Rachel graduated this spring with a BS in chemistry and environmental studies. She will be attending Purdue University in the fall to begin her PhD in ecological sciences and engineering. Rachel’s decision to pursue a PhD was motivated both by her undergraduate research experiences as well as her experience growing up in Los Angeles, CA. Rachel’s father was a water transport engineer for the city of Los Angeles, which inspired her to study the natural resources used by the city’s inhabitants, like clean water and food. Through her subsequent research experiences at UCSB, she gained new scientific and social insights into these relationships. Her research projects have included investigations of microbial regulation of greenhouse gas production, effects of UV radiation on microbial decomposition of organic matter and effects of reclaimed water irrigation on soil chemistry and plant growth. According to Rachel “the profound impact these experiences have had on my personal and academic life has influenced my decision to pursue a PhD and become a professor at a research university.” These experiences have also convinced Rachel of the necessity of integrating the natural/physical sciences with the social sciences to find and implement solutions to pressing environmental problems facing society.

Edison Scholars

The McNair Scholars Program is proud of our scholars who benefit from generous gifts made to the Edison International Program. The Edison International Program provides grants to support the educational and financial needs of our scholars and helps them to earn a STEM degree. The McNair Scholars Program receives financial support from Edison International which provides students with travel opportunities and supplies. In 2014-15, eight of our McNair Scholars received funding through this program, including: Daniel Cha, Jorge Dominguez, Benjamin Huffman, Richard Marta, Nathan Alamillo, Victor Mata, Rachel Scarlett, Christian Suarez, and Erik Suarez. Congratulations to our Edison recipients!

UCSB McNair Scholars Newsletter

UCSB McNair Alumni Angel Rodriguez completed his bachelor’s degree in philosophy in June 2012. He was awarded the Sigma-Cota-Robles Fellowship and pursued his master’s degree in Latin American and Iberian Studies at UCSB under the guidance of Professor Gabriela Soto Lavinas. Upon completion of his master’s thesis, which focused on the cultural history of biomedical research in Central America during the mid-20th century, Angel was admitted to the History of Science PhD program at Harvard University.

Angel enjoys working in an intellectual environment and interacting with colleagues. He believes these are two significant experiences of graduate school which can help all students develop their identities as scholars. According to Angel, “we are in a constant state of becoming, being open to new schools of thought and creatively adapting to our own questions, making for very interesting work.”

Angel deeply values the preparation that the McNair Scholars Program offered him: “The tools of a scholar include public speaking, article-length writing skills, posters and research development just to name a few. While these may be available elsewhere in the university, McNair really understood how one could best learn and apply them in our specific interests.” According to Angel’s advice to McNair Scholars: “Strive to be better than who you were yesterday, plan the productivity of today and continue to imagine the scholar that you want to become tomorrow.”

Graduates Senior with Recognitions and Awards

Nathan Alamillo, who graduated Summa Cum Laude, was the recipient of the following awards: Chancellor’s Award for Excellence in Undergraduate Research, 2014-15 Dean of Undergraduate Education Award in the College of Letters and Sciences for outstanding academic and personal achievement, Louise A. and D. Phil “Making a Difference Award,” and the University Service Award.

Jen Atila received the University Service Award for her ongoing contributions to the Equal Opportunity Program.

Benjamin Hoffman presented his work “Developing a Fluorescent Based Destructubilizing Domain System with Unal and Bilirubin,” at the annual Biomedical Research Conference for Minority Students this year. At this conference, Benjamin received an award for best student poster presentation in biology. He was also the recipient of the Willell L. McDairmott Prize from the Department of Chemistry.


Rachel Scarlett received the 2014-15 Environmental Studies Outstanding Student Achievement Award. Furthermore, her work “Effects of UV Photoproduction on Subsequent Microbial Decomposition of Bio-waste Shredded Liver” has been accepted for publication in the journal Plant and Soil.

Christian Suarez presented his research project titled “Understanding Type II Diabetes through the Glucose Transporter and Pancreatic Beta Cell Glycolytic During Starvation.” This project was presented at the Out in STEM annual conference in Atlanta, Georgia where he won the Award of Excellence for Outstanding Undergraduate Poster.
Rachel graduated with a BS in chemistry and environmental studies. She will be attending Purdue University in the fall to begin her PhD in ecological sciences and engineering. Rachel’s decision to pursue a PhD was motivated both by her undergraduate research experiences as well as her experience growing up in Los Angeles, CA. Rachel’s research interests center around human-environment relationships and sustainable use of natural resources. Growing up in Los Angeles, Rachel saw human-environment relationships obscured by the lack of a direct connection to the natural resources used by the city’s inhabitants, like clean water and food. Through her subsequent research experiences at UCSB, she gained new scientific and social insights into these relationships. Her research projects have involved the assessment of microbial degradation of organic matter and the effects of UV radiation on microbial decomposition of organic matter and human perceptions of new urban agricultural technologies. Her senior thesis focused on the effects of reclaimed water irrigation on soil chemistry and plant growth. According to Rachel, “The profound impact these experiences have had on my personal and academic life has influenced my decision to pursue a PhD and become a professor at a research university.” These experiences have also convinced Rachel of the need to integrate the natural/physical sciences with the social sciences to find and implement solutions to pressing environmental problems facing society.
in the classroom. At the competition, the other current McNair scholars presented current research work covering a wide range of topics and research interests, each discussing their “field of influence:” for example, from studying the effects of studentification in Isla Vista, California, and developing a fluorescent-based destabilizing domain system in the competition.

At the colloquium, other current McNair scholars presented cutting-edge scholarship covering a wide range of topics and research interests, each discussing their “field of influence:” for example, from studying the effects of studentification in Isla Vista, California, and developing a fluorescent-based destabilizing domain system in the competition. At the colloquium, other current McNair scholars presented cutting-edge scholarship covering a wide range of topics and research interests, each discussing their “field of influence:” for example, from studying the effects of studentification in Isla Vista, California, and developing a fluorescent-based destabilizing domain system in the competition.
Daniel Cha
Major: Mathematics
Hometown: Sunnyvale, CA
Graduation Date: June 2016
Mentor: Dr. Jeffrey Stepple
Mentor’s Department: Mathematics
Research Interests: Mathematical logic theory, set theory, group theory, number theory, complex analysis.

Sylvia Garcia
Major: English and Geography
Hometown: Camarillo, CA
Graduation Date: June 2016
Mentor: Dr. Tommy Dickey
Mentor’s Department: Geography
Research Interests: Human impact on polar bears.

Eugenie Guzman
Major: Psychology
Major: Applied Psychology
Hometown: Brentwood, Lebanon
Graduation Date: June 2016
Mentor: Dr. Karen Szuminski
Mentor’s Department: Psychological and Brain Sciences
Research Interests: Anxiety disorders, empathy, theory of mind.

Adriana Harker
Major: Psychology
Major: Applied Psychology
Home: Sunnyvale, Valley CA
Graduation Date: June 2016
Mentor: Dr. Melissa Morgan Consoli
Mentor’s Department: Counseling, Clinical and School Psychology
Research Interests: Resilience, subjective well-being, culture and ethnicity.

Michelle Parra: MA, Sexuality Studies, San Francisco State University
Jacqueline Partida: PhD, American Studies, University of Maryland, College Park

Erik Scarlett: PhD, Ecological Sciences and Engineering, Purdue University

Lizzie Wrenn: MA, Speech Pathology, Indiana University, Bloomington

Richard Mata:
UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Class of 2015 heading to graduate school!

Nathan Aluminau: PhD, Public Health Joint Doctoral Program, University of San Diego/SIDHU
Briana Avila: MA, Latin American and Latin Studies, University of Illinois, Chicago
Benjamin Huffman: PhD, Chemistry, The Scripps Research Institute, LaJolla, Florida
Victor Marte: PhD, Economics, University of California, Berkeley
Richard Mata: MA, Engineering and Industrial Applied Mathematics, Claremont Graduate University
Michelle Parra: MA, Sexuality Studies, San Francisco State University

Iliana Avila:
Research Interests: Synaptic plasticity and neurogenesis
Mentor’s Department: Molecular, Cellular and Developmental Biology
Graduation Date: June 2016
Hometown: Monterey, CA
Major: Biopsychology

Emma Angeles
Major: Anthropology with Biological Emphasis
Hometown: Brentwood, CA
Graduation Date June 2017
Mentor: Dr. Danielle Burns
Mentor’s Department: Anthropology
Research Interests: Forensic anthropology, human resilience, neuroscience of care, palaeo.

Robert Ansho
Major: Psychology
Hometown: San Mateo, CA
Graduation Date June 2017
Mentor: Dr. Mira Mirtle Riss
Mentor’s Department: Education
Research Interests: Spati psychology, mindfulness, motivations

Umair Bari
Majors: Psychology and Communication
Hometown: San Jose, CA
Graduation Date: June 2017
Mentor: Dr. Theophil Kim
Mentor’s Department: Psychological and Brain Sciences
Research Interests: Interpersonal and group dynamics, adherence to treatment, cross-cultural and global mental health.

Iliana Avila
Avila’s American Experience: First Generation Salvadoran in Southern California

Oludakun (Buki) Akintunji
Major: Sociology
Hometown: Ekiti, Nigeria
Graduation Date: June 2017
Mentor: Dr. Mary Hagerty
Mentor’s Department: Psychological and Brain Sciences
Research Interests: Drug effect and design, spatial ability and memory.

Erik Suarez
MA, Latin American and Latino Studies, University of Illinois, Chicago

Mentor’s Department: Sociology
Research Interests: Mechanisms of disease, epidemics, public health

Mariana Martin
Major: Sociology
Minor: Education and Applied Psychology
Hometown: Mexico City, Mexico
Graduation: June 2017
Mentor: Dr. Rebecca Mirtle Riss
Mentor’s Department: Education
Research Interests: Latinx and Indigenous student and student-activist motivations, education policy, juvenile justice.

Briana Avila
Research Interests: Drug effect and design, spatial ability and memory.
Mentor’s Department: Psychological and Brain Sciences
Research Interests: Drug effect and design, spatial ability and memory.

Mentor’s Department: Sociology
Research Interests: Mechanisms of disease, epidemics, public health

Mariana Martin
Major: Sociology
Minor: Education and Applied Psychology
Hometown: Mexico City, Mexico
Graduation: June 2017
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Briana Avila
Research Interests: Drug effect and design, spatial ability and memory.
Mentor’s Department: Psychological and Brain Sciences
Research Interests: Drug effect and design, spatial ability and memory.
Daniel Cha  
Major: Mathematics  
Hometown: Sunnyvale, CA  
Graduation Date: June 2016  
Mentor: Dr. Jeffrey Stopple  
Mentor’s Department: Mathematics  
Research Interests: Mathematics logic theory, set theory, group theory, number theory, complex analysis.

Sylvia Garcia  
Major: English and Geography  
Hometown: Camarillo, CA  
Graduation Date: June 2016  
Mentor: Dr. Tommy Dickey  
Mentor’s Department: Geography  
Research Interests: Human impact on polar icons.

Eugene Guevara  
Major: Psychology  
Masc: Applied Psychology  
Hometown: Brentwood, Lebanon  
Graduation Date: June 2016  
Mentor: Dr. Kevin Smith  
Mentor’s Department: Psychological and Brain Sciences  
Research Interests: Anxiety disorders, empathy, theory of mind.

Adriana Mancher  
Major: Psychology  
Masc: Applied Psychology  
Hometown: Sonoita, Valley CA  
Graduation Date: June 2016  
Mentor: Dr. Emilia Morgan  
Mentor’s Department: Counseling, Clinical and School Psychology  
Research Interests: Resilience, subjective well-being, culture and ethnicity.

Sylvia Garcia  
Hometown: Santa Clara, CA  
Subject: Political Science  
Graduation Date: June 2017  
Mentor: Dr. Heejung Kim  
Mentor’s Department: Counseling, Clinical and School Psychology  
Research Interests: Cultural influence, social and cultural identity.

Lizette Wences  
Masc: MA, Psychology  
Hometown: Santa Barbara, CA  
Graduation Date: June 2017  
Mentor: Dr. Danielle Kurin  
Mentor’s Department: Psychological and Brain Sciences  
Research Interests: Multiracial identities & human resilience, bioarchaeology of care, bioarchaeology of social movements.

Peri Wieden  
Masc: MA, Psychology  
Hometown: Palm Desert, CA  
Graduation Date: June 2017  
Mentor: Dr. Mary Hegarty  
Mentor’s Department: Psychological and Brain Sciences  
Research Interests: Multiracial identities & human resilience, bioarchaeology of care, bioarchaeology of social movements.

To view this journal and previous journals, please go to: http://mcnair.ucsb.edu/journal.html
Scholar Profile: Rachel Scarlett

Rachel graduated this spring with a BS in chemistry and environmental studies. She will be attending Purdue University in the fall to begin her PhD in ecology and environmental sciences. Rachel’s decision to pursue a PhD was motivated both by her undergraduate research experiences as well as her experience growing up in Los Angeles, CA. Rachel’s parents were both born in Los Angeles; her mother is a chemist with a PhD and her father is a chemical engineer. Growing up in Los Angeles, Rachel saw human-environment relationships obscured by the lack of a direct connection to the natural resources used by the city’s inhabitants, like clean water and food. Through her subsequent research experiences at UCSB, she gained new scientific and social insights into these relationships. Her research projects have included investigating food webs of microbial communities in groundwater production, effects of UV radiation on microbial decomposition of organic matter and human perceptions of new urban agricultural technologies. Her senior thesis focused on the effects of reclaimed water irrigation on soil chemistry and plant growth. According to Rachel, the “profound impact that these experiences have had on my personal and academic life has influenced my decision to pursue a PhD and become a professor at a research university.” These experiences have also convinced Rachel of the necessity of integrating the natural/physical sciences with the social sciences to find and implement solutions to pressing problems.