

UCSB MCNAIR SCHOLARS PROGRAM NEWSLETTER

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McNAIR



SCHOLARS PROGRAM UCSB

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



NOTE FROM THE Faculty Director

Reconnecting & Rebuilding in Community

After two years of lockdowns, quarantines, and restrictions imposed by responses to COVID-19, we are grateful to have the opportunity to reconnect and rebuild in community. While we will likely have to live with the conditions imposed by the pandemic, at least for the immediate future, we have found creative ways to minimize the mental and physical health impact on our students. Undoubtedly, however, the pandemic has weakened the bedrock of the UCSB McNair Scholars Program: learning, sharing, and developing as a community of scholars. We recognize the challenges that lay ahead but we remain optimistic that we will be able to renew and strengthen the bonds among students, staff, and

faculty mentors as well as with our campus partners and supporters. We have already started holding in-person seminars, social events, and inviting guest speakers, including URCA Director, Dr. Anita Stahl, and faculty mentors, Dr. Javier Read de Alaniz, Professor of Chemistry, and Dr. Rebeca Mireles Rios, Professor of Education, to speak to our students. We are grateful to them and to all the scholars who have demonstrated empathy and resilience.

Nowhere have we witnessed more patience and fortitude than among our cohort of seniors. They have demonstrated an impressive ability to persist and overcome the challenges of the last two years of their undergraduate careers.

Today, many have interviewed with and/or received acceptances to doctoral and master's programs in places such as the University of Michigan, UCLA, Vanderbilt, Cornell, and Berkeley, while others continue to wait patiently to hear the results of their applications. We wish them all the luck in the world on their journey to achieving their life's dreams and goals.

Welcome, too, to our new Staff Director, Veronica Fematt, Ph.D. Veronica is no stranger to our community, having received her doctorate in the Gervitz School of Education. Veronica brings boundless energy and an effusive personality. Please join me in welcoming her back to UCSB.



Faculty Director
Miroslava Chávez-García, Ph.D.

Note from the New Staff Director



Staff Director Veronica L. Fematt, Ph.D.

It is my honor to serve as the new Staff Director of the McNair Scholars Program at UCSB. I officially became part of the McNair family last November, and while this is a new position for me, I am not new to the campus. I am a proud alumna (class of 2017) of the Gervitz Graduate School of Education and served as a Postdoctoral Scholar and Lecturer in the Department of Chicana and Chicano Studies from 2017 to 2019. As we progress into the spring quarter,

I am eager to reconnect and collaborate with my fellow UCSB colleagues, and long-time friends, on efforts to better support our underrepresented, low-income, first-generation college students. I am also excited to continue working with my team on re-building the McNair community to foster a stronger sense of belonging among our brilliant scholars.



Welcome New Juniors



Natalia Almanza
Economics
Mentor: Dr. Rebeca Mireles Rios
Research interests: Inequality, education, poverty



Martha García
Psychological and brain sciences
Mentor: Dr. Skirmantas Janusonis
Research interests: Developmental psychopathology



Fatima González
Psychological and brain sciences
Mentor: Dr. Jill Sharkey
Research Interests: Trauma, psychopathology



Collin Lejano
Physics, minors in philosophy, religious studies
Mentor: Dr. Danielle Harlow
Research interests: Science & physics education



Madeleine Pacheco
Biological sciences & environmental studies
Mentor: Dr. Adrian Stier
Research interests: Ecology



Nataly Rincón
Chicana studies & sociology, education minor
Mentor: Dr. Dolores Inés Casillas
Research interests: Immigrant children, mental health, translators



Lizette Rivera
Economics, minor in poverty, inequality, and social justice
Mentor: Dr. Kathy Baylis
Research Interests: Political, environmental, labor, and behavioral economics



Mackenzie Taradalsky
Economics & philosophy
Mentor: Dr. Dana Kornberg
Research Interests: Systemic inequalities, sex trafficking



Angie Torrico
Environmental studies
Mentor: Dr. Russell Schmitt
Research interests: Ecology and animal conservation

McNair Scholar Profiles



Emily López

Emily López attends the College of Creative Studies, and she is graduating with her B.S. in math. Her research interests revolve around practical applications of math, especially those that respond to social justice issues and questions arising from the social sciences. She is interested in issues such as the use of mathematical modeling for determining factors related to gentrification, as well as investigating racial biases in artificial intelligence. Emily's favorite part of research is uncovering connections between mathematical theory and real-world applications, for example in X-ray imaging, particle physics, and cancer research. Whenever she learns a new theory, her first question is "What can I actually do with this?"

Under the direction of Professor Katy Craig, Emily has been researching optimal transport theory. This is a mathematical model that automates the comparison of images and visualization of data, allowing researchers to analyze images of weather patterns or to identify cancer. Emily's research seeks to develop a more efficient way of performing these calculations through the application of linear optimal transport theory. Besi-

des learning a lot, she has found the research process to be personally fulfilling and a boost to her confidence when she looks back at the many things she has accomplished.

Emily grew up in a community without much college preparation and so faced a steep learning curve when she got to UCSB. Since mathematics is among the fields with the lowest Latina representation this was a difficult environment for Emily to navigate, and she felt like the advice she received—to just work harder—was not helpful for a first-generation student of color. Emily eventually found community in student organizations such as the McNair Scholars Program. McNair has helped Emily to understand the invisible curriculum of expectations so that she can better navigate academia and academic relationships. McNair opened her eyes to the importance of professionalization, networking, and the broader activities of academic life. Now she is more aware of the systemic nature of the obstacles she has faced, and she has words to talk about them. Having a community of other diverse students helped Emily to realize she is not alone and made her realize

that "even though we are all different majors, we are all still able to support each other."

This summer, Emily plans to attend the EDGE Fellows Summer Program at Oxford University. This program offers professionalization and preparation for women entering graduate programs in the mathematical sciences. Emily is looking forward to starting graduate school in the fall and being around other mathematicians who are passionate about advancing the field. As a graduate student, she hopes to have more influence on learning environments so that she can make academia a more welcoming place for diverse students. Emily wants to remind upcoming cohorts: "Find your community. Find your squad. Find people who you connect with and who are going to advocate for you. There's a social aspect to academia and you need to have mentors because, if you don't, it's really hard to navigate academia on your own."

Emily is weighing offers to several Ph.D. programs in applied mathematics including UC Davis, Cornell, and University of Colorado, Boulder.



Miranda Tran

Miranda Tran is a graduating senior majoring in psychology and brain sciences, and double minoring in applied psychology and theater. She researches barriers ethnic groups encounter when accessing mental health services, and how these are complicated by intersections of race, class, culture, and education level. She plans to study risk factors and resilience for those exposed to adversity or trauma and develop access to interventions for minoritized populations. Some of her recent projects examine the Asian American community's needs during the COVID-19 pandemic and resource utilization of first-generation college students. Miranda enjoys research because she is always curious to learn new things. She says, "I love conducting my own research becau-

se I get to use my current knowledge to help underrepresented communities and emphasize their voices."

During Miranda's first quarters of coursework, she was disappointed to find that voices and opinions from underrepresented communities are not well represented in academic literature. This inspired her to conduct her own research on the experiences of these groups. She says, "Being a first-gen female in STEM with an invisible disability, I had to struggle with gaining the self-confidence to go after my goals and although I sometimes struggle even today, building a community of support has been vital to my mental wellbeing." She says McNair has helped by teaching her about graduate school and expanding her community of support: "I am able to not only study and work

with my peers, but I also get the chance to hear about their research and share our own experiences with one another."

Miranda is excited to enter graduate school so that she can continue finding ways to diversify academia and research. She is looking forward to taking the summer off to prioritize self-care before beginning graduate school in the fall. She wants to say, "For anyone thinking of joining the McNair program or applying to graduate programs: You got this! We need more voices and ideas from all of you!"

She is currently deciding between Alliant University's Ph.D. in clinical psychology and the University of San Francisco's masters in marriage and family therapy.

McNair Scholar Profiles



Denise Castro

Denise Castro is graduating in the fall with a B.A. in global studies with an education minor. Her research interests include educational equity, the experiences of first-generation college students, critical race theory, and elementary education and policy. In her career, she aims to contribute to the diversification of academia and produce research that validates and normalizes the experiences of underrepresented students.

She has two ongoing research projects. Her first project, currently in recruitment, explores the impacts of early educational experiences and students' academic trajectories and success as adults. One thing she wants to learn is how early experiences help students develop social skills for navigating academia. Her second project is developing a critical reading assessment tool that assesses both a student's reading ability and critical thinking. This will be a more holistic way of measuring students' abilities and that overcomes the implicit biases of standardized tests. This project has the potential for future implementation

nationwide.

When Denise started at UCSB she had difficulty finding community until she was accepted to McNair. Here, she got to know a group of other students with similar identities, struggles, and aims for graduate school. Denise has built confidence and overcome imposter syndrome with the support of her McNair cohort. She feels like this community is always proud of her success, which allows her to feel proud in enjoying success. This confidence and sense of self-validation allow her to thrive in academia. Denise is extremely grateful for the support of her mentor, Professor Diana Aria, who through weekly meetings has helped prepare Denise for a future in academia and research. Denise says that thanks to Dr. Aria, "I know my ideas are worth sharing."

Denise says McNair has been integral to her staying accountable with her research and graduate school applications. She appreciates McNair's curriculum that moves undergraduates towards graduate school in a way that is flexible and aware of the struggles underrepre-

sented students face. McNair has helped her to develop her work in ways that are both academic and authentic.

Denise will take part in the UC Education Abroad Program this spring as part of the Global Cities, Urban Realities program. Her travels will take her from London, to Amsterdam, Zurich, Venice, Florence, and Paris. She is most looking forward to riding a gondola in Italy. Denise wants to remind upcoming scholars to prioritize themselves and their wellbeing. She learned this in her last quarter when she prioritized self-care and still got As. She says, "Be confident and everything will work out in the end. No one else knows if you are really confident, so just act like you are! Be aware of your strengths, zone in on those strengths, and remember all the good words that people have given you."

In the fall, Denise will enter a teacher education program and begin work towards an M.A. in education. She is deciding between offers from Berkeley, UC Riverside, and UCSB.



Abraham Soto

Abraham Soto is a graduating senior majoring in biology at the College of Creative Studies. He is interested in addressing the root causes of parasitic diseases and developing prevention methods—such as vector control, public education, and environmental modification—to disrupt transmission pathways impacting underserved communities in the US and abroad.

Witnessing his undocumented family members struggle with inequalities in the healthcare system and learning about accessible diagnostic testing for malaria in his summer research experience at the Johns Hopkins University inspired him to pursue further education in public health. Abraham is currently working with the MacDonald Lab to analyze data on leishmaniasis

in Peru and identify ticks collected throughout California for a project on tick-borne diseases. He is also an undergraduate teaching assistant for the parasitology lab course at UCSB and is preparing to join Dr. Michelle Brown's lab in research focusing on the gastrointestinal parasites of blue howler monkeys.

As a queer, first-generation, and low-income student who has faced discrimination in academia, Abraham understands the importance of building a community. The McNair Scholars Program has helped him find a community within UCSB. Support from the McNair staff, as well as his mentors, friends, and family, has helped him become confident in his ability to pursue his goals. He recently participated in the Hispanic Scholarship Fund's 2022 Healthcare

Summit, and he received the UCSB Alumni Scholarship.

Abraham wants to say to upcoming McNair scholars: "It's easy to get discouraged by all the 'noes' and take them personally, but it's essential to prioritize and value every single 'yes' you receive. Take the rejections, reflect on them, and move on until you get a 'yes.' Trust in yourself and believe everything will work out the way it was meant to be."

Abraham is currently considering master's programs for epidemiology and infectious diseases at UC Berkeley and Johns Hopkins University.

A portrait of Dr. Janett Barragán Miranda, a woman with long dark hair, smiling, wearing gold earrings, against a background of green foliage.

Dr. Janett Barragán Miranda UCSB McNair Scholars Program, Class of 2011

The UCSB McNair Scholars Program is proud to highlight the accomplishments of one of its distinguished alumna, Dr. Janett Barragán Miranda. Having graduated in 2011 with a B.A. in Chicana/o studies at UCSB, Dr. Barragán Miranda received her Ph.D. in Chicana/o studies at UCSB in 2019, and, that same year, was awarded a two-year postdoctoral fellowship from American University. Currently, Dr. Barragán Miranda is an Assistant Professor in Latina/o studies at the University of Illinois at Urbana-Champaign (UIUC), where she teaches interdisciplinary courses on Chicanas and

Latinas as well as immigration, health, and society.

In addition to teaching, Dr. Barragán Miranda is working on her book, *Hungering for Equality: Mexican and Mexican Americans from Post WWII To Civil Rights*, which explores the Mexican and Mexican American communities' struggles for food justice in the 1960s. Focusing on federal food assistance programs, including the Food Stamps Program, Women, Infants, and Children (WIC), and the National School Lunch Program, Dr. Barragán Miranda argues that nutritional programs often function to racialize poor people throughout

the U.S. southwest. Using Spanish-language newspapers, oral interviews, and a variety of archival sources, Dr. Barragán Miranda weaves a richly textured narrative of the ways in which Chicana/o communities struggled to gain access to health, nutrition, and dignity. Dr. Barragán Miranda also has a forthcoming essay on research methodologies. That publication will appear in the *Latino Studies Journal*. Next year, Dr. Barragán Miranda will join the Humanities Research Institute at UIUC as a fellow, giving her the opportunity to join a cohort of early career scholars on campus.

In thinking about her experience with the UCSB McNair Scholars Program, Dr. Barragán Miranda reminisces on what the program taught her. "The McNair Program believed in me and nurtured my drive to earn a Ph.D.," she writes. "Today I find myself using the tools I gained in the program to ask questions, organize my semester, and even when I need to introduce myself to new people. As a first-generation student, and now scholar, I am very grateful for all of the skills I learned through McNair and it fills my heart to know they continue to serve new cohorts of students every year."



Farewell to Graduate Mentor, **Xochitl Clare**

It is with mixed feelings that we bid a fond farewell to Xochitl Clare, McNair Scholars Program Graduate Mentor. A marine biologist and performance artist, Xochitl spent much of 2021 working with the McNair students to prepare them for the rigors of graduate school. Growing up in a low-income, racially, and ethnically mixed neighborhood, Xochitl understands the challenges of navigating higher education as an underrepresented student. As a Latina African American with island heritage (Jamaica and Belize) investigating how climate change affects important fished species, Xochitl has helped carve out spaces for future students like herself with the energy and

passion for the marine world. Most recently, in January 2022, Xochitl joined the OceanX Young Explorers Program (YEP) exploring the Mediterranean Sea. YEP works with promising young ocean explorers to participate in an educational program aboard the OceanXplorer—the most advanced exploration, research, and media vessel ever built, decked out with submarines, labs, and a media center. Xochitl was excited to put her imagination to the test to embark on a wild ride of science and storytelling. “Two things this girl was born to do!” she says. The McNair community wishes you all the best on your future journeys.

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Publications and Awards

Natalia Almanza

- Awarded The James S. Bower Foundation Fund scholarship (\$3300 Academic year 2021-2022)
- Dean Honors Letters and Sciences (Winter 2021)

Odalys Callejas

- Cornell University, Graduate Studies, Geological Sciences, 2022-2027 (5-year, full funding award)

Ezequiel Contreras Martinez

- Awarded Edison Scholarship, 2021 (\$1500)

Jordyn Fuggins

- Scholastic achievement scholarship from Vanderbilt University, 2022 (covers 35% of tuition)

Isaias Ghezze

- Social-Personality Undergraduate Research Program Conference Presentation Award, awarded by the Society for Personality and Social Psychology (Dec 2021)

Arsalan Hashmi

- Awarded Caltech's WAVE Fellows Award, 2022 (\$6,840 for 10-week summer program)

Emily López

- Admitted to Oxford University's EDGE Summer Program for women entering Ph.D. programs in the mathematical sciences
- Cornell University's Dean's Excellence Fellowship (\$34,684, 2022-2027) and appointed a Cornell University, Graduate School Dean's Fellow
- Awarded Edison Scholarship, 2021 (\$1500)

Colin Lejano

- Awarded Edison Summer Research Program Scholarship, 2021 (\$4000)
- Awarded Edison Scholarship, 2021 (\$1500)

Lizette Rivera

- Co-founded Women in Business at UCSB and currently the club's events coordinator
- Chosen to be a member of UCSB's Promise Program (awarded \$30,000 for two years)

Diana Sánchez

- Admitted into the Moore Undergraduate Research Apprenticeship Program at UNC. A summer research program for first-generation students of color in pursuit of a Ph.D. (March 2021)
- Admitted into the Chicana/o/x Studies Departmental Honors Program at UCSB (September 2021)
- Awarded the URCA Grant (December 2021)

Abraham Soto

- UCSB Alumni Scholarship Award (\$2,000, October 2021)
- Invited to attend the inaugural Hispanic Scholarship Fund's Healthcare Summit (January 2022)
- UC Berkeley Block Grant Fellowship (\$25,000, February 2022)

Johns Hopkins University Master's Tuition Scholarship (\$45,000, March 2022)

Marian Walker

- Gene and Susan Lucas Fund Grant recipient (Nov 2021)
- Coastal Fund Grant recipient (Dec 2021)

Ajah Whitehead

- University of Michigan, Rackham Masters Award (full funding, 2022-2023)
- UCLA Graduate Opportunity Fund Scholarship (2022-2023)

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