

A Sessions - 9:45-10:45

<p><u>A1 Hispanic Studies</u> Moderator: Marina Pérez de Mendiola Michelle Nagler Beatriz Maldonado Sarah Owens</p>	<p>Humanities 120</p>
<p><u>A2 Economics</u> Moderator: Roberto Pedace Janine Yim Caroline Hu Yushuang Sun</p>	<p>Humanities 119</p>
<p><u>A3 Politics</u> Moderator: Mark Golub Tracy Yao Mengqi Pan Leah Hughes Rebecca Shin</p>	<p>Humanities 104</p>
<p><u>A4 Biology/Neuroscience</u> Moderator: Emily Wiley Robyn Sherman Rebecca Dutta Isabel English</p>	<p>Humanities 105</p>
<p><u>A5 Theatre</u> Moderator: Nancy Macko Allegra Breedlove</p>	<p>Humanities 204</p>
<p><u>A6 Athletics</u></p>	<p>Humanities Courtyard</p>

B Sessions – 11:00-12:00

<p><u>B1 Feminist, Gender, and Sexuality Studies (FGSS)</u> Moderator: Piya Chatterjee Zandalee Springs Emily Hampshire Claire Hirschberg</p>	<p>Humanities 120</p>
<p><u>B2 Latin American Studies</u> Moderator: Cindy Forster Angie Aguilar Kathryn Keisling</p>	<p>Humanities 101</p>
<p><u>B3 Economics</u> Moderator: Kerry Odell Grace Lutz Molly Robbins Anna Stricker</p>	<p>Humanities 119</p>
<p><u>B4 Biology</u> Moderator: Jennifer Armstrong Alexandra Forsyth Anna Marks Kristen Keller Catherine Kim</p>	<p>Humanities 105</p>

<u>B5 French</u> Moderator: Eric Haskell Hannah Swan Mariel Dunietz Mikayla Raymond Vaishali Ravi	Humanities 201
<u>B6 Politics</u> Moderator: Sumita Pahwa Cami Campbell Michaela Moffett Teesta Bhandare	Humanities 201
<u>B7 Athletics</u>	Humanities Courtyard

12:00-1:30 Malott Commons – taco bar for lunch, and chocolate bread pudding, strawberries and cream for dessert!

C Sessions – 1:30-2:30

<u>C1 Feminist, Gender, and Sexuality Studies (FGSS)</u> Moderator: Piya Chatterjee Helena Meitka Lauren Mitten Gabriela Al-Shamma	Humanities 120
<u>C2 English</u> Moderator: Warren Liu Rachel Grate Emily Kolpien Clea Harris Kathryn Brastow	Humanities 102
<u>C3 Media Studies</u> Moderator: Trang Tran Anjali Gupta Larkin Sheldon Alex Weston	Humanities 202
<u>C4 Music</u> Moderator: Hao Huang Ariane Gushue Sarah Chung	Balch Auditorium
<u>C5 Art Conservation & Art History</u> Moderator: Mary MacNaughton Kaela Nurmi Ana Sido Meghan Gallagher	Humanities 203
<u>C6 Environmental Analysis/EEP</u> Moderator: Zhaohua Tang Molly Freed Jessica Ng Devyn Parks Annemieke Ruina	Humanities 105

<u>C7 Philosophy</u> Moderator: Yuval Avnur Devika Agrawal Alexandra Ronco	Humanities 103
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D Sessions – 2:45-3:45

<u>D1 Art</u> Moderator: Susan Rankaitis Susanna Ferrell Lily Alan Mabelle Bong Leah Hughes Haley Ross Teagan Blain-Rozgay Seana Rothman	Ruth Chandler Williamson Gallery
<u>D2 American Studies</u> Moderator: Julia Liss Olivia Buntaine Anna Marburger Laurel Schwartz Hilary Slauson	Humanities 105
<u>D3 Anthropology</u> Moderator: Seo Young Danica Harootian Avalon Harder Taryn Riera Claire Shum	Humanities 121
<u>D4 Physics & Chemistry</u> Moderator: Steve Naftilan Taia Wu Rachel Brunetti Victoria Kim Mackenzie Leake	Humanities 120
<u>D5 Org. Studies, Sociology, & Writing</u> Moderator: Kimberly Drake Tori Sepand Alex April Christiana Ho	Humanities 101
<u>D6 Psychology</u> Moderator: Jennifer Ma Isabelle Kaplan Carolyn Lasch Anina Pearce Kaixin Bao	Humanities 204
<u>D7 Mathematics</u> Moderator: Winston Ou Tatiana Bradley Eleanor Dwyer Breeana Johnng	Humanities 102

3:45-5:00 Scripps Tea “Celebrating Our Seniors” Margaret Fowler Garden

5:00-6:00 Seniors vs. Faculty / Staff Soccer Game Tiernan Field

- **Co-Captains Faculty & Staff: Thierry Boucquey & Robert Pedace**
- **Captain Students: Molly Freed**
- **Announcers: Amy Cannistraro and Caroline Miller**

A Sessions

9:45-10:45

Session A1 Hispanic Studies

Humanities 120

Moderator: Marina Pérez de Mendiola

MICHELLE NAGLER

Foreign Languages & Dance

Advisor: Marina Pérez de Mendiola

Co-Advisors: Ronnie Brosternman & Suchi Branfman

This is home. : Reflections on a dance work based on personal histories of immigration.

This is home. is an abstract dance work based on personal histories of Spanish and French-speaking immigrants. It incorporates political themes and its mission is to open up the immigrant experience as something to talk about. It explores motifs such as navigating the unknown and vulnerability. It provides an opportunity to talk about unjust situations such as healthcare problems here and abroad and daily encounters that are based in different concepts of life between countries.

This is home. es una obra de danza abstracta basada en historias personales de inmigrantes hispanohablantes y francófonos. Incorpora temas políticos y su misión es abrir al espectador la experiencia inmigrante para que se discuta. Explora motivos de navegación, lo desconocido y la vulnerabilidad. Produce una oportunidad de hablar de situaciones injustas como los problemas de seguridad médica aquí y al extranjero y encuentros diarios que se forman de diferentes conceptos de la vida.

BEATRIZ MALDONADO

Hispanic Studies & American Studies

Advisor: Marina Pérez de Mendiola

Co-Advisor: Martha Gonzalez

Papers and Legitimacy: An Analysis of Legal Documentation and Migrant Salvadorans' Perceptions of "Being American"

El proyecto de investigaciones se enfoca en las identidades de inmigrante Salvadoreños dentro de los Estados Unidos desde su migración de El Salvador durante la Guerra Civil. Este proyecto provee un contexto histórico y un análisis crítico sobre las transiciones de documentación de ciudadanía que ocurren mientras se orientan en los Estados Unidos. Los resultados enfatizan una conexión entre documentación y las percepciones distorsionadas que los Salvadoreños Americanos sienten acerca de identidad y pertenencia.

SARAH OWENS

Hispanic Studies & Public Policy Analysis

Advisor: Jennifer Wood

Co-Advisor: David Menefee-Libey

A Leap in the Right Direction for California Public Education: The Local Control and Accountability Plan and its Effects on Latino English Learners

The Local Control Funding Formula and Local Control and Accountability Plan shift California's education funding and accountability systems toward local control. This thesis argues that these policies have the potential to make the California public education system more adequate and equitable, especially for Latino English learners. The LCAP is in its early stages of implementation, so now is a critical time to begin evaluating what is working and what needs to be corrected.

9:45-10:45

Session A2 Economics

Humanities 119

Moderator: Roberto Pedace

JANINE YIM

Economics & Legal Studies

Advisor: Roberto Pedace

Race, Gender, and Stand Your Ground Laws: An Analysis of Homicide and Justifiable Homicide

Over 20 states have enacted Stand Your Ground (SYG) laws. This thesis examines the effect of these laws on the number of homicide and justifiable homicide victims and offenders of a given race or gender. My results indicate that while SYG laws do not affect the number of homicide victims or offenders of any race or gender, they increase the number of black and male justifiable homicide victims and white and female justifiable homicide offenders.

CAROLINE HU

Economics

Advisor: Roberto Pedace

Co-Advisor: Jill Harris

E-Commerce: The Impact of Internet Technologies on Pricing in Retail

Studies in the early 2000s establish the existence of persistent price dispersion in online markets for homogeneous goods. This thesis examines why and finds that the Internet's impact on supply, demand, and market-related factors shapes retailers' pricing strategies and contributes to price dispersion. Ultimately, I predict that online retail, which is oligopolistic, will continue to exhibit price dispersion, and these levels will decrease the most for CDs, books, and then consumer electronics.

YUSHUANG SUN
Economics
Advisor: Roberto Pedace
Co-Advisor: Thomas Willet

Sanction Success and Domestic Dissent Groups

Despite the low success rate indicated by scholarly assessments, economic sanctions remain a commonly used foreign policy tool. Why do policymakers often turn to economic sanctions with great hope and enterprise in spite of their unimpressive success record? What determines a sanction outcome? Does the internal political dynamic of target matter in this case? How does it relate to different regime type? This thesis examines the relationship between the presence of domestic political opposition in the target state and sanction success conditional on the regime type by using data covering 763 US-imposed sanctions from 1945 to 2006. The findings suggest authoritarian regimes are more vulnerable to sanctions than their democratic counterparts in the presence of internal dissent groups. General strikes are the best strategy to aid sanctions and coerce policy changes in authoritarian regimes. The presence of guerrilla warfare has the greatest substantive and statistical impact on sanction success. Consistent and organized internal dissent groups pose threats to the authority by weakening domestic stability or partnering with sender countries to push for policy changes.

9:45-10:45
Moderator: Mark Golub

Session A3 Politics

Humanities 104

TRACY YAO
Politics & Legal Studies
Advisor: Mark Golub

How to Get Married: An Examination of the Marriage Equality Litigation Strategy

Marriage equality exists in 37 states and DC. Activists await a Supreme Court ruling to bring the movement to its conclusion. Critics claim that litigation's effects are limited at best and that marriage equality could be achieved without stepping foot in a courtroom. This thesis examines the movement's strategy for reaching this point, particularly the role of courts, and argues that litigation was an effective and necessary means for expanding the freedom to marry.

MENGQI PAN
Politics & International Relations
Advisor: Mark Golub

Power and Resistance: Reconciling Foucault and Marx

Despite their more visible differences, Foucault and Marx are not inherently in conflict with each other. What Foucault offers could be a solution to a Marxist problem. This thesis examines Foucault's and Marx's power analyzes and resistant strategies and proposes a possible way of reconciling the two.

LEAH HUGHES

Politics & International Relations

Advisor: Thomas Kim

Co-Advisor: Nancy Neiman-Auerbach

The Rogers Case: Examining Kentucky's Democratic Deconstruction Through Prison Expansion and Campaign Finance

Why has the expansion of prison construction and incarceration in Eastern Kentucky continued to be a viable political strategy for Congressman Hal Rogers despite its failure to improve the region's economy? This analysis suggests that the Rogers Case can be used as a case study to understand the proliferation of political power available to elected officials in ANY district where the democratic incentive structure encourages politicians to represent the interests of privatized industries instead of constituents.

REBECCA SHIN

Politics, International Relations, & Religious Studies

Advisor: Thomas Kim

Co-Advisor: Erin Runions

The Christian Influence Over Secular Understandings of Marriage in the United States: A Critical Analysis of Augustinian Theology

I investigate the use of Christian beliefs applied to the American legal system, consequently becoming the foundation of American commonsense. I draw out the ways in which Augustinian thoughts on marriage have inadvertently been used to justify institutional favoritism toward heterosexual, monogamous couples. Through examining the Christian-American lens that shapes our understanding of traditional marriage, I argue that previous and current secular opposition to non-traditional marriage is fundamentally grounded in the Christian faith, and furthermore, American cultural understanding of marriage is unconsciously lined with Augustinian thought.

9:45-10:45

Session A4 Biology & Neuroscience

Humanities 105

Moderator: Emily Wiley

ROBYN SHERMAN

Molecular Biology

Advisor: Emily Wiley

Regulation of Histone H3 Proteolysis by Acetylation in *Tetrahymena thermophila*

Nuclear DNA compaction is mediated through proteins called histones. A shortened, "clipped" histone H3 is found in some organisms, cleaving the N-terminus. *Tetrahymena thermophila* contains some clipped H3 molecules in the deacetylated, transcriptionally inactive micronucleus. Immunoblot analyses with acetylated and deacetylated micronuclei, and H3 lysine 9 mutations to

mimic acetylation and deacetylation, were used to determine if acetylation on histone tails inhibit clipping. Immunoblot analyses demonstrated an increase of clipped H3 when acetylated.

REBECCA DUTTA

Neuroscience

Advisor: Melissa Coleman

Co-Advisor: Bitu Moghaddam

Effects of an Anxiogenic Drug on a Novel Protocol Testing Reward Seeking and Punishment Avoidance in Rats

Anxiety disorders alter sensitivities to environmental cues, influencing both reward-seeking and punishment-avoidance. To study this, we developed a protocol in which rats injected with an anxiogen (FG-7142) performed instrumental actions to avoid punishment and obtain rewards. In most rats, FG-7142 reduced performance during avoidance trials and decreased appetitive performance. FG-7142 did not impair discrimination between trial types. Interestingly, rats that initially failed to avoid punishment were more successful in the task when FG-7142 was administered.

ISABEL ENGLISH

Human Biology

Advisor: Jennifer Armstrong

Co-Advisor: Elie Traer

Predicting Clinical Response to FGFR Inhibition from Ligand Expression in Head & Neck Squamous Cell Carcinoma

This study connects FGF2 ligand expression with sensitivity to FGFR1 receptor inhibition in head and neck squamous cell carcinoma (HNSCC). In HNSCC cell lines overexpressing FGF2 and FGFR1, we saw decreased survival after treatment with PD173074, an FGFR1 inhibitor, along with decreased expression of epithelial-to-mesenchymal related proteins and decreased metastatic potential. These data suggest that FGF2 and FGFR1 expression levels predict response to FGFR1 inhibition and could provide an effective biomarker during HNSCC treatment.

9:45-10:45

Session A5 Theatre

Humanities 204

Moderator: Nancy Macko

ALLEGRA BREEDLOVE

Media Studies & Theatre

Advisor: Art Horowitz

Co-Advisor: Nancy Macko

Hamlet #princeofdenmark: Exploring Gender and Technology through a Contemporary Feminist Re-Interpretation of Hamlet

This thesis project examines the role of technology and social media in the dynamic between public and private life in Shakespeare's HAMLET through a predominantly female contemporary production.

9:45-10:45

Session A6 Athletics

Humanities Courtyard

Molly Freed

Soccer

Claire Shum

Soccer

Rebecca Gold

Lacrosse

Hilary Slauson

Lacrosse

Madeleine Hurlbut

Lacrosse

Kaitlyn Spees

Cross Country, Track & Field

MacKenzie Leake

Swimming

Laura Wessbecher

Lacrosse

Kaela Nurmi

Swimming

Taia Wu

Cross Country, Track & Field

Shaina Raskin

Golf

Tracy Yao

Cross Country, Track & Field

B Sessions

11 am – 12 pm

Session B1 Feminist, Gender, & Sexuality (FGSS)

Humanities 120

Moderator: Piya Chatterjee

ZANDALEE SPRINGS

Feminist, Gender, & Sexuality Studies

Advisor: Piya Chatterjee

Co-Advisor: Tomás Summers Sandoval

Mexican Masculinities: Migration and Experiences of Contemporary Mexican American Men

This thesis examined how four post-undergraduate, male Mexican American's constructed their views on what it means "to be a man". I explored areas around immigration, work, labor, masculinities, macho, and machismo. Although the focus was on masculinities, I have included history from both a historical context and from each of the men's lives. The chapters were set up in a way that aided the reader to connect the past with the present.

EMILY HAMPSHIRE

Feminist, Gender & Sexuality Studies

Advisor: Mary Ann Davis

Co-Advisor: Erin Runions

"Quare Contestations: Bridging Queer, Lesbian, and Feminist Narratives of the Irish Diaspora"

“*Quare Contestations: Bridging Queer, Lesbian, and Feminist Narratives of the Irish Diaspora*” examines three sets of biographical and autobiographical narratives about Irish who migrated to the United States in the 19th and 20th centuries. Dwelling primarily in queer studies and diaspora studies, this thesis participates in the construction of a queer Irish diaspora archive by analyzing the spaces of overlap between Irish queer, feminist, and lesbian – together, *quare* – theory and lived experience in these narratives. In my analysis, I demonstrate the fluidity, movement, and interdisciplinary scope of a *quare* framework for approaching studies of gender and sexuality in the Irish diaspora context. This thesis intervenes into the work already being done to queer Irish diaspora by examining the contestations of “Irishness” appearing in the narratives that are analyzed, and by in turn contesting and complicating the action and meanings made by “queer” in the existing archive of queer Irish diaspora literature.

CLAIRE HIRSCHBERG

FGSS

Advisor: Piya Chatterjee

Co-Advisor: Sue Castagnetto

***“A VILLAGE CAN’T BE BUILT IN A JAIL”
Carceral Humanism and Ethics of Care in Gender Responsive Incarceration***

This thesis is built on my experience of working with CURB and the L.A. No More Jails coalition in the ongoing fight against the Mira Loma gender responsive “Women’s Village” Jail expansion. I explain the shifting California landscape that gives rise to a jail-building boom and unpack the threat of gender responsive carceral expansions. Gender responsiveness represents a failure of feminist prison reform that demands a re-imagining of justice through prison abolition.

11 am – 12 pm Session B2 Latin American Studies
Moderator: Cindy Forster

Humanities 101

ANGIE AGUILAR

Latin American Studies

Advisor: Marina Pérez de Mendiola

Co-Advisor: Martha Gonzalez

NOT JUST A LEGEND: THE GENDERED CONQUEST OF A SPANISH AMERICAN SOCIETY

Amid the growth of a nationalist ideology which sought to break free of Spanish roots after the Mexican War of Independence, there was a resurgence old legends. I have found that the legends that transpired from the retelling of past events in women’s lives exclude their accomplishments and emphasize their “deviant” tendencies. In my paper I will explore the legends of Malintzin and María Magdalena to talk about the gendered conquest of a Spanish-American Society.

KATHRYN KEISLING
Latin American Studies
Advisor: Nancy Neiman-Auerbach
Co-Advisor: April Mayes

Fairtrade Ground Up: Profit and Power in the Certification System from the Perspective of Coffee Farmers in La Convención Valley, Peru

According to Fairtrade International, certification provides farmers with "a better deal and improved terms of trade [that] allows them the opportunity to improve their lives and plan for their future." Drawing from personal interviews conducted in November 2013 in La Convención, Peru, my thesis focuses on producers' understandings and perceptions of the Fairtrade certification system. Despite Fairtrade's aim to rebalance the scales of power in the world market, when it comes to inequalities rooted in local and national history, the third-party certifier has done little to redistribute power to farmers. I conclude that, in the case of La Convención, Fairtrade is actually reproducing harmful and exploitative conditions of the past.

11 am – 12 pm
Moderator: Kerry Odell

Session B3 Economics

Humanities 119

GRACE LUTZ
Economics
Advisor: Roberto Pedace

It's the Economy, Stupid: Economic Voting and Gender Bias in U.S. Congressional Elections

This thesis examines the relationship between the U.S. economy and Congressional Elections. Using a unique sample data set of candidate demographics and state economic indicators, I find that between 1999 and 2014, economic factors are consistently related to election outcomes. I also find that female candidates are more negatively affected by increases in unemployment than their male counterparts. These results suggest the presence of a gender bias against women in elections that consider economic indicators.

MOLLY ROBBINS
Economics & Hispanic Studies
Advisor: Kerry Odell
Co-advisor: Jennifer Wood

What is the 'Economic Value' of Learning English in Spain?

This paper uses historical and economic references to evaluate the economic value of learning English in Spain. Seeing that English is the lingua franca in politics, business, and technology, it is a necessary skill for Spanish citizens to possess in order to efficiently interact in foreign relations of all kinds. Due to Franco's harsh language policies, and Spain's ineffective education system, Spain has lacked the same linguistic exposure to foreign languages—especially English—than the rest of Europe. By referencing the previous literature written about the

relationship between language and earnings, this paper seeks to find the economic incentive for Spaniards to learn English. The six issues introduced by language economist, Francois Grin, provide an economic, cultural, and social compass to evaluate the overall impact English language learning would have on the Spanish labor market and national economy. The six issues analyze the relevance language has on economic processes, human capital, social investments, policies, wage distribution, and the general market. With tourism as Spain's most lucrative business sector, better skills in English communication would only add to its economic success. While the Spanish government has named English as one of the seven basic skills within the labor market, effective teaching programs still have to be developed.

ANNA STRICKER

Economics

Advisor: Roberto Pedace

Co- Advisor: Kerry Odell

The Affordable Care Act: Year One

Using multiple regression analysis, the components of the ACA, along with baseline characteristics of the states, are examined in relation to premium prices and the rate of uninsured. We find that states with higher rates of uninsured have higher premium rates, and states with higher rates of obesity have more uninsured. Also we can measure the effect of Internet exchanges on reducing premium prices and the expansion of Medicaid on reducing the uninsured.

11 a.m. - 12:00 p.m.

Moderator: Jennifer Armstrong

Session B4 Biology

Humanities 105

ALEXANDRA FORSYTH

Science & Management

Advisor: Terry Medler

Co-Advisor: Emily Wiley

C5a Antagonist as a Therapy for Squamous Cell Carcinoma

Squamous cell carcinoma (SCC) is a cancer that can occur on the skin or mucosal tissue, and causes roughly 22,000 deaths in the United States each year. This thesis investigates a therapy for SCC based on C5a, the terminal anaphylatoxin of the complement cascade, through an antagonist for the C5a receptor, which is expressed on the surface of immune cells. Results suggest a C5a-based therapy in combination with chemotherapy is an efficacious treatment for SCC.

ANNA MARKS

Biology

Advisor: Gretchen Edwalds-Gilbert

Co Advisor: Bryan Thines

Phenolic stress disrupts attenuation of the Unfolded Protein Response in Saccharomyces cerevisiae

Endoplasmic reticulum (ER) homeostasis is essential to cellular stress response pathways that allow survival despite environmental fluctuations. Here, we study the Unfolded Protein Response (UPR), a well-conserved stress response pathway that assists in refolding unfolded proteins in the ER. UPR progress is monitored for ten hours following induction by butylated hydroxyanisole (BHA) and butylated hydroxytoluene (BHT), common food preservatives, and to bisphenol A (BPA), a component of many plastics and fuels.

KRISTEN KELLER

Biology

Advisor: Bryan Thines

Co-Advisor: Patrick Ferree

A Genomic Analysis of F-Box Gene FBS1 in the Arabidopsis thaliana Stress Response

The 26S proteasome pathway is a highly regulated system of protein degradation that is conserved among eukaryotes. In this pathway, an E3 ubiquitin ligase must first tag a target molecule with a poly-ubiquitin tail before it can be degraded. One common E3 ligase is the SCF Complex, which consists of a few core components and an interchangeable F-box protein that ensures specificity to the target molecule. Arabidopsis thaliana has over 700 F-box proteins, most of which have gone unstudied. We hypothesize that the stress responsive F-box gene *FBS1* codes for an important regulator in the Arabidopsis thaliana stress response. *FBS1* is an early responding gene in many abiotic stresses that shows a particularly large response to cold stress. *FBS1* knockout (KO) lines were obtained and microarray and qPCR experiments were run to examine differences in gene expression between KO and wild type (WT) plants during cold stress. It was found that KO plants overexpressed anthocyanin compounds during cold stress, which suggests that KO plants are not capable of dealing with cold stress properly. qPCR results suggest that the *FBS1* response to cold stress is independent of the well-studied CBF cold response pathway. Microarray data revealed that many genes involved in Jasmonic Acid and biotic stress response were misregulated in the KO line during cold stress. Taken together, these results suggest that *FBS1* plays an important role in both abiotic and biotic stress responses.

CATHERINE KIM

11 am – 12 pm

Moderator: Eric Haskell

Session B5 French

Humanities 201

HANNAH ROSE SWAN

French

Advisor: France Lemoine

Co-advisor: Claire Nettleton

Corpus Intactum: La Subversion Corporelle Féminine des Constructions de Dualité et d'Objectivité du Discours Colonialiste dans "Le Pied de momie" et "Le Roman de la momie" de Théophile Gautier

In "Corpus Intactum," I explore the possibility for the subversion of orientalist narratives in Théophile Gautier's "Le Pied de momie" and "Le Roman de la momie." Gautier's works demonstrate the beginnings of a colonialist critique, but his capacity for subversion is ultimately hampered by the constraints of popular discourse. I argue, nevertheless, that through a figurative conflation of text and the feminine mummified body, Gautier subverts systems of domination within orientalist academic discourse.

MARIEL DUNIETZ

French Studies & Middle Eastern Studies

Advisor: Fazia Aitel

Co-Advisor: Andrew Aisenberg

Marseille en trompe l'œil: la marginalisation de sa population d'origine nord-africaine

Marseille has been upheld as a success story of French immigration policy due its ability to successfully integrate inhabitants of North African origin. While Marseille has largely escaped the social unrest found in other French cities, its large North African population still faces everyday discrimination. This thesis challenges Marseille's newfound positive reputation by highlighting the social issues that North African immigrants living there still face and by analyzing the root causes of their marginalization.

MIKAYLA RAYMOND

French

Advisor: Eric Haskell

Co-Advisor: France Lemoine

Le Nationalisme et l'Identité Nationale dans la Préservation des Jardins Historiques: Vaux-le-Vicomte, le Potager du Roi, et Champ de Bataille

This thesis explores the ways in which nationalism and national identity play into the preservation process of French historic gardens. In the case of the gardens of Vaux-le-Vicomte, le Potager du Roi, et Champ de Bataille, the preservation of these sites prioritizes, as is often the case, narratives concerning the French monarchy and André le Nôtre, France's most celebrated garden designer, over narratives which fit less squarely into the French cultural framework.

VAISHALI RAVI

French

Advisor: Thierry Boucquey

Co-Advisor: Kerry Odell

CULTURAL ASSESSMENT OF PATERNITY LEAVE IN FRANCE, BELGIUM, LUXEMBOURG AND THE USA

Through increased paternity leave rights, France, Belgium and Luxembourg have come to better support women in the workplace and in the household. Culture and tradition play a big role in women's decision to participate in the labor market. I uncover how effective paternity leave is in its respective country based on female labor force participation, wage gap and other indicators. Using francophone Europe, I outline the benefits the US forgoes by excluding paternity leave.

11 am – 12 pm

Session B6 Politics

Humanities 201

Moderator: Sumita Pahwa

MICHAELA MOFFETT

Politics & International Relations

Advisor: Nancy Neiman-Auerbach

Co-Advisor: Sumita Pahwa

Building Bridges: An Evaluation of Urban Planning Interventions in Divided Cities

This thesis evaluates how effectively urban planning interventions transform socio-spatial division. Delineating interventions by the physical transformation they effect, this thesis focuses on six interventions in Belfast and Mostar from 1969 to 2008. Findings indicate that segregation perpetuates inter-group conflict; integrated spaces fail to impact conflict when they bypass contested areas; and micro-spatial projects have the greatest potential to transform socio-spatial division.

TEESTA BHANDARE

Legal Studies

Advisor: Thomas Kim

Co-Advisor: Mark Golub

Someone Else's Honor: Women as Repositories of Male Honor and Their Subsequent Vulnerability to Sexual Violence in India

This article seeks to uncover the historical trajectory of the discourse regarding women as repositories of male honor in Indian society and whether there has been a change in this discourse. Through a historically oriented comparative study of two case studies it draws attention to the fact that this perception of women has made them extremely susceptible to sexual attacks from members of opposing communities. At the time of Partition, India witnessed large scale religion-based rapes where men of one religion attempted to assert their dominance over another religious community by raping the women of the latter community. Today the use of rape as a means of power assertion is still prevalent but now it is upper caste men who are seeking to assert their dominance over lower caste communities. This article believes that a combination of legal and social problems create a discursive framework that works against the sexual safety of women.

CAMI CAMPBELL

11 am – 12 pm

Session B7 Athletics

Humanities Courtyard

Molly Freed	Soccer	Claire Shum	Soccer
Rebecca Gold	Lacrosse	Hilary Slauson	Lacrosse
Madeleine Hurlbut	Lacrosse	Kaitlyn Spees	Cross Country, Track & Field
MacKenzie Leake	Swimming	Laura Wessbecher	Lacrosse
Kaela Nurmi	Swimming	Taia Wu	Cross Country, Track & Field
Shaina Raskin	Golf	Tracy Yao	Cross Country, Track & Field

12:00 – 1:30 Malott Commons – Taco Bar for lunch & chocolate bread pudding, strawberries & whipped cream for dessert

C Sessions

1:30 pm – 2:30 pm Session C1 Feminist, Gender, & Sexuality Studies Humanities 120
Moderator: Piya Chatterjee

HELENA MIETKA

Feminist, Gender, & Sexuality Studies

Advisor: Piya Chatterjee

Co-Advisor: Susan Castagnetto

White Feminist Tears: Understanding Emotion, Embracing Discomfort, Exploring Dominant Femininities at Scripps College & Stepping Towards Critical White Anti-Racist Feminism

In this thesis, I traced my personal journey and, through my own experiences, outlined the types unlearning and conversations necessary to make the move towards anti-racism. With a focused look on specific aspects of feminist history, Scripps College as a location was historically contextualized. This allowed for an exploration of its student body, a look at the ways in which traditional formations of victimhood and femininity necessarily operate within this space. White students who claim the label feminist add complexity to our space, though we often shed caustic white tears when confronted with issues of race and privilege. Their reactions to conversations of race can be traced back to the historic and gender over-determined systems of domination and victimhood that produce an emphasis on individual emotion. Finally, different ways of having difficult conversations are discussed, with a focus on multicultural competence, along with detailed understandings of why those conversations are necessary. In conclusion, I try to envision a kind of feminism that I would like myself and my peers to continue to work for, and emphasize the type of education and sustained discomfort that one must undergo in order to continue their awareness and work.

LAUREN MITTEN

Gender & Women's Studies & Environmental Analysis

Advisor: Mary Ann Davis

Co-Advisor: Emily Wiley

Phthalates: Science, Advocacy, and Biomonitoring

Phthalates are chemicals that can leach from everyday products and into people, causing health problems like asthma and obesity. Using oral history interviews with anti-phthalate advocates, I compiled a history of phthalate advocacy, critiquing that advocacy through a feminist lens. Analyzing this history alongside phthalate exposure data for a representative sample of the US population suggests that advocacy around specific phthalates is effective in reducing exposure to those phthalates, in other words, phthalate advocacy works.

GABRIELA AL-SHAMMA

Feminist, Gender, & Sexuality Studies

Advisor: Piya Chatterjee

Co-Advisor: Mary Ann Davis

Our Bodies Below the Belt: Navigating Agency in Childbirth in the Contemporary United States

Within this thesis I examine Western practices and conceptualizations of childbirth from three distinct angles, with the goal of better understanding how one can negotiate agency in contemporary childbirth. First, I outline the history of the medicalization of childbirth in the West, using a reference frame of the famous second wave feminist text, *Our Bodies, Ourselves*. Next, I conceptualize agency in the context of contemporary childbirth, first defining the ‘agency’ that I am working with, and then outlining some of the factors that play into the negotiation of agency in one’s childbirth; some of these factors include race, class, location, and information provided about specific medical and physical procedures. Finally, I destabilize the hegemonic Western understanding of labor and birth pain by situating pain as culturally constructed and contextually specific. I provide a few examples of ways in which we can reconceptualize pain in a way that situates it as a unique experience for each individual. The end goal of this thesis is to contextualize current childbirth practices within a specific history of medicalization, and to illustrate the complex nature of agency, but the importance of it to a childbirth in which the mother feels as safe and supported as possible.

1:30 pm –2:30 pm

Session C2 English

Humanities 102

Moderator: Warren Liu

RACHEL GRATE

English

Advisor: Thomas Koenigs

Co-Advisor: Sarah Raff

Love at First Sight? Jane Austen and the Transformative Male Gaze

This thesis claims that the gaze is central to the courtship process in Austen's novels, and illuminates our understanding of the gendered power dynamics central to these relationships. While theories of the gaze typically position men as having all the power, Austen subversively

illustrates that women can also be subjects of the gaze and transform through it. However, limits exist to their power, for while men transform through projection, women transform through perception.

EMILY KOLPIEN

English

Advisor: Marissa Nicosia

Co-Advisor: John Peavoy

Queer Paradise Lost: Reproduction, Gender, & Sexuality

This thesis investigates John Milton's Paradise Lost as a queered space, highlighted through its acts of reproduction, sexuality, and gender. I discuss the queered landscapes of Hell and Chaos, the queer births of Eve and Sin, Eve's queer narcissism, and how the poem is a space that harbors both queer modes of reproduction and a misogynistic treatment of its female characters. I focus my argument on a close reading of the poem, while drawing from pre-existing feminist criticism in order to ground myself in the field.

CLEA HARRIS

English – Creative Writing

Advisor: Kimberly Drake

Co-Advisor: Mary Hatcher-Skeers

The Germ Theory of Dystopias: Fears of Human Nature in 1984 and Brave New World

This thesis examines early- and mid-20th century dystopian novels through the lens of germ theory. Specifically, it explores the ways that George Orwell's 1984 and Aldous Huxley's Brave New World contend with the ideological ramifications of the notion that invisible, toxic Others pervade human existence. This thesis argues that dystopian authors portray love and individuation as two naturally occurring pathogens that threaten the survival of existing society.

KATHRYN BRASTOW

1:30 pm –2:30 pm

Moderator: Trang Tran

Session C3 Media Studies

Humanities 202

ANJALI GUPTA

Media Studies

Advisor: Trang Tran

Co-Advisor: Elizabeth Affuso

Transmedia Narratives and Twitter Fiction

Beneath Still Waters is an original transmedia mystery narrative that explores the possibilities of an interconnected media landscape as a unique platform for creative use and audience engagement. Transmedia storytelling refers to the building of a fictional world comprised of multiple parts across different platforms, where each component makes a valuable contribution

to the whole. This project uses the tools and strategies of social media to tell a complex and interactive multi-platform story.

LARKIN SHELDON

Media Studies: Film & Video

Advisor: T. Kim Trang Tran

A Correspondence

A 12 minute video structured as a correspondence between Seattle and Los Angeles as if they were personified discussing what it means to be a developing/growing city and the responsibilities it entails. Visually I present a combination of footage from L.A. and Seattle to create an "impossible city" making the viewer second guess from where the footage originates, emphasizing the difference between learning about a city from others and learning about a city through experience. In "A Correspondence" I aim to provide an experience that forces the viewer to realize their own interactions with cities and how their view is shaped by their specific experiences, making everybody's view of a city subjective.

ALEXANDRA WESTON

Media Studies

Advisor: Nancy Macko

Co-Advisor: T. Kim-Trang Tran

Valkyries Handbook: The Representation of Women in Comics

This thesis delves into the surprisingly uniform treatment of the female character in comic storytelling, across all media, and will examine how this has evolved over time. It further explores what these changes represent for the stories, the characters, the creators, and the readers. The focus of the production aspects of this project is on the curation and development of a feminist perspective on comic books, their narrative and the industry that forms them.

1:30 pm –2:30 pm

Session C4 Music

Balch Auditorium

Moderator: Hao Huang

ARIANE GUSHUE

Music

Advisor: YouYoung Kang

Co-Advisor: Gayle Blankenburg

Self-Expression Through The String Quartet: An Analysis of Shostakovich's String Quartets No. 1, No. 8, and No. 15

Both heralded as a national hero and criticized as a dissident, Dmitriï Dmitrievich Shostakovich is most famous for his symphonic works. Despite the widespread interest in Shostakovich the composer, Shostakovich the individual remains obscure. Although the majority of contemporary scholarship on Shostakovich focuses on his symphonic works, this thesis focuses on his string quartets in order to reveal meaningful insight into his personal life. Analyzing and biographically

contextualizing String Quartets No. 1, No. 8, and No. 15 reveal how Shostakovich systematically turned to the string quartet as an outlet for greater self-expression.

SARAH CHUNG

Music & Economics

Advisor: Rachel Huang

Co-Advisor: David Cubek

Violin Senior Recital: Works by Ludwig van Beethoven, César Franck, Claude Debussy, Amy Beach, and Pablo de Sarasate

This thesis is a program of music covering the Classical, Romantic, and 19th Century eras of music on the violin. It includes different forms of works such as a concerto, sonata, and short pieces. The composers in the program include Beethoven, Franck, Beach, Debussy, and Sarasate. While differing in the styles of the respective periods of classical music in history, each piece additionally differs in the emotions it evokes with the personal context of each composer.

1:30 pm –2:30 pm Session C5 Art Conservation & Art History Humanities 203
Moderator: Mary MacNaughton

KAELA NURMI

Art Conservation

Advisor: Mary MacNaughton

Co-Advisor: Frances Phol

Challenges Surrounding the Conservation and Replication of Eva Hesse's Sculpture

The sculpture of German-born American artist, Eva Hesse (1936-1970), presents an extreme example of the conservation challenges of contemporary art. This thesis examines the challenges surrounding the conservation and replication of Eva Hesse's large-scale latex and fiberglass sculptures. The latex and fiberglass materials that captivated Hesse in the 1960s are compromising the structural integrity of her large-scale sculptures today. As a result, the replication of Hesse's sculptural works is necessary to represent her artistic vision.

ANA SIDO

Art Conservation & French Studies

Advisors: Mary MacNaughton

Co-Advisor: Eric Haskell

Making History: How Art Museums in the French Revolution Crafted a National Identity 1789-1799

This thesis considers the creation of art museums during the French Revolution (1789-1799) and why their existence was critical to the revolutionary government's attempts to unify the country and transmit Enlightenment values. Although this time period was marked by rampant vandalism, art conservation was given an unprecedented importance. Two museums will be examined

closely: the Musée Central des Arts in the Louvre palace and the Musée des Monuments Français in a former convent.

MEGHAN GALLAGHER
Art History & Media Studies
Advisor: Mary MacNaughton
Co-Advisor: Pryanka Basu

Claiming Images: The Production and Preservation of Desire in Richard Prince's Re-Photography

This thesis explores the re-photography of contemporary artist, Richard Prince. Using Lacanian theories of the gaze and of the drive cycle, it establishes desire as the central theme of Prince's work. It looks primarily at the Cowboys, Girlfriends, and New Portraits, in order to combat the dominant perception of Prince's work as critical commentary on contemporary consumer culture.

1:30 pm –2:30 pm Session C6 Environmental Analysis & Humanities 105
Environment, Economics, & Politics (EEP)

Moderator: Zhaohua Tang

MOLLY FREED
Environmental Analysis
Advisor: Paul Faulstich
Co-Advisor: Roberto Pedace

A Call for Bioregional Governance in Cascadia: Shaping an Ecological Identity in the Land of Falling Waters

This thesis argues for a shift to bioregional-scale environmental governance in Cascadia (the Pacific Northwest) via an interstate compact. Using the Great Lakes bioregion as a comparable case study, this thesis goes on to examine the effects of neoliberalization on resulting cross-border institutions. It ultimately concludes that a shared ecological identity is imperative for preserving the ethos of bioregionalism in future policymaking rather than just the scale, and crafts a communications framework to this end.

JESSICA NG
Physics
Advisor: Branwen Williams
Co-Advisor: Diane Thompson

Assessing calibrations of coralline algal $\delta^{18}\text{O}_{\text{alg}}$ to climate across the habitat range

The oxygen isotope ratio of encrusting coralline algae ($\delta^{18}\text{O}_{\text{alg}}$) is a developing climate proxy for crucial high latitude oceans. I assess how well constrained the $\delta^{18}\text{O}_{\text{alg}}$ -climate relationship is among diverse environments. While the timing and nature of the climate signal vary across sites, I find significant calibrations of $\delta^{18}\text{O}_{\text{alg}}$ to either temperature or salinity at each site, supporting the

use of $\delta^{18}\text{O}_{\text{alg}}$ for investigating high latitude marine climate patterns and history.

DEVYN PARKS

Environment, Economics, and Politics

Advisor: Branwen Williams

Variations in stable isotopic composition of gorgonian corals in southeastern Alaska

Primnoa pacifica corals from Alaska were used as an environmental proxy to examine nutrient patterns and variations in the ocean and atmosphere over time. We examined the $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ variations between each sample and compared the information to previously recorded data. The approximate calculated ages of GB1 and GB2 were 28.2 and 40.6 years respectively. The $\delta^{13}\text{C}$ results were inconclusive and need further work, and $\delta^{15}\text{N}$ results showed some variation between samples.

ANNEMIEKE RUINA

Environmental Analysis

Advisor: Donald McFarlane

Co-Advisor: Colin Robins

*Estimating the population size of wrinkle-lipped free-tailed bats, *Tadarida Plicata* in Borneo using image counting techniques*

Bat populations in South Asia have not been well-monitored. Imagery can aid the difficult task of estimating large bat population sizes. This study aimed to estimate the population size of *Tadarida plicata* in the Gomantong Caves (Borneo). Images were used to determine flight speed and number of bats to emerge from the cave. The result is approximately half of previous estimates, emphasizing the importance of continued monitoring. ImageJ particle analysis was deemed an effective tool.

11 am – 12 pm

Moderator: Yuval Avnur

Session C7 Philosophy

Humanities 103

DEVIKA AGRAWAL

Philosophy

Advisor: Dion Scott-Kakures

Co-Advisor: Susan Castagnetto

The Impulse to Punish: A Critique of Retributive Justice

This thesis explores the moral justifications behind two opposing systems of punishment: the U.S. and Norway. I argue that retributivism is the only plausible theory that can ground the U.S. penal practices, but I offer a series of objections to demonstrate its invalidity. In need of a radically different perspective on punishment, I argue that the Norwegian prison system is grounded in a hybrid theory of consequentialism that aims to enhance our human rights.

ALEXANDRA RONCO
Philosophy & French Studies
Advisor: Yuval Avnur
Co-Advisor: France Lemoine

MINDS, BRAINS, AND ANIMALS, OH MY!
An Examination of Parfitian Personal Identity Through Cartesian Dualism.

In this paper I establish the intellectual background, framework, and implications of Cartesian dualism and use this theory to examine Derek Parfit's concept of personal identity in, "We Are Not Human Beings." I argue that Parfit's examples, definitions, and "intuitions" lend themselves easily to the Cartesian philosophy and, despite his denial of dualism's relevance, his theory is an offshoot of it. He should consider the compatibility between the two arguments, since doing so could avoid many of the objections that have been brought against him.

D Sessions

2:45 pm –3:45 pm **Session D1 Art** **Ruth Chandler Williamson Gallery**
Moderator: Susan Rankaitis

SUSANA FERRELL
Art
Advisor: Professor Rankaitis
Co-Advisor: Professor Tran

Pattern and Disorder: Anxiety and the Art of Yayoi Kusama;
The accompanying art projects are entitled "Mala," and "Ebb."

"Mala" is in itself an obsession. It represents the peak of my obsessive compulsive disorder, circa 2011, when I was eighteen years old. Personal determination was the only way out of this disorder, and I recall that determination through the obsessive and repetitive drawing of approximately 1,000 ink-on-paper frames, paralleling the repetitive actions that were characteristic of my OCD. The intention of this animation is to communicate the discomfort that those with severe OCD experience.

LILY ALAN
Art
Advisor: Susan Rankaitis
Co-Advisor: Julia Haft-Candell

Interior, Concept & Clay: A Study of Self and Space

Interior, Concept & Clay explores the word "interior" as both a physical space and a sense of self. The suspended sculptures encourage viewers to place their heads inside the forms while the peepholes allow them an atomistic, specific frame of reference where details take on new

perspectives and one's sense of self-specificity is heightened. The effect is a sensation similar to being inside of one's own head—looking outward as a means to feel inward.

MABELLE BONG

Art/Psychology

Advisor: Susan Rankaitis

Co-Advisor: Phung Huynh

Wonders of the Amateur Orient

This thesis examines the exotification of Asian women in American culture. Paint, fake silk, and colors are manipulated to create grotesque, seductive works and cultivate a sense of discomfort in the audience. The goal is to pose a critique of the exotification of Asian women, to begin an uncomfortable conversation about race and gender, and to depict the violent reality that all Asian/American women must confront in order to understand their place in American society.

HALEY ROSS

Art

Advisor: Susan Rankaitis

CHAINS: PROCESS, FORM, AND THE PSYCHOANALYTIC

Unpredictability, noun: The inability to foresee; lacking predictability.

This project is a composition of the intersectionality between process, structure, and materiality; an exploration of personal confictions with feelings of constraint, confinement, and control.

TEAGAN BLAIN-ROZGAY

Art

Advisor: Susan Rankaitis

Co-Advisor: Julia Haft-Candell

My paper was called Cairns: A Journey into Art and Nature but my project is called Balance

My thesis paper looks at the different influences behind my senior art project. It looks at the artists that influenced me: Robert Arneson, Viola Frey, Andy Goldsworthy and Sally Mann. It also discusses the main focus of my project which was my journey of self-discovery in New Zealand. My current project is made up of large scale ceramic sculptures that are meant to mimic landmass forms that one might find in a fantasy land.

SEANNA ROTHMAN

2:45 pm –3:45 pm
Moderator: Julia Liss

Session D2 American Studies

Humanities 105

OLIVIA BUTAINE
American Studies
Advisor: Julia Liss

Howls on the Heath: Shakespeare Ensembles in American Prisons

This thesis examines the use of Shakespeare Ensembles in American Prisons as a form of rehabilitation programming. Research draws from performance theory, prison abolition theory and interviews with participants.

ANNA MARBURGER
American Studies
Advisor: Rita Roberts

Queer Content in Science Fiction Allegory and Analogue: Is It In Disguise?

Science fiction examines our society by imagining a different version of ourselves. Even in these imaginary worlds, real-life forces of oppression are absolutely present, especially in for-profit texts. Both Bryan Singer's "X-Men" films and James Roberts' "More Than Meets the Eye" are sci fi texts with queer content in their narratives. This thesis examines how imagining another version of our society challenges the status quo and yet simultaneously reinforces it.

LAUREL SCHWARTZ
American Studies
Advisor: Julia Liss
Co-Advisor: Mark Andreievic

#FLAWLESS: The Intersection of Celebrity Culture and New Media in the Modern Feminist Movement

Communities have organized around gender equality in modern America for the last century. The convergence of celebrity culture and social media helps communities rebuild and reconstruct the historically fragmented feminist movement.

HILARY SLAUSON
American Studies
Advisor: Rita Roberts

This Land is Your Land, This Land is My Land: An Analysis of Presidential Immigration Rhetoric Employed by Ronald Reagan and Bill Clinton in the "Nation of Immigrants"

The functions and limitations of presidential immigration rhetoric are explored in this thesis, using Presidents Ronald Reagan and Bill Clinton as examples to show development of language across time and across juxtaposed political parties. I conduct a close reading of their public speech, using secondary sources to guide my analysis. Contradictory and ambiguous presidential

immigration rhetoric employed to appeal to multiple constituencies has left immigration legislation unproductive and has had harmful consequences for immigrant communities.

2:45 pm –3:45 pm

Session D3 Anthropology

Humanities 121

Moderator: Seo Young Park

DANICA HAROOTIAN

Anthropology and Middle East & North Africa Studies

Advisor: Seo Young Park

Co-Advisor: Lara Deeb

Contextualizing the Elimination of Syria's Chemical Weapons: The Nonproliferation Regime, U.S. Policy, and Cultural Assumptions of the Middle East

This project examines the elimination of Syria's chemical weapons during the Syrian civil war and contextualizes this event alongside the international nonproliferation regime and the history of U.S. weapons of mass destruction policy. By examining the U.S.-Middle East relationship, WMD policy, and recent United Nations Security Council documents, I argue that nonproliferation policy presents weapons as a mode of Othering and employs cultural assumptions about a state and its weapons to justify nonproliferation intervention.

AVALON HARDER

Anthropology

Advisor: Seo Young Park

"We're All Jock Tamson's Bairns": Scottish Ethnic Identity and Nationalism in America

This paper explores how Scottish-Americans have contributed to Scottish national dialogues by laying roots for future generations in the form of early ethnic organizations as well as religious and social practices, engaging in discussion about what it means to be both white and ethnic, sustaining forms of traditional culture through Scottish Highland Games, and interpreting their personal experiences with ethnic and national identity as a way of negotiating their relationships with Scottish nationalism. The 2014 referendum on Scottish independence offered historical circumstances that were both relevant and exhilarating to explore these topics under. This exploration incorporates both interview and survey data gathered from Scottish-Americans.

TARYN RIERA

Anthropology

Advisor: Seo Young Park

Co-Advisor: Mary Ann Davis

Online Feminisms: Feminist Community Building and Activism in a Digital Age

This thesis explores both what feminism looks like in a digital age, as well as how the Internet and technology inform the ways in which feminists interact, build communities, and form identities. I found that online feminist spaces are built as communities of validation and support, education and empowerment, as well as spaces of radicalization and contention. Ultimately my

thesis leads toward a new understanding of feminist activism that incorporates the unique characteristics and abilities of online feminism.

CLAIRE SHUM

Anthropology

Advisor: Seo Young Park

Domestic Violence Advocacy in California: Social Influences, Legal Limitations, and Client-Centered Practice

This thesis examines domestic violence in California by tracing historical, social, and cultural influences. Our society's definition and perspective on the issue can limit the effectiveness of the law and perpetuate the abuse. Conducting interviews and participant observation at a local domestic violence agency, I found that advocates use a client-centered approach partnered with the use of boundaries and self care in their work to address these limitations and break the cycle of violence.

2:45 pm –3:45 pm

Moderator: Steve Naftilan

Session D4 Physics & Chemistry

Humanities 120

TAIA SEAN WU

Chemistry

Advisor: Timothy Bertram

Co-Advisor: Nancy Williams

Comparing bulk aerosol profiles in the mixed layer in coastal Los Angeles and the Inland Empire

Characteristic westerly sea breeze carries air over the Los Angeles Basin to the Inland Empire approximately 50 miles inland, directly impacting air quality in both of these two highly polluted regions. As aerosol particles play a critical role in air quality and human health, this study compares the bulk aerosol profiles of the Los Angeles pollution "source" and Inland Empire "receptor" regions during the 2013 and 2014 NASA Student Airborne Research Program (SARP) campaigns onboard the NASA DC-8 airborne laboratory. The source and receptor regions were characterized by a series of missed approaches at the Los Angeles International Airport, Long Beach Airport, and Los Alamitos Army Airfield (coastal sources) as well as the Ontario International Airport, San Bernardino International Airport, and March Air Reserve Base (inland receptors). The aerosol populations in each region were compared, and the changes evolved were analyzed alongside volatile organic compound (VOC) concentrations from Whole Air Samples. Particle size distributions were collected using a Droplet Measurement Technologies Ultra High Sensitivity Aerosol Spectrometer (DMT-UHSAS). Aerosol concentration, mass, and mode diameter increased significantly between coastal pollution source and inland pollution receptor regions in all cases, along with an increase in mode diameter. The observed changes cannot be accounted for by aerosol aging over the Los Angeles basin alone, suggesting new particle emission/formation over this region could be a dominating factor in the changes. Positive

correlations between particle increases at receptor sites and anthropogenic VOC tracers are discussed.

RACHEL BRUNETTI

Physics

Advisor: Christy Landes

Co-Advisor: Scot Gould

Super-Resolution Spatial and Diffusion Properties of Porous Materials Obtained Simultaneously by DESFI

Hydrogels have diverse applications in fields ranging from regenerative medicine to drug development. However, current imaging techniques, such as scanning electron microscopy and atomic force microscopy, require the hydrogel be removed from its native aqueous environment and subjected to harsh conditions for characterization, affecting sample structure. We have developed a fluorescence imaging technique that combines super-resolution optical fluctuation imaging (SOFI) and fluorescence correlation spectroscopy (FCS) theory to image hydrogels on a super-resolution (< 250 nm) level and elucidate information about transport properties. By correlating fluorescence signals emitted by photoluminescent probes diffusing within sample pores, we can use persistence of spatial signals to determine pore shape and size, informing what we know about overall structure. The structural information can then be fused with diffusive properties extracted from autocorrelation curves to understand transport behavior across the sample. Super-resolution images produced by the correlation analysis reveal the spatial heterogeneity underlying agarose structure and successfully encode transport properties. The ability to understand these properties simultaneously in an uncompromised environment presents opportunity for a deeper understanding of materials used in filtration applications and opens the door for the optimization of these materials. Our correlation analysis allows for the investigation of structure-function relationships in depth without expensive chemical labeling and the need for idealized experimental set ups, namely high signal to noise ratios and low particle density, making it a promising technique for biological applications.

VICTORIA KIM

Physics

Advisor: David Tanenbaum

Co-Advisor: Scot Gould

Fabrication of Plasmonic Nanostructures using Lithography

With increasing energy demands and decreasing fossil fuel supplies, the focus has shifted to finding and improving renewable and sustainable energy. Thin-film solar cells have been of great interest as a source of renewable energy, because they are easier and cheaper to mass-produce. This thesis focuses on developing a fabrication process for plasmonic nanostructures, which can be applied to the surface of solar cells to enhance light absorbance resulting in increased solar cell efficiency.

MACKENZIE LEAKE
Computational Science
Advisor: John Milton
Co-Advisor: James Higdon

Sparse Input Representation in Hierarchical Temporal Memory

This thesis develops a mathematical model for a brain-inspired computational framework called Hierarchical Temporal Memory. This model provides insight into how this framework, like our brains, can both memorize information and make generalizations. One of the challenges of this model is ensuring it holds true to the biology of the neocortex while representing inputs effectively. This thesis examines the numerical parameters required to ensure similar inputs have similar representations and different inputs have different representations.

2:45 pm –3:45 pm

**Session D5 Organizational Studies
Sociology & Writing**

Humanities 101

Moderator: Kimberly Drake

TORI SEPAND
Organizational Studies
Advisor: Jeff Lewis
Co-Advisor: Rita Roberts

The Black Ceiling: Barriers to Career Advancement for African American Women in the US

This qualitative study seeks to address how black women experience the double discrimination of race and gender within their organizations' cultures, policies, and practices. Using a combination of interviews and literature review, this study discovers that for those methods to work, there needs to be more structure around them and an understanding of race and gender biases on behalf of the organization and its most privileged employees.

ALEXANDRA APRIL
Sociology
Advisor: Phil Zuckerman
Co-Advisor: Thomas Kim

Civic Participation: Factors That Drive an Individual to Become Politically Involved

This thesis examines the lived experiences of individuals, who identify as politically active volunteers, in order to gain a better understanding of the motivations and factors that drive volunteerism in campaigns. By interviewing ten individuals in Colorado's 5th Congressional District, this thesis argues that party affiliation, religious values, and interactions with campaign staff greatly affect an individual's likelihood to dedicate his or her time and energy as a political volunteer.

CHRISTIANA HO
Creative Writing
Advisor: Kimberly Drake
Co-Advisor: Kevin Moffett

The Intersection of Women, Aestheticism and Dance in the Scripps College Dance Department

My creative writing: nonfiction thesis performs a genealogy of the Scripps College Dance Department. I explore the current obstacles facing the dance department at Scripps through an analysis of this particular institution's history along with the interconnected histories of various social movements surrounding women's bodies, women's colleges and dance beginning at the turn of the twentieth-century. Because my thesis advocates for changes to the Dance Department, I have used an accessible creative nonfiction style, incorporating my own experiences, interviews with two veteran members of the Scripps College community, and research on relevant historical moments, employing writing techniques from various nonfiction genres. This thesis foregrounds the importance of aesthetics both in the form of this thesis and within academic understandings of dance. It was through aesthetics that dance found a place in higher education, and perhaps it is through an understanding of the relationship between aesthetics, dance, and women's bodies that the Scripps Dance Department's current state can be understood.

2:45 pm –3:45 pm
Moderator: Jennifer Ma

Session D6 Psychology

Humanities 204

ISABELLE KAPLAN
Psychology
Advisor: Jennifer Ma
Co-Advisor: Kevin Carlson

Context-Dependent Insecure Attachment as a Product of Parental Dynamic

This thesis introduces Context-Dependent Insecure Attachment (C-DIA), or that insecure attachment behavior in romantic relationships is dependent on dynamic with the partner, and behavior is linked to childhood relationships. Studies 1 and 2 indicated that those with anxious and avoidant attachment were likely to report experiencing C-DIA and having parents with a contrasting dynamic and attributes. Results of Study 3 were not significant, but the sample did not have enough variance for a definitive conclusion.

CAROLYN LASCH
Psychology
Advisor: Jennifer Ma
Co-Advisor: Kevin Carlson

Personality and Creativity Correlates in Adults with Childhood Imaginary Companions

Childhood imaginary companions' (ICs) correlates with adult personality and creativity were examined. It was hypothesized that ICs would be positively correlated with adult creativity, and this relationship would be mediated by certain personality attributes. Participants answered questions about themselves, as well as IC experiences. Further analyses of IC experiences can help explore why different types of ICs are created, and how their presence impacts creators' personality and creativity in adulthood.

ANNINA PEARCE

Psychology

Advisor: Stacey Wood

Co-Advisor: Alan Hartley

Depression and the Risk of Elder Financial Exploitation: Mediating Effects of Physical Health and Loneliness

In recent years financial exploitation has become an increasingly relevant issue among the older adult population. The current study investigated how depression, poor physical health, cognition, and loneliness work together to explain older adults' risk of financial abuse. Structural equation modeling with AMOS revealed physical health and loneliness acted as mediating variables in the effect of depression on financial exploitation. Understanding specific mediating variables may allow for more targeted interventions in the future.

KAIXIN BAO

Psychology

Advisor: Michael Spezio

Co-Advisor: Alan Hartley

Language Mediates the Experience and Expression of Emotions Among Bilinguals

This thesis investigated the relationship between linguistic/cultural differences and variations in emotional experience and expression among bilinguals. Chinese-English bilinguals who were exposed to both Chinese and American cultures were recruited to complete two language sessions (Chinese and English). For each session, participants watched an emotion-eliciting film clip, reported affect changes during the film-watching process, and wrote about a past experience of guilt or nostalgia. The written responses were examined for affective valence and narrative styles.

2:45 pm –3:45 pm

Moderator: Winston Ou

Session D7 Mathematics

Humanities 102

TATIANA BRADLEY

Mathematics

Advisor: Lenny Fukshansky

Co-Advisor: Chris Towse

"A Cryptographic Attack: Solving the Discrete Logarithm on Elliptic Curves of Trace One"

The crux of elliptic curve cryptography, a popular mechanism for securing data, is an asymmetric problem. The elliptic curve discrete logarithm problem, as it is called, is hoped to be generally hard to solve in one direction but not the other, and it is this asymmetry that makes it secure.

This talk gives an introduction to the mathematics (and some of the computer science) necessary to understand and compute an attack on the elliptic curve discrete logarithm problem that works in a special case. The algorithm, proposed by Nigel Smart, renders the elliptic curve discrete logarithm problem easy in both directions for elliptic curves of so-called "trace one." The implication is that these curves can never be used securely for cryptographic purposes. In addition, it calls for further investigation into whether or not the problem is hard in general.

ELEANOR DWYER
Economics & Mathematics
Advisor: Roberto Pedace
Co-Advisor: Winston Ou

Price, Perceived Value and Customer Satisfaction: A Text-Based Econometric Analysis of Yelp! Reviews

We examine the antecedents of customer satisfaction in the restaurant sector, particularly in relation to restaurant price level. Price level is considered both as a factor in the budget constraint and as a quality signal. Using Latent Dirichlet Allocation, we extract latent topics from the text of Yelp! Reviews. Then we analyze the statistical relationship between these topics and satisfaction, which is measured as the difference between review rating and user average review rating.

BREEANA JOHNG
Mathematics
Advisor: Lisette G. de Pillis

A Mathematical Model of the Effect of Aspirin on Blood Clotting

In this paper, we provide a mathematical model of the effect of aspirin on blood clotting. The model tracks the enzyme prostaglandin H synthase and an important blood clotting factor, thromboxane A₂, in the form of thromboxane B₂. Through model analysis, we determine conditions under which the reactions of the enzyme are self-sustaining. Through numerical simulations, we demonstrate that the model accurately captures the steady-state chemical concentrations of interest in the blood, with and without aspirin treatment.

3:45 p.m. – 5 p.m. Scripps Tea “Celebrating Our Seniors” Margaret Fowler Garden

5 p.m. – 6 p.m.

Seniors vs. Faculty / Staff Soccer Game

Tiernan Field House

Co-Captains (Faculty): Thierry Boucquey & Roberto Pedace

Captain (Students): Molly Freed

Announcers: Amy Cannistraro and Caroline Miller