & Authoritarianism	352	1:00 – 2:20 PM
Thomas	Jenna Rose Thomas	Paul Henne	Emotion, Bias, and Perception	354	10:40 AM – 12:00 PM
Urban	Milo Urban	Tracy Marie Taylor	Ars Machina Vitae	254	1:00 – 2:20 PM
Velez	Millie Velez	Kimiko Matsumura	Curation & Creation with AI	254	10:40 AM – 12:00 PM
Villagrana	Jesus Villagrana	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Voloshchuk	Adriana Voloshchuk	Rudi Batzell	Empire, Slavery, Freedom	352	10:40 AM – 12:00 PM
Vorobev	Sergei Vorobev	Sara Jamshidi	AI in Action	254	2:40 – 4:00 PM
Wolf	Eliana Wolf	Tracy Marie Taylor	Ars Machina Vitae	254	1:00 – 2:20 PM
Wolf	Cordelia Wolf	Lia Alexopoulos	Culture, Identity, Community	354	2:40 – 4:00 PM
Yee	Isable Yee	Ying Wu	Selections from Collage Magazine	353	9:00 – 10:20 AM
Zimbizi	Christopher Zimbizi	Sara Jamshidi	AI in Action	254	2:40 – 4:00 PM

## A-Z List of Student Participants in Poster Sessions

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<b>Presenter Last Name</b>	<b>Presenter Full Name</b>	<b>Faculty Sponsor</b>
Abraham	Nicholas Abraham	Frederick Prete
Akbari	Sepehr Akbari	Sugata Banerji
Ali	Asad Ali	Nilam C. Shah
Bautista	Martius Bautista	Will Conrad
Bednard	Amelia Bednard	Ben Zeller
Benjamin	Paul Benjamin	Frederick Prete
Berlin	Ilana Berlin	Dawn Wiser
Beshara	Mariam Beshara	Erica Schultz
Carlson	Elsa Carlson	Nilam C. Shah
Casares	Leslie Casares	Shubhik DebBurman
Christopher	Haylee Christopher	Erica Schultz
Dacquisto	Isabella Dacquisto	Adina Stanculescu
Dirzo	Monique Dirzo	Rebecca Delventhal
Ettlin Cuitino	Martin Ettlin Cuitino	Rebecca Delventhal
Fernandez	Andrea Fernandez	Adina Stanculescu
Fields	Maggie Fields	Elayne Vollman
Forsythe	Dylan Forsythe	Shubhik DebBurman
Garry	Anna Garry	Erica Schultz
Gibbons	Shannon Gibbons	Rebecca Delventhal
Godnik	Zoey Godnik	Ben Zeller
Gregory	Atlas Gregory	Jason Cody
Jacobs	Chante Jacobs	Flavia Barbosa
Kennedy	Vivian Kennedy	Lynn Westley
Khan	Amal Khan	Frederick Prete
Kiernan	Holly Kiernan	Shubhik DebBurman
Kitzman	Delia Kitman	Ben Zeller
Machalina	Mariia Machalina	Elayne Vollman
Maculuve	Gavela Maculuve	Sugata Banerji
Nsibande	Michael Nsibande	Paul Henne
Osinaike	Simisola Osinaike	Adina Stanculescu

Oster	Aaron Oster	D. Blaine Moore
Pido	Nicole Pido	Elayne Vollman
Rasho	Bethany Rasho	Adina Stanculescu
Rodriguez	Thalia Leon Rodriguez	Flavia Barbosa
Sehic	Ena Sehic	Elayne Vollman
Strupovets	Sofia Strupovets	Veronika Walkosz
Swensen	Jared Swensen	Flavia Barbosa
Tahir	Sarah Tahir	Elayne Vollman
Takata	Mio Takata	Naomi Wentworth
Thumser	Laney Thumser	Jason Cody
Viquez	Tamara Viquez	D. Blaine Moore
Vojnikovic	Cecil Vojnikovic	Lynn Westley
Yee	Isabel Yee	Margaret Coleman
Zamudio	Katherine Zamudio	Elayne Vollman