University of California

President’s and Chancellor’s
Postdoctoral Fellowship Programs

PRESENTATION SCHEDULES

2018 Academic Retreat
Saturday, April 14, 2018

UCLA Lake Arrowhead Conference Center
Group I

Pineview Room

9:00 – 9:40  SA Smythe  
(Italian postcolonial literature and sociopolitics, Black European cultural studies, migration and citizenship)  
Death by Numbers: On Dispossession and the Black Mediterranean

9:45 – 10:25 Fernando Serrano  
(Colonial Latin American History, Mining and Labor History, Ethnohistory)  
To Be or Not to Be: Challenges to Indigenous Ethnic Identity in Colonial Guanajuato

10:30 – 11:10 Erin Gray  
(critical theory, political violence, aesthetics, cultural studies, feminist studies, historiography, poetics, the black radical tradition)  
America’s ‘Concrete Universal’: Excising Lynching from The Family of Man

11:15 – 11:55 Wendy Sung  
(race and visuality, spectatorship and memory, digital media studies)  
Spectacles in the Black Mirror: New Media Technologies, Racial Violence, and Visual Evidence

12:00 – 1:00 LUNCH

1:00 – 1:40 Michael Accinno  
(nineteenth century, disability studies, music)  
“If sight be from our eyes withdrawn”: John Sullivan Dwight and Music Education at the Perkins School for the Blind

1:45 – 2:25 Rebecca Chaleff  
(dance studies, performance studies, queer theory, critical race theory, temporality and performance, legacy, postmodernism)  
Rethinking Choreographic Legacies: Bloodlines and the Anxiety of Postmodern Genealogies

2:30 – 2:45 Wrap-up and Networking

2:45 – 3:10 Visit other Presentation Rooms

3:30 Free Time!
Group I

MODERATORS
Gina Dent, African and Diasporan Studies, legal theory, cultural studies, literature
Mariam Lam, Literature, Cinema, Visual Arts, Race, Sexuality, Global Studies

AUDIENCE MEMBERS
Neda Atanasoski, race and technology, religion, war and militarism, US imperialism
Christine Balance, performance studies, Filipino/Filipino American studies, queer/feminist studies
Susan Carlson, modern drama, political theatre, women’s studies
Xochitl Chavez, Cultural Performance, Music, Migration, Indigenous Communities, Latin America
Bridget Cooks, Art History, African American Studies, Black Visual Culture
Jeramy DeCristo, Black Studies, Sonud Studies, Queer Studies, Feminist Theory
Yvette Gullatt, Literature
Joshua Guzman, Performance studies, Latino studies, queer studies
Emily Hue, Asian American studies, feminist/queer studies, diaspora, humanitarianism, visual culture
Nicholas Mitchell, Feminist Theory, Black Cultural Studies, Critical University Studies
Dana Murillo, Latin America, colonialism, history, native peoples
Robert Romero, History, Law, Religious Studies
Felicity Amaya Schaeffer, Feminist Critical Science and Technology Studies, Migration/Border Studies
Setsu Shigematsu, Gender Studies, Cultural Studies, Asian/American Studies, Ethnic Studies
Eric Stanley, trans/queer studies, postcolonial theory
Death by Numbers: On Dispossession and the Black Mediterranean

In this presentation, Dr. SA Smythe addresses recent challenges in the regulation of legal residency and pathways to citizenship in Italy and the continued trend of right-wing ultra-nationalist electoral victories throughout Europe in the wake of recent Italian parliamentary elections. Smythe reads contemporary Black Italian women’s writing to consider the stakes of cultural belonging, human rights, and the Italian literary canon in the constitution of the Black Mediterranean. Thinking alongside Black, Trans, and Mediterranean Studies scholars, Smythe exposes the material and psychological violence of Frontex Europe and the legacies of colonial and fascist Italy by discussing the politics of citizenship through cultural production, specifically as pertains to political implications for seconde generazioni individuals, migrants, asylum seekers, Romani people, and others who bear the brunt of the hierarchical pressures of ethnoracial difference under a white supremacist state.

Smythe argues that Italophone migration and postcolonial literatures affirm Blackness and Africanness and resist false heteropatriarchal and antiblack claims about a historically monoracial and monological category called “Europe.” In this category, Italy exists as a borderscape and thus, within the culturally syncretic region of the Mediterranean, it is a highly-contested zone in which the self- initiated crisis of European identity thrives under the guise of a “crisis of migration.” Adapting Cedric Robinson’s analysis of “racial regimes” and Édouard Glissant’s theories on “créolité” and “antillianité,” Smythe theorizes how normative regimes of representation facilitate the death, dispossession, and disregard of lives deemed “other” within this so-called crisis, and posits the Black Mediterranean as a site of resistance and recognition for Black and migrant people that has the capacity for a collective response.
To Be or Not to Be: Challenges to Indigenous Ethnic Identity in Colonial Guanajuato

The dominant role that the ideology of mestizaje has played in Mexico for two centuries has often led to a minimization and even a negation of an indigenous presence in many places of this country. In part, this negation can be explained by the fact that an indigenous identity often came to represent an obstacle to different groups at different times. First, to the Spanish colonists in the colonial period, later to the liberal reformers of the nineteenth century, and eventually to the revolutionaries of the twentieth century. In that way, little by little, a narrative that emphasized a mestizo identity and minimized an indigenous presence came to be prominent in the Mexican imagination and was ultimately adopted as the national ideology.

Guanajuato is considered by many as the quintessential mestizo state in Mexico given its mixture of European and indigenous peoples that occurred during the colonial period. This is due, in part, to the fact that the mining industry required a big labor force, which was not available in the region when silver was discovered in the mid-sixteenth century. What many argue is that this led to waves of migrations by non-indigenous groups that outnumbered and eventually displaced any indigenous groups that remained in the area. However, while it is true that migrations to the region changed its demographic composition, an important fact that has been generally omitted is that those migrating to the region were predominantly indigenous men and women from central and western Mexico that would play an important role in the colonization and population of towns throughout Guanajuato. In this presentation, I will consider the ways in which an indigenous ethnic identity was challenged during the colonial period in Guanajuato and how that has affected our perception of an indigenous presence in the region up to the present.
Why and to what effects did the photograph of the torture by blowtorch of Roosevelt Townes in rural Mississippi in 1937 enter into renewed circulation as part of the Cold War visual landscape? How might this lynching photograph – and photographs of lynching in general – configure the vicissitudes of American family feeling while highlighting the contradictions of domestic ideology and the limitations of liberal humanism during the so-called “great American Century”? In “America’s ‘Concrete Universal’: Excising Lynching from The Family of Man,” I explore the incorporation of the 1937 lynching photograph into Edward Steichen’s modernist Cold War photography exhibition, The Family of Man, as well as the circumstances surrounding Steichen’s removal of the photograph from the exhibition shortly after it opened in 1955 at the Museum of Modern Art. In addition to investigating the historical context of the image’s circulation, I argue that the initial inclusion of the photograph of Townes’ torture and murder in The Family of Man troubled Steichen’s contention that marriage, reproduction, waged labor, and faith in a Christian God were the ideal tools to ensure universal human survival in the anxious racial era of the atomic bomb. I also speculate – in keeping with the aesthetic and philosophical mandate of the exhibition, which Steichen claimed was an aesthetic depiction of universal humanity – what it might mean to conceive of the massacre as representative of a “concrete universal” history. Employing theories of negative dialectical totality, I argue that the excised lynching photograph represents a particular instance of anti-black terror in the Mississippi Delta at the same time that we may glimpse within it an image of the white supremacist social structure that contradicted, in the wake of WWII, U.S. pretensions to global democratic leadership. I read the disappearance of the photograph from the exhibition as a key visual moment in the consolidation of Cold War civil rights and in the global spread of U.S. capitalist hegemony. Finally, I suggest an alternative “Family of Man” that highlights the centrality of anti-black violence to the affective formation of the normative family and to the racialization of the human.
Wendy Sung  
President's Postdoctoral Fellow  
Media and Cultural Studies, UC Riverside  

*Spectacles in the Black Mirror: New Media Technologies, Racial Violence, and Visual Evidence*

Released in December 2014, the UK series *Black Mirror’s* season 2 episode, “White Bear,” provided an unintended resonant critique and eerily prescient comment on the political climate in the US in the context of a growing awareness of #BlackLivesMatter. This talk puts spectacles of the Sandra Bland arrest and *Black Mirror’s* representation of mobile recording technology and black suffering in “White Bear” into conversation to dismantle the techno-utopian narratives associated with technological seeing and the visual. Specifically, I examine the practices of post-mortem care and acts of a situated collective imagination of Twitter users in response to Sandra Bland’s arrest and subsequent death. I contend that Twitter acts as a new type of medium, where the photographic is part of a data mixture that remediates and reconstitutes images, videos, text, and interactive messaging and retweeting. This heterogeneity constitutes a new formulation of witnessing that interacts differently with racial violence by breaking the ocularcentrism, or the dominance of the visual as a master sense and a synecdoche for human perception, of previous instances of racial violence. Using the epistemological interventions of Black feminist theory focused on the experiential, I read #SayHerName and #IfIDieInPoliceCustody as both a response to the failures of the photographic/visual evidence in providing safety, accountability, and justice and as acts of a collective situated imagination. These users opt to critique the visual regime and instead craft a multi-sensorial mode of subjectivity that incorporates reading practices, an anticipatory non-spectatorship, listening, and world-making through the technocultural specificities of Twitter.
“If sight be from our eyes withdrawn”: John Sullivan Dwight and Music Education at the Perkins School for the Blind

In 1875, John Sullivan Dwight was appointed as a trustee of the Perkins School for the Blind in Boston. Editor of Dwight’s Journal of Music and president of the Harvard Musical Association, Dwight had maintained a lively interest in blind education for decades. Dwight first became acquainted with Samuel Gridley Howe, founding director of Perkins, in 1851. Through his Journal of Music, founded one year later, Dwight introduced readers to music at Perkins, in line with his broader agenda of promoting music education in Boston’s public and private schools. Dwight believed that blind students were naturally inclined toward music. Through music, he argued, Perkins students could participate in the “culture of the senses,” leading to the “refinement of the whole nature, mental, moral spiritual.”

Drawing on Dwight’s music criticism and correspondence, as well as Perkins administrative records and annual reports, this presentation assesses Dwight’s strong support for music education at Perkins, culminating in his service as a trustee from 1875–1893. A close friend of the Howe family, Dwight counseled Samuel Howe and his successor at Perkins, Michael Anagnos. Dwight helped write Perkins annual reports, procured student tickets to chamber recitals and concerts in Boston, and edited a Braille edition of Bach chorales. He took special pleasure in promoting Bach’s music at Perkins, claiming in 1892 that the composer “permeates and tempers and refines the whole study and practice of the art [of music here].” Following Dwight’s death, Perkins administrators paid special tribute, christening the main auditorium as Dwight Hall. Building on previous studies of Dwight, which have focused chiefly on his music criticism and his stewardship of the Harvard Musical Association, I draw further attention to a nexus of professional activities bridging Dwight’s interests in music, education, and disability.
Rethinking Choreographic Legacies: Bloodlines and the Anxiety of Postmodern Genealogies

For his 2012 Joyce Theater season, Stephen Petronio began to commission the reconstructions and restagings of works by widely influential postmodern choreographers who had directly influenced him. Petronio began with Steve Paxton’s *Intravenous Lecture* (1970), which will be the main case study of this paper, to infuse the Company with the artistic and financial life blood. Petronio’s reperformance of Paxton’s work invokes a historical moment in American postmodern dance when racial segregation described dance aesthetics; and those aesthetics, inversely, described the boundaries of exclusion and the canonized status of whiteness. Moreover, Bloodlines’ methods of racialization move beyond the politics of representation. Bloodlines perpetuates postmodernism’s racial exclusivity not only through the reperformances of works by white choreographers, but through the metaphor of blood as an essentializing genealogical framework. In this context, the emphasis on blood raises numerous, intertwining questions and concerns about choreographic transmission. And even though Petronio is openly gay, this model heterosexualizes dance lineages and disavows the possibilities and complexities of queer transmissions of affect and history. Bloodlines’ conflation between artistic authorship and exclusively white genealogies therefore recalls and reinforces violent histories of segregation illicitly justified by the sanctified purity of white bodies and blood. Reperformances such as those reproduced by Bloodlines thus carry with them entangled histories of canonical exclusions and racial anxieties that are often transmitted without being marked or remarked upon. My focus on Petronio’s reenactment of Paxton’s *Intravenous Lecture* explores the uncomfortable relationship between the queer politics of Petronio’s performance and the racialized genealogy of his championed choreographic lineage. Although, on the one hand, Petronio’s performance moves Paxton’s political stance against censorship into a conversation about the precarity of queer lives, I argue that Petronio’s performance within the frame of the Bloodlines project reifies the tacitly racialized genealogy of white postmodern aesthetics and practices.
Group II

Cedar Lodge, 3rd Floor Conference Room

9:00 – 9:20  Daniela Cusack  
Overall Structure and Graphics Approach for Talks (for fellows)

9:30 – 10:10  Angelica Riestra  
(Microbiology, Parasitology, Innate Immunity)  
Inflammasome activation by *Trichomonas vaginalis*

10:15 – 10:55  Peter Ramirez  
(Virology, Immunology, Microbiology, Innate Immunity)  
* A conserved acidic cluster motif reduces the sensitivity of SERINC5 to antagonism by HIV-1 Nef *

11:00 – 11:15  BREAK

11:15 – 11:55  Sergio Ita  
(Virology, NGS, viral evolution)  
SMRT Sequencing of full-length POL Amplicons to investigate HIV-1 drug resistance

12:00 – 1:00  LUNCH

1:00 – 1:40  Lauren Libero  
(Neuroscience, autism spectrum disorder)  
*Fear learning, amygdala development, and anxiety in children with autism spectrum disorder*

1:45 – 2:25  Eve Higby  
(Neurolinguistics, psycholinguistics, bilingualism, aging)  
*The dynamic nature of the bilingual language system*

2:30 – 3:10  Marie-Claire Chelini  
(Ecology and evolution, organismal biology)  
Ecological adaptations as drivers of sexual size dimorphism in the common side-blotched lizard, *Uta stansburiana*

3:15 – 3:55  Celia Symons  
(Aquatic ecology)  
*The importance of traits in shaping community responses to changing conditions in alpine lakes*

3:55 – 4:10  Wrap-up and Networking

4:10  Free Time!
Group II

MODERATORS

John Carlos Garza, Genetics, Ecology, Conservation, Evolution, Marine Biology

AUDIENCE MEMBERS

Farid Chehab, Metabolism, Obesity, Reproduction, Genetics, Genomics
Anthony Covarrubias, Immunology, Metabolism, Aging*
Margarita Currás-Collazo, neuroscience and neurotoxicology
Daniela Cusack, Tropical forest ecology and biogeochemistry
Marie Heffern, Chemistry, Inorganic, Chemical Biology, Nutritional Biology
Jacqueline Kimmey, Microbiology, Immunology, Bacteria, Inflammation, Lung*
Brian León, Chemical Biology, Organic Chemistry, Medicinal Chemistry*
Dequina Nicholas, Obesity, Type 2 Diabetes, Metabolism, Immunology*
Victor Nizet, Microbiology and Immunology
Katy Patras, Host-pathogen Interactions*
Roberto Tinoco, Immunology
Ameae Walker, Intersection of oncology, endocrinology and immunology

*Current Chancellor’s or President’s Postdoctoral Fellow
Inflammasome activation by *Trichomonas vaginalis*

*Trichomonas vaginalis* is an extracellular protozoan parasite that causes trichomoniasis, the most common non-viral sexually transmitted infection in the world. Little is known about the host innate immune response mounted against the parasite and how the parasite may modulate these processes for its survival. We hypothesize that inflammasomes are involved in the inflammatory response to *T. vaginalis*. Inflammasomes are multi-protein signalling complexes that activate the caspase-1 protease. Active caspase-1 can then process the proinflammatory cytokine Interleukin-1β (IL-1β), leading to its maturation and release from the cell. We have found that human THP-1 macrophages release increased levels of bioactive IL-1β upon exposure to *T. vaginalis*. Caspase-1 activity was also increased in THP-1 macrophages exposed to *T. vaginalis*. Furthermore, inhibition of caspase-1 using the peptide inhibitor Ac-YVAD-CMK led to a decrease in IL-1β production upon co-incubation with the parasite. To dissect the particular inflammasome complexes that are assembled in response to *T. vaginalis*, we tested the effect of CRID3, an NLRP3 inflammasome inhibitor, and found it led to a decrease in IL-1β production. NLRP3 inflammasome activation initiates an inflammatory cell death called pyroptosis. We found that caspase-1 and NLRP3 inflammasome inhibition decreased host cell killing by *T. vaginalis*. Since pyroptosis is mediated by the gasdermin D protein, we created a gasdermin D knockout in THP-1 cells using CRISPR/Cas9 and found that *T. vaginalis* could induce less host cell killing of these gasdermin D knockout cells. Together, our results indicate that inflammasome activation induced by contact with *T. vaginalis* contributes to macrophage cell death through pyroptosis. The findings of our studies will help elucidate the role of inflammasomes as an innate immune response to *T. vaginalis*, a pathogen of great public health importance.
A conserved acidic cluster motif reduces the sensitivity of SERINC5 to antagonism by HIV-1 Nef.

The identification of SERINC5 as a potent inhibitor of diverse retroviruses represents a breakthrough in our understanding of how HIV-1 Nef enhances viral infectivity. Determining regions within SERINC5 that provide restrictive activity or Nef-sensitivity is likely to yield new mechanistic models that will deepen our understanding of the SERINC5 / Nef relationship. Here, we report that deletion of a highly conserved sequence reminiscent of a membrane trafficking signal, EDTEE, leads to a relative loss of SERINC5’s restrictive activity against HIV-1 infectivity in a Nef-dependent manner; that is, the EDTEE sequence appears to reduce the sensitivity of SERINC5 to antagonism by Nef. This effect on infectivity correlated with decreased cell surface levels of SERINC5 DEDTEE relative to wild type SERINC5 in the presence of Nef and with enhanced exclusion of the mutant protein from virions by Nef. Specific mutational analysis revealed that the acidic residues, but not the threonine, within the EDTEE motif are important for the decrease in Nef-sensitivity. We suggest that the EDTEE motif may have evolved to mediate resistance against retroviruses that use Nef or Nef-like proteins to antagonize SERINC5.
SMRT Sequencing of full-length POL Amplicons to investigate HIV-1 drug resistance

Current HIV drug-resistance testing does not identify viral variants present at levels below 20% of the population and fails to simultaneously sequence the principal regions targeted by antiretroviral therapy (ART). Deep sequencing platforms have improved detection of minority drug resistant mutations (DRMs); however, these methods are limited by the relatively short length of the output reads (~150-400 base pairs). Here, we used Pacific Biosciences single molecule real time (SMRT) sequencing to deep sequence en bloc the 3-kilobase pol gene among HIV-infected individuals and define DRMs across full-length (FL) pol haplotypes.

Using viral RNA isolated from participants of the San Diego Primary Infection Resource Consortium, we generated 3-kilobase pair pol products using subtype-B-specific primers spanning three major antiretroviral drug targets: RT, PR, and IN. Libraries of each FL pol amplicon were sequenced on the PacBio RS II platform. For sequence analysis, we adapted FLEA, a pipeline for processing full-length HIV PacBio data to generate phylogenies of high quality consensus sequence reads (HQCSs). We then submitted sequences to the Stanford HIV drug resistance database to determine the presence of DRMs within each participant sample.

We produced HQCS reads for eight participants, including longitudinal sampling for three participants. The consensus sequence of HQCS reads matched standard Sanger sequencing showing that our PacBio approach produced pol-specific reads. Further, we observed mutations at sites of DRM in six participants. In one participant we also found evidence of APOBEC3G-mediated hypermutation at sites of DRM and at over 15 other sites within one haplotype variant.

In conclusion, we show that long-read deep sequence platforms, such as PacBio, provide a high-resolution method for linkage analysis across the entire length of HIV-1 pol for screening of minority DRMs. Further, linkage analysis across the entire pol region allowed us to identify DRMs on an APOBEC3G-targeted haplotype, suggesting a role for this host restriction factor in introducing DRMs through sub-lethal mutations.
Fear learning, amygdala development, and anxiety in children with autism spectrum disorder

Symptoms of anxiety are reported commonly in autism spectrum disorder (ASD), with approximately 40-50% of individuals with ASD meeting criteria for an anxiety disorder. Alterations in amygdala morphology and activity are also commonly reported in ASD, yet the relationship between alterations in the amygdala and the development of co-morbid anxiety disorders is unclear. Given that the amygdala is functionally related to fear and anxiety, investigating amygdala growth and probing amygdala function using a fear potentiated startle paradigm may provide insight into autism-related anxiety disorders that emerge during middle childhood.

Participants to date include 36 children with ASD and 36 typically developing children between 9 and 13 years of age. T1-weighted structural MRIs were collected for each child at around 2-3 years-of-age and again at present and amygdala volumes were measured bilaterally at each age. The fear potentiated startle response was evaluated using a paradigm previously tested in adolescents with ASD that was adapted for testing with children with low IQ and limited verbal abilities. Clinically significant anxiety was measured using the Anxiety Disorders Interview Schedule (ADIS-IV) with the Autism Spectrum Addendum.

In the fear potentiated startle task, children with ASD had significantly reduced mean percent potentiation compared to TD children. Interestingly, within the ASD group, children with co-morbid anxiety disorders had significantly greater percent potentiation than those with ASD alone. In the ASD group, amygdala volumes and rate of growth were not related to percent fear potentiation or ratings of anxiety. However, percent fear potentiation was significantly correlated with the clinical anxiety severity ratings.

Overall, children with ASD have reduced fear potentiation compared to typically developing children, indicating that individuals with autism have significant alterations in fear learning. For children with ASD, greater fear potentiated startle response was related to higher clinical ratings of anxiety, indicating that the fear potentiated startle paradigm may be a useful tool for evaluating anxiety levels particularly in non-verbal individuals.
The dynamic nature of the bilingual language system

A common assumption among language researchers is that the native language, once acquired, remains largely the same throughout the lifespan. However, recent work on bilingualism has shown that the native language is much more dynamic than previously thought, demonstrating the plasticity of the language system to various patterns of language input and use. I will present data from behavioral, electrophysiological, and neuroimaging studies focusing on two major subsystems of language: the lexicon and the syntactic system. First, I will examine how bilinguals choose the right words in spoken language given that lexical items in both languages are thought to compete for selection. Next, I examine how integrated the syntactic systems are for bilinguals by probing the vulnerability of the syntactic system to undergo change. Results across these studies reveal that bilinguals make use of all the linguistic tools at their disposal to efficiently produce and comprehend language. Further, this work uncovers characteristics of the language system that are difficult to obtain from work on monolinguals – that the language system adapts to various contexts and the demands placed on it in dynamic ways.
Ecological adaptations as drivers of sexual size dimorphism in the common side-blotched lizard, *Uta stansburiana*

Differences in size between females and males (Sexual size dimorphism – SSD) are typically associated to male-male competition and female fecundity benefits. SSD can also, however, be due to sex-specific ecological adaptations to the environment. The evolutionary drivers of sexual dimorphism are unfortunately often assumed to reproductive in nature, and the relationship between sexual dimorphism and ecological adaptations is rarely explored. In my research, I aim at understanding how the environment in which a species is found may influence the evolution of morphological differences between females and males. I will present results on my research with the common-side blotched lizard, *Uta stansburiana*, demonstrating that SSD in these species is at least partially driven by ecological adaptations. Populations of this polymorphic lizard differ in number of males color morphs, as well as in degree of SSD. By collecting morphological and ecological data on males and females from 51 populations of *U. stansburiana* distributed across the southwestern US, I show that environmental factors influence female and male size differently, resulting in intraspecific differences in the degrees of SSD. My results highlight that natural selection through ecological adaptations are a long-ignored potential driver of sexual dimorphism in a classic study system of sexual selection, and urge future studies to go beyond the relationship between sexual dimorphism and reproductive benefits.
Celia Symons
President's Postdoctoral Fellow
Ecology & Evolutionary Biology, UC Santa Cruz

The importance of traits in shaping community responses to changing conditions in alpine lakes

Climate change is shaping the traits of individuals and structuring ecological communities; however, the role of trait and community compositional change in determining how ecosystems function remains largely unknown. My research focuses on intraspecific trait variation and species interactions to understand how environmental variation at different spatial and temporal scales structures communities and their responses to a changing global climate.

Climate change is expected to have disproportionally large impacts in alpine regions over the coming decades. My research examines zooplankton to understand how communities re-organize during environmental change in Sierra Nevada alpine lakes. I use a ‘natural experiment’ in the Sierra Nevada, where lakes are arrayed along a temperature gradient, with and without a history of fish stocking. This provides a system where communities have assembled and evolved under different environmental conditions, and with differing trophic structure. Through a series of surveys and experiments I show that temperature and predators have interactive effects in nearly every response we measure – individual traits, food web structure and ecosystem function - suggesting that a warmer climate will magnify the effect of introduced predators on alpine lake ecosystems. As temperatures warm we expect to see an increase in algal blooms, increase in fish growth and a reduction in the unique large-bodied zooplankton species found in the high elevation sites across the Sierra.
Group III

Library

9:00 – 9:40  Stacy Copp  
(biomimetic polymer membranes, photonics, self-assembly)  
Programmable photonics: controlling light with soft matter building blocks

9:45 – 10:25  Christine Morrison  
(bioinorganic chemistry, biophysical chemistry, medicinal chemistry)  
A New Approach to Fragment-Based Drug Discovery using Inert, 3D Metal Complexes

10:30 – 11:10  Amal El-Ghazaly  
(Electronics devices, Magnetics, Optics)  
Enabling Versatile Electronic Systems with Magnets

11:15 – 11:55  Anastasia Chavez  
(combinatorics)  
Dehn-Sommerville relations and their curious friendship with the Catalan Matroid

12:00 – 1:00  LUNCH

1:00 – 1:40  Nickolas Castro  
(Low-dimensional and geometric topology, trisections of 4-manifolds)  
Adapting the Cut Complex to Relative Trisections of 4-manifolds with Boundary

1:50-2:05  Wrap-up and Networking

2:10 – 3:10  Visit other Presentation Rooms

3:15  Free Time!
Group III

MODERATOR
Kenneth Millett, Knot theory and applications to the natural sciences

AUDIENCE MEMBERS
Sarah Brown, machine learning*
Mei-Chu Chang, Combinatorial Number Theory
Marcella Gomez, systems and synthetic biology
Atul Parikh, Materials Science, Biology, Soft Matter, Engineering
Padmini Rangamani, biophysics and computational biology
Andrea Tao, materials chemistry, nanotechnology

*Current Chancellor’s or President’s Postdoctoral Fellow
Stacy Copp  
President's Postdoctoral Fellow  
Integrated Nanotechnologies, Los Alamos National Laboratory  
Biomedical Engineering and Material Science & Engineering, UC Davis

Programmable photonics: controlling light with soft matter building blocks

Polymers self-assemble into a wide range of complex structures, and these molecules can also direct the assembly of other materials. By understanding and controlling assembly in polymeric and other soft matter systems, we would not only better understand how complex structures form in living organisms but could also develop new technologies that mimic these principles to create materials and devices by solution-phase assembly.

This talk will explore novel photonic materials scaffolded by two classes of polymers. First, I will discuss how DNA can be used to stabilize few-atom silver clusters with sizes and optical properties selected by DNA sequence. The biopolymer scaffold imparts a unique, elongated geometry on the silver clusters, leading to a wide range of possible fluorescence wavelengths. Our studies show that these anisotropic clusters exhibit a collective excitation process that can be harnessed for near-field sensing. While the connection between silver cluster geometry and optical properties is becoming clearer, the role that DNA sequence plays in selecting a cluster’s properties remains unknown. By marrying high-throughput experiments with data mining and machine learning, we discover DNA base motifs that are predictive of the silver clusters a DNA strand may stabilize. This framework not only sheds light on how DNA sequence selects silver cluster properties, but it also provides a tool for programming a DNA sequence to direct the assembly of silver clusters with size precision of just a few atoms. Next, I will discuss ongoing work on photonic materials templated by synthetic polymers. Certain block copolymer amphiphiles with low molecular weights are surrogates for lipids, forming biomimetic membranes that are being explored for applications ranging from drug delivery to photonics. We are using these lipid-like polymers to organize and control interactions among optically active nanoparticles and among chromophores.
A New Approach to Fragment-Based Drug Discovery using Inert, 3D Metal Complexes

This research aims to establish a new fragment approach to the development of protein-based therapeutics. This approach capitalizes on the inherent three-dimensional geometry of metal complexes to create ‘metallofragments’ that may occupy more idealized spaces within protein targets compared to traditional organic fragments. The foundation of this project is the development of a metallofragment library consisting of more than 100 metal complexes exhibiting topological and chemical diversity. These 100+ metallofragments are divided into more than 12 different classes according to metal identity (Fe, Re, Mn, and Co) and shape. Using a FRET-based enzymatic assay, we screened this novel library against the PA endonuclease domain of the RNA-dependent RNA polymerase of the H1N1 influenza A virus (PA_{N}E), which is an essential protein for the influenza viral lifecycle and is a validated therapeutic target. Our screening reveals that at least one metallofragment from each of three different metallofragment classes inhibits PA_{N}E activity with IC_{50} values of ~20-70 µM. Structural characterization by X-ray crystallography shows the binding mode of one of these metallofragments, and efforts are underway to determine the binding mode of the other two metallofragments. Analysis of the structure-activity relationship of these inhibitors suggests that they occupy at least two distinct binding sites in the PA_{N}E active site. Once the binding modes of all these hits have been determined, they will be developed into more potent inhibitors. Concurrently, the metallofragment library will be screened against additional, more diverse therapeutic targets, including eukaryotic, viral, and bacterial proteins; metallo- and non-metalloproteins; monomeric or multimeric proteins, and targets involving protein-protein interactions. 8-12 proteins belonging to these different target groups will be purchased for screening with the metallofragment library using fluorescence assays, thermal shift analysis, X-ray crystallography. Following hit-to-lead development, the pharmacokinetic properties of the metallo-inhibitors will be assessed and optimized. The expected outcomes of this work are a demonstration of the viability and versatility of metallofragment-based drug discovery (mFBDD) for the development of new protein-based therapeutics.
Enabling Versatile Electronic Systems with Magnets

In just a few years, wireless electronics will exist in excess of four times the world’s human population; they will be used for countless “smart” applications beyond communications, city and urban planning, and agriculture to include other applications unimaginable today. Ericsson Corporation estimates that by the year 2021, 28 billion electronic devices will be connected wirelessly, with the largest two categories of devices being sensors (14.2B) and mobile phones (8.6B). However, the functions of these devices, even today, are broad and, depending on the industry, the operational requirements for these devices often vary widely. The underlying idea of this research is to engineer devices that are highly versatile, tunable, and energy efficient in order to meet the diverse demands of the ever-broadening wireless electronics applications of the future.

This research focuses on the three areas in which electronics can benefit the most from versatility: communications, sensors and actuators, and energy. Beginning from the fundamental quantum physics of spin, charge, and atomic interactions, this research achieves versatility by integrating a variety of materials into complex thin-film heterostructures that specifically take advantage of quantum mechanical, and often interfacial, interactions to enable new device capabilities. Furthermore, this work strategically examines the frequency-domain behavior of these interactions and properties in various magnetic, dielectric/piezoelectric, semiconductor, and 2D material heterostructures. For instance, although ferromagnetic metals offer the highest permeability at low frequencies, their conductivity and ferromagnetic resonance frequency limit make them inoperable at higher frequencies. On the other hand, insulating ferromagnetic, ferrimagnetic, and antiferromagnetic materials provide moderate permeabilities into increasingly higher frequencies for each material respectively, with antiferromagnetic properties approaching the terahertz (THz) frequency regime. This research takes advantage of this feature to create new material heterostructures and device designs operable into the THz gap. By integrating ferrimagnetic and antiferromagnetic materials with dielectrics/piezoelectrics, semiconductors, and 2D materials into intimately-coupled nanoscale heterostructures, this work will reconfigure these materials to offer their high frequency advantages to the communication, sensing and actuation, and energy harvesting device areas.
Dehn-Sommerville relations and their curious friendship with the Catalan Matroid

The $f$-vector of a $d$-dimensional polytope $P$ stores the number of faces of each dimension. When $P$ is a simplicial polytope the Dehn–Sommerville relations condense the $f$-vector into the $g$-vector, which has length $\left\lfloor \frac{d+1}{2} \right\rfloor$. Thus, to determine the $f$-vector of $P$, we only need to know approximately half of its entries. This raises the question: Which $\left\lfloor \frac{d+1}{2} \right\rfloor$-subsets of the $f$-vector of a general simplicial polytope are sufficient to determine the whole $f$-vector? We prove that the answer is given by the bases of the Catalan matroid.
Adapting the Cut Complex to Relative Trisections of 4-manifolds with Boundary

The cut complex has been used to understand automorphisms of closed surfaces and, via Heegaard splittings, closed 3-manifolds. In ongoing work, Kirby and Thompson have adapted the cut complex to understand smooth, closed 4-manifolds via the theory of trisections. In the case of smooth, compact 4-manifolds with boundary, it is not obvious what the corresponding complex should be. In particular, the trisections surface necessarily has boundary and a relative trisection diagram encodes the data of an (abstract) open book decomposition of the bounding 3-manifold. In this talk, I will introduce relative trisection diagrams and the algorithm to determine the induced open book decomposition. I will also define the tethered cut complex, an adaption of the cut complex tailor made to understand relative trisection diagrams with intention of also encoding the open book data. This is joint work (in progress) with M. Miller, J. Pinzón Caicedo, and M. Tomova.
Group IV

Skyview Room

9:00 – 10:25  Visit Group III Presentation Room

10:30 – 11:10  Kingsley Odigie
(Geochchemistry, Environmental Toxicology, Climate Change)
Pyrogenic Remobilization and Fate of Toxic Trace Elements

11:15 – 11:55  Fernanda Santos
(Soil science, biogeochemistry, fire impacts, freshwater ecosystem, carbon cycle, nitrogen cycle)
Soil responses to fires and implications for freshwater systems

12:00 – 1:00  LUNCH

1:00 – 1:40  Juan Lora
(Climate, paleoclimate, planetary sciences)
Uncovering the changing climate of western North America since the last glacial maximum

1:45 – 2:25  Seyda Ipek
(Theoretical High Energy Physics)
What is beyond the Standard Model of elementary particles?

2:30 – 3:10  Steph Sallum
(astronomy, exoplanets, high contrast imaging)
Imaging Protoplanets: Observing Transition Disks with Non-Redundant Masking

3:15 – 3:30  Wrap-up and Networking

3:30  Free Time!
Group IV

MODERATOR
Tessa Hill, oceanography, climate change

AUDIENCE MEMBERS
Roby Douilly, Earthquake seismology, earthquake source mechanisms and rupture dynamics*
    Gail Hanson, Experimental Particle Physics
    Timothy Lyons, geochemistry, astrobiology, geobiology
    Claire Max, astrophysics instrumentation, colliding galaxies
    Tim Tait, Theoretical Particle Physics

*Current Chancellor or President’s Postdoctoral Fellow
Kingsley Odigie  
Chancellor's Postdoctoral Fellow  
Earth Science, UC Riverside  

*Pyrogenic Remobilization and Fate of Toxic Trace Elements*

Anthropogenic emissions over the past century have substantially increased the levels of toxic trace elements (e.g., lead) in the biosphere. Understanding the physical and chemical processes that drive the cycling of these contaminants is important for protecting human and environmental health. This presentation will focus on my work exploring the impacts of fire on the mobilization and fate of contaminants in two regions: Western United States and Patagonia in Chile.

In the Western United States, I investigated the impacts of recent wildfires on the remobilization of toxic elements, with a focus on lead. For example, I used geochemical profiles, including lead isotopes, to assess how the historic use of leaded gasoline has contributed to fire-remobilized lead at two contrasting sites in California. In Patagonia, my collaborators and I investigated the mobilization of toxic elements in response to large-scale fires that were set during European colonization in the region. The results show a positive relationship between fire size and the flux of metals. These findings have strong implications with respect to climate change because the frequency and intensity of wildfires are expected to increase.
Soil responses to fires and implications for freshwater systems

Soils store more carbon (C) than the atmosphere and vegetation combined, and the surface oceans. This means that any ecosystem perturbation in the soil system will significantly change C fluxes from terrestrial to marine ecosystems. Rivers are estimated to flush 0.5 Gt C year⁻¹ from land to oceans, but it is not clear how fires will affect these annual fluxes. In the Western US, especially in the Sierra Nevada (California), the area burned is increasing, and fires are projected to increase in frequency and severity. Such an increase in fire occurrence in watersheds could increase the transport of C to stream water during post-fire runoff. Understanding the impacts of fire on C transport from land to rivers is important not only to predict how C fluxes will respond to climate change, but also because C in ‘dissolved’ form (dissolved organic C, DOC) fuels organisms, facilitates the transport of pollutants, and is an indicator of water quality. In this talk, I will demonstrate that fire can affect the mobility and bioavailability of DOC in soils in different ways. For example, my work has shown that soil heating changes the concentration and chemical composition of DOC in surface soils, suggesting that low temperature fires will increase the bioavailability of DOC, whereas high temperature fires will increase the bioavailability of DOC. I will also show that an increase in combustion temperature of plant biomass also decreases bioavailability of DOC pool derived from these materials; and that, regardless of the fire severity level, wildfires decreased DOC concentrations in streamwater from watersheds of the Sierra Nevada. Taken together, my results suggest that wildfire is an ecosystem perturbation that has a significant impact on water quality and regional fluxes of C from land to oceans.
Atmospheric transport of water vapor from the North Pacific is the primary source of moisture for most of western North America. Wintertime precipitation accounts for upwards of 75% of the total along the west coast of the United States, and atmospheric rivers in particular deliver large fractions of this precipitation in high-intensity events. Various paleoclimate proxy records from western North America indicate a much wetter environment in Nevada and southern California at the Last Glacial Maximum (approximately 21,000 years ago), which has been interpreted as evidence for a southward shift of the mid-latitude jet stream, which steers extratropical storms, in the eastern North Pacific.

Using climate models and reanalysis data, I investigate the climatology of North Pacific atmospheric rivers, as well as the influence of the Last Glacial Maximum conditions on the atmospheric circulation and moisture budget of the eastern North Pacific and western North America. I will show that a southeastward shift and intensification of the atmospheric river “track” into the continent, resulting from a reorganized atmospheric circulation in response to the North American ice sheets, can explain the inferred hydroclimate changes.
What is beyond the Standard Model of elementary particles?

The Standard Model of particle physics explains a wide range of phenomena from how electromagnetic waves behave to what makes the Sun shine. Its predictions have been tested by many experiments including the Large Hadron Collider. However there are still many foundational questions about our universe that the Standard Model cannot answer. I will give an overview of a few of these looming questions.

What is dark matter? Astrophysical observations of many galaxies and the Cosmic Microwave Background suggest that there is some ‘matter’ in the universe that doesn’t behave like the matter we know. For example it does not radiate any light. Hence the name dark matter. There is no particle in the Standard Model that behave like this dark matter. Then what is the nature of dark matter? How was it produced? Does it interact with the Standard Model particles?

Why is there more matter than antimatter in the universe? As far as our best telescopes can see, every structure in the universe is made up of matter and not antimatter. However the Standard Model tells us that there should be equal amounts of matter and antimatter. Where does this asymmetry come from?

Why are neutrinos massive? Neutrinos (first detected by Frederick Reines of UCI) are very light elementary particles (million times lighter than the electron). Unlike other particles in the Standard Model, however, they cannot acquire their masses from the Higgs boson. What is the process that give neutrinos a mass?
Imaging Protoplanets: Observing Transition Disks With Non-Redundant Masking

Understanding how planets form requires direct observations of protoplanets themselves. Transition disks, protoplanetary disks with inner, solar-system-sized clearings in dust, are the most promising targets for these studies. Their inner clearings and relatively low stellar accretion rates may be caused by forming planets sweeping up material that would have otherwise fallen onto the star. While protoplanets are expected to be bright in the infrared compared to mature planets, transition disks lie at much greater distances than typical directly-imaged mature planetary systems. Thus, protoplanets orbiting ~\(10\) astronomical units from their host stars will be at or even within the resolution limit of the world’s largest infrared telescopes. The technique of non-redundant masking (NRM), which transforms a conventional telescope into an interferometric array, is well posed to make these difficult detections. I will describe this technique and present the results of NRM protoplanet searches. I will also discuss potential applications of NRM on next-generation observing facilities.
Group V
Lakeview Room

9:00 – 9:40  Visit other Presentation Rooms

9:45 – 10:25  **Susila Gurusami**
(race, gender, intersectionality, carceral politics, Black feminism)
*Motherwork Under the State: The Maternal Labor of Formerly Incarcerated Black Women*

10:30 – 11:10  **Brittany Morey**
(health disparities, race/ethnicity, immigrant health, structural racism, immigration policy)
*Community-Level Prejudice and Mortality among Immigrant Groups*

11:15 – 11:55  **Irene Vega**
(migration, race/ethnicity, law and society, education)
*A Representative Immigration Control Bureaucracy? Latino Border Patrol Agents’ Boundaries and Modes of Professionalism*

12:00 – 1:00  **LUNCH**

1:00 – 1:40  **Brandon Robinson**
(Gender & Sexualities, Race & Ethnicity, Health & HIV/AIDS, LGBTQ Studies, Urban Poverty & Homelessness, Cyberspace, Qualitative Methodologies)
*Reframing Family Rejection: Poverty, Instability, and LGBTQ Youth Homelessness*

1:45 – 2:25  **Justin Perez**
(Gender, sexuality, queer studies, Health, risk, human rights, Peru and lowland South America)
*Queer Amazonia: The Transactional Politics of HIV Prevention in Peru*

2:30 – 3:10  **Lisa Beard**
(Race, Gender, and Sexuality Politics and Political Thought)
*“Our People Are Worth The Risk”: Race, Identification, and the Formation of Political Community*

3:15 – 3:30  Wrap-up and Networking

3:30  Free Time!
Group V

MODERATOR
Geoff Ward, Race and Justice, Racial Violence, Youth Justice

AUDIENCE MEMBERS
James Battle, Science, Technology, and Society Studies, Health Disparities, Race
Hanna Garth, Food, inequality, Caribbean cuba, Los Angeles, Southern California
Bruce Link, Social Determinants of Health, Mental Health
Ellen Reese, race, class, gender, social policies, poverty, work
Damien Sojoyner, Prisons, Public Education, Race, Urban Anthropology
Anjuli Verma, punishment and inequality, mass incarceration, decarceration, politics of social change*

*Current Chancellor’s or President’s Postdoctoral Fellow
Motherwork Under the State: The Maternal Labor of Formerly Incarcerated Black Women

Although Black mothers are disproportionately represented among formerly incarcerated mothers in the United States, existing research has largely neglected to document the challenges they face in resuming their parenting roles after prison or jail. This study addresses this gap using 18 months of participant observations with formerly incarcerated Black women to examine how state surveillance under post-release supervision and Child Welfare Services shapes and constrains formerly incarcerated Black women’s mothering practices. The study develops a typology of three context-specific strategies—what I call “anti-carceral motherwork”—that these women employ to anticipate, react to, and cope with state interventions that threaten their mothering: collective motherwork, hypervigilant motherwork, and crisis motherwork. These findings suggest that contrary to popular constructions of formerly incarcerated Black women as negligent mothers, they navigate multiple, overlapping sources of violence to protect their children. Yet, the labor of navigating the state structures that put their children at risk often placed these women in conflict with the state. This paradox suggests the state criminalizes the maternal labor of formerly incarcerated Black women and that these state logics are used to justify state intervention in Black women’s post-incarceration parenting.
Community-Level Prejudice and Mortality among Immigrant Groups

Building on theories of structural racism and health, this study assesses whether anti-immigrant prejudice at the community level is prospectively associated with mortality. I analyzed 10 waves of data from the General Social Survey (GSS) that were linked to mortality data via the National Death Index (NDI) for the period between 1993 and 2014 (n=13,242). The 2014 GSS-NDI dataset is a nationally representative sample reporting social characteristics and attitudes in the United States that was prospectively linked to mortality data. Community-level prejudice was measured with 5 questions regarding anti-immigrant sentiments across 123 communities, defined using primary sampling units. Cox proportional hazards models tested the association between anti-immigrant prejudice and mortality hazard, controlling for covariates at the individual and community levels. I further examined whether the association varied by race (white, black, or other race) and nativity (US-born or foreign-born).

Findings showed that among “other race” respondents, those born in the US had higher risk of mortality in communities with greater anti-immigrant prejudice, whereas foreign-born “other race” respondents had lower risk of mortality in communities with greater anti-immigrant prejudice. Sensitivity analyses indicated that the “other race” category was comprised largely of Asians and Hispanics, and that these results were similar for both groups. In contrast, anti-immigrant prejudice was not associated with mortality for foreign-born immigrants who self-report as white or black. These findings provide insights into how structural racism impacts mortality. In this talk, I will discuss implications for how racialized anti-immigrant sentiments can affect health disparities.
Latinos are not only the primary target of U.S. immigration control efforts, they are also a large portion of agents carrying out that work. This article draws on semi-structured interviews with sixty active Border Patrol agents (thirty seven of them Latinos), to examine how race/ethnicity shapes their professional narratives and their work. I demonstrate that Latino Border Patrol agents experience social sanctions for transgressing expectations of ethnic solidarity on the issue of immigration. Although there is little variation in Latinos’ boundary making responses to these sanctions, their ideas about whether/how their background shapes their work practices cluster in two patterns. I refer to these patterns as *modes of professionalism* and identify two types: impartial and compassionate professionalism. Agents who adopt an impartial professionalism discount the relevance of race/ethnicity at work and adhere to strict ideas about equal treatment; agents in the second category harness certain cultural competencies to do their job “better” than non Latinos. My findings suggest that some Latinos, especially those with higher ethnic attachments, attempt to improve the qualitative character of migrants’ custodial experiences, while simultaneously (re)producing the government’s racialized immigration control outcomes. I discuss my findings in relation to the literature on representative bureaucracy, which examines whether having a racially diverse government workforce improves the services that marginalized groups receive in their interactions with the state.
Reframing Family Rejection: Poverty, Instability, and LGBTQ Youth Homelessness

Existing research on LGBTQ youth homelessness identifies family rejection as the main pathway into homelessness. But as poor LGBTQ youth of color make up the majority of LGBTQ youth experiencing homelessness, this family rejection paradigm can be a slippery slope of depicting poor families and/or families of color as more prejudice than middle-class, white families. In this talk, Robinson complicates this rejection paradigm through ethnographically documenting the lives of 40 LGBTQ youth experiencing homelessness. Specifically, Robinson examines how poverty and instability shape negotiations of gender and sexuality within the family and the youth’s perceived pathways into homelessness. Robinson also shows how being gender expansive, more so than sexuality, marked many youth’s experiences of familial abuse. This abuse generated strained familial ties within families wherein the ties were already fragile. In showing then how family instability shapes experiences of strained familial ties and rejection for some LGBTQ youth, Robinson shifts the analytical focus away from blaming marginalized families for LGBTQ youth homelessness toward a broader examination of how poverty can influence negotiations of gender and sexuality within families.
HIV prevention initiatives among gay and transgender communities in Peru have increasingly targeted transactional behavior as a site of intervention. On the one hand, existing HIV/AIDS-related research describes the proliferation of transactional sex among gay, transgender, and MSM (men who have sex with men but who do not identify as gay) as an inevitably risky behavior that explains, in part, the concentration of HIV/AIDS among these same populations in the country. Second, through capacity building workshops and trainings, LGBT rights efforts encourage gay and transgender communities to abandon transactional forms of politics in favor of human rights advocacy (e.g. municipal antidiscrimination ordinances that include sexual orientation and gender identity) in order to address the discrimination that contributes to their vulnerabilities. In this paper, I describe a case of discrimination that occurred while I conducted ethnographic fieldwork in 2014-2015 examining the effects of global HIV prevention initiatives among gay and transgender communities in Peru’s Amazonian region. The case involved an informal practice in which the administrators of a municipal cemetery charged additional burial costs to the families of gay and transgender individuals rumored to have died with HIV/AIDS. Over the course of several months, I followed one interlocutor, Ramón, as he carried out the formal protocol of the antidiscrimination efforts in which he had been trained at HIV prevention workshops and LGBT rights trainings. In examining how transaction enabled Ramón to call attention to the case and convince the mayor to stop it, I analyze this case as a starting point to theorize transaction as a mode of politics that makes visible the novel social transformations effected by global flows of HIV/AIDS funding and LGBT rights.
“Our People Are Worth The Risk”: Race, Identification, and the Formation of Political Community

When civil rights organizer Ella Baker asked the question, “Who are your people?,” she was issuing not only the geographic question “where do you come from?” but also the political question “with whom do you identify?” (Ransby, 2003). This question of identification as a political act is likewise registered by anticolonial feminist philosopher María Lugones, who insists that, “we must constantly consider and reconsider the question: ‘Who are our own people?’” (2003) and by Black feminist theorist Audre Lorde, who in one public address asks herself how she is “complicit in the subjugation of any part of those who I call my people?” ([1982] 1984). Drawn from a working chapter of Beard’s book manuscript, Intimate Appeals: Race and Political Identification, this talk turns to Baker, Lugones, and Lorde to register identification as a political practice, then brings this theoretical discussion to bear on work by the contemporary social movement organization Southerners On New Ground, an antiracist LGBTQ organization based in the U.S. South. Ultimately, the presentation offers an account of the ways in which practices of identification are deeply political acts, and argues that struggles over identification are a primary site of politics.
Group VI

Alumni Room, Arts & Crafts Building

9:00 – 9:40  **Ugo Edu**  
(aesthetics, race, reproduction, affect, body knowledge and modifications)  
*Beauty and the Black: Aesthetics Politics and Black Reproduction in Brazil*

9:45 – 10:25  **Gregorio Gonzales**  
(Race, ethnicity, indigeneity, Indigenous borderlands of U.S. Southwest)  
*Sigue el llanero: Riding and Writing Across a Genizaro Homeland in northern New Mexico*

10:30 – 11:10  **Raquel Pacheco**  
(Gender, race, and labor)  
*The Promise of Gender Progress: the civilizing project of biopolitical citizenship*

11:15 – 11:55  **Theresa Ambo**  
(Higher education, American Indian Education)  
*Characterizing Tribal-Institutional Relationships in Higher Education*

12:00 – 1:00  **LUNCH**

1:00 – 1:40  **Samar Al-Bulushi**  
(Africa, surveillance, policing, race, geopolitics, elites)  
*Power, Publics, and Politics in the East African Warscape*

1:45 – 2:25  **Kirisitina Saliata**  
(Race, Indigeneity, Law, Feminism, Militarism and Pacific History)  
*Exhibiting Tradition: The American Samoa Commission, Pacific Anthropology and Samoan Political Status in 1930*

2:30 – 2:45  Wrap-up and Networking

2:45 – 3:10  Visit other Presentation Rooms

3:10  Free Time!
Group VI

MODERATOR
Tanya Golash-Boza, Race, Immigration, Deportation, Incarceration

AUDIENCE MEMBERS
Leisy Abrego, Migration, Gender, Families
Veronica Castillo-Muñoz, History of Gender, The U.S.-Mexico Borderlands, Immigration
Cynthia Feliciano, race/ethnicity, immigration, education, inequality
Anthony Jerry, Citizenship/racial subject making
Roshanak Kheshti, Music, sound, anthro, race, Iran, Islam
Keith Miyake, Racial Capital, Environmental Justice, Carcerality/Critical Prison Studies*
Brenda Stevenson, Race, Gender, Slavery, Family, American South

*Current Chancellor or President’s Postdoctoral Fellow
Based on ethnographic research in Salvador, Bahia, this talk explores the role of aesthetics in the construction and perception of what constitutes healthy reproduction and reproductive practices. I draw on women’s navigations within a Brazilian economy of aesthetics, race, and sexuality and the way these navigations shape and are shaped by processes and procedures related to the governance and measurements of reproduction and reproductive health. I focus on Black women’s experiences of contraceptive use, attempts to acquire tubal ligations, and family construction. I analyze the way that values, sensibilities, and affect that have come to adhere to particular appearances and arrangements, have also adhered to the perception and apprehension of reproductive decision-making (seen and unseen, articulated and not-articulated), reproductive health, and family constructions. This work points to the importance of an understanding and recognition of the aesthetic underpinnings of health and biomedical systems.
Gregorio Gonzales
President's Postdoctoral Fellow
Anthropology, UC Santa Barbara

_Sigue el Ilanero: Riding and Writing Across a Genízaro Homeland in northern New Mexico_

Despite a sustained interest in the formation of Genízaro identity in northern New Mexico during the eighteenth and nineteenth centuries, little has been done to address its collective persistence and maintenance today. Whether serving as the corporeal buffer zones between Native and colonial nodes of power as Indigenous slaves, settlers, or military scouts, Genízaros continue to be recognized for their historical presences and current absences. Yet nestled in the Rio Chama and Taos valleys of northern New Mexico, individuals, families, and communities maintain Genízaro identity as a continued experience—including Dr. Gonzales. These tensions indeed motivate this talk to examine the realities, pitfalls, and potentialities of academic knowledge acquisition and production among Genízaro communities peculiarly situated along the margins of settler states and tribal nations.
The Promise of Gender Progress: the civilizing project of biopolitical citizenship

In Mexico, state policy has become especially invested in socially engineering gender practices since the 1970s in response to a global preoccupation with overpopulation (Laveaga 2007). My talk traces the deployment of the notion of gender progress in rural Mexico as the basis of a new kind of citizenship used in managing rural indigenous peoples as a population of surplus labor. I examine the deployment of gender progress in the Huasteca region of Hidalgo, wherein municipal public servants are steering the Nahua and Teenek populations towards the ideal of the small nuclear family that is dual earning and free of gender violence.

I interrogate the discrepancy between this state-sponsored notion of gender progress and the highly gendered and racialized labor matrixes into which Nahuas and Teenek are sidelined, namely domestic labor in the metropolitan area of Monterrey, Nuevo León. I show how the mandate to insert themselves as flexible labor in the wake of the dismantling of peasant agriculture leads Nahua and Teenek youth migrants to confront what I call “intimate mestizaje”, the colonial core of gender progress. I use “intimate mestizaje” to refer to a colonial structure of intimate relations that includes sexual violence and the desire for love irrespective of class and race (see Povinelli 2006), which in Latin America is closely associated with whitening.

I discuss how embodying gender progress appears to be the most accessible platform by which marginalized indigenous subjects can make claims to agency, respect, and national relevance. I posit that, in Mexico’s post-NAFTA economic conjuncture, gender progress is filling the vacuum left by the end of state-sponsored peasant agriculture and peasant citizenship. In my talk, I will examine the promises and perils of this type of citizenship, which I term biopolitical.
Characterizing Tribal-Institutional Relationships in Higher Education

Notable efforts have been made recently by colleges and universities nationwide, and globally, to include and engage local Indigenous communities through campus-wide equity, inclusion and diversity initiatives. Such efforts, however, are not universally practiced across postsecondary institutions. California public postsecondary education presents a compelling case of tribal engagement, given the number of in-state federally and non-federally recognized tribes, prior financial divestments from public education by the state government, and the privatization and growing dependence by colleges and universities on external donors – in this case monetary tribal partnerships. To situate California public universities within the discourse of tribal-institutional relationships and partnerships, this presentation will characterize that nature of formal and informal tribal-institutional relationships between public land-grant universities and local federally and non-federally recognized tribes in California. Perspectives collected from tribal and institutional representatives will be shared that speak to the state institutional relationships and responsibility. Last, I will address implications for engaging Indigenous communities.
Samar Al-Bulushi  
President's Postdoctoral Fellow  
Anthropology, UC Irvine

*Power, Publics, and Politics in the East African Warscape*

The Euro-American preoccupation with borders, security, and counter-terrorism has prompted African leaders to negotiate more competitive positions in the global economy. Since the U.S.-backed Ethiopian invasion of Somalia in 2006, for example, members of the political elite across East Africa have been actively engaged in the political marketplace that has emerged in connection with the ongoing war against the Somalia-based militant group Al-Shabaab. This presentation draws on ethnographic research in Kenya to offer observations about the means and methods deployed by members of the Kenyan political elite to produce their power in the geopolitical realm. I aim to broaden the focus beyond the standard Euro-American ‘big players’ to consider everyday practices of geopolitical agency ‘at the margins’ (Ayoob 2002; J. P. Sharp 2013). How, for example, do members of the Kenyan political elite draw on liberal internationalist logics of ‘sovereignty as responsibility,’ to legitimate political and military interventions abroad? How do they contend with the racialized ideas that continue to structure Africa’s participation in the global order?

Despite the fact that members of the African political elite regularly interface with actors who wield more power and influence, their roles are generally obscured by theories of fragmented sovereignty and privatized governance (Amar 2013; Grovogui 2001; Sabaratnam 2013; Samson 2009). If and when they are considered, these actors are objectified as repugnant, corrupt, or as incapable of critical or independent thought. Anthropology’s discomfort with powerful figures, coupled with its longstanding commitment to focus on the lives of the disenfranchised or marginalized—particularly in Africa—has resulted in a gap in scholarly analysis, whereby some actors simply do not merit study (K.M. Clarke 2010). I argue that an anthropology of geopolitics enables us to deconstruct ‘empire’ as an abstract, seemingly coherent force operating from above, and instead to think about how subaltern elites position themselves in relation their more powerful counterparts, and to consider how global power dynamics are interpreted and contested in everyday life.
Exhibiting Tradition: The American Samoa Commission, Pacific Anthropology and Samoan Political Status in 1930

Through an analysis of testimonies from the 1930s American Samoa Commission, this talk explores how discourses of cultural preservation and tradition shaped Samoan political status debates. Pacific anthropologists were hired as cultural advisors throughout the multi-sited hearings and also in the drafting of both federal and local policies. Not only was the territory itself redefined physically in this period but Samoans and Samoaness were being transformed through these citizenship debates on racial purity, cultural authenticity and modernity.

I use the framework of ‘the Samoan Cause’ to demonstrate how such diverse and, at times, oppositional political agendas came to use a shared language of protection and rescue rather than erasure in Samoa. I argue that the Samoan territory is often normalized through these discourses of benevolence that mask a violence of containment. Engaged with scholarship on imperialism, intimacy and indigeneity, this paper explores Samoan self-determination movements and the insidiousness of preservation policies in the early twentieth century.