

UCSB McNair Scholar Newsletter

Spring/Summer 2018



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NOTE FROM THE DIRECTOR

We've come to the end of another academic year, and there's great excitement at the offices of the McNair Scholars Program. During spring quarter, we celebrated the McNair seniors. After two years of faculty mentored research, participation in seminars and workshops which prepared them for entrance to graduate school, and the arduous process of making application to graduate programs, eleven of thirteen of our 2018 seniors applied to Master's or Doctoral programs, and 85% of these applicants are on their way to post-baccalaureate training in the Fall 2018. [See the list inside this issue for their post-baccalaureate destinations.] We showcased the scholarship of eight of our seniors in the 8th edition of the UCSB McNair Scholars Research Journal, which is now available in journal and on-line formats. Thanks again to the faculty mentors whose efforts on behalf of our students allow them to produce a first publication in what we hope is a long and stellar academic career.

More of our McNair Scholars from the first cohorts have attained their doctorates. We are pleased to announce that at the end of academic year 2017-18, the UCSB McNair Scholars Program has 13 alumni with doctoral degrees from institutions among which are the University of Iowa, Indiana, Stanford, Chicago, Michigan, Berkeley, USC, Colorado, and UCSB. At last count, we have fifteen other UCSB McNair alumni working on the last stages of their dissertations. We look forward to announcing their success in the coming year.

Of special importance for the long-term viability of the program was the successful funding of the UCSB McNair Scholars Program from the U.S. Department of Education. This five-year grant, coupled with continued support from the UCSB Executive Vice Chancellor and the Deans of the College of Letters and Sciences, assures staff and students long-term stability to undertake the important work of increasing the ranks of low-income, first-generation and underrepresented students who seek doctoral degrees and professional positions at universities, government, and industry. Additionally, our program sponsors a program for students in many STEM fields through a continuing gift from Edison International; Edison Scholars undertake faculty-mentored research during the summer and some receive professional development opportunities prior to application to graduate school.

As always, we welcome all students, staff, and faculty to visit us year round at the McNair Scholars Program offices in Building 477.

Dr. Beth Schneider

The UCSB McNair Scholars Program is supported by the U.S. Department of Education Ronald E. McNair Post-Baccalaureate Achievement Program and the UCSB Office of the Executive Vice Chancellor and the deans of the College of Letters and Sciences. Additionally, our science, technology, engineering and mathematics (STEM) scholars are partially funded by Edison International.

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Meet the New Program Coordinator



Raquel Ramos earned her B.A. in Anthropology with an Education Studies Minor from UCLA. As a first-generation college student, Raquel co-created a “Survival Tips for 1st Generation College Students” workshop and served as a Peer Advisor for the Peer Advising Network. After graduating UCLA, Raquel was selected for the Japan Exchange and Teaching (JET) Program and taught English in Nagasaki. While in Japan, Raquel took every opportunity to explore as much of Asia as possible. Raquel has extensive experience in program management and event planning. Raquel has worked for the Santa Ynez Band of Chumash Indians as the Education Program Specialist and her most recent position was as the Graduate Advisor in the English Department at UCSB. Raquel is a voracious reader and can typically be found with a book or listening to an audiobook. Raquel is also passionate about traveling and hopes to one day visit all seven continents.

Scholar Profile: Christian Rodriguez

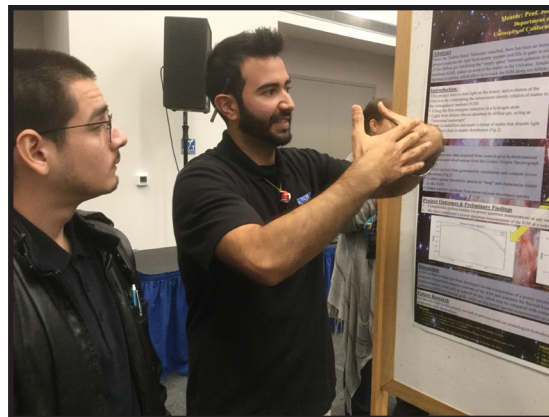
Christian Rodriguez graduated from UCSB, in June 2018 with majors in Physics and Chemistry and a minor in Astronomy and Planetary Science. As an undergraduate researcher, Christian has applied his education to the study of exoplanets and Cosmology. Under the tutelage of his faculty mentor, Dr. Joseph Hennawi in the Department of Physics, he studied the gas between galaxies which is important in determining the make-up of the universe and what has influenced how it is today. Christian most recently presented his work titled “Space is Never Empty” at the Spring 2018 Undergraduate Research Colloquium.

In college Christian fell in love with Astronomy and sought out his TA’s advice about how to pursue a career in this field. Since then, he has been involved in various research projects and conducted several independent studies as a McNair Scholar. What he enjoys most about research is delving deeply into a subject that he is passionate about. Christian says that he is grateful for the preparation and guidance the McNair program provides. He is also grateful to McNair for providing the structure, guidance, and more importantly, funding for him to be able to conduct research full-time during the summer.

Christian faced various challenges in becoming an undergraduate research scholar. His first classes at UCSB were large, with up to 400 students, which made it difficult for him to receive individual support. There was little gender and race diversity represented throughout his schooling, putting pressure on him to work harder as he felt he was representing others of his background. Christian said that the biggest challenge for him has been gaining confidence in his abilities. He struggled to demonstrate to not only others, but also to himself, that he is capable of studying physics and conducting research. He shared that “the impostor syndrome” was something he experienced and overcame through the acknowledgement and individualized feedback he received while conducting his independent research with professors.

Christian advises others to look for campus resources that can provide support. As a CLAS mentor, he understands how this resource can provide students with information to develop the study skills necessary to do well in their classes. In addition, Christian shares that self-care has become a priority for him and highly recommends it to others. When he began trading his long overnight study sessions in the library for a few short sessions and included time for yoga and spending time with friends, he began to do better academically. He believes this has made him more efficient and has better supported his mental health.

Christian will be attending the Astronomy doctoral program at University of California, Irvine in the Physics and Astronomy Department.

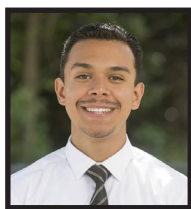


Class of 2018 Graduate Programs

Ten of the seniors who graduated in 2018 will begin graduate school programs in the fall of 2018



Fernanda Castellon
PhD in Psychology
UCLA



Rodolfo Cerda
PhD in Education
UCSB



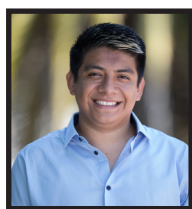
Maria Garcia Garcia
MSW in Social Work
Sacramento State University



Victoria Melgarejo
PhD in Linguistics
Stanford



Jorge Moran
PhD in Political Science
UCLA



Francisco Olvera
PhD in English
University of Chicago



Christian Rodriguez
PhD in Physics
UC Irvine



Sirenia Sanchez
PhD in Psychology
Northwestern University



Syrian Truong
MS in Physical Sciences
University of Chicago



Christopher Turner
MA in Anthropology
University of S. Florida

Recognitions and Awards

Zingha Foma

University Service Award

Victoria Melgarejo

Chancellor's Award for Excellence in Undergraduate Research - Humanities and Fine Arts; Vice Chancellor's Award for Scholarship, Leadership, and Citizenship; University Service Award

Johanna Najera

ALA Jane Waldman Archaeological Field School Scholarship and Howard C. Fenton Fellowship 2018-19 from the Art History Department

Jeremy Neill

Jack Kent Cook Foundation Scholarship

Francisco Olvera

College of Letters and Science William R. Reardon Award; College of Letters and Science Highest Honors, College Honors

Sirenia Sanchez

College of Letters and Science Honors

Syrian Truong

Physics Department Research Honors Award; LGBTQ STEM Scholar of the Year; CONCERT –European Joint Programme for the Integration of Radiation Protection Research Grant to attend SCK-CEN Space Summer School in Mol, Belgium

Christopher Turner

National Science Foundation Fellowship; College of Letters and Science Outstanding Transfer Student Award

Publications

Benjamin Monreal, **Christian Rodriguez**, Ama Carney, Rob Halliday, Mingyuan Wang. "Wide Aperture Exoplanet Telescope: a low-cost flat configuration for a 100+ meter ground based telescope," *Journal of Astronomical Telescopes, Instruments, and Systems*, 4(2), 024001 (2018). <https://doi.org/10.1117/1JATIS.4.2.024001>.

Diane C. Fujino, Jonathan D. Gomez, Esther Lezra, George Lipsitz, **Jordan Mitchell** & James Fonseca (2018). A transformative pedagogy for a decolonial world, *Review of Education, Pedagogy, and Cultural Studies*, 40:2, 69-95, DOI: 10.1080/10714413.2018.1442080

Neil D. Dolinski, Zachariah A. Page, Ben Callaway, Fabian Eisenreich, Ronnie Garcia, **Roberto Chavez**, David Bothman, Stefan Hecht, Frank Zok, and Craig J. Hawker. Solution Mask Liquid Lithography (Small) for One-Step, Multi-Material 3-D Printing. (Communication, No. adma.201800364R1) *Advanced Materials*. <https://doi.org/10.1002/adma.201800364>

McNair Class of 2020



Xochitl Briseño

Major: Political Science

Hometown: South Gate, CA

Mentor: Dr. Rebeca Mireles-Rios

Research Interests: Educational equity; Retention rates of Black and Latinx students; Bilingual Education



Zheng Chen

Major: History & Global Studies

Hometown: Rosemead, CA

Mentor: Dr. Xiaowei Zheng

Research Interests: Chinese Ethnicity & Diaspora, Asian American Identities



Brian Galaviz-Sarmiento

Major: Biology

Hometown: Turlock, CA

Mentor: Dr. Zach Ma

Research Interests: Measles virus' inclusion bodies



Gabrielle Grafton

Major: Economics

Hometown: Sacramento, CA

Mentor: Dr. Shelly Lundberg

Research Interests: Inequalities, education, wealth disparities, demographics, discrimination



Jesse Ramirez

Major: Religious Studies

Hometown: Palmdale, CA

Mentor: Dr. Jose Cabezon

Research Interests: Medieval Religion in European contexts



Raymond Thicklin

Major: Physics

Hometown: Inglewood, CA

Mentor: Dr. Song-I Han

Research Interests: Bio-Physics, Radiation-Oncology, Machining



Veronica Torres

Major: CCS Biology

Hometown: Norwalk, CA

Mentor: Dr. Armand Kuris

Research Interests: Parasites, ecosystems, food webs

UCSB McNair Scholars Attend 2018 SAEOPP McNair/SSS Research Conference

In June 2018, twelve of our UCSB McNair scholars, both juniors and seniors, presented their research at the annual SAEOPP McNair/SSS Research Conference in Atlanta, Georgia. This symposium provides an opportunity for all McNair Scholars to present their research in an academic setting as well as participate in graduate school fairs, GRE workshops, plenary panels, and special dinners.

UCSB McNair Scholars presented on numerous topics. In the STEM fields, we had presentations on paleoclimatic reconstruction of the South Western Indian ocean, static solution mask liquid lithography, excited state dynamics of indigo, and parasite species richness in relation to diet in hermaphroditic fish. In the social sciences, our scholars presented on how legislation and immigration affects mental health, ethnic co-authorship within the UC system, stress patterns in spoken Fijian, Latinx political engagement in California, and the presence and impact of neocolonial punitive methods on the global community of children of color. McNair humanities students shared their research on Black nostalgia and postwar urban poetry, cultural appropriation and the production of “African” textiles by European companies, and the influence of cool jazz composers on Cuban and Mexican boleros.

After presenting their research in oral and poster presentations, our scholars had the chance to network with McNair Scholars and recruiters from campuses across the country. Statistics student Eduardo Cardenas-Torres describes attending this conference as “one of the most inspiring events I have been a part of yet. By presenting my research, listening to plenary speakers, and meeting other McNair scholars, I truly saw what it meant to be a scholar and now have more ambitious goals to ensure I earn my doctorate.” Another student, English scholar Lexxus Coffey Edison, mentions that the conference “provided us with a beautiful way to interact with scholars within and outside our cohort, taught us about other grad school opportunities, and gave us motivational speeches to keep us focused on our goals.” Finally, Israel Chora, an Economics major notes that the experience “helped me grow as an academic by exposing me to other scholars, educators, and graduate school recruiters.”



UCSB Edison Scholars Program

This summer, 17 students from a wide range of fields including Mathematics, Physics, Chemistry, Biochemistry, Mechanical Engineering, Statistical Science, and Environmental Science (BS) participated in the Edison Scholars Program. With the generous support of Edison International, each scholar received a stipend of \$4,000 to support their summer research. During the summer program, scholars worked on their science communication skills through creating a poster and presenting it to a general audience as well as participating in workshops and professional development seminars. The workshops and seminars, facilitated by graduate student Maddie Nolan, covered topics such as developing a CV, constructing a graduate school list, and writing a personal statement and statement of purpose. Edison Scholars presented their research at the annual UCSB Summer Research Programs Poster Session on August 16th.



New Junior and Transfer Scholars

**Claudia Alegre**

Major: Political Science & Sociology

Hometown: San Diego, CA

Mentors: Dr. Erika Arenas and Dr. William Nomikos

Research Interests: Mental Health and Latinx Political Participation

**Johanna Najera**

Major: Anthropology & History of Art and Architecture

Hometown: South Gate, CA

Mentors: Dr. Claudia Moser and Dr. Gerardo Aldana

Research Interests: Archaeology, material culture, museum studies, classics, art history

**Eduardo Cardenas-Torres**

Major: Statistics

Hometown: Lompoc, CA

Mentor: Dr. Michael Nava

Research Interests: Disease surveillance, biomedical analysis, and data mining

**Erika Prado**

Major: Psychology & Language, Culture and Society

Hometown: Oxnard, CA

Mentor: Dr. Mary Bucholtz

Research Interests: Interactional Competence of Nonverbal Bilingual Youth with Autism

**Steven Castro**

Major: Linguistics

Hometown: La Mirada, CA

Mentor: Dr. Marianne Mithun

Research Interests: Endangered Languages, Documentation, Morphology, Phonology, Conservation

**Brandon Quintana**

Major: Environmental Studies

Hometown: Lynwood, CA

Mentor: Dr. Hunter Lenihan

Research Interests: Ecology, Conservation/Restoration, Climate Change

**Lexus Coffey Edison**

Major: English

Hometown: Palmdale, CA

Mentor: Dr. Felice Blake

Research Interests: African American Literature, Post-Colonialism, Afrofuturism

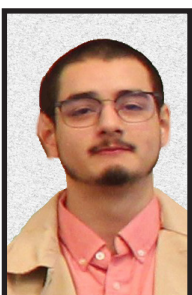
**Resham Tessa Redmond**

Major: Anthropology

Hometown: Ramona, CA

Mentor: Dr. Anabel Ford

Research Interests: Adaptation, archaeology, paradigm, human, heuristic

**Transito Gonzalez**

Major: Mathematics

Hometown: Los Angeles, CA

Mentor: Dr. Joe Incandela

Research Interests: Standard Model Particle Physics Chromodynamics