

## Erlinda Ulloa Receives Fulbright Award in Medicine; Credits Participation in UCSD Undergrad Research Programs

*Reared in Santa Ana, CA Where Life Was Difficult, Fulbright Scholar is Performing Cutting-Edge Research in Mirror Neurons Under Mentor in Argentina*

October 25, 2006

Debra Lin

Fulbright Scholar Erlinda Ulloa at UCSD last summer before leaving for the Fundación Para la Lucha Contra las Enfermedades Neurológicas de la Infancia, a leading neurosciences institute in Argentina.

University of California, San Diego graduate Erlinda "Chulie" Ulloa has been awarded the prestigious Fulbright U.S. Student Scholarship to fund her medical research studies in the Argentinean cities of Escobar and Belgrano.

The Fulbright Scholarship is the nation's most prominent international educational exchange award. The scholarship is awarded to those who, through academic and professional achievement in their field of study, demonstrate exceptional potential for leadership. Since the program was begun in 1946, hundreds of thousands of teachers, students, and researchers have traveled abroad each year as Fulbright scholars, furthering the program's mission of spreading mutual understanding and respect between the United States and over 150 other participating countries through education. Ulloa is one of more than 1,200 U.S. citizens who have been chosen as Fulbright scholars to study abroad during the 2006-2007 academic year.

Ulloa has come a long way from the Santa Ana, California barrio where she was reared by her young, single mother, who worked constantly to support Ulloa, and her elderly grandparents. "Life was difficult," Ulloa says, "but I never felt disadvantaged. My family persevered to make my goal of attaining a college education a reality. I can't express how good it felt to make them proud when I received this scholarship."

As a first-generation, ethnically underrepresented college student, Ulloa credits UCSD's Academic Enrichment Programs (AEP), a unit of Student Educational Advancement, under Student Affairs, for playing a key role in her receiving the Fulbright award. AEP, through a cadre of enrichment initiatives for undergraduates (including research with faculty mentors) is dedicated to encouraging and preparing undergraduate students for success in graduate or professional school. Ulloa participated in AEP's rigorous McNair Program, and, through AEP, the University of California Leadership Excellence Through Advanced Degrees (UC LEADS) Programs. Both programs give low-income, first-generation college students opportunities to conduct scholarly research with faculty mentors, in addition to the chance of presenting such research before peers and faculty at AEP-sponsored undergraduate research conferences and other undergraduate symposia around the country.

Ulloa, who graduated *magna cum laude* from UCSD last summer with bachelor's degrees in both Psychology, and Animal Physiology and Neuroscience, was first given the opportunity to pursue her interests in neuroscience through the McNair Program where she developed as a scientist and thrived in the free-thinking research laboratory of world-renowned scientist V.S. Ramachandran. The experience "generated a spark that grew into a flame, which was continuously nurtured by AEP and its excellent, supportive staff," Ulloa recalls.

Ulloa went on to produce an honors thesis as a UC LEADS scholar under the mentorship of UCSD cognitive scientist Jaime Pineda. The experience marked a milestone in Ulloa's academic career and was further enhanced when a research paper she completed under Dr. Pineda was published and she presented it at the Society for Neuroscience's international conference in Washington, DC.

Commenting on the influence that AEP programs have had on her career, Ulloa says: "They provided a stimulating challenge, requiring self-disciplined research and independent thought, and ultimately propagated my transition from a consumer to a producer of knowledge. I can't stress enough the important role that AEP has played in this process. The AEP office and all of the people that make these programs happen have left a lasting impression on my life."

Ulloa in Argentina with her Fulbright mentor, neuroscientist Esteban Fridman.

With the assistance of programs like those offered by AEP, Ulloa is now using her scholarship to investigate mirror neurons under Dr. Esteban Fridman at the Fundación para la Lucha contra las Enfermedades Neurológicas de la Infancia, a leading institute in Argentina that specializes in neurosciences. Mirror neurons are nerve cells in the brain that fire in both humans and primates when these mammals perform an action, and when they observe someone else performing the same action. Termed by some researchers as one of the most significant neuroscience discoveries in the past decade, mirror neurons may play a major role in explaining certain human functions that involve the matching or comparing of observations and actions, such as in imitation learning, empathy, autism, mind reading, and language acquisition. In addition, research also suggests that such neurons may be linked to the body's ability to recover motor function following stroke or brain injury.

In relationship to her investigation of mirror neurons as a Fulbright scholar, Ulloa is studying the ability of human research subjects to correctly identify human gestures, while also investigating the brain regions responsible for helping us properly recognize faces, objects, words and other stimuli. Through her work, she hopes to learn more about the connection between mirror neuron activation and motor rehabilitation - research that could have direct implications for stroke and brain injury rehabilitation.

In addition to scientific pursuits, Ulloa looks forward to expanding her knowledge of the social issues that heavily influence quality of healthcare, such as poverty and cultural barriers in underserved communities and underdeveloped countries - a desire that she inherited from her own struggles growing up.

"I want to pursue my interests in neuroscience without losing sight of the ways my research affects others," she says, adding that her goals of breaking down barriers between nations through research and public service are similar objectives of the Fulbright Scholarship Program.

"I am proud to represent my country and university as a Fulbright Scholar in Argentina, and I look forward to building upon the strong foundation that my family and UCSD have provided," says Ulloa. In the process, she also plans to continue her studies in M.D. and Ph.D. programs.

For further information on UCSD's AEP programs, visit: <http://aep.ucsd.edu/default2.htm>. For more information on the Fulbright Scholarship Program, go to: <http://exchanges.state.gov>.

Media Contacts: Debra Lin, (858) 534-9410 Michael Dabney, (858) 822-0566

