



# La Monarca

UC MEXUS-CONACYT

DOCTORAL FELLOWSHIP NEWSLETTER



October, 2007  
Volume 1, Issue 1

## UC MEXUS-CONACYT DOCTORAL FELLOWS SYMPOSIUM

For the first time since the inception of the UC MEXUS-CONACYT Doctoral Fellowship program, an all-day symposium for fourth and fifth year fellows from all 10 UC campuses was held at the Riverside campus on June 8, 2007.

Several scholars from Mexico were invited to discuss changes within the current social, economic, and educational context. **Alejandro Nadal Egea**, professor of economics at El Colegio de México, spoke about challenges to economic growth in Mexico. **Manuel Gil Anton**, professor of sociology at la



Jose Antonio de la Peña

Universidad Autónoma Metropolitana, addressed the issues of access to higher education and the need for an improved system of faculty remuneration to encourage higher standards of teaching and research. **Jose Antonio de la Peña**, director adjunto de desarrollo científico y académico of Mexico's Consejo Nacional de Ciencia y Tecnología (CONACYT), provided an overview of the history of support for science and technology and discussed potential opportunities for new doctoral students.

Addressing the more practical concerns of students, the symposium also brought together two panels of current and former fellows. A diverse group of former UC MEXUS-CONACYT fellows shared their postgraduate work experiences and directly addressed students' questions about how to contribute to Mexico. Also, the student panel showcased current research that fellows are conducting in their 4<sup>th</sup> and 5<sup>th</sup> years of the program.

*For more detailed information about the UC MEXUS-CONACYT Doctoral Fellows Symposium and additional photos of the event, please visit our website:*

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

**In this issue:**

Herguin Cuevas	2
Luis Estrada	4
Stella Villegas	7

## Introducing the "La Monarca" Newsletter

UC MEXUS Director of International Academic Programs,  
Wendy DeBoer

As the UC MEXUS-CONACYT Doctoral Fellowship program approaches its tenth year and crosses the milestone of funding more than 200 Mexican students pursuing their doctoral studies at UC campuses, the need to connect fellows during their doctoral studies and beyond has become increasingly apparent. Though this program provides support at the individual level, it also seeks to create a larger network of binational scholars who are linked by more than their funding source. It is this vision of a tightly interconnected community of scholars that has motivated UC MEXUS' support of new opportunities for fellows to meet one another and share their experiences and expertise.

Many of our fellows attended the 1<sup>st</sup> Biennial UC MEXUS-CONACYT Doctoral Fellows Symposium held at UC Riverside on June 8, 2007. This event brought together fellows in their 4<sup>th</sup> and 5<sup>th</sup> years of study from all of the UC campuses for a series of sessions that shed light on the current state of Mexico's economy and higher educational system, showcased the research being done by current fellows, and provided practical guidance regarding postgraduate employment in Mexico and elsewhere. We are looking forward to organizing future events such as this one and developing additional ways to maintain contact with and support for our fellows.

This inaugural issue of *La Monarca* is a timely addition to the UC MEXUS-CONACYT Doctoral Fellowship program. Its publication reflects our expanding vision of this program as a gateway for binational scholarship and collaboration. More than simply an administrative entity, this cost-sharing program jointly supported by CONACYT and UC MEXUS is evolving into a larger resource to current fellows and alumni. This newsletter is an



Wendy DeBoer

"La Monarca" ...Continued on Page 10

## Doctoral Student Spotlight Herguin Arellano, 2003 Cohort Environmental Health Sciences, UC Los Angeles

A river flowed through the area south of where Herguin B. Cuevas Arellano grew up in Colima, Mexico, and with the water flowed a lesson that would direct his academic life. Before reaching the town of Lo de Villa, where people washed, bathed, and swam in the waters, the river passed by a meat packing plant whose effluent flowed into its stream. Irrigation channels that dumped farm pollutants and oil processing facilities' waste also sullied the water. Intestinal infections were common among the children who played there, as were skin rashes and abdominal pain.

When a scholarship took Cuevas to the University of Michoacán his "eyes were opened" and he made the connection between the condition of the river and local children's health problems. He launched on a course of study with a two-fold purpose: to uncover and understand environmental hazards, and to educate people about these public health issues.

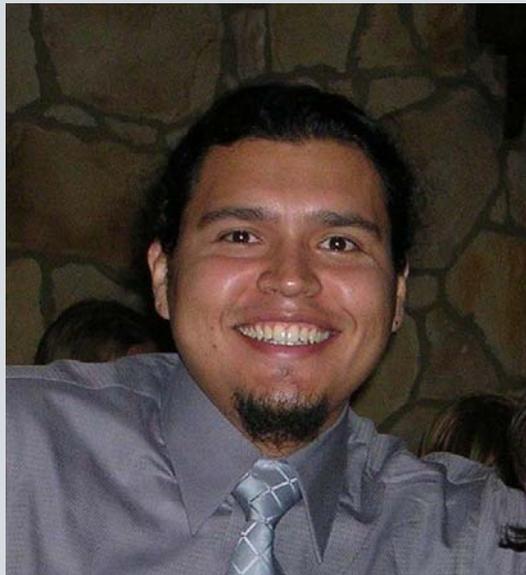
During his undergraduate years of study, Cuevas took part in a number of research projects related to his area of interest, including one study which elucidated the health hazard posed by bats to those living near their environs.<sup>1</sup> The following year, Cuevas joined a university project involving Morelia's Children's Hospital and Mexico's Ministry of Health. Seeking to explain a sudden spike in the number of children suffering from parasitic worms, Cuevas tracked the environmental

factors necessary for worms to proliferate by using a Geographic Information System (GIS) and other tools learned through his studies in geochemistry. Once he isolated the most important environmental factors, health workers were able to ascertain that children's physical contact with worms, through walking barefoot in the contaminated fields, was the source of the problem. In recognition of the project's innovative use of GIS, satellite imagery, and field sampling in public health monitoring, international and national congresses awarded his project top honors.

After completion of his undergraduate studies, Cuevas secured a position at the Mexican environmental protection agency (SEMARNAT) as GIS manager for the Environmental Policy and Impact Evaluation Department in Colima where he took part in land evaluation, watershed assessment, and sustainable planning strategies.

A year later, he secured a UC MEXUS-CONACYT Doctoral Fellowship to study environmental health at UCLA. He completed his master's study with a thesis on the assessment of local wetlands for the remediation of polluted runoff, at the same time that he completed an internship with the Stormwater Pollution Prevention Program at the Los Angeles Regional Water Quality Control Board from the California Environmental Protection Agency.<sup>2</sup>

The timing of his doctoral program was propitious. In 2004, California media turned their focus to the issue of lead hazards in candy. Extraordinarily high levels of lead in



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## Doctoral Student Spotlight Herguin Arellano, 2003 Cohort Environmental Health Sciences, UC Los Angeles

Herguin Cuevas...Continued from Page 2

the blood of mostly immigrant children had been traced to the ingredients, manufacturing processes, and packaging of Mexican-style candy – much of it imported officially or unofficially from Mexico, and some manufactured locally. The levels of toxic lead were high – five times the level at which lead can begin to damage a child's system and mental faculties. According to Cuevas, "There had been cases of kids almost dying while their parents didn't know that they were feeding [the lead] to them in their treats."

While initial state and local studies had pinpointed the source of lead contamination in California children, Cuevas said that those early studies were flawed in design and implementation and their sample sizes were too small to draw solid conclusions. He resolved to address those issues in his dissertation work, and to draw a comparison between the lead exposure from candy in California and Mexico.

In his current research, Cuevas has enlisted help on both sides of the border. His adviser Hilary A. Godwin, professor and chair of environmental health sciences at University of California Los Angeles, and Donald R. Smith, an environmental toxicologist from UC Santa Cruz, will facilitate high-resolution lead isotope ratio studies. Liliana Q. Vera, a chemist from El Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional (CINVESTAV-IPN), will aid both investigators in sampling in Mexico and in establishing connections to health care workers and government agencies there.

Concurrently with these investigations, Cuevas' interest in the community education aspect of environmental health has prompted him to undertake assessment work on an educational project at the RAND Corporation, with another UC MEXUS-CONACYT Doctoral Fellow Jose Felipe Martinez.<sup>3</sup> Although the study, commissioned by the Mexican Secretary of Public Education, deals with the effectiveness of teacher

incentive programs, it also highlights the importance of teacher involvement in helping to identify signs of lead exposure in children. For Cuevas, this project has special meaning: "It is fascinating, having these two...interests in my life and seeing that they are merging. It is the beginning of relevant research that will have an effect on the general population."

Now that he is near completion of his dissertation, Cuevas is exploring opportunities for a postdoctoral fellowship. Whatever the future brings, he says he is eager to return to Mexico where he can put some of his new skills into practice. A recent UC MEXUS symposium for senior Mexican doctoral fellows confirmed this desire: "It was good to see the experience of people who have gone home and those who have stayed here," he said. "It's helping me decide that I have made the right choice." ❖

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<sup>1</sup>Mexican Free-tailed Bats (*Tadarida brasiliensis mexicana*) at Carlsbad Cavern, New Mexico: Where Do They Spend the Winter? Troy L. Best, Lisa A. McWilliams, Celia Lopez-Gonzalez, David M. Roemer, Gabriel Villegas-Guzman, John L. Hunt, Luis Guevara-Chumacaro, and Herguin B. Cuevas-Arellano, Auburn University, AL; Centro Interdisciplinario de Investigación para el Desarrollo Integral Regional, Durango, México; Carlsbad Caverns National Park, NM

<sup>2</sup>Pankratz, S., Young, T., Cuevas-Arellano, H., Kumar, R., Ambrose, R.F., & Suffet, I.H. (2007). The ecological value of constructed wetlands for treating urban runoff. *Water Science and Technology*, 55(3), 63-69.

<sup>3</sup>Santibañez, L., Martinez, J.F., Datar, A., McEwan, P.J., Sedodji, C.M., & Basurto-Davila, R. (2007). *Breaking ground: Analysis of the assessment system and impact of Mexico's teacher incentive program "Carrera Magisteral"* (Technical Report). Santa Monica, CA: Rand Corporation. (ERIC Document Reproduction Service No. ED496982)

## Doctoral Alumnus Spotlight Luis Estrada Straffon, 2000 Cohort Political Science, UC San Diego



**“The key for me was that I raised a really important question that no one had asked before...”**

**P**olitics became an integral part of the life of Luis Manuel Estrada Straffon when he was a 14-year-old middle school student in Mexico. For the first time in living memory, the ruling Institutional Revolutionary Party (PRI) faced major challenges, losing its first governor’s race and facing

the most competitive presidential election ever. Along with many of his fellow countrymen, Estrada realized that change was possible in a country whose political development had been stalled for decades.

These events ignited his interest in political science as a route to hastening the formation of a new democratic society. As he explains, “I started to study political science because it provided an opportunity to do something for my country.” Today, Estrada hopes he has become a catalyst of such change in his role as director of political risk assessment in the office of Mexican President Felipe Calderon Hinojosa.

Estrada’s first direct exposure to presidential polling came after completing his undergraduate studies at Instituto Tecnológico Autónomo de México (ITAM). He learned of an opportunity to work on political polls and surveys for then-President Ernesto Zedillo, and under the guidance of veteran Mexican pollster Ulises Beltran, head

of a prominent polling firm and associate professor of political science at Centro de Investigación y Docencia Económicas (CIDE), who had perfected a system of using opinion polls in effective strategic communication. According to Estrada, that experience exposed him to some of the best polling available in Mexico: “As a survey analyst, I had a chance to look at many questionnaires and the analysis that was carried out on these surveys.”

Estrada noticed that many survey questions being ignored by analysts might have a story to tell. As Samuel Popkin, a UC San Diego professor of political science and Estrada’s dissertation adviser explains, “There has been an assumption that party identification didn’t matter in Mexico.” As in other countries that were emerging from one-party systems, such as Russia and Spain, voters tended to express support for or opposition to whoever was in power, rather than expressing their identification with a particular party. As a result, Mexican pollsters had concluded that party identification was irrelevant, whereas U.S. pollsters had traditionally found that party identification was a good predictor of voting patterns. By the time that Estrada arrived in San Diego to begin his doctoral work, he already had begun to recognize that this issue needed further investigation. “He was chewing on it,” Popkin says. “He had an instinct that this was an important problem.”

With the help of UC San Diego political scientists, Estrada tested his idea by comparing Mexico to other countries where one-party systems also were crumbling. He spent more than a year poring over opinion polls stretching back to the late 1980s. The resulting dissertation set an entirely new research agenda for him and other researchers in his field. According to Popkin, it was pioneering: “He was the first to pay attention to the residue of the one-party state. It was clever work.”

# Frequently Asked Questions

## How does the UC MEXUS-CONACYT cost-sharing program work?

The UC MEXUS-CONACYT Doctoral Fellowship program provides up to 5 years of funding. During the first and second year of the program, CONACYT provides fellows with non-resident tuition and fees, stipend, and support towards health insurance. During the 3<sup>rd</sup> and 4<sup>th</sup> year, CONACYT continues to provide non-resident tuition, fees, and support towards health insurance, while UC MEXUS provides the stipend. If necessary during the 5<sup>th</sup> year, UC MEXUS provides non-resident tuition, fees, stipend, and support toward health insurance.

### Distribution of financial support:

	Year 1	Year 2	Year 3	Year 4	Year 5
Non-resident Tuition	CONACYT	CONACYT	CONACYT	CONACYT	UC MEXUS
Student Fees	CONACYT	CONACYT	CONACYT	CONACYT	UC MEXUS
Health Insurance	CONACYT	CONACYT	CONACYT	CONACYT	UC MEXUS
Stipend (12 months)	CONACYT	CONACYT	UC MEXUS	UC MEXUS	UC MEXUS

## Luis Estrada...Continued from Page 4

Before he returned to Mexico, Estrada secured a position as a political consultant for the upcoming presidential election. He also began writing articles and expanding his client base. When the close election between Calderon and former Mexico City Mayor Andres Manuel Lopez Obrador was being challenged in the courts, his analysis of exit polls nationwide (conducted in collaboration with Alejandro Poire from ITAM, now Calderon's General Director of Political Analysis) was essential to the court's decision that voter fraud had not occurred. An invitation to join the Calderon team followed, putting him in the position to advise on the policy implications of issues on the President's agenda. As Popkin explains, it was Estrada's job to identify the "unexpected landmines" of support for or resistance to any policy issue: "His job is to look ahead and say, As you turn the corner, you may be surprised by 'X'."

Despite the rapid progress of his career, Estrada feels that the key to success has been his work more than his

contacts. He places particular emphasis on how he approached his research:

The key for me was that I raised a really important question that no one had asked before, and that I answered that question correctly with all the rigor and emphasis and advanced methods and complete review of all the literature related to my topic.

There is a lesson, also, that he has tried to pass on to students at ITAM, in avoiding over-sensitivity to criticism: "The first thing to learn is that criticism of your work is not personal; it's the only way that science can succeed. Don't just listen to your critics but thank them for taking the time to read your work and offering their feedback."



# Bienvenidos!

## New Students funded through the UC MEXUS - CONACYT Doctoral Fellowship



Please join us in welcoming the new 15 doctoral students who will be funded through the UC MEXUS-CONACYT Doctoral Fellowship.

Also, we would like to extend a special welcome to UC Merced's first fellow!

**Alicia Abadia Cardoso**

UC Santa Cruz  
Ocean Sciences

**Leandro Balladares Ocaña**

UC Santa Cruz  
Computer Engineering

**Joel Barajas Zamora**

UC Santa Cruz  
Electrical Engineering

**Rodrigo Beas Luna**

UC Santa Cruz  
Ecology & Evolutionary Biology

**Ruy Cervantes Fregoso**

UC Irvine  
Informatics

**Everardo Diaz Gomez**

UC Santa Barbara  
Political Science

**Juan Gomez Cavazos**

UC San Diego  
School of Biological Sciences

**Liza Gomez Daglio**

UC Merced  
Quantitative and Systems Biology

**Jose Roman Lujan Perez**

UC Los Angeles  
Spanish & Portuguese

**Alejandro Macias Melken**

UC Los Angeles  
Economics

**Pedro Reynoso Mora**

UC Berkeley  
Mechanical Engineering

**Valeria Valencia Zamudio**

UC Los Angeles  
Spanish & Portuguese

**Silvia Ventura Luna**

UC Riverside  
Anthropology

**Luz Elvia Vera Becerra**

UC Davis  
Nutritional Biology

**Sandra Xochipiltecatl Vazquez**

UC Riverside  
Anthropology

## Doctoral Fellowship Alumni: Where are they now?

**Adriana Cruz Manjarrez Garcia**

UC Los Angeles, Cohort 2001  
Postdoctoral Fellow  
Smithsonian Institute  
Center for Folklife & Cultural Heritage

**Ivonne Del Valle Wiarco**

UC Berkeley, Cohort 2001  
Assistant Professor of Spanish  
University of Michigan  
Department of  
Romance Languages & Literatures

**Mariana Mondragon Palomino**

UC Irvine, Cohort 1999  
Postdoctoral Researcher  
Friedrich-Schiller University of Jena  
School of Biology & Pharmacy

**Miguel Angel Perez Lara y Hernandez**

UC Davis, Cohort 1999  
Coordinador de Estudios de Posgrado  
Universidad Autónoma de Querétaro  
Maestría en Estructuras

**Victor Manuel Ruiz Vera**

UC Riverside, Cohort 1999  
Profesor Investigador Asociado  
Colegio de Postgraduados, Campus San Luis Potosí

**Irma Erendira Sandoval Ballesteros**

UC Santa Cruz, Cohort 2000  
Investigadora Asociada  
Universidad Nacional Autónoma de México  
Instituto de Investigaciones Sociales

**Daniel Jesus Valencia Sanchez**

UC Irvine, Cohort 2003  
Programmer  
Google

**Jose Joaquin Velazquez Monreal**

UC Riverside, Cohort 1998  
Investigador Titular  
Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias, Colima

**Carlos Jose Vera Hernandez**

UC San Diego, Cohort 1998  
Profesor  
Universidad Autónoma de Baja California  
Campus Tijuana, Facultad de Medicina

## Doctoral Research Snapshot

**Stella Villegas Amtmann, 2003 Cohort  
Ecology and Evolutionary Biology, UC Santa Cruz**



Like most sea-living mammals, the sea lion population that inhabits the Galapagos Islands is threatened. These isolated island dwellers face harsh and changeable conditions that are exacerbated by global climate change. By contrast, the California sea lion population, against all expectations, is on the increase—even though they share some of the same reproductive conditions as the Galapagos sea lions.

Stella Villegas Amtmann, a UC MEXUS-CONACYT Doctoral Fellow and UC MEXUS Dissertation Grant recipient, who is studying ecology and evolutionary biology at UC Santa Cruz, explores this phenomenon in her dissertation, *How do California and Galapagos sea lions cope with a changing environment? Implications for diving behavior, physiology, thermoregulation and conservation.*

Stella has been tracking the two populations of sea lions during both warm and cold weather to evaluate changes in their diving behavior, adaptive physiology, and thermoregulation. Because they spend most of their time at sea, water temperature is a determinant of activities such as diving, and influences physiological performance. Stella has been collecting data on the mammals using satellite and radio transmitters to ascertain their location both at sea and on land, and time-depth recorders to evaluate water temperature and diving behavior.

The resulting data document how sea lions respond behaviorally and physiologically to varying environmental conditions while they are foraging for food. Stella hopes that identifying behavioral and physiological differences will contribute to understanding their differing population status and facilitate efforts to conserve these vulnerable species. ☒

## Doctoral Fellows' Accomplishments 2006-2007

**Veronica Aguilar** (2003 cohort, Chemical Engineering & Material Sciences, UCD) will publish her first article "Genesis of a Highly Active Cerium Oxide-supported Gold Catalyst for CO Oxidation" this year in the journal *Chemical Communications*.

**Rosangela Bando** (2005 cohort, Agricultural & Resource Economics, UCB) was invited to participate in a project analyzing fair trade and non-fair-trade coffee in collaboration with the University of San Francisco. She was awarded the Tinker Summer Field Research Grant by the Center for Latin American Studies at UCB to facilitate field research in Guatemala.

**Martha Bonilla** (2002 cohort, Environmental Studies, UCSC) published an article titled "Arrecifes Coralinos, Selvas Tropicales y Huracanes" in the journal *Ciencias*, and co-presented findings from her dissertation research on forest recovery in the Yucatán at the annual meetings of The Association for Tropical Biology and Conservation and The Ecological Society of America.

**Gabriela Caballero's** (2002 cohort, Linguistics, UCB) article "'Templatic Backcopying' in Guarijio Abbreviated Reduplication" was published in the journal *Morphology*. She presented her research results on the Mexican indigenous language Rarámuri at three conferences. In June 2007, Gabriela attended a training workshop of the Endangered Languages Documentation Programme at the University of London.

**Roosbelinda Cardenas** (2006 cohort, Anthropology, UCSC) received the Social Science Research Council's Predissertation Fellowship in 2006 for international collaboration with Eduardo Restrepo, a Colombian anthropologist at the Universidad Javeriana. She was awarded a mini-grant in 2006 for conducting summer research from the Chicano/Latino Research Center at UCSC.

**Rodrigo Castillo-Garza** (2002 cohort, Physics, UCR) was first author of "Experimental Approaches to Difference in the Casimir Force Due to Modifications in the Optical Properties of the Boundary Surface" published in the journal *Physical Review*. The piece appears also in the *Virtual Journal of Nanoscale Science & Technology*. Rodrigo's dissertation work was selected for a poster at the Gordon Research Conference of Atomic Physics in 2007.

**Maria de la Paz Celorio-Mancera** (2002 cohort, Plant Biology Graduate Group, UCD) earned her department's Graduate Student Researcher Award and the Jastro-Shields Graduate Research Award for two consecutive

years. Her first published paper appeared in the 2005 issue of the *Archives of Insect Biochemistry and Physiology*. Two abstracts on her work "Polygalacturonase Isozymes in *Lygus hesperus* Salivary Glands" and "Lygus hesperus Polygalacturonase Characterization and Role in Plant Damage" will be published in the *Journal of Insect Science*.

**Raul Gomez** (2006 cohort, Mathematics, UCSD) participated in the UCSD "Food for Thought" seminar, a forum for expository talks, in November 2006. He also passed his preliminary exams for analysis, algebra, and topology.

**Salome Gutierrez Morales** (2002 cohort, Linguistics, UCSB) was chosen as President of the Advisory Committee for the National Indigenous Languages Institution (INALI) in Mexico which advises INALI and the Mexican government. His adviser Marianne Mithun has described the selection as "quite an honor." One colleague noted that this appointment "makes Salome the most prominent and important native-speaker linguist in all of Mexico."

**David Heres Del Valle** (2004 cohort, Agricultural & Resource Economics, UCD) received an honorable mention in the XXII Premio Nacional Tlacaélel de Consultaría Económica 1978-2006 for his bachelor's thesis titled "Evidencia Empírica de Tráfico Inducido en la Zona Metropolitana de la Ciudad de México: Implicaciones sobre la Movilidad y el Medio Ambiente."

**Roberto Hernandez** (2006 cohort, School of Public Policy, UCB) participated in the preparation of a Mexican Constitutional reform initiative. Two of his articles were published in the Mexican daily newspaper *La Reforma* in January 2007. Along with **Layda Negrete** (2006 cohort, School of Public Policy, UCB), he presented a talk about penal justice reform in Mexico, "El Derecho a Ser Escuchado (The Right to be Heard)," at Stanford University's School of Law. Roberto and Layda's documentary film "El Tunel" can be viewed at: <http://www.youtube.com/watch?v=-8HQ4XtE7jQ>

**Xochitl Juarez Varela** (2005 cohort, Geography Graduate Group, UCD) was awarded the Jastro-Shields Graduate Research Award for 2007-2008 to begin fieldwork in the Sierra Norte de Puebla and the State of Mexico where she will explore the impact of immigration on the role of indigenous women. An article based on her work with Mauricio Bellon and Lone Badstue from the Centro Internacional de Maize y Trigo, appears in a special September 2007 issue of the journal *World Development*.

## Doctoral Fellows' Accomplishments 2006-2007

**Erick Moreno Centeno** (2005 cohort, Industrial Engineering & Operations Research, UCB) and a colleague were awarded the Marshall-Olliver-Rosenberger Endowment for Scholarships and Fellowships in the Science and Analysis of Decision-Making. His article "The Inequality-Satisfiability Problem," co-authored with his adviser Dorit S. Hochbaum, was accepted for the 2008 issue of the journal *Operation Research Letters*.

**Maria Moreno Carranco** (2002 cohort, Architecture, UCB) published an article, "Megaprojects: Beneath the Pavement, Excess," co-authored with Gareth A. Jones of the London School of Economics, in the international journal *CITY*.

**Claudia Perez-Maldonado** (2004 cohort, Biomedical Engineering, UCD) In June, the US Patent & Trademark Office issued a provisional patent to the UCD Office of Technology Transfer for a system Claudia is developing for use by people with spinal chord injuries. Her system uses the contractions of a single facial muscle to control external objects such as a computer cursor or a wheelchair.

**Alfredo Quinto** (2005 cohort, Chemistry & Biochemistry, UCSB) was invited to take part in three research projects in the Republic of China involving high resolution photoionization mass spectrometry. A first visit to the University of Science and Technology of China in Hefei, Anhui involved identifying cyclic-N<sub>3</sub> in flames by tunable synchrotron radiation photoionization. The work resulted in two articles being accepted, one by the *International Journal of Mass Spectrometry* and another by the *Journal of Physical Chemistry*.

**Teresita Ramirez** (2003 cohort, Mathematics, UCSB) was nominated for a Graduate Student Association outstanding Teaching Assistant/Associate Instructor Award.

**Jessica Roldan** (2006 cohort, Economics, UCLA) received an award in 2006 for her bachelor's thesis, "Un Análisis de la Política Monetaria en México bajo el Esquema de Objetivos de Inflación," from the Instituto Mexicano de Estudios de Finanzas.

**Diego Romero-Perez** (2003 cohort, Molecular Pathology, UCSD) had two articles published in 2006 by the *Journal of Biological Inorganic Chemistry* and the *Journal of Molecular and Cellular Cardiology*. Diego was a recipient of a National Institute of Health grant to participate in the course "Systems Pharmacology and Translational Biology" during the summer of 2006 when he explored the role of Matrix metalloproteinases in animal models of heart disease and undertook clinical trials.

**Juan Carlos Suarez Serrato's** (2006 cohort, Economics, UCB) project, "Forecasting Mexico's Inflation: The Effects of an Inflation-Targeting Regime," was published as part of the Proceedings of the 5th Annual Carroll Round at Georgetown University. A co-authored paper, "Juanita's Money Order: Income Effects on Human Capital Investment in Mexico," was presented in the January 2007 meetings of the American Economic Association.

**Arturo Vargas Bustamante's** (2003 cohort, School of Public Policy, UCB) paper titled "The Tradeoff between Centralized and Decentralized Health Service Providers: Evidence from a Major Anti-Poverty Program in Mexico" was accepted for presentation in the American Public Policy and Management Association and the American Evaluation Association.

**Rodrigo Vargas Ramos** (2002 cohort, Environmental Sciences, UCR) presented a paper at the 2006 meeting of the Soil Science Society of America (SSSA) that was ranked the best paper in the Soil and Plant Interactions: Carbon and Root Dynamics session. The paper, co-authored with Michael F. Allen, a UCR professor of plant pathology, estimated soil respiration before and after Hurricane Wilma.

**Judith Villanueva** (2004 cohort, Spanish & Portuguese, UCI) presented a paper, "Cantar Sin Contar: La Poesía Como Acto de Resistencia en *Incompletamente de Juan Gelman*" at the Poetry of the Americas conference at Texas A & M. In the spring, Judith co-curated the VIII Latin American Film Festival at UCI. She also organized an awards ceremony in honor of the Mexican Director Alejandro Pelayo, and received a grant from the International Center for Writing and Translation at UCI to interview renowned Uruguayan poet and literary critic Eduardo Milan.

**Cristo Yee's** (2003 cohort, Physics, UCSB) article, "Patterned Femtosecond Laser Excitation of Terahertz Leaky Modes in GaAs Photonic Crystals," was published in the December 2006 issue of *Applied Physics Letters*.

**Maria Barbara Zepeda Cortes'** (2004 cohort, History, UCSD) article, "El Nacionalismo en Puerto Rico: Fracasos y Adaptación Exitosa," will be published in the edited volume *In Caribe/Caribes: Criollización y Proceso de Cambio*. The collection of articles resulted in a roundtable discussion in the Congreso Internacional de Americanistas held in Seville, Spain in July 2007. Barbara received several grants including dissertation grants from the Center for Iberian and Latin American Studies at UCSD and UC MEXUS.

## Recent Program Graduates

### Dr. Ismael Aguilar Benitez

2001 Cohort  
UC Irvine, Planning Policy & Design  
*Institutional & Economic Aspects of Water Services Management at the U.S.-Mexico Border: Accountability, Non-Payment and Water Demand in Laredo, Texas & Nuevo Leon, Tamaulipas*

### Dr. Maria Susana Davalos Torres

2005 Cohort  
UC Berkeley, School of Law  
*Executory Contracts in Bankruptcy: A Comparative Study*

### Dr. Arturo Gutierrez-Gonzalez

2002 Cohort  
UC Santa Barbara, Computer Science  
*Minimum-Length Corridors: Complexity and Approximations*

### Dr. Antonio Lloret-Carrillo

2001 Cohort  
UC Santa Barbara,  
School of Environmental Science and Management  
*Governance of Transboundary Water Resources: The Incidence of Institutions and the Interplay of Formal and Informal Agreements*

### Dr. Josue Medellin Azuara

2000 Cohort  
UC Davis, Ecology  
*Economic-Engineering Analysis of Water Management for Restoring the Colorado River Delta*

### Dr. Laura Oropeza Ramos

2001 Cohort  
UC Santa Barbara, Mechanical Engineering  
*Investigations on Novel Platforms of Microelectromechanical Inertial Sensors: Analysis, Construction and Experimentation*

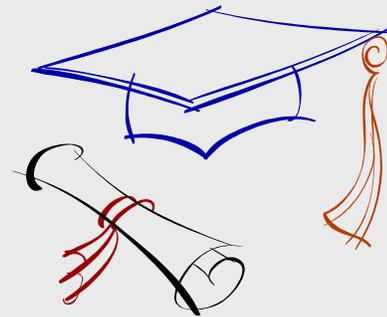
### Dr. Daniel Jesus Valencia Sanchez

2003 Cohort  
UC Irvine, Computer Science  
*Service Address Routing for Concurrent Computing*

### Dr. Rodrigo Vargas Ramos

2002 Cohort  
UC Riverside, Environmental Sciences  
*Soil Carbon Dynamics in a Tropical Seasonal Forest: From Natural Succession to Ecological Restoration*

*UC Mexus is proud of  
our graduates' accomplishments.  
We wish them the best  
in their future endeavors!*



### "La Monarca"...Continued from Page 1

extension of that growth. With *La Monarca*, we hope to create a forum through which current and past fellows may share their research and accomplishments. Each issue will address topics that are relevant to fellows and showcase their outstanding work. It will be issued electronically twice a year and available along with UC MEXUS' other publications on our website.

Frances Fernandes, principal editor, and Clara Quijano, international academic programs assistant,

deserve special recognition for their contributions to the rich content and to the elegant and colorful design of this first newsletter, respectively. They have managed the difficult task of selecting from among the numerous examples of achievement by fellows in this program, and have succeeded in bringing this program to life in the pages that follow. We hope that you will enjoy reading this newsletter as much as we have in creating it. ☒



## UC MEXUS Staff News



We are pleased to introduce Clara Quijano, who has joined UC MEXUS as International Academic Programs Assistant. Clara will be the first point of contact for prospective doctoral students and will address inquiries related to administrative issues for the UC MEXUS-CONACYT Doctoral Fellowship Program. She is also responsible for ensuring that information about fellows and alumni is complete and up-to-date.

A native of Colombia, Clara earned a fine arts degree from Escuela de Bellas Artes de Cesar Taco in Quito, Ecuador, and an associate's degree in business administration from Santa Ana College. She will begin study of her bachelor's degree in Spanish at UC Riverside this year.

Clara brings a wealth of experience to her position as International Academic Programs Assistant. She previously worked as a patient coordinator for the UC Irvine Institute for Brain Aging and Dementia on a research project studying Alzheimer's disease. She also worked with the Latino Health Access, a non-profit organization dedicated to ensuring the Latino community's access to health services. This combination of academic research and first-hand work with Latino issues makes Clara uniquely suited for her position at UC MEXUS. She is very happy to have the opportunity to apply her myriad skills and artistic sensibility to this newsletter and to special events such as the Doctoral Fellows Symposium. Please join us in welcoming her to our International Academic Programs team.



### Wedding Bells

For the last three years, Susana Garcia has worked directly with incoming and current fellows to ensure their smooth entry into the University of California and to assist them in maintaining good standing in this program. Due to

her dedicated efforts and gracious approach in attending to all fellowship matters, she is on a first-name basis with most of our current and past fellows. Soon, she will be known by a new name: Susana Hidalgo.

This August, Susana married her boyfriend Manny Hidalgo in her hometown of Whittier, California. Please join us in congratulating her, and look for her new name and e-mail address to make their appearance in the next few months.

Felicidades, Susana y Manny!



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