UC San Diego UC San Diego News Center

By Erika Johnson May 07, 2015

Diverse Undergraduates Discover Pathway to Ph.D. through McNair Program

The youngest of a Salvadorian family of seven, Franklin Mejia's goal is to pursue a doctorate in educational psychology, which is why he joined the UC San Diego McNair Program. The program provides low-income, first-generation undergraduate students and students from groups underrepresented in graduate education with effective preparation for doctoral study. "I am truly blessed to be a part of the McNair Program," said Mejia, a UC San Diego senior. "I believe I will gain the necessary skills to excel in my undergraduate research and prepare me for my Ph.D."



Franklin Mejia

Led by UC San Diego Academic Enrichment Programs, this year the <u>McNair Program</u> celebrated its 100th undergraduate alumni to go on to receive a doctoral degree—one of the first in the nation to reach the milestone. Many of the students pursued graduate study at top-ranked universities, including Yale University, Harvard University, UC San Diego, and UC Berkeley. The UC San Diego McNair Program was one of the original 14 programs to receive a grant from the U.S. Department of Education as part of the nationwide Ronald E. McNair Postbaccalaureate Achievement Program, created in 1989 in honor of the physicist who was among the first African Americans in the U.S. space program.

"The individual success of McNair Program alumni, and the fact that we've reached 100 doctoral graduates, proves that UC San Diego is a place where first generation, low-income and underrepresented students

can thrive when they are in a supportive environment," said David Artis, dean of Undergraduate Research Initiatives and director of Academic Enrichment Programs at UC San Diego. "The record of the program's achievements has made it easier to attract faculty members to work with students from these groups and so has strengthened in a real way the culture of undergraduate research at UC San Diego."

Each year, the program selects 30 UC San Diego juniors and seniors of all majors and pairs them with a faculty mentor in their field of interest. During winter and spring quarters, students spend 10 hours per week conducting research and for eight weeks in the summer work full time as a research assistant. McNair scholars receive 12 units of independent study credit as well as a \$2,800 award and free on-campus housing during the summer.



As part of the McNair program, students learn how to effectively write a scholarly research paper and convey their ideas in a professional setting, participating in at least two conferences.

Eduardo Valle, a senior studying chemical engineering and McNair Program alumnus, spent the summer working in the UC San Diego department of nanoengineering on research pertaining to the creation of flexible organic photovoltaics. Valle recently earned a graduate research fellowship from the National Science Foundation, which he applied for with help from his faculty mentor.

"The McNair Program allowed me to spend a summer working in a laboratory of my choice while providing an essential GRE course to prepare us for graduate school," said Valle, whose goal is to become a professor and help

underrepresented students achieve their educational goals. "The program also provided funding for me to attend a research conference where I had the opportunity to learn how to effectively convey scientific results in a professional setting."

For many students thinking about a doctorate, the aspiration is present, but the route is unclear. The McNair Program helps students clarify their goals and illuminate the steps that need to be taken, including how to apply for fellowships and write a scholarly research paper. Students are also trained with presentation skills and are required to participate in a minimum of two conferences.

"I was naïve about graduate school when I began my undergraduate studies—I didn't know much about how to actually do research or get into graduate school," recalled Blanca Himes, Ph.D., who completed the UC San Diego McNair Program in the summer of 2000 and went on to receive a doctorate in medical physics and bioinformatics from the Massachusetts Institute of Technology. "I always knew I wanted to be in academia, but I didn't know what particular field. The program provided a glimpse into day-to-day life of researchers and offered a chance to figure out what I wanted to pursue." Dr. Himes enrolled at UC San Diego as a transfer student to study physics and was drawn to the McNair Program because she believed it would help prepare her for graduate school. During this time, she studied MRI pulse sequences and was able to travel to conferences in California and Scotland to present her research. "I am very grateful to have been in the McNair Program," said Dr. Himes. "I received practical advice about what it takes to get into graduate school—from taking entrance exams and writing essays—as well as insight from program alumni about how to choose a mentor."



Dr. Blanca Himes

To learn more about the UC San Diego McNair Program, visit the <u>Academic Enrichment Programs website</u>.

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