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What is McNair?

The McNair Post-Baccalaureate Achievement Program is a federally-funded program dedicated to increasing the ranks of under-represented groups in graduate study. The McNair Program provides a select number of promising scholars with mentoring and fellowships to improve their chances of being admitted to PhD programs nationwide.



Where Are They Now?

McNair alumna Tania Gonzalez graduated from UC Davis with a degree in Biochemistry and Molecular Biology in 2010 and recently completed a doctorate. Here's what she told us.

The most influential academic programs in my undergraduate experience were STEP, the Biology Undergraduate Scholars Program (BUSP), the Collaborative Learning at the Interface of Mathematics and Biology (CLIMB) program, and the McNair Scholars Program. They put me on the path to a PhD when my initial plan was to get my bachelor's degree and then work in industry. During my first year at UCD, I was asked, "What is the highest degree you hope to achieve?" I liked the idea of research and I knew that being a doctor or lawyer wasn't for me, so I chose "PhD" as my highest degree goal. This moment was very important for my future.

Through BUSP and CLIMB, I spent two years doing research, and learned that I really enjoy it.

Gradually, that wild idea of getting a PhD did not seem so wild. I joined McNair and started studying a plant hormone signaling pathway in Judy Callis' lab. I worked with graduate student Jonathan Gilkerson in plant and protein biochem-

istry, and presented my work in front of 300 people as a plenary speaker at the 17th Annual California McNair Scholars Symposium. I had never presented in front of so many people! I had so much support leading up to that presentation from my lab and the folks at McNair. After the talk, students from all fields asked questions. My excitement for my work had made them excited as well! I loved it!



McNair also trained my cohort for the application process. We drafted personal statements, took practice GREs, talked about our research, quizzed each other on vocabulary words, and traded tips and stories. It was hardcore. When I graduated and entered the PhD program in Molecular and Cell Biology at UC Berkeley, I had to marvel at the trajectory of my life. UC Davis helped me cross over to the parallel reality, and it felt completely normal.

At UC Berkeley, I joined the lab of Ming Chen Hammond. I worked on gene regulation in plants and helped advance work on a new method of gene regulation. In nature, alternative splicing of messenger RNA is extremely common. However, scientists do not typically use alternative splicing to control genes. Most researchers use promoters - sequences that act like on/off switches in front of the gene. Promoters are easier to use, but they can be

(see *Where are they*, p. 3)

On Our Campus

The McNair Scholars Program is housed within the Office of Graduate Studies at the University of California Davis. We are located on the second floor of the Student Community Center within the Undergraduate Research Center. Please share the news of this unique program with others in the UCD community. We begin accepting applications in the spring!



UCD McNair Program Graduating Seniors



Lucy Cedillo will attend Harvard for graduate study in genetics.



Ligaya King was accepted into a Master's program at Tufts University.

Sequoya Collins plans to study abroad in 2016-2017 and will apply to graduate school thereafter.



Kayla Meza is exploring options for teaching and research in a gap year.



Abraham Corrales will graduate in June 2017, work at the National Institutes for Health, and will apply to joint MD/PhD programs.



David Moyers will continue his research with his mentor and graduate from the College of Engineering in June 2017.

Austin Edmonson will spend a gap year in Arkansas.



Yvonne Muñoz was accepted into the Masters in Education program at UC Davis.



Azka Fayyaz is considering several options for a gap year.



Julie Ngo plans to take the MCAT in June in preparation for applying to joint MD / PhD programs in fall 2016.

Pedro Gutierrez plans a gap year.



Kathryn O'Neil will begin a PhD program in the Watson School of Biological Sciences at the Cold Spring Harbor Laboratory.



Julie He has a position at UC Davis as a Junior Specialist in 2016-2017 and will apply to graduate school after that.

Mariana Henry was accepted to graduate programs at Yale, Columbia, UCLA, and Davis. After visiting the Ivy League programs, Mariana will attend Yale in the fall.



Alina Quintana is spending Spring 2016 in an Education Abroad program in Spain and will check in with us upon her return.



Shane Hoang is weighing his options for doctoral study in biomedical engineering.

Irene Yim will begin UC Davis' Ph.D. program in Food Science in fall 2016.



Advice from McNair Seniors to Juniors

We asked seniors McNair Scholars for their best advice to juniors who are just beginning GRE preparation and the graduate school search. Some nuggets of their shared wisdom:

- If I could do the GRE differently, I would view the GRE as a test, just a test. Not a test of my intelligence, not a test of my endurance, or a test of how well I'll do in Grad School. It's a test of how well I manage anxiety. It is a test of how well I overcome obstacles. Then it is over, after 3 hours.
- If I could do the GRE differently, I would start studying for the vocabulary much earlier and think of the Barron words not as 800 words whose definitions I must know before I take the GRE, but as 800 words that I should try to incorpo-

rate into my everyday speech and writing in order to apply my knowledge of these terms and their connotations to both the verbal and analytical sections of the test.

- Take time to self evaluate why you are doing this. I didn't even consider the question "What do you want to do after you get your Ph.D.?" until someone asked me when I was knee deep in applications. If you have an answer that makes your heart sing, fan-freakin-tastic.
- You're here for a reason, you are powerful, and your ability to achieve will be strictly dictated by your perception of your ability to achieve. Don't let your perception hinder you because you can do it, whatever it is.

Where are they, continued from p. 1

difficult to completely turn "off" and sometimes a little bit of gene transcript can cause a strong response. I used alternative splicing to control a gene that causes a severe immune response (and cell death). We were able to make a switch to regulate even very sensitive responses. Our method is versatile and can be used in virtually any gene for regulation in plants.

Another benefit of grad school: I met my fiancé at the department's holiday party! A few years later, he proposed to me at the UC Berkeley Botanical Gardens. He knows I love plants!

I also love learning new things, so I decided to switch fields for my postdoctoral work. I am working as a postdoctoral scientist at Cedars-Sinai Medical Center in Los Angeles, in the obstetrics and gynecology department. I will be researching gene expression changes that affect pregnancy outcomes. I just started in January and I have much reading to do.

We congratulate Tania and all our alumni. Got an update? Send it to us at mcnair@ucdavis.edu.

Siria's story, continued from p. 4

I am grateful to so many people who helped me along this journey. Although the three letters are behind my name, I know that I owe my success to those who supported me. I know what it means to be a scholar and I'm no longer intimidated by the word. Now I embrace it and I look forward to helping others who are committed to the journey.

Siria began an appointment as Dean of Student Success and Institutional Effectiveness at Woodland Community College in Fall 2015.



Photos, from top to bottom: members of the 2014 cohort and Siria having lunch in Berkeley, celebrating after the UC Berkeley McNair Symposium, 2015 juniors and seniors bonding on a hike, Fall 2015.

Siria's story



Siria Martinez, former Director of the UC Davis McNair Scholars Program, recently completed a Ph.D. in Higher Education after working for almost a decade to accomplish her goal. She took the non-traditional route working full-time while completing her degree part-time. Siria tells her story in her own words.

was going on in my personal life or in my research. My father passed away during finals week of my first semester. My priority became taking care of funeral arrangements and my family. My professor gave me an incomplete. Although I had a year to turn in my final paper, I knew I needed to submit that paper as soon as possible so that I could continue my academic journey. Two years later I was laid off from my job. I had to move for a new job. Of course, I met with my advisor and she understood my dilemma. She encouraged me to take care of myself and my family and worked with me so I could continue to make progress. The move increased the time in my program by about a year.

Iremember clearly having a very demanding schedule during the first three years of my program. Three days a week, my day started at 5am. I got ready for work and endured a long commute. After an eight hour work day, I headed to class from 4 pm to 10 pm. I got home around 11pm and then prepared to do it all over again 3 days a week. The other four days, I read and wrote papers. This went on for three years while I completed my coursework. I remember the first time being referred to as a scholar. I was intimidated by the word and felt pressure to live up to it. I wasn't really sure how I would become a scholar, but I was ready to start the journey. Fortunately I had very supportive faculty and classmates, so I wasn't alone trying to figure out how to become a scholar.

I soon discovered that completing a Ph.D. was not about how smart I am, but about my willingness to persist despite what

It helped to have supportive classmates who became good friends. We never stopped communicating and keeping each other accountable. I realized that completing this degree wasn't about me doing it all alone, but was about creating my network of friends, family, and colleagues who asked about my work, provided me with feedback, or encouraged me to keep going. It was important that I not hide from my faculty advisor even when I hadn't met my deadlines. Communicating with her became crucial, especially as I got closer to the end and I required more of her guidance. And, equally important: having supervisors who had no problem adjusting my work schedule so I could attend class, attend a professional conference, or meet my writing deadlines. Their support meant that I could eventually graduate.

(see Siria's story, p. 3)

UC Davis McNair Scholars Program

The McNair Program at UC Davis is part of the Office of Graduate Studies. We are located on the second floor of the Student Community Center in Suite 2300 with the Undergraduate Research Center. Please share the news of this unique program. We are now accepting applications!

Program Benefits:

- Academic Counseling
- GRE Preparation Seminars
- Assistance with Graduate School Applications
- Independent study with a faculty mentor
- \$2,800 Summer Research Stipend

Program Requirements:

- UCD GPA of 3.0 or higher
- US citizenship or Permanent Resident
- 90 quarter units or 60 semester units
- Low-income and first generation college student, or member of a group underrepresented in graduate study (e.g. Chicano/Latino, African American, Native American or Asian Pacific Islander)



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