

## Sharada Balachandran Orihuela, 2005 Cohort English, UC Davis

Sharada Balachandran describes herself as a “pirate of sorts.” Born in Mexico to a Mexican mother and Indian father who met while studying at the University of Wisconsin, Madison, Sharada began her own formal education in New Delhi but moved regularly between India, Mexico and the United States as life demanded. “I know that moving from house to house is pretty normal,” she says about her nomadic upbringing, “but I have spent my life commuting between two continents.”

Having grown accustomed to moving between countries, she took a not surprisingly international approach to her undergraduate education as well, choosing to attend Mills College in Oakland, California to study English. With special affection she recalls the powerful role played by three female faculty members who taught her critical thinking and composition courses that introduced literature as a window for the examination of social life. “After being in schools that emphasized memorization for most of my life,” she says, “I enjoyed the opportunity to use literature to explore the ways in which individuals like myself shape and are shaped by experiences of transnationality and marginalization.”



Sharada Balachandran  
Doctoral Fellow

Her dissertation research, which she describes as “very Sharada,” is inspired by her journey as a female migrant of Mexican and South Asian descent moving between countries. In *From Flags to Freeways: Hemispheric Routes of Exchange, Marginalized Economies, and Liberal Rights* she explains the ways in which marginalized groups in



## Jethro Hernández Berrones, 2009 Cohort Anthropology, History & Social Medicine, UC San Francisco



Jethro Hernández  
Doctoral Fellow

Homeopathic medicine has had an intriguing and unique history in Mexico. While in many countries homeopathy and conventional or allopathic medicine have uncomfortably co-existed, during the first decades of the 20<sup>th</sup> century, Mexico’s *Escuela Nacional de Medicina Homeopática* (ENMH) was incorporated within the *Universidad Autónoma Nacional de México* (UNAM) where the *Escuela Nacional de Medicina* was also housed. This symbolic merging of the two schools, which granted homeopathy legitimacy as a scientific body of knowledge and practice in the eyes of medical practitioners and the public, would be short-lived with the doors of the ENMH closing only a few years later. Jethro Hernández Berrones, a second-year doctoral fellow at the University of California, San Francisco, wants to understand why.

For Jethro, the study of homeopathy’s history and evolution in Mexico is a personal and philosophical quest. Years ago, his sister suffered from an illness that conventional medicine was unsuccessful in treating. It was only when his family turned to homeopathic treatments that she began to improve. His family’s reliance on homeopathy and their belief in its power to heal stood in contrast to orthodox physician’s skepticism about alternative holistic approaches, sparking a larger question about what social practices become valued, and even revered, as science.

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### ENGLISH, UC DAVIS

the Americas affirm their positioning within the socio-economic and political context. Analyzing everything from novels, travelogues, films and personal correspondence found in archival materials, Sharada examines how individuals within these groups maneuver to gain power and validate their rights.

Liberalism, which refers to a system of beliefs that emphasizes liberty and equal rights, is central in Sharada's work. She points out that in the Americas human rights have been "anything but universal," with particular groups being denied political acknowledgment and access to property at different historical periods. Her work specifically concerns how enslaved people, migrants and pirates have endeavored to gain liberal rights in spite of having been denied formal recognition and citizenship.

Minority populations in the Americas, she argues, have gained access to liberal rights in a *piratical* way. In much the same way that "pirates engage in transactional prac-

tices both in full view and under the purview of state regulation to affirm their position and rights in society," disenfranchised groups engage in forms of exchange (e.g., economic exchange) in ways that are not reliant upon national inclusion and citizenship. Applying insights from history, economics and literature, she looks at how these groups engage in piratical activities that have encouraged the development of alternative economic exchanges or hidden economies to demand political legibility.

Research is not the only pathway through which Sharada is committed to making complex political and social dynamics apparent. In her role as educator, she seeks to empower students and help them realize their opportunities of action within a "politically charged" society. While pursuing her Ph.D. she has mentored both graduate and undergraduate students and served as a teaching assistant and associate instructor for undergraduate courses in English and the humanities. She has served as a

teaching assistant consultant for the UC Center for Excellence in Teaching and Learning. In recognition of her outstanding research and teaching, she was recently awarded the Marilyn Yarbrough Dissertation and Teaching Fellowship which will enable her to complete her dissertation and teach two courses of her own design while in residence at Kenyon College in Gambier, Ohio.

Reflecting on the sum of her experiences as migrant, scholar and teacher, Sharada feels fortunate to conduct a research project that allows her to link her personal interests, pedagogical commitments and professional pursuits. She emphasizes, "I have both enjoyed and examined my role as an immigrant in several countries where cultural diversity is exalted and diminished. I appreciate that research allows me to reflect on my personal experiences and knowledge to understand the construction of transnational worlds and lives." ❧



Photo courtesy of Sharada Balachandran

Sharada Balachandran participated in the 2011 Interdisciplinary Graduate and Professional Student Symposium at UC Davis.

# DOCTORAL FELLOWSHIP ALUMNI: WHERE ARE THEY NOW?

## **Ismael Aguilar Benítez**

UC Irvine, 2001 Cohort  
Director  
Departamento de Estudios Urbanos y  
del Medio Ambiente  
El Colegio de la Frontera Norte

## **Heriberto Avelino Becerra**

UC Los Angeles, 1998 Cohort  
Director  
Speech Sciences & Phonetics Research Unit  
Max Planck Institute for Evolutionary  
Anthropology

## **Raymundo Campos Vázquez**

UC Berkeley, 2003 Cohort  
Profesor-Investigador  
Centro de Estudios Económicos  
El Colegio de México

## **Héctor Estrada Medina**

UC Riverside, 2004 Cohort  
Profesor-Investigador Asociado  
Facultad de Medicina Veterinaria y Zootecnia  
Universidad Autónoma de Yucatán

## **Victor M. González y González**

UC Irvine, 1999 Cohort  
Profesor Titular  
Departamento Académico de Computación  
Instituto Tecnológico Autónomo de México

## **Javier Guzmán López**

UC Davis, 1999 Cohort  
Program Leader  
Catalytic Systems and Science Section  
ExxonMobil Research and Engineering Co.

## **Natividad Delfina Herrera Castro**

UC Riverside, 2001 Cohort  
Directora de Investigación  
Dirección de Investigación Científica  
Universidad Autónoma de Guerrero

## **Carlos Felipe López Suárez**

UC Berkeley, 2002 Cohort  
Director, Credit Stress Testing Methodologies  
Canadian Imperial Bank of Commerce

## **Rolando Menchaca Méndez**

UC Santa Cruz, 2004 Cohort  
Profesor Titular y Jefe  
Laboratorio de Comunicaciones y Redes de  
Computadoras  
Centro de Investigación en Computación  
del Instituto Politécnico Nacional

## **Minerva Oropeza Escobar**

UC Santa Barbara, 2000 Cohort  
Profesora-Investigadora Titular B  
Centro de Investigaciones y Estudios Superiores  
en Antropología Social, Sede Golfo

## **Laura Adriana Oropeza Ramos**

UC Santa Barbara, 2001 Cohort  
Profesora-Investigadora  
Centro UNAMems (Microsistemas  
Electromecánicos)  
Departamento de Electrónica, Facultad de  
Ingeniería  
Universidad Nacional Autónoma de México

## **Angel Pita Duque**

UC Davis, 2003 Cohort  
Profesor-Investigador  
Dirección de Centros Regionales Universitarios  
Centro Regional Universitario del Anáhuac  
Universidad Autónoma Chapingo

## **Teresita Ramírez Rosas**

UC Santa Barbara, 2003 Cohort  
Postdoctoral Fellow  
Department of Mathematics  
Grand Valley State University

## **Diego Romero Pérez**

UC San Diego, 2003 Cohort  
Biologist  
Sanford Burnham Medical Research Institute

## **Marcela Romero Reyes**

UC Los Angeles, 2001 Cohort  
Assistant Professor  
Department of Oral & Maxillofacial Pathology,  
Radiology & Medicine  
College of Dentistry, New York University

## **Norma Velázquez Ulloa**

UC San Diego, 2003 Cohort  
Postdoctoral Researcher  
Anatomy Department  
University of California, San Francisco

## DOCTORAL FELLOWSHIP ALUMNI: WHERE ARE THEY NOW?



Marco Vargas Bello, International Scholarship Officer at CONACYT

*Mi nombre es Marco Antonio Vargas, actualmente soy Subdirector de Asignación de Becas al Extranjero en el Consejo Nacional de Ciencia y Tecnología, pero mi experiencia en el CONACYT inició hace casi 18 años, en donde he desarrollado mis actividades en diferentes áreas, siempre con el objetivo de contribuir a la formación de capital humano que fortalezca los sectores productivos de México.*

*Mi relación con el programa UC MEXUS la he tenido prácticamente desde sus inicios en*

*1997, pues como parte del staff del área que en ese entonces llevó a cabo la negociación del primer convenio de colaboración entre el CONACYT y la Universidad de California, tuve que ver con la postura del Consejo en tan importante proyecto de vinculación académica. Posteriormente, como responsable directo de la negociación y seguimiento de los convenios estuve a cargo de la selección, en conjunto con los colegas de la Universidad de California, de los nuevos becarios que recibirían los beneficios del convenio a lo largo de sus estudios de doctorado.*

*Ahora de igual manera mi participación en la articulación de la operación del programa UC MEXUS sigue siendo activa, pues como coordinador del proceso de selección de nuevos becarios, estoy en contacto con los interesados en ser parte del programa desde el inicio, brindándoles asesoría sobre el procedimiento que deben seguir para hacerse acreedores de la beca, hasta la asignación definitiva de la misma, abriendo con ello la brecha para que una vez concluidos los estudios doctorales, regresen a México para contribuir en su desarrollo. ❧*

*My name is Marco Antonio Vargas and I am currently the International Scholarship Officer at Mexico's National Council for Science*

*and Technology (CONACYT), but my experience with CONACYT began almost 18 years ago where I have been involved in different areas, always with the objective of contributing to the development of human resources to strengthen Mexico's productive sectors.*

*My relationship with UC MEXUS extends practically to its very beginning in 1997 when I worked in the unit that negotiated the first collaborative agreement between CONACYT and the University of California, and was involved with CONACYT's participation in this important academic collaborative endeavor. Later, as the person responsible for the negotiation and the follow up of agreements, I was in charge of the joint selection of the new doctoral fellows to be included under and supported by the agreement.*

*Currently, my participation continues to be very active in the joint operation of the UC MEXUS program as the coordinator of the selection process for new doctoral fellows. From the start, I am in contact with students who are interested in being part of the program advising them about the procedures that they must follow to obtain the doctoral fellowship until their official granting of the fellowship, and opening the way so that once they complete their doctoral studies they may return to Mexico to contribute to its development. ❧*

# DOCTORAL ALUMNUS SPOTLIGHT

## VIRGINIA MONTERO HERNÁNDEZ, 2005 COHORT

### UC MEXUS SCHOLAR IN RESIDENCE



Photo courtesy of Virginia Montero

Virginia Montero  
Doctoral Fellow Alumnus

A turning point in my life occurred in 2005 when I was selected as a UC MEXUS-CONACYT doctoral fellow. In September of that year, I entered the U.S. for the first time in my life to pursue doctoral studies at the Graduate School of Education (GSOE) at the University of California, Riverside (UCR). It was during my undergraduate studies in educational science at the *Universidad Autónoma del Estado de Morelos* (UAEM) that my

mentor Omar García Ponce de León, a sociologist and full-time professor at the university, encouraged me to come to the UC system and advised me through the entire application process.

My first year as an international student at UCR was an exciting and daunting experience. To be in a foreign country forced me to reorganize my way of being and thinking. In the midst of missing my family and language, I had to familiarize myself with the fixed and rigid public transportation schedules of the U.S., the widespread use of agendas and compulsive use of email. I had to learn as much about efficiency and planning as medical and tax systems.

One of the greatest challenges I faced as a Mexican student in the UC system was finding my voice in academic writing. Although I spent three years studying English as a second language in Mexico, I found it very difficult to write well structured essays. The limited training I received in Mexico to write academically combined with thinking in my

mother tongue made the transition to writing in English difficult.

The complexities of being an international student were usually balanced by positive experiences such as discovering new people and places. From my first day at the university campus, I was surprised by its infrastructure. Specialized libraries, highly equipped computer laboratories and student services were things I did not find at my university in Mexico. I was particularly grateful for the Learning Center at UCR, which I visited almost every day during my first year to ask for guidance to improve my abilities in writing and speaking a second language.

Both motivation and discipline were main factors that led me to overcome the challenge of studying in an English-speaking country. As the daughter of elementary school teachers who have worked for thirty years and continue teaching in Mexico, I was advised to be a committed student. Both my father and mother encouraged me to think creatively and to explore beyond the

content offered by my instructors.

My parents' dedication to their students inspired me to investigate the work and lives of educators. As someone who grew up attending protests by school teachers demanding better salaries and work conditions, I realized early on that educators are often undervalued and overlooked by policy makers, academic administrators and politicians. This realization motivated me to work as a research assistant with professor John S. Levin at the GSOE and study the ways in which faculty interact with students to shape academic life at higher education institutions.

When I began working on my dissertation, *The Construction of Professional Identity and Pathways of Participation of Full Time Faculty Members in University Restructuring in Mexico*, I organized my goals, research interests and abilities. I conducted six months of fieldwork in Mexico at the same time that I coauthored a book, *Community Colleges and Their Students: Co-construction and Organizational Identity*, with my

# DOCTORAL ALUMNUS SPOTLIGHT

## VIRGINIA MONTERO HERNÁNDEZ, 2005 COHORT

### UC MEXUS SCHOLAR IN RESIDENCE

mentor John Levin. Finishing my dissertation and coauthoring publications with him were arduous activities that helped me improve my academic writing and broaden my understanding of academic's work in postsecondary education.

While working with John Levin, I maintained communication with Omar García and Manuel Aguilar Tamayo, an educational researcher and full-time professor at the UAEM. The overlap in the work of these three scholars as well as their willingness to work with those in other countries led me to suggest that we collaborate on an academic project. In 2010, we received funds from CONACYT to develop a three-year Mexico-U.S. collaborative research project exploring faculty's academic practices across three public state universities in Mexico. As a bi-national research group, in which other Mexican and U.S. professors participate, we have overcome language barriers and differences in academic culture to advance knowledge and open up opportunities for student mobility. The professional experiences of external researchers

have brought both critical and fresh perspectives that help the Mexican scholars question the familiarity of their academic practices and context.

I graduated from UCR in June of 2010 and was chosen as the commencement speaker of the graduation ceremony—an honor that allowed me to overcome my apprehension of speaking and writing in English. My collaboration with John Levin continued beyond graduation through a seven-month postdoctoral position in which I began exploring the construction of academic identity at three institutional contexts: a research intensive university, a comprehensive university and a community college in California.

My work on higher education in Mexico continues through the Mexico-U.S. collaborative research project and the repatriation program offered by CONACYT. Currently, I am a resident scholar at UC MEXUS. With the assistance of Wendy DeBoer, director of academic programs, I have found an opportunity to integrate elements of my previous research

experiences and write about the convergences and differences between the construction of academic life both in Mexico and the U.S.

Studying abroad is a life-changing experience for those who engage in it. It changes the lives of the students who decide to leave their country, the opportunities for collaboration by the professors who encourage students to study in another country, the perspective of the foreign professors who

receive and work with them and the opinion of classmates who listen to the educational experiences of those who come from a different cultural background. I must say that studying in a foreign country has changed my life in the same positive way in which I have tried to contribute to the lives of those who have opened their heart to let me in. ❧

*Virginia Montero Hernández was contributing writer for the stories in this edition of La Monarca.*



Virginia Montero standing in front of the Rivera Library at the University of California, Riverside.

Photo courtesy of Virginia Montero

# 2009-2011 RECIPIENTS OF THE UC MEXUS-CONACYT DOCTORAL FELLOWSHIP

**Luis Alejandro Abdala Roberts**  
UC Irvine  
Ecology & Evolutionary Biology

**Eréndira Aceves Bueno**  
UC Santa Barbara  
Environmental Science &  
Management

**Juan Luis Aguilera Servín**  
UC Riverside  
Physics & Astronomy

**Luis Felipe Alvarez León**  
UC Los Angeles  
Geography

**Gerardo Francisco Aragón Castaño**  
UC Davis  
Agricultural & Resource Economics

**Christian Briseño Avena**  
UC San Diego  
Ocean Biosciences

**Mixtli Campos Pineda**  
UC Riverside  
Chemistry

**Carlos Armando de Jesús Cantú  
García**  
UC Los Angeles  
Economics

**David Carrillo Cisneros**  
UC Irvine  
Computer Science

**Dora María Cedano Prieto**  
UC Davis  
Pharmacology & Toxicology

**María Elvira Cedano Prieto**  
UC Davis  
Pharmacology & Toxicology

**Christian Constandse Cabello**  
UC San Diego  
Economics

**Paúl Alejandro de la Cruz Frías**  
UC Los Angeles  
Economics

**Daniel Domínguez Valles**  
UC Los Angeles  
Education

**Marco Antonio Escobar Acevedo**  
UC San Diego  
Electrical & Computer Engineering

**Alejandro Carlo Estrada Melo**  
UC Davis  
Horticulture & Agronomy

**Cecilia Farfán Méndez**  
UC Santa Barbara  
Political Science

**Victor Manuel Fragoso Rojas**  
UC Santa Barbara  
Computer Science

**Mariano Cristóbal Franco de León**  
UC Irvine  
Mathematics

**Jonathan Fresnedo Ramírez**  
UC Davis  
Horticulture & Agronomy

**Ana Elisa García Vedrenne**  
UC Santa Barbara  
Ecology, Evolution & Marine Biology

**Diego Garrido Ruiz**  
UC San Francisco  
Biophysics

**Marcel David Gómez Valenzuela**  
UC Davis  
Computer Science

**Janin Guzmán Morales**  
UC San Diego  
Geosciences of the Earth, Ocean &  
Planets

**Jethro Hernández Berrones**  
UC San Francisco  
Anthropology, History & Social  
Medicine

**María del Carmen Hernández Lara**  
UC Santa Cruz  
Economics

**Sara Veronica Hernández Muñoz**  
UC Los Angeles  
Economics

**Christian Herrera Ortiz**  
UC Irvine  
Cognitive Sciences

**Ivo José Jimenez Ramos**  
UC Santa Cruz  
Computer Science

**Miguel Angel Lastras Montaña**  
UC Santa Barbara  
Electrical & Computer Engineering

**Venecia Citlali Lara Caldera**  
UC Irvine  
History

**Emir Adolfo Leal León**  
UC Davis  
Pharmacology & Toxicology

**José Luis Luna Alpizar**  
UC Irvine  
Economics

# 2009-2011 RECIPIENTS OF THE UC MEXUS-CONACYT DOCTORAL FELLOWSHIP

**Claudia Martínez Macías**  
UC Davis  
Chemical Engineering &  
Materials Science

**Sofía Medina Ruiz**  
UC Berkeley  
Molecular & Cell Biology

**Oscar Alejandro Méndez Medina**  
UC Davis  
Economics

**Giulianna Mary Mendieta Melgar**  
UC Los Angeles  
Social Research Methodology

**Natalie Millán Aguiñaga**  
UC San Diego  
Marine Biology

**Rodolfo Navarrete Pérez**  
UC Santa Cruz  
Astronomy & Astrophysics

**Quetzalcoatl Orozco Ramírez**  
UC Davis  
Geography

**Vicente Diego Ortega Del Vecchyo**  
UC Los Angeles  
Bioinformatics

**Francisco Javier Parada Gómez**  
**Urquiza**  
UC Davis  
Agricultural & Resource Economics

**Daniel Alonso Pérez Becker**  
UC Berkeley  
Physics

**Alejandra Priede Schubert**  
UC Los Angeles  
Education

**Ana Laura Quezada Lara**  
UC Riverside  
Bioengineering

**Ana Guadalupe Ramos Velazquez**  
UC San Diego  
Chemistry & Biochemistry

**Alejandro Rodríguez Méndez**  
UC Berkeley  
Mechanical Engineering

**Ana Elvira Rodríguez Soto**  
UC San Diego  
Bioengineering

**Alejandra Rodríguez Verdugo**  
UC Irvine  
Ecology & Evolutionary Biology

**Michelle Azucena Romero Franco**  
UC Los Angeles  
Environmental Health Sciences

**Mónica Romero López**  
UC Irvine  
Mathematical, Computational &  
Systems Biology

**Nadia Tamara Rubio Cisneros**  
UC San Diego  
Marine Biology

**Eva Luz Sánchez Alvarez**  
UC San Diego  
Marine Biology

**Cynthia Hixahuary Sánchez Tapia**  
UC Irvine  
Mathematical, Computational &  
Systems Biology

**Norma Saiph Savage Chávez**  
UC Santa Barbara  
Computer Science

**Aleidy Marlene Silva Vite**  
UC Los Angeles  
Mechanical & Aerospace  
Engineering

**Edgar Humberto Téllez Foster**  
UC Riverside  
Environmental Sciences

**Luz María Sinaia Urrusti Frenk**  
UC Berkeley  
Economics

**Victor Eduardo Villalobos Daniel**  
UC Berkeley  
Public Health



WELCOME TO THE UNIVERSITY OF CALIFORNIA!  
UC MEXUS IS PROUD TO SUPPORT  
YOUR DOCTORAL STUDIES.



# DOCTORAL ALUMNUS SPOTLIGHT SUSANA DÁVALOS TORRES, 2005 COHORT SCHOOL OF LAW, UC BERKELEY



Susana Dávalos in her office at UNAM.

Susana Dávalos Torres literally grew up in the halls of the *Universidad Nacional Autónoma de México* (UNAM). She recalls spending many an afternoon at UNAM with her father, a professor of law there, during her youth. “UNAM has been my home,” she says. “I spent most of my childhood in the gardens of the university during weekends while my father was working at

his office.” Today, she carries on the UNAM family tradition as an associate professor at its *Instituto de Investigaciones Jurídicas*/Institute for Legal Research, where she teaches and conducts research on commercial and bankruptcy law.

A former UC MEXUS-CONACYT doctoral fellow and alumnus of UC Berkeley’s Boalt

School of Law, her decision to pursue a J.S.D. was influenced not only by her academic upbringing, but by two key events in Mexico during a formative period in her education. In response to the devaluation of the peso and deepening external debt in 1995, the Mexican government created the FOBAPROA (*Fondo Bancario de Protección al Ahorro*) as a contingency fund to assume outstanding debt and protect the Mexican banking system from insolvency. While it assumed 552 billion pesos in debt to prevent financial collapse, it has also been declared responsible for wide-scale corruption and weakening of Mexico’s financial system. For Susana, the implementation of the FOBAPROA in the midst of a lack of other formal alternatives and protections highlighted a problematic relationship between Mexico’s financial and legal systems.

The student strike at UNAM in 1999 would also have a profound impact on the direction of her graduate studies. Lasting 300 days, it sparked national debate about Mexico’s constitutional guarantee of

free public education. The ensuing protests, blockades and violence left an indelible mark on Susana’s professional commitment to her country: “My classmates and I felt an urgent need to understand what was happening and to find ways to contribute to the betterment of our society.”

A clear way in which she saw change being effectively implemented was through legal scholarship and practice. She joined UNAM’s Institute for Legal Research in January of 2000, where she had the opportunity to meet some of Latin America’s most notable law professors including Hector Fix-Zamudio, Jorge Carpizo and Diego Valadés whose work led to the development of institutions dedicated to improving Mexico’s social and political life. Based on their proposals, the Mexican Congress eventually created a number of institutions that have helped to advance democracy in Mexico: *La Comisión Nacional de los Derechos Humanos*, *El Instituto Federal Electoral* (an independent public entity responsible for organizing federal elections in Mexico), and *El Instituto Federal*

# DOCTORAL ALUMNUS SPOTLIGHT

## SUSANA DÁVALOS TORRES, 2005 COHORT

### SCHOOL OF LAW, UC BERKELEY

*de Acceso a la Información Pública* (a federal institute created to facilitate public information access).

Recognizing the need for legislation to create civil and political rights as well as economic protections, she chose to study commercial law and applied to UC Berkeley's law school due to the strength of its programs in law and economics, intellectual property and business law. Her studies at Berkeley would present her with two immediate challenges: undertaking the study of commercial law in a new language and doing so without a background in economics. With the strong encouragement and mentoring of her professors at UC Berkeley, Jesse Fried and Robert Cooter, she bravely faced both challenges and graduated in 2006 from one of the most prestigious law schools in the world with an impressive dissertation comparing bankruptcy laws in the U.S., Germany and Spain.

In *Executory Contracts in Bankruptcy: A Comparative and Economic Analysis*, she identifies the most representative legal strategies used across

countries to allow both debtors and creditors to negotiate mutually favorable conditions once in bankruptcy. Susana explains that in countries like Mexico, liquidation (when business is closed and all contractual relationships between parties come to an end) is the preferred alternative within the bankruptcy process. However, in other nations like the U.S. it is

not liquidation but reorganization, the mechanism to rehabilitate the debtor, that is the first alternative. Indeed, for debtors, who need “space to breathe” without the pressure of self-interested creditors seeking to dismantle the debtor's assets, reorganization can enable the debtor's recovery and allow them to have a fresh start in the market—an alter-

native with the long-term possibility of stabilizing jobs and the economy as a whole.

Though many law firms, judges and legal scholars have publicly criticized Mexico's bankruptcy process as ineffective in dealing with debtor's insolvency, research in this area continues to be limited. Susana hopes that her own work will help to address this gap and lead to improvements in bankruptcy procedures. Although her research is primarily theoretical in nature, she sees it as having practical application for the Mexican bankruptcy system and is passionate about introducing innovative ways to address insolvency. She says, “In Mexico, legal mechanisms for rehabilitating the debtor as part of the bankruptcy procedure show clear flaws. Therefore, real opportunities exist for creating legislation to regulate undesirable economic practices and protect the assets of individuals against the threats of economic crisis and bankruptcy.”



Susana Dávalos at the gardens of UNAM.

# UC MEXUS DOCTORAL FELLOWS ACCOMPLISHMENTS

**Alicia Abadía Cardoso** (2007 Cohort, Ocean Sciences, UCSC) is first author of “Discovery and Characterization of Single Nucleotide Polymorphisms in Steelhead/Rainbow Trout, *Oncorhynchus Mykiss*.” She also coauthored “Discovery and Characterization of Single Nucleotide Polymorphisms in Chinook Salmon, *Oncorhynchus Tshawytscha*.” Both articles were published in a 2011 special issue on single nucleotide polymorphism development in non-model organisms in *Molecular Ecology Resources*.

**Luis Abdala Roberts** (2010 Cohort, Ecology & Evolutionary Biology, UCI) was awarded the 2011-2012 Graduate Assistance in Areas of National Need Fellowship. Additionally, he was awarded Level 1 researcher status in the *Sistema Nacional de Investigadores* by CONACYT for 2011-2013.

**Sharada Balachandran Orihuela** (2005 Cohort, English, UCD) was awarded the Marilyn Yarbrough Dissertation and Teaching Fellowship at Kenyon College where she will be a scholar in residence. She was also awarded the UC Davis Humanities Graduate Research Award. Her article, “The Virtual Realities of U.S./Mexico Border Ecologies in *Maquilapolis* and *Sleep Dealer*,” was published in *Environmental Communication: A Journal of Nature and Culture*.

**Joel Barajas Zamora** (2007 Cohort, Electrical Engineering, UCSC) presented a poster resulting from a collaboration with the AOL team in massive computing and advertising titled “Measuring the Effectiveness of Display Advertising: A Time Series Approach” at the 20<sup>th</sup> International World Wide Web Conference in Hyderabad, India.

**Alberto Barrera-Enderle** (2008 Cohort, History, UCI) was awarded the Miguel Velez Fellowship. His dissertation research focuses on the transformation of political culture in the interior provinces of the northeastern border region (Coahuila, Texas, Nuevo León and Tamaulipas) between 1780 and 1824.

**Rodrigo Beas-Luna** (2007 Cohort, Ecology & Evolutionary Biology, UCSC) created an online database for reporting and updating ecological research that is intended to promote collaboration among research groups monitoring and evaluating natural resources in Baja California. Visit the site at: <http://www.gawana.com/baja>

**Roosbelinda Cárdenas** (2006 Cohort, Anthropology, UCSC) was awarded a small writing grant from the Land Deals Politics Initiative and was invited to

attend a conference on Global Land Grabs in Brighton, England. She presented preliminary research results at the Conference of Latin American Geographers in Bogotá, Colombia; the American Anthropological Association’s Annual Meeting; and the Latin American Studies Association Conference in Toronto, Canada. She recently published an article in the Colombian journal *Tabula Rasa* and was awarded the UCSC Chancellor’s Dissertation Year Fellowship.

**Ruy Cervantes** (2007 Cohort, Informatics, UCI) received an award to conduct dissertation fieldwork on innovative Internet industry practices in Mexico from UCLA’s Institute for Research on Labor and Employment. He also published an article about the use of laptops in Mexican primary schools in the conference proceedings of the 2011 Association for Computing Machinery Conference on Computer Human Interaction in Vancouver, Canada.

**Luis Antonio Domínguez** (2006 Cohort, Earth & Space Sciences, UCLA) coauthored the article “Scattering of Teleseismic Body Waves by the Lateral Crustal Heterogeneity at the Pacific Trench on Mexico” with Francisco Sanchez-Sesma (UNAM) and Paul Davis (UCLA) in the *Bulletin of the Seismological Society of America*.

**Marco Escobar** (2009 Cohort, Electrical & Computer Engineering, UCSD) was first author of the article “Focusing Surface Waves with an Inhomogeneous Metamaterial Lens” in *Applied Optics*.

**Michel Estefan** (2008 Cohort, Sociology, UCB) was awarded the Outstanding Graduate Student Instructor Award by UC Berkeley’s Department of Sociology. He also received the GSI of the Year Award from the Berkeley Undergraduate Sociology Association.

**Alejandro Estrada** (2009 Cohort, Horticulture & Agronomy, UCD) was awarded the Jastro-Shields Graduate Research Award for his research on plant adaptability to drought resistance.

**Francisco Fernandez** (2008 Cohort, Planning, Policy & Design, UCI) was awarded the Miguel Velez Fellowship Award. His work in the area of community development and poverty alleviation in Mexico explores the mechanisms that reinforce poverty and inequality.

# UC MEXUS DOCTORAL FELLOWS ACCOMPLISHMENTS

**Alan Fuchs** (2006 Cohort, Agricultural & Resource Economics, UCB) presented his paper “Drought and Retribution: Evidence from a Large Scale Rainfall-indexed Insurance Program in Mexico” at the Latin American and Caribbean Economic Association Meeting and the Northeast Universities Development Consortium Conference.

**Liza Gómez Daglio** (2007 Cohort, Quantitative & Systems Biology, UCM) was granted the Ernst Mayr Travel Grant in Animal Systematics by Harvard University to do morphologic analyses of scyphozoans jellyfish collections contained in its Museum of Comparative Zoology and the Smithsonian Institution’s National Museum of Natural History. She was also awarded the best student poster presentation at the 3<sup>rd</sup> International Jellyfish Blooms Symposium in Mar del Plata, Argentina.

**Raúl Gómez Muñoz** (2006 Cohort, Mathematics, UCSD) coauthored “Bessel Models for General Admissible Induced Representations: The Compact Stabilizer Case” with Nolan Wallach (UCSD), which appeared in the online edition of *Selecta Mathematica*. He was invited to participate in the Representation Theory and Quantization Workshop held by the Fields Institute, Toronto.

**David González Hernández** (2008 Cohort, Communication, UCSD) presented “Mexico: Reception and Audience Research. Findings and Perspectives” with Mexican colleagues at the 2010 Latin American Seminar in Reception and Audience Research organized by the International Center of Higher Studies in Communication for Latin America in Quito, Ecuador. It was published also as a book chapter in *Análisis de la Recepción en América Latina: Un Recuento Histórico con Perspectivas al Futuro*, available at [www.ciespal.net/ciespal/](http://www.ciespal.net/ciespal/)

**José Antonio González Fuentes** (2008 Cohort, Horticulture & Agronomy, UCD) was recognized by the Golden Key International Honor Society and Jastro-Shields Graduate Research Award for research toward the development of a soilless system for open field strawberry production in California as an alternative to methyl bromide pre-plant soil fumigation.

**Irma Hernández Magallanes** (2005 Cohort, Statistics, UCB) is collaborating with David R. Brillinger (UCB) and Haiganoush Preisler (Pacific Southwest Research Station of the US Forest Service) on the prediction of wildfire occur-

rence in the Continental U.S., work that will integrate data collected on federal and non-federal land.

**Jethro Hernández Berrones** (2009 Cohort, Anthropology, History & Social Medicine, UCSF) was awarded the UC MEXUS Small Grant for “Homeopathy and Medical Education in Mexico, 1920-1930.” He was invited to participate in a historical research seminar at the *La Universidad del Papaloapan* where he also gave the lecture “Las Humanidades en la Biomedicina: Por qué y para qué.”

**V. Xóchitl Juárez Varela** (2005 Cohort, Geography, UCD) earned a third Jastro-Shields Graduate Research award for the 2009-10 academic year, a 2010 Gifford Center Summer Grant Award, and a 2010 UC MEXUS Dissertation Research Grant for the project “Challenges and Opportunities for Mexican Rural Mazahua Women in a Context of Spatial Mobility.”

**Raymundo Marcos-Martínez** (2008 Cohort, Environmental Sciences, UCR) coauthored an article on the economics of land use dynamics in Mexican coffee agroforests published in *Agroforestry Systems*. A second coauthored article will be published in *Investigación Económica*. He also contributed a book chapter to a volume published by the *Universidad Veracruzana*.

**Natalie Millán Aguiñaga** (2010 Cohort, Marine Biology, UCSD) passed her departmental exam in Marine Biology and presented her project “A Multilocus Phylogeny of the Genus *Salinispora*” at the first-year student symposium.

**Erick Moreno Centeno** (2005 Cohort, Industrial Engineering & Operations Research, UCB) obtained his Ph.D. in August 2010. He is currently a visiting assistant professor in the Department of Industrial and Systems Engineering at the University of Texas A&M.

**Vicente Diego Ortega Del Vecchy** (2010 Cohort, Bioinformatics, UCLA) has presented his theoretical work on population expansions at the Western Evolutionary Biology Meeting (UC Irvine) and the Bioinformatics Retreat (UCLA). He is currently working on a project that involves the genome sequencing of 5 canids to understand the evolution of dogs and wolves.

**Alfredo Quinto Hernández** (2005 Cohort, Chemistry & Biochemistry, UCSB) was awarded the UCSB Graduate Division’s Graduate Dissertation Award.

# UC MEXUS DOCTORAL FELLOWS ACCOMPLISHMENTS

In collaboration with the University of Hawaii at Manoa's Department of Chemistry, he authored "On the Interaction of Methyl Azide ( $\text{CH}_3\text{N}_3$ ) Ices with Ionizing Radiation: Formation of Methanimine ( $\text{CH}_2\text{NH}$ ), Hydrogen Cyanide (HCN), and Hydrogen Isocyanide (HNC)," published in the *Journal of Physical Chemistry A*. He was also first author of "A Theoretical and Experimental Study of the Ion-Pair Channel" in the *Journal of Physical Chemistry Letters*.

**Alejandra Rodríguez Verdugo** (2009 Cohort, Ecology & Evolutionary Biology, UCI) coauthored the paper "Diversity of Culturable Thermo-resistant Aquatic Bacteria along an Environmental Gradient in Cuatro Ciénegas, Coahuila, México," published in *Antonie van Leeuwenhoek*. She was also awarded the Chateaubriand Fellowship to do 9 months of research in France for a joint project between UC Irvine and the *Université Paris Diderot*.

**Jessica Roldán Peña** (2006 Cohort, Economics, UCLA) was awarded UCLA's Dissertation Year Fellowship. She also presented the paper, "Re-examining the Role of Financial Constraints in Business Cycles: Is There Something Wrong with the Credit Multiplier?" at the 2010 Society for Economic Dynamics Meeting and 2010 Congress of the European Economic Association.

**Nadia T. Rubio-Cisneros** (2009 Cohort, Marine Biology, UCSD) was awarded field research grants from the Professional Association of Diving Instructors and the David and Lucile Packard Foundation for work on ecosystem services of Mexican mangroves. Her field research takes place in the wetlands of Marismas Nacionales where she has been actively working with fishing communities for the past year.

**Ilse Ruiz-Mercado** (2005 Cohort, Civil & Environmental Engineering, UCB) won first place at the student poster competition of the 2010 Annual Conference of International Societies of Exposure Science and Environmental Epidemiology in Seoul, Korea with the poster "Modeling the Variability in Kitchen Time-activity and its Effect on Exposure to PM2.5 from Biomass Cooking." She was also part of the team awarded first prize by the Vodafone Wireless Innovation Project for developing a wireless stove use monitoring system (w-SUMs). Her article, "Adoption and Sustained Use of Improved Cookstoves," coauthored with Omar Masera (2010 UC MEXUS visiting scholar) and Kirk R. Smith (UCB), was published in *Energy Policy*.

**Eva Sánchez** (2010 Cohort, Marine Biology, UCSD) presented "*Chlorella Protothecoides* as a Microalgal Model System for Biofuel Precursors Production" at the 2011 Marine Biology Student Symposium. This research, part of a binational project between UCSD-SIO and UABC-*Facultad de Ciencias*, seeks to develop strains of *Chlorella protothecoides* and *Dunaliella salina* to produce renewable biofuel precursors as an environmentally friendly alternative fuel.

**Norma Saiph Savage** (2009 Cohort, Computer Science, UCSB) was awarded the Grace Hopper Celebration of Women in Computing Scholarship by Google Inc. In collaboration with UNAM's Department of Engineering she presented "Mmmmm: A Multi-modal Mobile Music Mixer" at the 2010 New Interfaces for Musical Expression Conference in Sydney, Australia.

**Juan Carlos Suárez Serrato** (2006 Cohort, Economics, UCB) was awarded the Burch Center Continuing Student Fellowship and recently submitted for publication "Estimating Local Fiscal Multipliers" jointly with Philippe Wingender (UCB). This paper proposes a novel method to quantify the impact of government spending on job creation and income growth.

**José Pablo Vázquez Medina** (2008 Cohort, Quantitative & Systems Biology, UCM) is studying the biochemical and physiological mechanisms that allow elephant seals to naturally tolerate potential detrimental conditions. His work was selected for presentation at the 16<sup>th</sup> Annual Meeting of the Society for Free Radical Biology and Medicine. He also presented at Experimental Biology 2010 and the APS Intersociety Meeting Global Change and Global Science: Comparative Physiology in a Changing World. Part of his work has been published in *The Journal of Experimental Biology*, the leading journal in the field of Comparative Physiology. He received a supplemental fellowship from Mexico's Ministry of Education.

**Sandra Xochipiltecatl** (2005 Cohort, Anthropology, UCR) contributed to the online Multimedia CD "*Lengua y Cultura Nahuatl de la Huasteca*" coordinated by Anuschka van't Hooft of the *Universidad Autónoma de San Luis Potosí*. Her article, "Temajmatili. Un Enfoque Antropológico al Susto o Espanto," will be available as part of an edited volume in 2011. She also presented "The Circulation and Colonization of Perception" at the American Anthropological Association and the *Benemérita Universidad Autónoma de Puebla*.

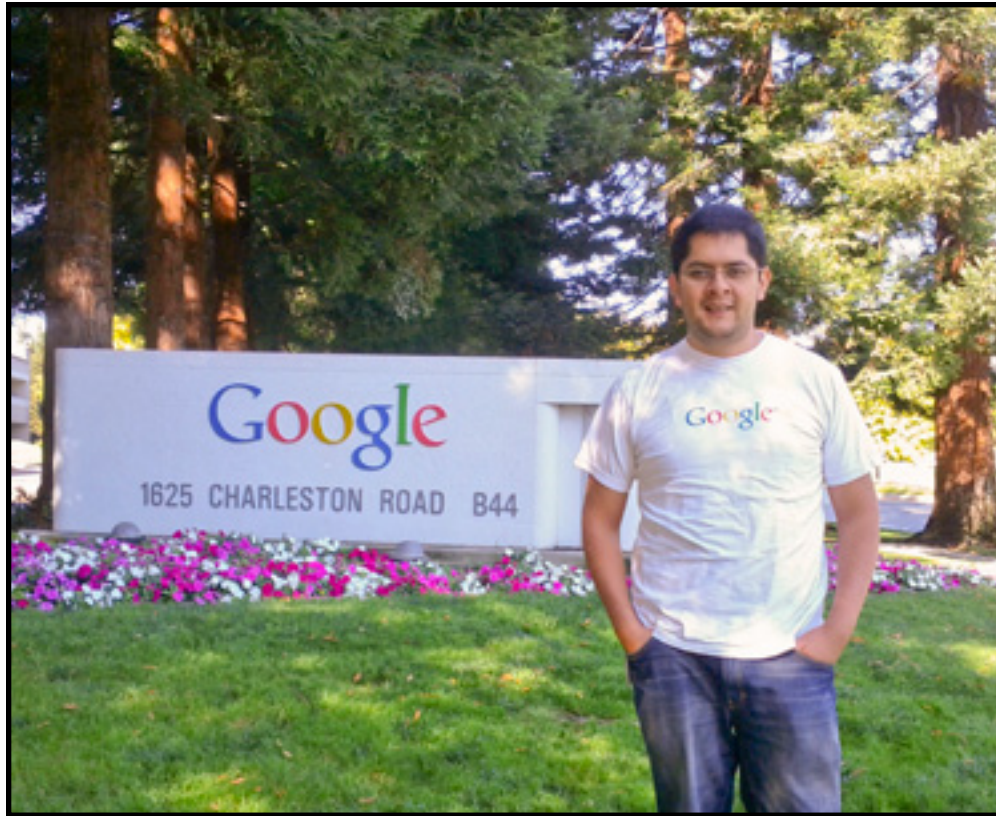
# DOCTORAL ALUMNUS SPOTLIGHT

## EDGAR ENRIQUE CAUICH ZERMEÑO, 2004 COHORT

### COMPUTER SCIENCE, UC IRVINE

Edgar Cauch Zermeño has dedicated much of his academic and professional life to solving practical problems through computer technology. For his dissertation project he designed a cost-effective solution to improve the use of computer resources within high performance computer networks, and in his current position as a Software Engineer at Google Inc. he continues to develop next-generation technologies through his programming skills.

Edgar began pursuing the study of computer science at the *Tecnológico de Monterrey* (ITESM) in the State of Mexico, where he received his bachelor's degree in 2002. His interest in computer science has deep roots. His father holds a master's degree in computer science and was an assistant dean in the Department of Computer Science at the *Instituto Politécnico Nacional* (IPN) in Mexico. About his influence, he says, "My father introduced me to my first computer and he had the patience to show me a new world."



Edgar Cauch standing in front of the Google offices in Irvine, California.

It was also at the advising of his father, who encouraged him to consider international graduate programs, that Edgar pursued his doctoral studies in the Donald Bren School of Information and Computer Sciences (BREN:ICS) at UC Irvine.

Edgar admires both the interdisciplinary nature of his field (particularly its incorporation of mathematics, physics, engineering and molecular biology) as well as the powerful impact of computers: "Computer technology is everywhere. Therefore,

I view my work as an opportunity to have an influence on many people's lives."

During his graduate studies Edgar undertook a three-month internship with Dr. Benoît Fourestié, principal investigator for France Telecom near Paris, France. With the support of Fourestié, he explored the foundations of a topic that would become central to his dissertation. He developed a virtual system based on the design of a specific kind of software that forms part of the computer system and makes the functioning of computer networks more efficient within organizational contexts. As part of his internship he also tested the effectiveness of his computing design in a real corporate installation at France Telecom R&D.

Edgar's dissertation, *Low Level Resource Sharing in High Performance Distributed Networks*, describes the design and benefits of a specific computer network configuration. This particular configuration is based

# DOCTORAL ALUMNUS SPOTLIGHT

## EDGAR ENRIQUE CAUICH ZERMEÑO, 2004 COHORT

### COMPUTER SCIENCE, UC IRVINE

on the creation of a virtual system called TReX (Transparent Remote Execution) which identifies dormant resources (e.g., RAM memory not being utilized) in low-performance computers like clerical workstations and distributes them into high performance ones that run applications or programs demanding maximum levels of processing power and RAM memory. The use of TReX makes a series of interconnected computers work as a single coherent system so that computing power is increased when resources are distributed and shared between computers that perform simple clerical and intensive scientific applications.

According to Edgar's advisor Isaac Scherson, professor of computer science at UC Irvine, Edgar's work addresses a "difficult and novel problem whose solution offers benefits to the corporate sector." Indeed, his work provides a cost-effective means of managing computing resources within modern corporations and typical institutions like schools whose functioning depends on the efficiency

of the computer network's performance. The distribution of computer resources within a network has two main benefits. On the one hand, the use of virtual systems like TReX increases network performance. On the other hand, corporations can save money by using their existing resources rather than turning to expensive solutions that may require the acquisition of new servers. "At a time when educational institutions and corporations are struggling financially," Edgar emphasizes, "making the most of the computer infrastructure they already possess is of special necessity."

His interest in solving complex practical problems led him to take a three-month internship at Google during the final period of his doctoral studies. Upon completing his degree, he found himself in the enviable position of being offered a position there. With his pragmatic approach to computer science, the transition from the academic to the private sector was seamless. His job has allowed him to continue his research and implementation, in a real-world context, mecha-

nisms to upgrade the performance of computer networks in which intensive scientific applications are used.

He is committed to his work and enjoys being part of a competitive workplace that encourages the advancement of his computer science skills and knowledge. He also expects to contribute to the development of computer science in Mexico: "The most important part of my career, besides contributing to science and technology, is to help other students to achieve their academic and professional goals. I am deeply committed to this task, especially in Mexico, which also allows me to visit my family." Another aspect of his work that has been especially fulfilling is outreach. As part of his responsibilities at Google, he visits schools with students of diverse backgrounds and educates them about the field of computer science. Not unaware of the limited number of Latino students in Science, Technology, Engineering, and Mathematics (STEM), he sees his role in community and school outreach as a way to excite minority

students about the STEM fields: "I like to help other people, interact with them, and talk about what I do. I enjoy the social aspect of my job which allows me to bring my previous experience as an instructor to invite students to think of computer science as a career choice." One could say he has found the optimal solution. ☘



Edgar Cauch with Google's mascot in Irvine, California.

Photo courtesy of Edgar Enrique Cauich

# DOCTORAL STUDENT SPOTLIGHT

## JETHRO HERNÁNDEZ BERRONES, 2009 COHORT

### ANTHROPOLOGY, HISTORY & SOCIAL MEDICINE, UC SAN FRANCISCO



Photo courtesy of Jethro Hernández Berrones

Jethro Hernández conducting bibliographic research at the History of Health Sciences Library, located in the department of Anthropology, History and Social Medicine at UCSF.

This question has been at the heart of Jethro's intellectual pursuits for many years. He began undergraduate studies in biology at UNAM, however, his studies were temporarily interrupted due to the 1999 student strike. During that nine-month hiatus, he

enrolled in a two-year credential program to become a professional translator in order to remain active in his academic development and contribute to scientific literacy in Mexico through the translation of English scientific books into Spanish.

As it turned out, this program would have a profound impact on his future. Requiring coursework in global history and culture, his classes in translating also pushed him to think “outside the lab” and consider the social dimensions of science. In the social sciences, he discovered a lens through which to explore the relationship between science and society. So inspired, and after graduating with honors, he changed from biology to a master's program in the philosophy of science at UNAM.

In 2009, he enrolled in the doctoral program at UCSF's Department of Anthropology, History and Social Medicine. With this campus' focus on health sciences and his graduate program's multidisciplinary approach,

it has been the perfect place for him to more fully explore the introduction and evolution of homeopathic medicine in Mexico. Only two years into his doctoral studies, he was awarded the 2010 UC MEXUS Student Small Grant to conduct archival research on homeopathy and medical education in Mexico. In the summer of 2010, he visited a number of archives in Mexico including *el Archivo General de la Nación*, *el Archivo Histórico de la Secretaría de Salud*, *el Archivo Histórico del Distrito Federal*, and *el Archivo Histórico de la UNAM*. This initial period of research would prove to be quite fruitful, allowing him to develop an introductory framework for analyzing events surrounding the merging and separation of the ENMH from 1920 to 1924.

He has become particularly interested in the larger social and political context framing these events and, more specifically, in how the ideology of elite political groups ruling after the Mexican civil revolution (and their

participation in the reorganization of professional institutions) shaped the legitimization and de-legitimization of medical practices. Through continued research he hopes to capture the perspectives of various actors (e.g., national officers, educational authorities, faculty members and students of medicine) involved in the temporary merging of the two schools. He also wants to explain the relationship between scientific ideology, state intervention and medicine professionalization during the 20<sup>th</sup> century in Mexico.

For Jethro, engaging in fieldwork at such an early stage in his doctoral studies helped him identify critical sources of information, clarify the scope of his research and refine his theoretical and conceptual orientation. At the same time, it highlighted the need for additional perspectives through the incorporation of oral histories. “The archival documents I reviewed helped me realize that I needed to learn more about the ways in which homeopathic doctors and



# UC MEXUS RECENT PROGRAM GRADUATES

**Dr. Verónica Ileana Aguilar Guerrero**

2003 Cohort  
UC Davis, Chemical Engineering & Materials Science  
*CeO<sub>2</sub>-supported Gold Catalysts for CO Oxidation: Synthesis, Reactivity, Activation, and Characterization for Site-isolated Mononuclear Species and Clusters*

**Dr. Raúl Eduardo Aguilar Schall**

2003 Cohort  
UC Berkeley, Biostatistics  
*Semi-Parametric Graphical Computation Approach Using Loss-based Estimation to Estimate Exposure Effects: Applications on Infant Developmental Outcomes*

**Dr. Eva Olimpia Arceo Gómez**

2004 Cohort  
UC Berkeley, Economics  
*Essays on Labor Economics*

**Dr. Hugo Joaquin Avila Paredes**

2004 Cohort  
UC Davis, Chemical Engineering & Materials Science  
*Ionic Conduction in Fluorite-Structured Solid Electrolytes Used in Solid Oxide Fuel Cells: The Role of the Grain Boundaries*

**Dr. Rosangela Bando Graña**

2005 Cohort  
UC Berkeley, Agricultural & Resource Economics  
*The Effect of School Based Management on Parent Behavior and the Quality of Education in Mexico*

**Dr. Mauricio Benítez Iturbe**

1999 Cohort  
UC Berkeley, Political Science  
*The Politics of Distribution: Subnational Policy Regimes in Mexico*

**Dr. Gabriela Caballero Hernández**

2002 Cohort  
UC Berkeley, Linguistics  
*Choguita Raramuri (Tarahumara) Documentation and Description*

**Dr. Raymundo Miguel Campos Vázquez**

2003 Cohort  
UC Berkeley, Economics  
*Essays in Labor Economics*

**Dr. Sergio Cañedo Gamboa**

1999 Cohort  
UC San Diego, History  
*Merchants and Family Business in San Luis Potosí, México: The Signs of an Economic Upsurge, 1820-1846*

**Dr. Mónica Castillejos Aragón**

2008 Cohort  
UC Berkeley, Law  
*Judges as Institutional Builders: The Transformation of the Mexican Supreme Court into an Arena for Political Contention*

**Dr. José Rodrigo Castillo Garza**

2002 Cohort  
UC Riverside, Physics & Astronomy  
*Measurements of the Casimir Pressure at Low Temperature*

**Dr. Edgar Enrique Cauich Zermeño**

2004 Cohort  
UC Irvine, Computer Science  
*Low Level Resource Sharing in High Performance Distributed Networks*

**Dr. Jesús Córdova Guerrero**

2005 Cohort  
UC Los Angeles  
Chemistry & Biochemistry  
*Total Synthesis of Kellermanoldione, 3-Deoxyconferdione and Progress Towards the Total Synthesis of Epi-Conferdione*

**Dr. Aldo Hilario Cruz Cota**

2003 Cohort  
UC Santa Barbara, Mathematics  
*Hex Structures on Singular Euclidean*

*Surfaces with Conical Singularities*

**Dr. Juan Valentín Escobar Sotomayor**

2000 Cohort  
UC Los Angeles  
Physics & Astronomy  
*Experiments on Peeling, Fracture and Dry Friction: X-ray Emission and Friction Reduction*

**Dr. Héctor Estrada Medina**

2004 Cohort  
UC Riverside, Soil & Water Sciences  
*Importance of the Subsurface Limestone and Pockets of Soil as Sources of Water for Tree Species in Yucatan, Mexico*

**Dr. María Laura Fernández Medina**

1999 Cohort  
UC Davis, Ecology  
*Estimation and Inference of Willingness to Pay for Whale Watching in the California Coast*

**Dr. Judith Alejandra Frías Anguiano**

2001 Cohort  
UC Los Angeles, Economics  
*Unions, Taxes, and the Changing Mexican Labor Market: 1990-2007*

# UC MEXUS RECENT PROGRAM GRADUATES

**Dr. Alan Fuchs Tarlovsky**

2006 Cohort  
UC Berkeley, Agricultural & Resource Economics  
*Essays on Weather Indexed Insurance and Energy Use in Mexico*

**Dr. Raúl Gómez Muñoz**

2006 Cohort  
UC San Diego, Mathematics  
*The Bessel-Plancherel Theorem and Applications*

**Dr. Ricardo Roman Gómez Vilchis**

2004 Cohort  
UC San Diego, Political Science  
*Citizens' Evaluation of the President and Democratic Transition: Determinants and Effects of Presidential Approval in Mexico*

**Dr. Jaime Gonzalez Cabrera**

2005 Cohort  
UC Riverside, Entomology  
*Quality Control and Captive Rearing Genetics of the Biological Control Agent *Trichogramma Pretiosum**

**Dr. Santiago Guerrero Escobar**

2006 Cohort  
UC Berkeley, Agricultural & Resource Economics  
*Essays in Regulatory Economics*

**Dr. Salomé Gutiérrez Morales**

2002 Cohort  
UC Santa Barbara, Linguistics  
*Borrowing and Grammaticalization in Sierra Popoluca: The Influence of Nahuatl and Spanish*

**Dr. David Ricardo Heres Del Valle**

2004 Cohort  
UC Davis, Agricultural & Resource Economics  
*Essays on the Comparison of Climate Change Policies: Land Use Regulations, Taxes, and Tradable Permits*

**Dr. Irma Hernández Magallanes**

2005 Cohort  
UC Berkeley, Statistics  
*Integrating Grouped And Ungrouped Data: The Point Process Case*

**Dr. Marco Aurelio Hernández Vega**

2006 Cohort  
UC Davis, Economics  
*Nontraded Goods Prices and Real Exchange Rate Volatility*

**Dr. Natividad Herrera Castro**

2001 Cohort  
UC Riverside, Anthropology  
*Ecological Consequences of Gendered Work and Social Change Among Totonac Coffee Growers of Veracruz,*

*Mexico: A Political Ecology Approach* *phosmin Protein (NPM)*

**Dr. Yuri Herrera Gutiérrez**

2003 Cohort  
UC Berkeley, Spanish & Portuguese  
*Los Demonios de la Mimesis: Textualidad de Una Tragedia en el México Posrevolucionario*

**Dr. Verónica Hoyo Ulloa**

2003 Cohort  
UC San Diego, Political Science  
*Outsider Politics: Radicalism as a Political Strategy in Western Europe and Latin America*

**Dr. Mariano Isidro Lizárraga Fernández**

2006 Cohort  
UC Santa Cruz  
Computer Engineering  
*Design, Implementation and Flight Verification of a Versatile and Rapidly Reconfigurable UAV GNC Research Platform*

**Dr. Esther Márquez Lona**

2002 Cohort  
UC Irvine, Molecular Biology & Biochemistry  
*Elucidating the Role of Nucleolus in Neuronal Cell Death Pathways: Assessing the Neuroprotective Role of Nucleo-*

**Dr. Rolando Menchaca Méndez**

2004 Cohort  
UC Santa Cruz  
Computer Engineering  
*Routing and Scheduling in Mobile Ad Hoc Networks using Meshes*

**Dr. Virginia Montero Hernández**

2005 Cohort  
UC Riverside, Education  
*The Construction of Professional Identity and Pathways of Participation of Full Time Faculty Members in University Restructuring in Mexico*

**Dr. Sonia Montes Romanillos**

2001 Cohort  
UC Berkeley, Spanish & Portuguese  
*Poesía Indígena Contemporánea de México y Chile*

**Dr. Erick Moreno Centeno**

2005 Cohort  
UC Berkeley, Industrial Engineering & Operations Research  
*Use and Analysis of New Optimization Techniques for Decision Theory and Data Mining*

# UC MEXUS RECENT PROGRAM GRADUATES

**Dr. Barbara Paulina Oliva Vallejo**  
2004 Cohort  
UC Berkeley, Economics  
*Environmental Regulations:  
Enforcement of Emission Standards*

**Dr. Camila Pastor de Maria Campos**  
2001 Cohort  
UC Los Angeles, Anthropology  
*The Mashreq in Mexico: Patronage,  
Property and Class in the Postcolonial  
Global*

**Dr. Francisco Javier Pérez Estrada**  
2006 Cohort  
UC Los Angeles, Economics  
*Essays in Development Economics and  
Applied Microeconomics*

**Dr. Francisco Gerardo Pérez  
Gutiérrez**  
2004 Cohort  
UC Riverside  
Mechanical Engineering  
*Photomechanical, Photothermal and  
Photothermomechanical Mechanisms of  
Interaction of Nanosecond-Long Laser  
Pulses With Artificial Tissue Models  
and Pigmented Melanoma Cells in  
Medical Applications*

**Dr. Claudia Pérez Maldonado**  
2004 Cohort  
UC Davis, Biomedical Engineering  
*Multiple channels of Control Based on  
Single Muscle Contractions*

**Dr. Angel Pita Duque**  
2003 Cohort  
UC Davis, Geography  
*Impact on Maize Diversity of Mexican  
Farmers' Participation in Off-farm  
Labor Markets*

**Dr. Teresita Ramírez Rosas**  
2003 Cohort  
UC Santa Barbara, Mathematics  
*Quadriseccants and the Ropelength of  
Knots*

**Dr. Ernesto Rattia Lima**  
2003 Cohort  
UC Riverside, Economics  
*Essays on Returns to Human Capital  
Accumulation in Mexico*

**Dr. Raúl Razo García**  
2002 Cohort  
UC Berkeley, Economics  
*Essays on Exchange Rate Regimes and  
Capital Account Liberalization*

**Dr. Alejandra Ríos Cázares**  
2001 Cohort

UC San Diego, Political Science  
*The Circuitous Path of Democracy:  
Legislative Control of the Bureaucracy  
in Presidential Regimes: The Case of  
Mexico*

**Dr. María de Lourdes Rodríguez  
Chamussy**  
2005 Cohort  
UC Berkeley, Agricultural &  
Resource Economics  
*Essays on the Political Economy of  
Social Government Programs*

**Dr. Jessica Roldán Peña**  
2006 Cohort  
UC Los Angeles, Economics  
*Essays on the Effects of Financial Fric-  
tions in Macroeconomic Dynamics*

**Dr. Claudia Ruiz Ortega**  
2006 Cohort  
UC Los Angeles, Economics  
*Essays on Credit Access and Household  
Specialization*

**Dr. Ricardo Salazar Torres**  
2002 Cohort  
UC Los Angeles, Mathematics  
*Determination of Time-dependent  
Coefficients for a Hyperbolic Inverse  
Problem*

**Dr. Juan Pedro Sánchez Fleisher**  
2006 Cohort  
UC Davis, Plant Biology  
*Pathogenesis-related Protein P14a  
Interferes with Programmed Cell Death  
and is Synthesized under Translational  
Control*

**Dr. Hugo Santos Gómez**  
2000 Cohort  
UC Santa Barbara, Anthropology  
*California Rural Communities, Farm-  
worker Settlement, and Citizenship  
Practices: Playing Soccer in the San  
Joaquin Valley*

**Dr. Javier Suárez Espinosa**  
2003 Cohort  
UC Riverside, Applied Statistics  
*Inference for the Multiparameter Skew  
Normal Distribution*

**Dr. Arturo Vargas Bustamante**  
2003 Cohort  
UC Berkeley, Public Policy  
*Essays on Health Care Organization  
and its Effect on Recipients of Condi-  
tional Cash Transfers Programs*

# UC MEXUS RECENT PROGRAM GRADUATES

**Dr. Norma Andrea Velázquez Ulloa**  
2003 Cohort  
UC San Diego, Neurosciences  
*Mechanism for Spontaneous Calcium Activity and Spinal Cord Neurotransmitter Specification, and the Role of Calcium Activity in Dopamine Specification in the Brain and Spinal Cord*

**Dr. Judith Iliana Villanueva Chávez**  
2004 Cohort  
UC Irvine, Spanish & Portuguese  
*Poéticas de la Errancia, Política de la Escritura: Juan Gelman, Eduardo Milán y Ana Cristina Cesar*

**Dr. Stella Villegas Amtmann**  
2003 Cohort  
UC Santa Cruz,  
Ecology & Evolutionary Biology  
*How Do California and Galapagos Sea Lions Cope with a Changing Environment? Implications for Diving Behavior, Physiology, Thermoregulation and Conservation*

**Dr. Cristo Manuel Yee Rendón**  
2003 Cohort  
UC Santa Barbara, Physics  
*High Q Terahertz Photonic Crystal Microcavities*

Susana's strong desire to make an impact together with a sense of obligation to the individuals and institutions that supported her through her education motivated an immediate return to Mexico, following completion of her J.S.D. Since she went back in 2007, she has been actively engaged

in research, teaching and consulting at UNAM's Institute for Legal Research. Recently, she also authored an introductory textbook on commercial law that UNAM's undergraduates have already used as part of their coursework.

Her return to UNAM brings her full circle to the place that she began but with an even clearer vision of the way in which her expertise in the field of commercial law can inform legal innovations and inspire other students to join her in the journey of creating knowledge. "I am surround-

ed all the time by enthusiastic minds and generous souls who believe in helping Mexico flourish," she says. "Working at UNAM gives me the opportunity to do what I believe in and contribute to the betterment of my country." ☺



Susana Dávalos with her *Contratos Mercantiles* class at UNAM.

# DOCTORAL STUDENT SPOTLIGHT

## JETHRO HERNÁNDEZ BERRONES, 2009 COHORT

### ANTHROPOLOGY, HISTORY & SOCIAL MEDICINE, UC SAN FRANCISCO

patients interacted during the 20th century in Mexico,” he says. “Finding eyewitnesses and gathering their historical accounts can be a challenge but it is one that I am excited and motivated to undertake.” Having recently advanced to candidacy, he is also able to dedicate himself fully to the dissertation and answer the questions about homeopathy and science that have inspired him from the beginning. ☺

#### UC MEXUS University of California Institute for Mexico and the United States Academic Programs Staff

Wendy DeBoer  
Director of Academic Programs  
wendy.deboer@ucr.edu

Susana Hidalgo  
Academic Programs Officer  
susana.hidalgo@ucr.edu

Clara Quijano  
Academic Programs Coordinator  
La Monarca Graphic Designer  
clara.quijano@ucr.edu

Virginia Montero  
Scholar in Residence  
virginia.montero@uaem.mx



UC MEXUS  
[www.ucmexus.ucr.edu](http://www.ucmexus.ucr.edu)

University of California, Riverside  
900 University Ave., 3324 Olmsted Hall  
Riverside, CA 92521-0147



#### CONACYT Consejo Nacional de Ciencia y Tecnología Becarios en el extranjero

Jorge Herrera Espinosa  
Director de Becas  
jherrerae@conacyt.mx

Samuel Manterola Martínez  
Subdirector de Becas en el Extranjero  
smanterola@conacyt.mx

Marco Vargas Bello  
Subdirector de Asignación de Becas en el Extranjero  
avargas@conacyt.mx

Xóchitl Rodríguez Ayon  
Analista de Convenios Internacionales  
xrodriguez@conacyt.mx



CONACYT  
[www.conacyt.mx](http://www.conacyt.mx)



Av. Insurgentes Sur 1582, Col. Crédito Constructor Del. Benito Juárez C.P.:  
03940, México, D.F.