Giacomo Bernardi, Ecology and Evolutionary Biology

SRG

Giacomo Bernardi

A genomics approach to natural selection

Evolution proceeds in part via Natural Selection, yet empirical studies that specifically illustrate the genomic consequences of natural selection are still scarce in non-model organisms. For this work, we want to capitalize on the genomic sequencing facility on the UCSC campus to obtain large amount of DNA sequences from two intertidal goby fishes, the long-jawed mudsucker and its sister species, the short-jawed mudsucker. These two closely related species are exposed to very different selective regimes, one lives in very hot water (42 C) while the other is only found at 30 C). This translates into strong selective pressure in the warm water species to stabilize proteins from denaturation. Thus far we have sequenced 32 genes for those two species and have found a very strong signature of selection. With such encouraging preliminary results, we now propose to expand this study to capture a large amount of genomic information to understand the consequences of selection on the genomes of these two species. We have applied for funds to the National Science Foundation and are waiting to hear from them. As a first submission, our proposal is unlikely to be funded. With the data gathered with this COR grant, we will be able to resubmit a much stronger proposal.

E.G. Crichton, Art
SRG

Associate Professor

LINEAGE: The J-1 Delegate Archives

I seek COR SRG funding for a new public art project called "LINEAGE: The J-1 Delegate Archives". As 1st Artist-in-Residence for the GLBT Historical Society (GLBTHS), I have invented a framework for bringing components of the organization's vast archive collection off the shelves into creative public visibility. For my first project, Matchmaking in the Archive, I invited 24 individuals to create responses to the archives of ordinary people who have died. Now in its 2nd year, this process has been highly successful with 3 exhibitions (2 upcoming) and 8 public speaking invitations in the US and Australia. I will use a similar matchmaking model for this new project but shift to the world stage. Through personal and organizational connections, I shall invite international LGBT organizations to each loan two archives of deceased individuals to the GLBTHS. These guest "delegates" will be on display for research and will also become the inspiration for new creative work, a major exhibition and web site. In the 2010/11 period, I will conduct outreach, acquire archives, fabricate a display, match people to archives and establish the website.

Noah Finnegan, Earth & Planetary Sciences
SRG
Jonathan Moore

Are wildfires good or bad for salmonids? Characterizing geomorphic

Wildfires, which have increased four-fold over the last 30 years in the western United States, are commonly followed by catastrophic erosion. Such infrequent, large-scale watershed disturbances can strongly affect the dynamics of ecosystems. However, there is great uncertainty about how disturbances such as fires alter ecosystems. Does wildfire, for example, harm or help vulnerable fish populations, and under what conditions? This collaborative research investigates how changes triggered by fire spread through a watershed. It focuses on the August 2009 wildfire that burned much of Scotts Creek, a coastal California watershed near Davenport, CA containing populations of steelhead trout and coho salmon, both ESA-listed salmonids. Fortuitously, the spatial burn pattern created fire treatments of burned, unburned, and downstream reaches. Furthermore, there are extensive pre-fire datasets on the watershed topography, fish, and their food webs in all of these three fire treatments. This study will utilize a post-fire airborne LiDAR (Light Detection And Ranging) flight paired with detailed geomorphic field mapping to characterize and quantify geomorphic change on the watershed scale. This physically based work will then provide the context for interpreting food web dynamics and salmonid population changes.

Mary-Kay Gamel, Literature

SRG

Mary-Kay Gamel
Mark Griffith

International Conferrence on Music and Greek Tragedy: History,

This conference will be held in May 2011 in connection with a UCSC production of Euripides' Orestes with original music performed live. Musicologists, classicists and theater practitioners will address questions such as: What effects did music and dance have on the meaning and impact of ancient dramatic performance? In what ways was Greek theater music gendered, or otherwise marked? Which characters sing, and when and how, -- and which ones don't? How did the social context of ancient Greek drama performance influence the meaning of music and dance? How do scholars and musicians reconstruct the likely sounds and styles of ancient Greek music and dance? What can and should the role of music and dance in modern productions of Greek drama be? The use of music in the theatrical production will serve as a case study.

Shannon Gleeson, Latin American and Latino Studies

SRG

Shannon Gleeson

N/A

Rights in Theory, Rights in Practice: The Experience of Low-Wage

Law and society scholars have extensively documented the barriers that employees face pursuing legal mobilization in the wake of a workplace violation. Yet, we also know that many workers do come forward, and often draw on a number of information outlets and community resources to do so. This research proposes a broad survey to learn more about the experiences of low-wage workers who file claims with the assistance of legal aid programs, in order to understand the ways legal rights are activated amongst vulnerable workers. The goal of this inquiry is gather information on the claimant's workplace experience, knowledge about their rights, and decision-making process. In addition to identifying the barriers workers have faced in the process, I will uncover some of the strategies workers use when making claims on their rights. In doing so, I will gain a broader understanding about how workers understand and identify with their rights, and will identify differences in legal consciousness across sub-populations. This broad approach will also allow me to identify trends across major categories of workers - including different industries, women versus men, and immigrant workers. Particular focus will be placed on the experiences between documented and undocumented workers.

Lisbeth Haas, History
SRG

Independence, Sparta, and Tepoztlán

This project examines the twentieth century histories of an area of the Blue Ridge Mountains in Virginia and North Carolina, and a mountainous region area of Morelos, Mexico, both deeply affected by globalization. It traces discrete regional histories of the Blue Ridge towns of Independence and Sparta, and the Mexican town of Tepoztlán. The study seeks to contribute a comparative analysis of places and populations, and their vernacular and official histories, as these intersect through the imperatives of globalization. People have moved out of these regions for the entire modern era, and yet in each place, local identities and histories rarely incorporate the movement of people from the region. Anthropologists have taken the lead in studying discrete regions of the U.S. and Mexico, linked together through the migration of people, products, and labor. I will similarly map the movement of industry to Mexico, and the movement of people to the U.S., to a region of deindustrialization. The study brings the histories of globalization and diaspora together. In doing so, I hope to add to the extensive work on industrialization, deindustrialization, and immigration a history that integrates the cause for change in local and global economies, and in the dynamics of memory.

Minghui Hu, History
SRG

Flowing from Heaven to Sea: An Environmental History of the Yangzi

The low-land, labor-intensive farming and commercially-driven economy in China proper had increasingly become environmentally unsustainable from 1400 to 1900. Developmental theorists focus on whether China could break out of any kinds of traps with or without the impact of the modern West. They consider environment, or "biological regime," as passive factors or limitations. I fundamentally challenge these development theorists from an environmental perspective and propose to measure key environmental parameters (air, water, and soil) in eighteenth- and nineteenth-century China. I will statistically induce the patterns of sustainability of China's environment on the eve of, and immediately after, the advent of industrial capitalism.

John Jota Leanos, Community Studies

SRG

John Leanos

Animating the West: A Series of Documentary Animations on the

"Animating the West: A Series of Documentary Animations on the Formation of the Southwest Borderlands of the United States" is a documentary film project that uses animation to tell the story of a three historical moments in the development of the US-Mexico borderlands from subaltern and underrepresented perspectives. The three illustrative and documentary short animated films, "1848: Gold, Land and Manifest Destiny," "The Taos Revolt: The Assassination of U.S. Governor Bent in New Mexico," and "500 Years of Colonial History," will be part of the documentary film "The Dawning of Liberty," an alternative re-telling of United States history from the site of the U.S.-Mexico borderlands directed and produced by award-winning PBS Senior Producer and Associate Professor of Transborder Chicana/o Latina/o Studies at Arizona State University, Paul Espinosa. Professor Leaños will direct and write the three animations in collaboration with Professor Espinosa and other prominent scholars of American History and Ethnic Studies. The films are conceived for general audiences to be distributed through broadcast on PBS in the United States and at film festivals internationally.

Boreth Ly, History of Art and Visual Culture

SRG

Mekong and Memory: Visual Traces of Trauma in Contemporary Arts

My book project, Mekong and Memory: Visual Traces of Trauma in Contemporary Arts of Southeast Asia and Its Diaspora considers the visual implications of trauma and memory as registered in the visual arts and verbal narratives created since the end of the Vietnam-American War (1945-1975). It attempts to locate and to map the sites/sight of memory where trauma is repressed. More important, my manuscript argues that Contemporary Southeast Asian artists and filmmakers play an important role in shaping our understanding of the theme of human suffering, memory, and trauma through their arts. Here Trauma is defined as a psychic and emotional wound caused by violent experiences with its lingering traces made manifest in verbal, visual, and body language. Last, my book project argues that the work of different artists ultimately contributes to a dialogue between the memory and trauma of individuals and what we understand as collective cultural notions of trauma.

Justin Marion, Economics
SRG
Ricard Gil

Segregation and African American Movie Theaters in the 1940s and

Segregation was an important feature of African-American life prior to the civil rights movement, potentially having long-term consequences for the socio-economic status of African-Americans. The effects of segregation in access to business and culture has not been studied extensively in the economics literature, due in large part to data limitations from this era. We propose to study segregation using a unique dataset of all movie theaters in the United States from 1945-1955, which importantly indicates whether a particular theater was designated for African-American customers. Using these data, we can study black business formation by estimating the entry decision of the so-called Negro theaters, and how entry depends on discrimination and the extent of competition from white theaters. Furthermore, we can study how segregation affects the political engagement and long-run racial attitudes of both blacks and whites. To complete the project we must collect the racial characteristics, voter participation, and racial attitudes of relevant locales. Furthermore, we would like to extend our sample of theaters to cover more years and to incorporate other evidence regarding segregation from historical sources such as local newspapers. SRG funding will allow for the collection of these necessary complementary data and the preparation outside funding applications.

Pradip Mascharak, Chemistry and Biochemistry

SRG

Nitric-oxide Donating Bactericidal Patches for Infected Wounds

Nitric Oxide (NO) plays an important role in our body's response to bacterial infection. Elevated levels of NO along with other reactive oxygen species promote rapid killing of bacteria via damage to DNA and cell membrane. The recent emergence of severe infections by antibiotic-resistant bacteria (such as methicillin-resistant Staphylococcus aureus, MRSA) is a major concern in the surgical units of hospitals. We are trying to make biocompatible wound-patches that will deliver high doses of NO to infected locales upon illumination to visible light. The patches will be assembled via incorporation of light-sensitive metal-NO complexes (designed and isolated in our lab at UCSC recently) in carboxycellulose and other biocompatible polymers. These patches will be tested against various gram-positive and gram-negative bacteria (grown in the laboratory) for their efficacy in eradication of the bacterial load upon light-induced delivery of NO. Since bacteria hardly exhibit resistance to NO, this treatment modality will be quite effective. We are requesting partial support for Nicole Fry (a graduate student) and some supply money to complete this ongoing project in my laboratory. The results of this study will allow me to write a full proposal to NIH in the forthcoming months.

Mark Massoud, Politics
SRG

Law Wars: Human Rights, Law, and Development in Sudan

This proposal builds on previous research in Sudan in 2006-07 toward a book project on the role of law in development in Sudan. The purpose of this proposal is to extend my existing data set by conducting qualitative and ethnographic research.

Understudied in both political science and law, Sudan is most known to the outside world because of the incomparable suffering within its borders: Two civil wars and the recent humanitarian emergency in Darfur have killed or displaced nearly one-third of its population.

This project uses Sudan as a case study to illuminate the diverse functions of law in such extreme environments; and to reveal the importance of legal institutions even in failed states with weak political institutions. It examines how three sets of key political actors – government leaders, civil society groups, and international aid agencies – have undertaken costly actions to develop the rule of law since Sudan's colonial independence. Understanding their motivations and the impacts of their strategies reveals the diverse functions of law, as an instrument for regimes to maintain authority and for civil society and aid groups to improve the lives of the disadvantaged.

J. Cameron Monroe, Anthropology
SRG

The Cana Archaeological Project: Urbanism, Slavery, and Social

Urbanism has been central focus of archaeological analysis for more than a century. Precolonial West African cities, however, have only recently been seriously considered in this discussion. Urban communities here were considered the product of outside stimulus, and thus were deemed of little value for identifying the processes of cultural evolution unobstructed by outside influences. Archaeologists have shifted from questions about 'origins' to political processes, and from a focus on universal trajectories to the variable pathways towards social complexity. In this context, West Africa in the Atlantic Era has emerged as an ideal context in which to explore the dynamics of urbanism and social transformation. The Abomey Plateau Archaeological Project has adopted a landscape perspective to examine the regional dynamics of Dahomean urban transformation in the era of the slave trade. The next phase of this research involves a new excavation project that will address questions regarding the origins and nature of urban communities, the evolution of 'internal' African slavery, and the shifting nature of community identity in precolonial Dahomey. This proposal seeks seed money to support the Cana Archaeological Project in the Republic of Bénin towards this end.

Matthew O'Hara, History
SRG
Matt O'Hara

The History of the Future in Mexico

Historians of Latin America, and Mexico in particular, have spent a great deal of energy studying historical legacies. Whether examining the implications of the colonial past for the newly independent nation-states of the nineteenth century or the role of historical memory in contemporary politics, the notion that "the past weighs heavily on the present" is now a standard trope of historical analysis.

Moving beyond this paradigm, my project examines the way that Mexicans thought about, planned for, and accessed the future from the late colonial period into the early republic, a period spanning the eighteenth and nineteenth centuries. Slicing time in this way places analytic attention on the continuities and ruptures between colonial and republican practices. It also helps to capture the subtle changes to "futuremaking" that only appear when viewed over the long run.

Based primarily on archival materials, I study a diverse range of practices, from topics that we usually associate with religious studies (divination, witchcraft, augury) to others that are typically the domain of economic historians (budgeting, accountancy, demand and supply forecasting). Bringing together these disparate topics will produce a cultural and social "history of the future" that takes the Mexican past on its own terms, rather than viewing it through a prism of relative underdevelopment.

Nicole Paiement, Music
SRG
nicole paiement

Great Gatsby Phase 1

My research focuses on orchestral timbral combination through reorchestration into smaller instrumental forces, as a means to insure the viability of masterworks of contemporary opera. Reducing a full orchestra to a smaller ensemble presents the challenge of combining instrumental timbres such that the original intention is preserved, yet the new version can stand on its own as a separately viable work. Following my research on John Rea's 1995 reorchestration of Berg's Wozzeck, the next step is to commission a new chamber orchestration of a contemporary opera. Composer John Harbison and his publisher G. Schirmer have agreed to let his opera The Great Gatsby be the basis for a new reorchestration to be realized by composer Jacques Desjardins. I will be able to collaborate with both composers on an ongoing basis to complete the project. The world premiere of this new version will be presented in February 2012 under my direction. In its new form, more performance opportunities will arise for this work, and will bring increased attention to my research in timbral combination through reorchestration. Both UCSC and UC will benefit from the increased visibility and will consolidate their role as participants in the perservation of masterworks in performing arts.

Jennifer Parker, Art
SRG

Invisible Spaces at Gray Area Foundation for the Arts (GAFFTA) in

I use physical computing to create interactive artworks to dynamically visualize and sonify data as it relates to an installation site or location. For Invisible Spaces I will create an interactive art installation over a period of three months at Gray Area Foundation for the Arts (GAFFTA) in San Francisco beginning March 2011.

The physical framework for this project is an electronic information ecology, consisting of a complex series of robotic sound sculptures, machines, video projections and sensors that employ viewer's reactions as one of the interface systems. This interactivity intermittently produces a wide range of audioscapes, data projections and mechanical noises to build, collect and distribute media into the exhibition space. Programming content of Invisible Spaces will consist of real time air and water data collected from EPA's pollution databases, sound files from the University Corporation for Atmospheric Research, data parsed from UCLA's research in upper atmosphere and space physics, and on-site data from sensors placed in and around the gallery location.

Invisible Spaces seeks to frame meaningful connections between data and live experience while engaging gallery viewers in uncovering and presenting information about the environment and their location.

Hector Perla, Latin American and Latino Studies

SRG

Content Analysis of US-Central American Solidarity Movement

Throughout the 1980s one of the Reagan Administration's most contested foreign policy initiatives was that towards Central America, where it attempted to defeat the Salvadoran and Guatemalan guerrillas, as well as overthrow the Sandinista government of Nicaragua. Reagan's policy was challenged by civil society organizations, whose efforts became known as the Central American Peace and Solidarity Movement (CAPSM). Since coming to UCSC I have collected significant archival material from several local organizations that participated in this movement. These records document the transnational strategies that these activists used to mobilize opposition to U.S. intervention in Central America, and hold potential insight for current transnational social movement activists and scholars working on similar issues. Analyzing this material would be invaluable for improving my current manuscript, and essential for my next major research project: the first comprehensive history of the CAPSM. Thus, I am requesting funding to hire a Graduate Student Researcher to help complete this project. I am also requesting support for research travel to interview prominent CAPSM activists that are located in Central America or in other cities around the U.S. These interviews are essential because activists' testimonies will give insight into the movements' dynamics that may have varied by location.

Amy Ralston, Molecular, Cell, and Developmental Biology

SRG

EXAMINING THE IMPACT OF AGING ON CELLULAR

That an organism's lifespan is limited is a well-accepted principle. However, the existence of reprogramming technology, wherein adult cells are reverted to an embryonic stem cell state, challenges this notion by providing a means to extend the lifespan of a genome indefinitely. In fact, the utility of reprogrammed stem cells in medicine relies upon the assumption that aged cells will function like young cells following reprogramming. This assumption has significant implications for intended therapies involving reprogrammed stem cells, but it has not been rigorously examined. This calls for 1) a systematic analysis of the impact of aging on cellular reprogramming and 2) the development of alternative methods for creating more "youthful" patient-derived stem cells, such as reprogrammed placenta cells. My lab has the expertise needed to address both of these goals.

Catherine Ramirez, American Studies

SRG

Catherine Ramirez

N/A

Democracy and Difference: Mexicans and Muslims in the United

This social and cultural history of immigration since World War II compares Mexicans in the United States and Muslims in France. While France has been upheld as the birthplace of the universalist language of rights, the U.S. is celebrated as an egalitarian melting pot. Myths of abstract citizenship, multicultural harmony, and colorblind meritocracy have collided and merged with the legacies of imperialism and exigencies of capitalism, in other words, with processes and practices of exclusion and exploitation. Using an eclectic array of sources, including newspapers, government documents, memoirs, political manifestos, and websites, I argue that these processes and practices have rendered Mexicans and Muslims seemingly unassimilable, yet necessary, actors in the American and French nation-building projects (e.g., as guest workers, illegal aliens, and legal citizens who are presumed to be aliens). Meanwhile, the presence of these two groups in the metropole exposes the competing needs and drives of the nation, empire, and market and interrogates the state's responsibilities to workers and denizens, "legal" and "illegal" alike.

Christina Ravelo, Ocean Sciences
SRG
Matthew McCarthy

California coastal ecosystem response to climate change: developing

Periodic large-scale climate shifts and El Niño events have profound impacts on California marine ecosystems, including episodes of marine mammal starvation and the recent California salmon fishery collapse. However, available instrumental records to directly study these phenomena are only ~50 years long, severely limiting our ability to discern whether recent ecosystem deteriorations are part of natural climate/oceanic variability, or are enhanced by human-induced global warming. To understand the context of recent changes requires a baseline record of natural variability extending 100's of years, before humans began altering global climate. We will pioneer an approach to study natural variability of the last ~500 years using deep-sea gorgonian corals. The chemical composition of their annual growth rings reflects their food source (sinking organic particles), thus providing a remarkable record of surface plankton communities, which form the base of the ecosystem food chain, back through time. We will analyze the nitrogen isotopic composition of individual amino acids of growth rings to provide information on changes in nutrient cycling by plankton and in the number of trophic transfers of energy in the food chain. Our study will deliver the first baseline records of natural variability in California coastal ecosystems for the last ~500 years.

Roger Schoenman, Politics
SRG

Assistant Professor

Captains or Pirates? Politics and Business Forging Networked

This research, which will provide the material necessary to complete a book-length manuscript, seeks to understand the social network basis of capitalism in developing countries. It focuses on the middle ground in which most capitalist activity takes place globally: countries where institutions are not yet fully developed and networks of individuals compensate through formal and informal means in the conduct of economic activity. The goal is to understand how the structure of these networks –how they are shaped, who takes part in them and whether they are more or less cohesive -influences later institutional development and function. In other words, do these networks take countries toward more institutionalized forms of capitalism or more pervasive corruption?

Economics conceptualizes markets as spaces where individuals interact according to a set of institutional procedures. However, markets also rely heavily on social ties to transmit norms, critical information and offset uncertainty although networks can also be used to support corrupt activity. How can one distinguish between the positive and negative role of social ties in the process of development? This research explores the process of building market institutions in eleven post-communist countries to answer that question.

David Smith, Physics
SRG

Lightning Research from a Mobile Platform

Despite the spectacularly visible nature of lightning, the physical mechanisms governing its initiation and propagation from the thundercloud to the ground are not well understood. Over the past decade, high-energy radiation (x-rays and gamma-rays) has become recognized as a phenomenon associated with most lightning that may be fundamental to understanding its initiation and propagation. We are seeking to adapt a gamma-ray detector that we developed for use on aircraft for operations in a "storm chaser" van. With SRG funding we can prove the concept this summer by chasing storms in Florida in a rental van, and then apply for NSF funding for larger campaigns in following years.

Victoria Stone, Microbiology and Environmental Toxicology
SRG
Roberto Bogomolni

Role of the LOV-STAS protein in Listeria monocytogenes virulence.

Sensing of environmental signals enables facultative pathogens to switch their lifestyles from growth outside to inside host organisms. LOV domains are sensory modules that detect light, oxygen, and voltage, transmitting a signal to an output domain that controls a specific pathway or function. The facultative pathogen Listeria monocytogenes can grow in soil, decaying matter, and food as well as in mammals, where it can cause serious infections. Listeria contains a protein encoding a LOV domain and a STAS domain, which is predicted to control the expression of genes involved in the environmental stress response and virulence. Roberto Bogomolni's group studies LOV-domain containing proteins and recently found that a Brucella abortus LOV protein is important for growth in mammalian cells. In addition, Victoria Auerbuch Stone has done extensive work on Listeria pathogenesis. By combining the expertise of our two research groups, we will characterize the role of the Listeria LOV-STAS protein in Listeria host cell invasion and growth and acid tolerance (which is important for the infectivity of this food-borne pathogen). The results from the proposed experiments will enable us to pursue external funding to address the importance of the LOV-STAS protein in Listeria pathogenesis.

Renee Tajima-Pe¤a, Community Studies
SRG
Renee Tajima-Pena

"Mas Bebes?" Sterilization Abuse and Mexican American Women in

The 1-hour documentary, ¿Más Bebés?, will uncover the history of Mexican-origin women who were forcibly sterilized at Los Angeles County-USC Medical Center during the late 1960s and 70s. Many of the women spoke no English and were prodded into tubal ligations in the late stages of labor, often based on little more than the question, “More babies?” The case ignited organized resistance among a rising generation of Chicana feminists and the class action lawsuit, Madrigal v. Quilligan. The story will be told through the multiple perspectives of key participants in the events, including plaintiffs, medical personnel, lawyers, activists, journalists, and the whistle-blowing doctor who exposed the practices. The cinematic strategy of ¿Más Bebés? is informed by the idea of a “haunting,” linking the trauma of lived experience to the sociopolitical contours of history and the present day. We argue that, with the coercive sterilizations, the brown body is policed by a racialized state even before it is born.¿Más Bebés? will not simply be a dramatic and neglected history uncovered, but will address questions that resonate powerfully with present-day themes of immigrant women and families, notions of citizenship and access to public benefits, reproduction rights and reproductive justice.

Anna Tsing, Anthropology

SRG

Matsutake Worlds Live

This proposal seeks funding to continue preparing a web-based documentary interview site for my research on global interconnections involving an aromatic wild mushroom known as matsutake. Matsutake is harvested in forests across the northern hemisphere for export to Japan, where it is the world's most expensive mushroom. My research, funded by a grant from the Toyota Foundation, studies the cultural translations of the matsutake commodity chain. An unfunded but expensive development from the research has been the plan to create a public web site to allow a larger audience to appreciate and comment on the cultural and biological richness of global matsutake networks, both ecological and social. To prepare for this website, my collaborators and I have videotaped interviews with matsutake scientists, traders, and pickers in the United States, Japan, China, and Finland. The interviews highlight both the ecological and cultural specificity of each regional situation and the web of interconnections that link them across continents. I am seeking funds for specialized assistance in film editing, on the one hand, and translation, on the other. The project is currently well underway but is currently stalled for lack of funds. Your grant would allow the fruition of this project.

Yiman Wang, Film and Digital Media
SRG

Assistant Professor

Becoming "Minor" – Regarding Ann May Wong Performing across the

My new book project continues to explore border politics by focusing upon Anna May Wong, an early 20th-c. Chinese-American actress who actively shuttled between America, Europe and China, while bridging different media forms. I conceptualize Wong as a minority actress, a minor star, and a migrant worker, who strives to convert disadvantages into a strategic position from which to address the audience in a potentially self-empowering manner. Utilizing Deleuze's theorization of "minor literature," I describe Wong's tactical performance in terms of "becoming minor," which enables subversion on the discursive and performative level. By studying Wong's tactical performance in the first part of the 20th-c., this project theorizes a viewing position that enables radicalization of media representation and production in our times.

In the coming summer, I plan to conduct extensive research on minority women working in Euro-American film industries during the silent era. For this purpose, I plan to attend: 1) Il Cinema Ritrovado Film Festival in Bologna, Italy (which will devote a special section to women and silent cinema), and 2) San Francisco Silent Film Festival. Participating in these film festivals will build the necessary base to launch this project. And the COR grant enables precisely this first step.

Edward (Ted) Warburton, Theater Arts

SRG

Edward (Ted) Warburton

Danny Scheie

You Nero, New Media

"You Nero, New Media" seeks funding to support the research and development of an ambitious new-media adaptation of You Nero, Amy Freed's highly acclaimed play written for and starring UCSC Professor Danny Scheie. This project has two parts: phase one is script-design and phase two is full production. This proposal seeks support for the first phase only. In a series of script-design residencies, our creative research project will develop – and document the process of designing – a new-media, multi-site script with complete director cues, original lighting-set-costume designs, technical requirements, and technology topologies. The goal of script design is two-fold: a) to research, develop, and produce a new-media script in preparation for a full production during Shakespeare Santa Cruz's 2011 season, a show that will happen literally in two different places at the same time and stream live online, and b) to document and publish our creative research process of scripting You Nero for stage and screen in what may come to be seen as the birth of a new theatrical genre.

Lewis Watts, Art
SRG

Tracing The Cultural Landscape in Cuba

Cuba has been on my radar for much of my professional life. It has been primarily frozen in time aesthetically and architecturally since the revolution because of the U.S. economic blockage. Much of what has been "frozen" is beginning to change rapidly after Fidel Castro stepped down amid the inevitable changing relationship between Cuba and the rest of the world. I am interested in documenting that transition as part of my continuing research of the Cultural Landscape. I am interested in the connections between Cuba and Louisiana. Much of the cultural practice including carnival in New Orleans has its origins from immigrants who came from Haiti by way of Santiago Cuba. There is an architectural tradition that comes from a shared colonial and environmental tradition. I am also interested in the trace of economic, demographic and cultural change as reflected in the built and natural landscape. This has been the basis of much of my photographic examination of places such as West Oakland, New Orleans, Jamaica and Harlem where natural and economic forces have effected the ways that space is occupied and culture is evidenced visually.

Christopher Wilmers, Environmental Studies
SRG
James Estes

Can predators reduce atmospheric CO2 through trophic cascades?

Top predators, by suppressing herbivores, often have positive indirect effects on plant biomass. Plants utilize CO2 in photosynthesis and store much of the earth's non-fossilized organic carbon in their living tissues and detritus. This suggests that the presence of predators can ultimately lead to a greater amount of carbon stored in plant biomass, thereby decreasing atmospheric carbon. We recently discovered that sea otters, by suppressing herbivorous sea urchins, increase kelp biomass 100-fold, resulting in a 550 to 890 gCm-2yr-1 increase in net primary production. The difference in living kelp biomass alone results in a 10 Tg increase in ecosystem carbon storage. This represents 11.4% of the carbon contained in the atmosphere above the North American otter range, which is equivalent to 44% of the increase since pre-industrial times with a present-day value of over $700 million on the European Carbon Exchange. Populations of large predators have been depleted or lost throughout much of the globe. These losses have likely altered the rates of carbon flux and storage in global ecosystems. We propose to estimate the potential magnitude of the global effect of predators on carbon sequestration, and identify ecosystems that have a high potential for carbon sequestration through food web restoration.

Matthew Wolf-Meyer, Anthropology
SRG

Assistant Professor

The Mutable Nation: Cancer, Race, and American "Biological

A critical study of the history and contemporary practice of epidemiology provides a means to understand the interdependencies of colonial, industrial and political projects on medicine and science as they all developed over the course of the 19th and 20th centuries. This project focuses on the ways that epidemiology constructs cancer "hot spots" throughout the American West, obscuring the colonial and industrial past that has produced these sites of high prevalence, and instead substituting biological explanations focused on race and genetic predisposition. Through participant-observation, life history and informational interviews, supplemented with archival research, this project attempts to evidence the colonial and industrial histories that have produced particular populations as cancerous communities, both afflicted by national histories and integral to the nation as "biological citizens," in need of governance.