



# 2022 MCNAIR SENIOR PRESENTATIONS



**WEDNESDAY, MAY 25TH, 2022**

Powell Rotunda

**UCLA**

Undergraduate Education

**McNair Research Scholars Program**

# PRESENTATION SCHEDULE

11:00 – 11:10

WELCOME

**ALICE HO, PHD (SHE/HER) MCNAIR DIRECTOR**

11:10 – 12:10

*EDUCATIONAL, IMMIGRATION, CARCERAL,  
AND GEOGRAPHICAL CONSIDERATIONS*



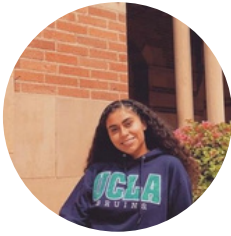
**CRISTIAN HERNANDEZ (HE/HIM)**

***Resilience in the Face of Adversity: Unaccompanied Minors  
Navigating the U.S. Immigration System***

***Faculty Mentor: Dr. Leisy Abrego***

*Sociology Major, Chicana/o/x and Central American Studies Minor*

Some scholars have begun to address the unjust treatment and inhumane conditions experienced by unaccompanied minors as they navigate the U.S. immigration system. However, as increasing attention has focused on their capacity for resilience, there is still much more work to be done to understand the resilience strategies unaccompanied minors use to adjust to life in the United States against such extreme adversity. This motivates the question: What resilience strategies do unaccompanied minors use to adapt to life in the United States and cope with the trauma inflicted by the U.S. immigration system? Through semi-structured interviews, this study hopes to highlight how unaccompanied minors use resilience strategies to adjust to life in the United States while navigating an immigration system lacking procedural safeguards and concern for their wellbeing. Furthermore, it explains how U.S. policy claims to support this vulnerable population but continues to accentuate their trauma, focus on the threat they may pose, and inflict further harm. This study calls for the improvement of policies and procedures, as well as comprehensive immigration reform addressing the needs of unaccompanied minors in order to protect their well-being.



## JESSIKA VIVEROS (SHE/HER)

### ***Racialized Policing: The Role of the Qualified Immunity Doctrine in the Process of Accountability***

***Faculty Mentor: Dr. Raymond Rocco***

*Political Science and Labor Studies Double Major*

This project will address: To what extent does qualified immunity hinder the process of holding police accountable for their actions amongst our black community, and how does it, in turn, add to racially motivated policing? Taking into consideration the historical roots in which qualified immunity derived, to what degree is this doctrine maintaining white supremacy at an institutional and systemic level? Qualified immunity is a legal doctrine that grants government officials performing discretionary functions immunity from civil suits unless the plaintiff shows that the official violated "clearly established statutory or constitutional rights of which a reasonable person would have known." Black Critical Theory (BlackCrit) and an Afropessimism historical approach will be applied to examine the historical roots of the qualified immunity doctrine. These empirical approaches will be utilized to analyze the frequency with which appellate cases were granted or denied immunity. Furthermore, utilizing qualitative methods of semi structured interviews and an analysis of public statements, this study will examine the voices of key interest groups like that of the American Civil Liberties Union (ACLU), police unions, and Black Lives Matter (BLM). The expected findings will contribute to the scholarship regarding the movement of abolishing the qualified immunity doctrine.



## ANDREA MACIAS (SHE/HER)

*The Self-efficacy, Mindset, and Achievement of Children of UC Student Mothers: The Links to Perceptions of Mothers' Student Role*

**Faculty Mentor: Dr. Alison Bailey**

*Psychology Major*

Despite lack of supportive university policy, student parents are both highly motivated and high-achieving. Little research has investigated how children are affected by their mothers pursuing higher education. Previous research found a positive relationship between mothers' student role motivation and children's academic motivation. There are also additional factors related to mothers' direct interactions with their children (e.g., attitude in helping with homework) that are partial mediators for this relationship. There has not been enough research investigating other mechanisms through which student mothers may impact their children. The present study sought to examine how student mothers affect their children through unintentional role-modeling, like studying in their children's presence.

Using surveys, this study assessed the relationships between children's observations of their mothers' student role and children's academic self-efficacy, growth mindset, and academic performance. It was predicted that positive relationships would be found among these variables. The data showed a negative relationship between children's perceptions of their mothers' student role and children's growth mindset. All other correlations were found to be insignificant. Content analyses of free responses showed areas where student mothers, especially mothers of color, need more university support. This research highlights mechanisms in which universities affect student mothers and student mothers affect their children, which provides useful insight for the development of effective university interventions aimed at supporting the success of student parents and their families.





## ABEL ARAGON (HE/HIM)

### *Understanding the Eocene-Oligocene Transition Through Clumped Isotope Paleothermometry*

**Faculty Mentor: Dr. Aradhna Tripathi**

*Geology Major, Geochemistry and Chicano Studies Double Minor*

My research project aims to explore the conditions of the Eocene-Oligocene transition (~34 Ma) using clumped isotope paleothermometry on benthic foraminifera. Foram samples were retrieved from the Ocean Drilling Program Site 1218, located in the Pacific, and offers a well preserved record of the transition, according to past studies using older methods of paleothermometry. Clumped isotope paleothermometry is powerful in that it does not require interpretation of the isotopic composition of ancient oceans, meaning temperature can be found independently given the isotopic composition of the carbonate sample. Methods will be adjacent to past studies, where samples will be read into a gas source mass spectrometer in order to determine the values needed to calculate  $\delta^{18}\text{O}$ . Overall, I aim to compile data and analysis on the Eocene-Oligocene transition, a period which has not yet been extensively studied using clumped isotope paleothermometry.

12:30 - 1:30

LUNCH

1:30 - 2:30

*DISRUPTING THE NORMALCY OF WHAT IS  
KNOWN: NEW TECHNOLOGIES, CONTESTED  
POLITICS, AND COUNTER PERSPECTIVES*



## SEBASTIAN FIGUEROA (HE/HIM)

*Measuring Plasma Density through New Hardware  
Applications of Microwave Interferometry*

*Faculty Mentor: Dr. Troy A. Carter*

*Astrophysics Major*

The goal of this project is to innovate new hardware methods in plasma diagnostics by developing an interferometer for measuring plasma density using frequency-modulated continuous-wave (FMCW) radar equipment. This automobile-grade hardware can be equipped to measure its transmission's phase shift after traveling through a plasma, which can be directly used to calculate the plasma's line-averaged density by utilizing the framework of refractive-index measurements. The current specialized hardware solutions for obtaining interferometry-based measurements of plasma density involve expensive and purpose-built equipment, which has necessitated such generalized and economical approaches to the task.

Thus far, successful tests have been conducted on actual plasma samples. Multiple sets of interferometry data were collected from an Argon plasma, over which the power, flow rate, and pressure associated with the plasma were varied. By doing this, this project's radar equipment was verified to correctly respond to changes in the plasma parameters. The radar equipment also correctly demonstrated a largely linear relationship between a plasma's power and its density. In addition, in the most extreme of the plasma conditions used during testing, the expected fringe behavior was correctly identified in the phase shift data. This work will conclude by comparing results from existing interferometers with the data produced by the project's radar equipment to confirmedly confirm the validity of this new hardware approach.



## CINDY BERGANZA (SHE/HER)

***Online Politicking: The Impacts of Social Media on Contemporary Activism***

***Faculty Mentor: Dr. Efrén O. Pérez***

*Psychology and Political Science Double Major*

Activism throughout the 21st century has been greatly impacted by the growing relationship of technology and the political sphere. However, the impacts of social network sites (SNS) on the political mobilization of young racial minorities have not been analyzed. This project examines the impact of social media on contemporary activism amongst college students of color. More specifically, the study explores the psychological processes by which social media mobilizes college students of color to engage in activism. Survey data will be collected to measure social media use, political engagement, and demographic information (e.g., racial/ethnic background). An experiment will also be designed to test how mere exposure of political content on social media promotes mobilization. The findings will provide greater insight into how social media contributes to contemporary activism, and if it increases political engagement within youth of color. With this insight, political scientists will be able to explain and further promote patterns of online interaction, in order to influence political participation, on and off the screen.



## BRITTANY JASPER (SHE/HER)

***Intent vs. Impact: Black students in special education and teacher education***

***Faculty Mentor: Dr. Robert Cooper***

*Sociology Major, Education and African American Studies Double Minor*

Existing literature regarding special education in California elementary schools reveals that Black students are disproportionately recommended to these programs, such as the Individualized Education Program (IEP); these wrongful recommendations perpetuate racial discrimination as they are often executed through racial profiling due to lack of culturally relevant teacher trainings (Alexander, 2009). There is currently minimal attention given to the consequences created for Black students and for their families. This research relies upon literature review, as well as critical education theory and critical white study, to provide further insight into culturally relevant educational policies and teacher training.



## EDWIN ZAMORA (HE/HIM)

### *Parent Perspectives on the Value of Service Support for Heritage Language Development in Autistic Youth*

**Faculty Mentor: Dr. Connie Kasari**

*Psychology Major, Applied Developmental Psych and Education  
Double Minor*

Bilingualism is a growing phenomena among neurotypical and neurodiverse children alike. Yet, literature on children with disabilities, such as Autism Spectrum Disorder (ASD), has largely focused on possible association between bilingual exposure and language delays in these populations. Recent studies are beginning to highlight a potential benefit in the preverbal communication, expressive vocabulary, and executive functions of bilingual children. However, 90% of developmental psychology research is conducted on white, U.S., middle class families known as the W.E.I.R.D. population. Consequently, families from differing cultural and environmental contexts may be overlooked in these studies. Through mixed methods (i.e. qualitative interviews & surveys), this study aims to explore and document the parenting practices in Spanish-speaking families that support their Autistic child's cognitive and bilingual development. Four out of five parents endorsed the importance of bilingualism but all five parents promoted dual language learning for their autistic child. Three out of five parents explicitly sought support for the promotion of bilingualism through in-home services, which resulted in delayed service delivery and long wait times. The growing number of bilinguals with ASD calls for extensive research on second language development, parental support for successful bilingual development, and culturally sensitive and competent services for immigrant populations.

2:30 - 2:45

BREAK



2:45 - 3:45

ALTERNATIVES TO MARGINALITY: CENTERING  
INDIGINEITY, INTERSECTIONALITY, AND  
INFORMAL ECONOMIES



**RUBY GORDILLO (SHE/HER)**

*The 'Vanishing Indian': Navigating the Literary Formations of the Settler-Colonial Relationship in Scott Momaday's House Made of Dawn and Tommy Orange's There There*

**Faculty Mentor: Dr. Marissa Lopez**

*English and Chicana/o/x Studies Double Major*

The project explores the historically fraught relationship between Latinidad & Indigeneity present since initial settler-colonial contact in the 16th century, focusing on the 20th-century tensions between Native Americans and Latinos. Scott Momaday's 1968 "House Made of Dawn" explores the historical implications of this relationship, attesting to the present-day oppression and subjugation engendered by the system of state violence against Indigenous people by Latinos. Delving deeper into the settler-colonial relationship in Momaday's novel, I bring into conversation Tommy Orange's 2018 "There There" to see how scholars in Latinx and Indigenous literary studies understand this relationship. Through distinct efforts and histories of displacement, white supremacists prevent Native/Indigenous and Mexican American coalition building. In order to work together for a better world Mexican claims to indigeneity have to work around or reject whiteness rather than collude with it. I aim to discover how these two novels comment on the tensions between Indigenous and Mexican American communities, and discuss the insight they may give into an Indigenous perspective on how to work around whiteness. We may work faster alone but we can only go further together.



## LUIS GODINEZ (HE/HIM)

*¿Si Ni De Aquí, Ni De Allá, Entonces De Dónde? The Transfronterizx Student Experience of Navigating Race, Place, Identity, and Language in the Search for Community and Acceptance*

**Faculty Mentor: Dr. Carlos E. Santos**

*Political Science and Public Affairs Double Major*

Transfronterizo/a/x students are individuals who engage in a near-daily cross-border commute to attend public or private school. As they navigate geopolitical and cultural borderlands, they develop complex multicultural-intersectional identities. At a young age, students witness and experience disparities among race, class, gender, phenotype, and sexual orientation. The study focuses on the experiences of transborder students from the San Diego-Tijuana border region. This work is interested in capturing and understanding the process in which students accept their complex identities, find community, and a sense of belonging. Utilizing pláticas, testimonios, and frameworks such as Social Identity Theory, Borderland Theory, and Legal Consciousness Perspective, I ask: What are the lasting effects of border-crossing experiences on transborder students in higher education? What are the impacts of self-discovery and finding communities that affirm their identities? And What are the experiential disparities among transborder students in relation to their intersectional identity? The project pushes the field of Transborder Studies to recognize that transborder experiences are not homogeneous and differ in accordance with one's racial-ethnic identity, phenotype, gender identity, class, and sexual orientation. These experiences are further nuanced in institutions of higher education.

This work hopes to minimize the marginalization of transfronterizx students by acknowledging and understanding the complex multicultural-intersectional identities of this community. Through these pláticas and testimonios, it is evident that through processes of self-discovery and finding community, individuals thrive academically and in new environments through their increased awareness of navigating race, place, identity, and language.



## ALICIA LOPEZ (SHE/HER)

***En El Nombre De La Madre, La Hija, y La Lucha Para Sobresalir:  
The Daughters Contribution to the Mother's Small Business***  
**Faculty Mentor: Dr. Abel Valenzuela**

*Sociology & Chicana and Central American Studies Double Major*

The research that I am conducting examines the impact COVID-19 has had on the immigrant Latina entrepreneurs of DTLA. More specifically, it analyzes how processes of gentrification & neighborhood change have been expedited by the pandemic. Gentrification & neighborhood change continues to displace the most vulnerable communities of DTLA and with a pandemic looming overhead, minority women owned businesses are shuttering at exponential rates. In my preliminary findings and initial interviews, I have discovered that many of these women have faced displacement in some form whether it be from loss of business due to social distancing guidelines, forced closures due to financial loss, or the necessity to seek work in other informal labor sectors.

Moreover, one of the most significant findings I have come across throughout the duration of this project is that of the mother - daughter dynamic as it relates to survivalist entrepreneurship. As a woman and once child who played a pivotal role in the survivability and success of her mothers small business, I contend the importance of furthering scholarship that highlights the gender dynamics associated with minority women owned businesses. Furthermore, as a scholar who strives for creating work rooted in the community and lived experiences of the individuals represented in this project I continue to exclaim the importance of providing a perspective that is embedded in experiential knowledge.

3:50 - 4:50

AGAINST THE GRAIN OF TRADITION:  
CONTESTING NOTIONS OF WELL-BEING AND  
LABOR



**RENO GARCIA (THEY/THEM)**

*Uncovering and Addressing Health Care Inequality amongst  
Mixtec Migrants in Madera, CA*

*Faculty Mentor: Dr. Gaspar Rivera-Salgado*

*Sociology Major*

Indigenous Mixtec farmworkers from Oaxaca, Mexico are a growing population throughout U.S. society. Unfortunately, emergent literature on Oaxacan migrants uncovers growing disparities regarding their access to culturally competent healthcare that incorporates and centers aspects of Oaxacan (Mixtec) traditional medical cultures. Therefore, in my pilot project, I questioned: How do Mixtec farmworkers want to manage their behavioral health? And in what ways can behavioral healthcare providers in San Joaquin Valley reshape their practices to recognize and incorporate aspects of the traditional Mixtec medical culture?

In the pilot I explored possibilities for adequate mental health care for Indigenous Mixtec Central Valley farm workers who have immigrated and settled in Madera, CA through oral history methodologies like testimonios. Testimonios were employed as a method to decenter essentialist or western understandings of healthcare and to center Indigenous experiences, knowledge, and epistemologies surrounding health. Two main themes emerged from the data such as cultural gaps between Mixtec patients and their providers as well as sentiments of mistrust towards practitioners because of their status as cultural outsiders. Finally, this project is socially significant as it emphasizes the importance of culturally sensitive healthcare that adequately meets the needs of growing populations in the U.S. such as Indigenous migrant Farmworkers.



## **SAM MAZARIEGOS (SHE/HER)**

### ***Impact of COVID-19 on the Mental Health of First-Generation Undergraduates at UCLA***

***Faculty Mentor: Dr. Michael Suarez***

*Human Biology & Society Major, Global Health Minor*

First-generation college students face a unique challenge of navigating institutions and processes that they have little to no familiarity with. The COVID-19 pandemic has exacerbated these challenges that first-generation students face and created new ones as well. In addition to a pandemic, students have continuously witnessed a lack of humanity across the nation including inadequate implementation of public health measures, blatant discrimination from elected officials, police brutality, and corporations prioritizing profits over people. This project's purpose is to investigate the impacts of the COVID-19 pandemic on the mental health of first-generation undergraduate students at UCLA, and how we can prepare for future crises with a focus on well-being. A literature review will be conducted in order to gauge what themes are relevant in the research on COVID-19 and the mental health of first-generation students. The literature review as well as ethnographic approaches will be used to develop a survey that first-generation UCLA undergraduates may take online. Participants will be asked to provide their perspectives on how the university responded during the pandemic and information regarding their mental health. Survey results will contextualize how the university helped or failed students during this time of crisis in order to create student-informed recommendations that can lead to improvement of future support services.





## STEPHANIE MARTINEZ (SHE/HER)

***Ni Santa, Ni Puta: Tracing the Impact of the Colonization of Erotic Labor in Central Mexico***

***Faculty Mentor: Dr. Kevin Terraciano***

*History and Chicana/o/x and Central American Studies Double Major*

My research examines an understudied aspect of the history of women and sexuality in early colonial Mexico, the most populous region of the Americas in this period. In particular, I will focus on sex work, analyzing how the topic is addressed in sources such as the Florentine Codex and other manuscripts produced by Indigenous artists and writers in the 16th century, as well as archival records generated by the colonial legal system and texts written by Spaniards, such as *Las Siete Partidas*. Few scholars have sought to understand how Indigenous and Spanish traditions of sex work converged and/or differed in this period. My research aims to address this gap.

In pre conquest Mexico, Nahuas used the term *ahuiani* to refer to a woman who “pleasured” others with her company and sexuality. The Nahuatl peoples of central Mexico, including the Mexica or Aztecs (Aztecs), understood laughter, intoxication and sex as “earthly pleasures.” But the Spaniards who arrived in Mexico and the many priests who followed them, re-interpreted the profession of the *ahuiani* as the work of an evil *puta* or whore.

Nahuatl sources describe *ahuianime* (plural) as women who played important roles as pleasure givers, dancers in celebrations, and companions to warriors. I contend that Eurocentric notions of the *puta* disregarded many of these roles. Despite the impact of Christian and patriarchal attitudes toward women who offered companionship and sex, the archival record suggests that sex workers continued to perform at all social levels in colonial Mexico, regardless of the laws and doctrine designed to punish them.

4:50 – 5:00

CLOSING

IRIS LUCERO, PHD (SHE/HER) MCNAIR ASSISTANT  
DIRECTOR

# SPECIAL THANKS

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