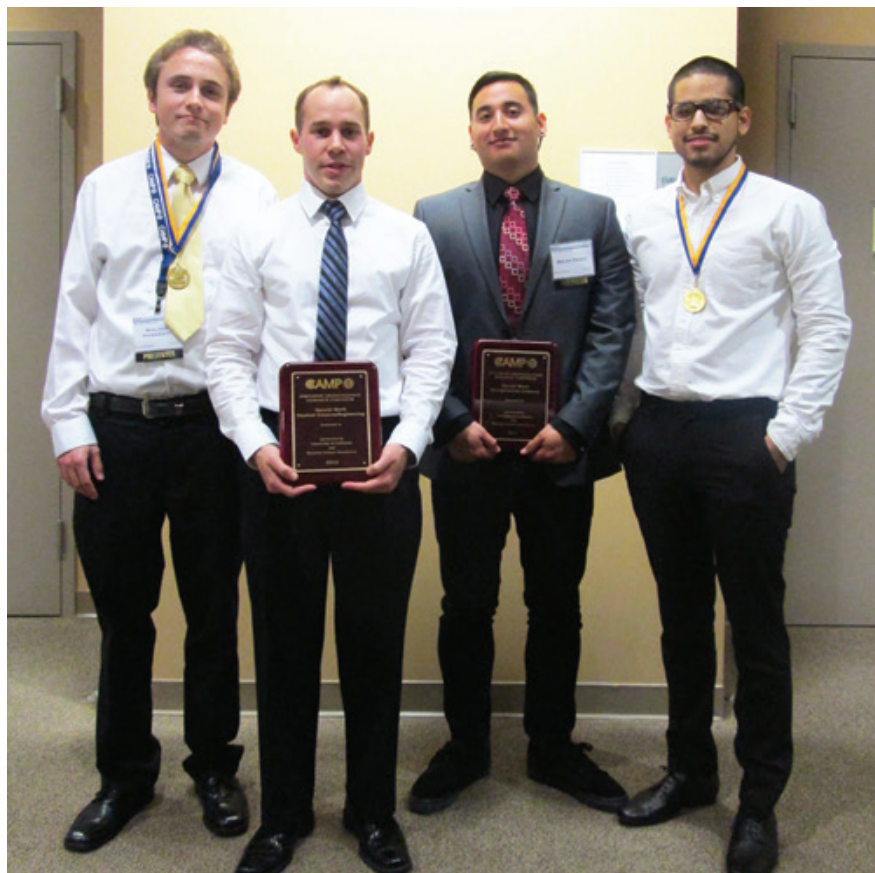


UC Los Angeles

Community College Students Take Full Advantage of Like-Minded Programs. UCLA STEM Transfer Students Excel in Research!

Community college transfer students historically have difficulty acclimating to the rigorous demands of the quarter system, and the steep expectations placed on them to adapt, excel and graduate on time. With support from CAMP, UCLA's Undergraduate Research Center (URC) – Sciences offers resources and scholarships that prepare transfer students to advance into capstone research programs and pursue graduate school. The UCLA Bridges program is committed to diversifying the biomedical research field by “bridging” the research gap between local community college students and UCLA by exposing them to research via seminars, panels, and courses aimed at increasing their research abilities and professional development. The program culminates in an eight-week Bridges Summer Undergraduate Research Program (BriSURP) for students who are transferring to UCLA or to another four-year university.

The five UCLA 2013 CAMP State-wide Symposia awardees reflect the successes of programs and initiatives aimed at assisting STEM transfer students set forth by programs like CAMP. This year, Steve Guzman and Walter Hardesty received Honorable Mentions, and Brett Lopez, Brian Perez and Kenny Robles received Special Merit Awards for their presentations in their respective fields. All five winners are transfer students and are



currently affiliated with at least one URC undergraduate research program, including CAMP.

Steve Guzman, a former BriSURPer, is currently a MARC (Minority Access to Research Careers) Scholar who conducts research in the Department of Integrative Biology and Physiology. His research investigates the recovery of upper limb motor function in Rhesus Monkeys

after spinal injury. Guzman feels the Bridges Summer Undergraduate Research Program helped facilitate his adjustment to UCLA. The program allowed him to gain confidence in his abilities both as a student and researcher by opening doors and introducing him to mentors.

Walter Hardesty is a former BriSURPer and a current IMSD-funded CARE Fellow, working in

“CAMP has inspired me to study harder and to ask more questions in my lab, in order to learn more, and further my career goals.”

—Walter Hardesty

the Department of Immunology, and Molecular Genetics. His research examines the role of carbonic anhydrase in cAMP signaling and social motility in *Trypanosoma brucei*. When asked about his experience at the symposium, Hardesty offered, “[CAMP] inspired me to continue to pursue my research goals. By interacting face to face with top scientists in the field of microbiology, not only was I able to learn more about my research, but I became motivated to ask myself more scientific questions and bring these same questions to light in my lab.”

The experience at the CAMP Symposium illustrates an essential factor pivotal for inspiring undergraduates to pursue research careers. Kenny Robles, a former BriSURPer, conducted research last summer at the National Institute of Dental and Craniofacial Research focusing on fibroblast growth factors signaling and the role it plays in impairing innervation of the submandibular gland. He says, “CAMP reinforced my interest in pursuing research in the future.” Robles plans to attend the University of Southern California for Dental Surgery in Fall 2013.

The CAMP Symposium also exemplifies the small community wherein scientists gather from their respective backgrounds to both share and contribute knowledge and fervor for research. Current MARC Scholar, Brian Perez, who won the Special Merit Award, investigates epidermal induction mediated through multivesicular endosomes in the Department of Biological Chemistry. He admits CAMP “motivated me to work harder.”

Brett Lopez is an IMSD-funded CARE Scholar, who won a special Special Merit Award for his work in the physical sciences. Lopez investigates combustion instability and its influence on droplet flame behavior in acoustically excited fields.

Because of the opportunities CAMP presents to the underrepresented and transfer student population, the UCLA awardees have set their ambitions to

contribute and commit themselves to “serve the underserved community,” as Robles states.

Thanks to CAMP and programs like it, UCLA can continue to outreach and mentor transfer students in the STEM field. UCLA

genuinely appreciates CAMP’s significant impact on undergraduates and is equally committed to its mission to extend opportunity to underrepresented students in the sciences.

—Article provided by Benjamin Hà.



SPOTLIGHT ON CAROLINE ARELLANO-GARCIA:

Community College Student on Pathway to the Baccalaureate

Caroline Arellano-Garcia currently studies Human Biology & Society at Los Angeles Valley College, and plans on transferring to a four-year institution starting Fall 2013. Caroline participated in the UCLA Bridges to the Baccalaureate Summer Undergraduate Research Program (BriSURP) during summer 2012, where she worked full-time in Dr. Art Arnold’s laboratory within the Department of Integrative Biology & Physiology. Her research evaluated estrous cycle differences between XX and XY- Female C57BL/6 four core genotypes mice.

Arellano-Garcia presented during the Works-In-Progress Session at the 2013 CAMP Statewide Symposium, after which she admits, “CAMP

definitely exceeded my expectations. I never expected such a wonderful first experience!” She adds that she felt “immense pride” as the only UCLA female presenter as well as the only presenter currently at a community college. “I cannot wait to see what the future holds for all of us.”

She has set high aspirations for herself, including pursuing graduate education. Arellano-Garcia would like to pursue a career in biomedical research and give tribute to the opportunities presented to her by actively promoting the participation of underrepresented minority groups and women in the STEM fields, particularly at the community college level.

“I cannot wait to see what the future holds.”



UCLA INTRODUCES:

New CAMP Director, Diana Azurdia

Diana Azurdia, Ph.D., was recently appointed Director of CAMP at UCLA, under the direction of Director and Assistant

Vice Provost of Undergraduate Research, Dr. Tama Hasson. She leads a number of undergraduate research programs and teaches Honors

Collegium Research Courses. She received her B.S. in Biochemistry from CSU Los Angeles. In 2010 she graduated with her Ph.D. in Molecular Biology and Biochemistry from UCLA. Her graduate school research focused on characterizing the regulation of the riboflavin pathway in *E. coli*. Upon graduating Diana was appointed adjunct faculty in the Chemistry and Biochemistry Department at CSU Los Angeles. She also served as an assistant teaching instructor in the Chemistry and Biochemistry Department at UCLA.

Diana's journey with undergraduate research began as a MARC scholar at California State University, Los Angeles. Her passion for research grew amidst a very nurturing and welcoming environment. The support from her mentors and the financial support granted by LSAMP programs set her well on the path to complete the Ph.D.

UCLA FACULTY SPOTLIGHT:

Dr. Jorge Torres

Dr. Jorge Torres, member of the Jonsson Comprehensive Cancer Center and assistant professor in the chemistry and biochemistry department at UCLA, is CAMP alumnus from UC Santa Barbara. He participated in CAMP as an undergraduate at UCSB where his initial research experience dealt with the *Tetrahymena thermophila* Genome Project in the lab of Dr. Eduardo Orias. (See page 39.) The UCSB CAMPers made it a habit to meet on a weekly basis over lunch to discuss and receive feedback on their work. The guidance, training and opportunities provided by CAMP prepared him for candidacy in competitive research institutions early on in his career.

From UCSB, Torres went on to

complete a Ph.D. at Princeton University, Department of Molecular Biology. He was a postdoctoral fellow at Stanford University, Department of Pathology, and at Genentech Inc, South San Francisco, Department of Tumor Biology and Angiogenesis.

Recently, Torres's research has received much notoriety due to his identification of a novel protein called STARD9. Using high throughput proteomic and genetic screens, his research group sought to identify a protein that when depleted stopped cancer cell division and prompted cell death. The result of their discovery was STARD9, a

molecular motor involved in cell division. Further studies showed that depleting STARD9 also helped Taxol, the commonly used chemotherapy drug, to work more effectively

against certain cancers.

Torres was named one of thirteen 2013 Cottrell Scholars by the Research Corporation for Science Advancement (RCSA), recognizing his scientific contributions to research and his commitment to undergraduate education.

Torres credits much of his success to CAMP and says it "really kick-started

my independent science career by giving me the confidence, skills, and training needed to succeed."



"One of the main things that I gained from the CAMP program was an appreciation of the importance of having a network of dedicated mentors, program directors and staff."