



NOTE FROM THE DIRECTOR

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It is the beginning of the 7th year of the UCSB McNair Scholars Program. Our successes continue: Nine 2014 graduating seniors are now enrolled and very busy in graduate school, seven fully funded in Ph.D. programs at major research universities around the country (Stanford, Texas, Michigan State, Illinois, Virginia Tech, Missouri, and UC-Merced). Before they left UCSB, most were among the contributors to the 4th volume of our research journal whose cover and table of contents are highlighted in this issue. And speaking of seniors, all 12 of the current ones are busily preparing grant proposals and applications for 2015 entrance to graduate school.

We were very pleased to announce that Edison International provided some funding to our program for the 2014 calendar year. Through its support to non-profits in education, Edison helps underrepresented students pursue higher education in science, technology, engineering, and math (STEM) fields. This year, through the Edison grant, we were able to send eight of our STEM and Economics/Math majors to the SACNAS annual conference, held in Los Angeles.

SACNAS is a society of scientists dedicated to fostering the success of Latino/Chicano and Native American scientists to attain advanced degrees, careers, and positions of leadership in science. At the conference, each of our undergraduate students presented research posters and were judged by scholars in their respective fields. We are very pleased to announce that Richard Mata, one of our current seniors, was honored for his "outstanding contribution and research presentation" in mathematics.

Amid the bustle of an exceptionally busy Fall Quarter, staff takes some time to reaffirm our commitment to the core mission of the program: To change the face of the next generation of professional researchers and faculty entering the professoriate. A recent essay in the New York Times on October 19, 2014, though focused on South Africa, reminds us how important it is to not only bring low-income, first generation, and underrepresented students into our colleges and universities, but to assure that some sizable number enter post-BA education in order to change the culture of academic life. It will take a significant shift in the proportion of faculty and senior administrators in higher education before students perceive that campuses are a place where they truly belong. See this article for an intriguing and challenging discussion. <http://www.nytimes.com/2014/10/19/opinion/sunday/a-paradox-of-integration.html>

Dr. Beth Schneider, Professor of Sociology



McNair Seniors



Iliana J. Avila
Major: Sociology and Chicana/o Studies
Hometown: Los Angeles, CA
Graduation Date: June 2015
Mentor: Dr. Dolores Ines Casillas
Mentor's Department: Chicana/o Studies
Research Interests: Cultural Studies, Central American Studies, Latina/o Education, Popular Chicana/o Culture



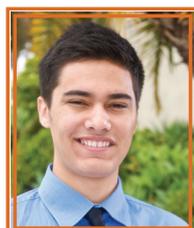
Michelle Parra
Major: Sociology and Feminist Studies
Hometown: Los Angeles, CA
Graduation Date: June 2015
Mentor: Dr. Leila Rupp
Mentor's Department: Feminist Studies
Research Interests: Hook Up Culture, Sexuality, Same Sex Intimacies, Race/Ethnicity, Oppression of Women of Color



Leslie Rene Castro
Major: Cultural Anthropology and Global Studies
Hometown: Lancaster, CA
Graduation Date: June 2015
Mentor: Dr. David Novak
Mentor's Department: Music
Research Interests: Global Popular Music, Hybrid Identities



Jacqueline Beatriz Partida
Major: Chicana/o and Feminist Studies
Hometown: Los Angeles, CA
Graduation Date: June 2015
Mentor: Dr. Ralph Armbruster
Mentor's Department: Chicana/o Studies
Research Interests: Media Censorship Social Movements, Gender Studies



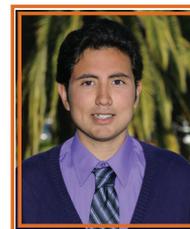
Benjamin Huffman
Major: Chemistry
Hometown: Fresno, CA
Graduation Date: June 2015
Mentor: Dr. Javier Read de Alaniz
Mentor's Department: Chemistry and Biochemistry
Research Interests: Organic Chemistry, Synthesis and Organic Materials



Rachel Scarlett
Major: Environmental Studies and Chemistry
Hometown: Los Angeles, CA
Graduation Date: June 2015
Mentor: Dr. Jennifer King
Mentor's Department: Geography
Research Interests: Environmental Sustainability in Urban Settings



Richard Mata
Major: Mathematics
Hometown: West Covina, CA
Graduation Date: June 2015
Mentor's Name: Dr. Hector Cenicerros
Mentor's Department: Mathematics
Research Interests: Dynamical Systems, Non-linear PDE's, Fluid Dynamics



Christian Suarez
Major: Biochemistry-Molecular Biology
Hometown: Artesia, CA
Graduation Date: June 2015
Mentor: Dr. Jamey Marth
Mentor's Department: Molecular, Cellular, Developmental Biology
Research Interests: Drug Design, Drug Delivery, Mechanisms of Disease, Evolutionary Genetics



Erik Suarez
Major: Economics/Mathematics
Minor: Statistics
Hometown: Van Nuys, CA
Graduation Date: June 2015
Mentor: Dr. Jon Sonstelie
Mentor's Department: Economics
Research Interests: Urban Economics, Economics of Education



Lizette Wences
Major: Linguistics with Spanish Emphasis
Minor: Teaching English to Speakers of Other Languages (TESOL)
Hometown: Palmdale, CA
Graduation Date: June 2015
Mentor: Dr. Mary Bucholtz
Mentor's Department: Linguistics
Research Interests: Clinical, Developmental, Sociocultural Linguistics



Victor Marta
Major: Economics/Mathematics and Political Science
Hometown: San Marcos, CA
Graduation Date: June 2015
Mentor: Dr. Jon Sonstelie
Mentor's Department: Economics
Research Interests: Behavioral Economics, Urban Economics

Summer Research Around the Country

Victor Marta participated in the American Economics Summer Training Program at the University of New Mexico. Under the guidance of Dr. Alok Bohara from the Department of Economics, he worked on the research project, "Media's Impact on Modern Contraception Use in Uganda." He also had the opportunity to present his research at the University of New Mexico's AEA Mentoring Pipeline Conference. For Victor, this was an eye opening research experience: "This was a great experience for me. The program had long days from 9am to 9pm and everything goes by so fast but at the end you realize just how much you have actually learned."

Erik Suarez also took part in the American Economic Association Summer Training Program at the University of New Mexico. Under the direction of Dr. Alok Bohara, he worked on a research project entitled, "Reexamining the Effect of Foreign Direct Investment on Economic Growth in Developing Countries." Erik notes: "In addition to enrolling in three intensive seminars and analyzing data I was privileged to meet with and learn from a wide range of speakers."

Michelle Parra participated in the Summer Research Opportunity Program, at the University of Illinois, Chicago. Under the supervision of Dr. Lorena Garcia, she worked on her project, "Hookup Culture: How Young Latina College Women Negotiate their Sexual Identities." She presented on this topic twice, first at the Illinois Summer Research Symposium and then at the 2014 SROP Research Symposium. For Michelle this was an amazing experience: "I would definitely say that my research this summer has helped me narrow my research interests and will impact my decisions when applying for graduate school."

Jacqueline Partida was selected for the Summer Research Opportunity Program at University of Illinois at Urbana-Champaign. During this summer program she worked under Dr. Alejandro Lugo on the research project, "Consciousness Raising through Artistic Interventions in the Ni Una Mas Social Movement." She participated in the Illinois Summer Research Symposium, where she shared her work in both oral and roundtable presentations. For Jacqueline this summer program was very challenging and rewarding: "Learning how to understand the complexity in social issues allowed me to relate multiple power structures in my studies. Working among other scholars was empowering and motivating for pursuing graduate school."



Rachel Scarlett attended the Diversity Summer Internship Program at Johns Hopkins Bloomberg School of Public Health. She was mentored by two faculty members, Dr. David Love and Dr. Jillian Fry, both from the Center for a Livable Future. She worked on the project, "Evaluation of the Johns Hopkins Center for a Livable Future Aquaponics Project: A Survey of Visitors." In addition, she had the experience of presenting this project, first at the Leadership Alliance Conference in Stamford, CT., followed by an oral presentation and poster session at the Diversity Summer Internship Program Conference at Johns Hopkins. According to Rachel this experience was inspirational: "I became more confident in my ability to become a leader in the field of environmental studies."

Benjamin Huffman went to Stanford University for his summer program. In the Department of Chemical and Systems Biology he worked under the guidance of Dr. Raul Navarro and Dr. Ling Chun-Chen. Benjamin's research project was on the topic of, "Developing a Fluorescent Destabilizing Domain System with UnaG and Bilirubin." Benjamin also had the opportunity to deliver an oral and a poster presentation on his research during the Stanford Summer Research Program. For Benjamin, working in a highly motivated and diverse group of scholars allowed him to grow as a scientist and granted him a new perspective on how to design and execute scientific experiments. In his words: "I plan to both apply my newly acquired scientific mindset to further advance my organic chemistry research and continue to nurture the new connections I have acquired."

UCSB Summer Program 2014



This summer all McNair scholars produced impressive original research projects. Nineteen McNair scholars participated in the McNair Scholars Summer Program here at UCSB, while the other six conducted research on a variety of campuses throughout the nation (see article above). The students here at UCSB undertook intensive McNair summer seminars. Among the topics covered in the seminars were: developing a research project, research ethics and methodologies, presenting research, professional development and preparing for graduate school. Along with the seminars, students met regularly with their selected faculty mentor and at the end of the summer course students produced a quality research paper. Scholars presented their research project at the UCSB McNair Summer Program Symposium and gave a poster presentation at the UCSB Undergraduate Summer Research Colloquium. One of our students, Christian Suarez, won first prize for his poster, "Understanding the glucose transporter and pancreatic beta cell glycosylation during starvation." In addition, four of our scholars presented their research projects at the 22nd Annual McNair National Conference at UC Berkeley in August.

Goodbye to Rob



The McNair Scholars Program was excited to have Rob Miller serve as a Graduate Mentor for the 2013-2014 academic year. Rob is currently completing his Master of Science in Media Arts and Technology/Multimedia Engineering and will defend his thesis in December of 2014. He focused his graduate study on music information retrieval, a growing field of research extracting statistical and semantic information from digital audio signals. He graduated from the University of Maryland, College Park in 2012 with a Bachelor of Music degree. He is also a former McNair Scholar and his undergraduate McNair research project consisted of a content analysis of the background music used in the 2008 presidential campaign between Barack Obama and John McCain. Rob's favorite experience working for the UCSB McNair program was the opportunity to provide advice about the graduate school experience. He especially enjoyed helping students in the application process. His advice to new and continuing McNair Scholars: "Treat even the smallest assignment as if it were a major project." Rob knows from personal experience that students will show great improvement in their academic work and research. With a master's in hand, Rob is looking forward to moving into industry in the Bay Area. There he will continue his work in the area of music recognition. The UCSB McNair Scholars will miss Rob's guidance, support, and patience. We wish Rob good luck in all his future endeavors.

The McNair Scholars Research Journal 2014



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To view this journal and previous journals, please go to: <http://mcnair.ucsb.edu/journal.html>

Our New McNair Scholars



Cairo O. Briceño
 Major: Latin American and Iberian Studies
 Hometown: Pasadena, CA
 Graduation Date: June 2016
 Mentor: Dr. Gabriela Soto Laveaga
 Mentor's Department: History
 Research Interests: Central American Studies, Liberation Theology, Latino Social Movements



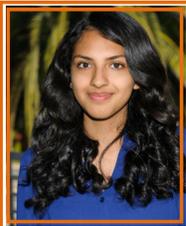
Jacqueline Lepe
 Major: Sociology and Spanish major
 Minor: Feminist Studies
 Hometown: Inglewood, Ca.
 Graduation Date: June 2016
 Mentor: Dr. Victor M. Rios
 Mentor's Department: Department of Sociology
 Research Interests: Non-cognitive Skills Development, At-Risk Student Intervention, Juvenile Justice



Jacky Chan
 Major: Cell and Developmental Biology
 Hometown: Montebello, California
 Graduation Date: June 2016
 Mentor: Dr. John Lew
 Mentor's Department: Molecular, Cell and Developmental Biology
 Research interests: Alzheimer's Disease, Therapeutic Intervention of Disease Mechanisms



Anibal Lopez
 Major: Political Science - American Politics Emphasis
 Minor: Philosophy
 Hometown: Escondido, CA
 Graduation Date: June 2016
 Mentor: Dr John T. Woolley
 Mentor's Department: Political Science
 Research interests: Financial Regulatory Reform, Decision-Making



Gisella Diaz
 Majors: Psychology and Anthropology
 Hometown: Delano, CA
 Graduation Date: June 2016
 Mentor: Dr. Barry Giesbrecht
 Mentor's Department: Psychological & Brain Sciences
 Research Interests: Perceptual, Cognitive, Neural Mechanisms of Selective Attention



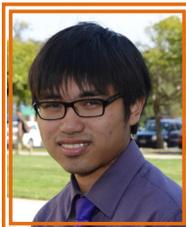
James Perez
 Majors: Biochemistry and Molecular Biology
 Hometown: Santa Clarita, CA
 Graduation Date: December 2015
 Mentor: Dr. Luc Jaeger
 Mentor's Department: Chemistry and Biochemistry
 Research Interests: RNA Nanotechnology, Non-coding RNA, Drug Design and Delivery, Gene Therapy, Microbiology, Immunology, Biomimetics



Jorge Dominguez
 Major: Economics/Mathematics
 Hometown: Cathedral City, CA
 Graduation Date: June 2016
 Mentor: Dr. Heather Royer
 Mentor's Department: Economics
 Research Interests: Macroeconomics, Behavioral Economics, Experimental Economics



Joleana Shurley
 Major: Linguistics
 Minor: Teaching English to Speakers of Other Languages
 Hometown: Joshua Tree, CA
 Graduation Date: December 2015
 Mentor: Dr. Marianne Mithun
 Mentor's Department: Linguistics
 Research Interests: Psycholinguistics, First/Second Language Acquisition, Computational Linguistics



Bob Feng
 Major: Chemical Engineering and CCS Biochemistry
 Hometown: Fremont, CA
 Graduation Date: June 2016
 Mentor: Dr. Scott Shell
 Mentor's Department: Chemical Engineering
 Research Interests: Soft Matter



Bertin Solis
 Major: Sociology
 Minor: Education
 Hometown: San Diego, CA
 Graduation Date: June 2016
 Mentor: Dr. Richard Duran
 Mentor's Department: Education
 Research Interests: Latino Parental Engagement, P-20 Education Pipeline, Education Policy



Jamelia Harris
 Major: Sociology
 Minor: Black Studies and Education
 Hometown: Los Angeles, CA
 Graduation: June 2016
 Mentors: Dr. George Lipsitz and Dr. Claudine Michel
 Mentor's Departments: Black Studies/Sociology and Feminist Studies
 Research Interest: K -12 Educational Equity, Recruitment/Retention Initiatives for African Americans



Paola Villegas
 Major: History of Public Policy
 Minor: Labor Studies and Spatial Studies
 Hometown: Van Nuys, CA
 Graduation Date: June 2016
 Mentor: Dr. George Lipsitz
 Mentor's Departments: Sociology and Black Studies
 Research Interests: Land Use Policy and Planning, Equitable Housing, Gentrification

Alumni Reflection with Afiya Brown



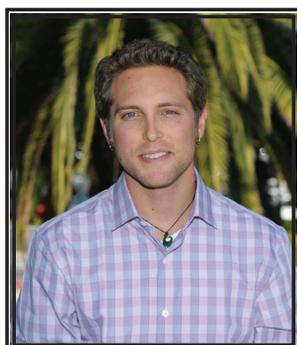
Afiya Brown was a McNair Scholar at UCSB in 2011 and 2012 where she studied how gang activities and involvement impact the lives of young Black girls. She was fortunate to have the opportunity to be mentored by the late Dr. Clyde Woods in Black Studies, as well as Dr. Beth Schneider in Sociology. Ms. Brown is now pursuing her doctoral degree in Criminology, Law, and Society at the University of California, Irvine under the guidance of Dr. Sora Han, working on a project titled: "Police Brutality and the Ungendering of Black Women." When asked what she remembers most about McNair, Ms. Brown responded that "during the application process, McNair helped with establishing my time-management skills, and helped me pick a program that actually FITS what I wanted to do." Furthermore, "McNair helped me become an expert at presenting my research." The experiences that the UCSB McNair Scholars Program provided for Afiya now help her mentor undergraduates at UCI who want assistance with their academic presentations. Her advice for current and future McNair Scholars is "to learn how to adapt, but always remember YOUR goals and why YOU are entering academia. Knowing who you are and what you want to accomplish will help you make the best decisions for your future."

McNair Class of 2014!



Jorge Ballesteros, MA Sport Psychology, Ball State University
Allegra Latimer, PhD Chemical Engineering, Stanford University
Amieris Lavender, PhD in Educational Policy, Michigan State University
Michelle Len, PhD Mechanical Engineering, UC Merced
Nathan Lopez, PhD Mathematics, University of Illinois at Chicago
Noe Lopez, PhD Social Anthropology and the U.S. Mexico Borderland,
University of Texas at Austin
Erika Matadamas, MA Global and European Studies, Leipzig University in Germany
Mynor Medrano, PhD Microbiology, Virginia Tech
Marilyne Tamayo, PhD Anthropology, University of Missouri, Columbia

Our New Graduate Mentors



Andy MacDonald is a PhD candidate in the department of Ecology, Evolution and Marine Biology at UCSB. His research at UCSB focuses on the ecology of infectious diseases of humans from Lyme disease to rabies and West Nile virus. He holds a bachelor's degree from the University of Wisconsin, Madison and a master's degree from the University of Michigan, Ann Arbor. While a student in Ann Arbor, he was active in the recruitment of students from minority-serving institutions and



Veronica Zavala was born and raised in Salamanca, Guanajuato. Veronica became a McNair Scholar in 2008 at Sacramento State University where she majored in social work. During her McNair research project, which focused on the experiences of Mexican immigrants, Veronica discovered her passion for research. After finishing her undergraduate studies, she completed a master's degree in Latin American and Iberian Studies at UC Santa Barbara. Veronica is currently pursuing a doctoral degree in the Film and Media Studies Department with an emphasis on Spanish-language radio, television and film in

historically black colleges and universities to the Frontiers master's Program in ecology and evolutionary biology. Throughout his graduate career, Andy has worked with and mentored many undergraduate students, primarily first generation or community college transfer students, and he is thrilled to be continuing this commitment with the McNair Scholars Program at UCSB.

the Americas. Due to Veronica's firsthand experience, she recognizes the potential benefits that McNair programs have for underrepresented students and is honored to be part of the McNair team which significantly contributes to the lives and careers of young scholars.