

McNair Scholars

Fall 2012

Cal Poly Pomona



Preparing Scholars for Graduate School

The Ronald McNair Post-Baccalaureate Achievement Program provides undergraduate students an opportunity to work with a faculty mentor, explore and research in their discipline, while preparing for future graduate school enrollment.

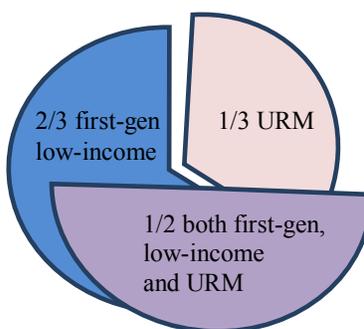
The McNair Scholars Program is funded by a grant from the United States Department of Education with support from Cal Poly Pomona. McNair Program Provides:

- GRE preparation
- High quality research projects
- Annual research symposium
- Travel to conferences
- Graduate school workshops
- Financial literacy
- Public speaking
- Student stipends

Program Impacts

Of the 115 students that graduated from CPP 6 or more years ago, 25 (~22%) have received their doctorates with many more in the pipeline.

This is compared to 0.8% of CPP graduates who receive their doctorates within 10 years after graduation.



McNair Participant Make-up

The CPP McNair Program serves 27 low-income/first-generation, underrepresented minority (URM) college students each year.

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Profile Jeffrey Kim

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www.csupomona.edu/~mcnair



Ronald E. McNair Scholars Program

Building 8, Room 306
www.csupomona.edu/mcnair
(909) 869-3381
mcnair@csupomona.edu

Helping Scholars Go Further

McNair Scholars at Cal Poly Pomona Need Your Help

Message from the Director

The McNair Scholars Program at Cal Poly Pomona has been supporting students and developing future leaders for 14 years! We are very pleased to announce that the program has received an additional 5 years of funding from the U.S. Department of Education. The program continues to provide student Scholars with valuable research experience and encouragement that give them a distinct advantage when they undertake the demands of graduate school. The McNair Scholars Program has been a model for promoting academic success and for ensuring that underrepresented students pursue doctoral studies. Few aspects of human endeavor are more stimulating than actions that nurture intellectual creativity among young individuals.

Although the funding from the Department of Education is critical to the viability of the McNair Scholars Program at Cal Poly Pomona, it is not enough. Over the past 5 years, the program's budget has seen a steady decrease and national support for programs such as McNair seems to be waning. But with your help, we can turn this around! Please help McNair Scholars by:

Sharing Your Successes

Let your congressional representatives know what the McNair Scholars Program has allowed you to achieve. Congress sets the budget for the McNair Program and this most recent national budget saw a cut of \$10 million to the McNair Scholars Programs around the country, a roughly 22% reduction! This is a trend in the federal budget. Congressional cuts have recently ended the Javits Fellowships, a grant program for needy students, and stopped federal subsidies for graduate student loans. By speaking up for McNair, you will help congressional members see the importance in investing in future leaders and prevent future funding cuts to the McNair Scholars Program. To contact your elected officials, start by going to the following webpages:

<http://www.house.gov/representatives/find/>

http://www.senate.gov/general/contact_information/senators_cfm.cfm

Supporting Scholar Travel

The budget cuts to the McNair Scholars Program has meant that there is very little available money for travel funding. Presenting research results at professional conferences is one of the best ways for a Scholar to get noticed by potential graduate faculty mentors as well as providing invaluable opportunities for networking. Additionally, Scholars are encouraged to visit graduate schools and attend recruitment events. We are fortunate that President Ortiz, a strong supporter of the McNair Scholars Program, has given \$5,000 annually for our Scholars' travel needs. But more is needed since each trip by a scholar costs between \$500 - \$1,500. Please help by sending in your donation in the enclosed envelope.

Giving to the McNair Scholarships

Although tuition at Cal Poly Pomona (and institutions all across the country) has risen dramatically over the past 14 years, the stipend amount that the Department of Education allows our program to provide to the McNair Scholars has not increased. This means that the stipend that each scholar receives over the entire year is only enough to pay for 1 quarter of registration and tuition fees. With your help, we are instituting a new scholarship, available only to McNair Scholars, ranging between \$500 - \$2,000. To contribute to this scholarship, please use the enclosed donation envelope.

Sincerely,



Dr. Winny Dong
McNair Program Director
Professor Chemical & Materials Engineering

Introducing McNair Scholars 2012-13

DARYL ADKINS

GEMS

Mentor: Dr. Patricia de Freitas

DORA LOPEZ

Psychology & GEMS

Mentor: Dr. Corina Benavides-Lopez

MELIKA SHAYEGH

Biology

Mentor: Dr. Sepehr Eskandari

RAUL GONZALEZ

Civil Engineering

Mentor: Dr. Xin Ye

JESSICA MARQUEZ

Political Science

Mentor: Dr. Murniz Allen Cason

ANNA STORTI

MHR & GEMS

Mentor: Dr. Anita Jain

EDWARD GUZMAN

Aerospace

Mentor: Dr. Beverley McKeon

CHRISTIAN MURILLO

Psychology & GEMS

Mentor: Dr. Erika DeJonghe

ANN TRUONG

Psychology

Mentor: Dr. Jeffery Mio

ERICKA JAMES

Psychology

Mentor: Dr. Felicia Thomas

ELVIRA RAMIREZ

Chemical Engineering

Mentor: Dr. Tanya Faltens

LUIS VALENZUELA

Electrical Engineering

Mentor: Dr. Saeed S. Monemi

VATCHE KAPRIELIAN

Biology

Mentor: Dr. Wendy Dixon

MIGUEL RODRIGUEZ

Mathematics & Mechanical

Mentor: Dr. John Arlo Caine

SAMAYYAH WILLIAMS

Civil Engineering

Mentor: Dr. Monica Palomo

DAVID KOK

Chemistry

Mentor: Dr. Tanya Faltens

DIANNE SANCHEZ

Chemistry

Mentor: Dr. Barbara Burke

DIANA ZAFRA

Plant Science

Mentor: Dr. David Still

GRACE LIM

Mathematics

Mentor: Dr. Randall Swift

MADILYNN SANTOYO

Anthropology

Mentor: Dr. Denise Lawrence

ALEJANDRO ZERMENO

Sociology

Mentor: Dr. Anthony C. Ocampo

McNair Scholars Program Team



Winnie Dong
Director



Mary Ferrel
Assistant Director



Wei Bidlack
Program Faculty Advisor



Frank Torres
Director Emeritus

Cal Poly Pomona Symposium

By: *Kristin Dettmers, Mathematics*

Over a year ago, skimming through my inbox, I came across an e-mail from the Office of Financial Aid about the McNair Scholars Program. Out of curiosity, I began to read: undergraduate research, help with the GRE, stipend, etc. It sounded like a great opportunity, so I decided I'd give it a shot, submit my application, and hope for the best. Shortly after my interview with the staff members, I was admitted into the program and on my way to discovering just what it takes to get into graduate programs. Before entering into the McNair Program, all I knew about graduate school was that I needed to go if I wanted to fulfill my aspirations of becoming a university professor and that undergraduate research would be helpful for admission. After a year in the program, I've learned that there is much more to it than that. Through the weekly workshops, the graduate school fairs, GRE preparation, mentoring Upward Bound students, the trip to Berkeley, and so much more, I feel that the program has really been a great jumping off point for my career in graduate school.

When I entered the program, I was very nervous. I wasn't sure what research would be like, and I didn't know what results I would find (if any). After a couple weeks, the nervousness subsided, and I became excited about my work. Meeting with my mentor was a great experience, and she was always there to help me with new ideas. Not only was I having fun experimenting with my project, I was able to learn skills beyond what I would have learned in the classroom setting.

As I journeyed through the quarter meeting the deadlines set by the McNair staff, presentation day seemed to be gaining on me. Having our PowerPoint slides due in advance was very helpful when it came time to start practicing. I already had the majority of my work ready to go, and all that it needed were a few tweaks. We had several days of preparation, and the feedback from my cohort was extremely helpful. By the time the big day came, I felt confident and ready to speak intelligently about my topic.

While standing in front of the crowd, despite the confidence I had when I entered the room, I was still nervous about my presentation. I stuck to what I had practiced, and once it was over I had great feedback. I felt so accomplished and proud of the work I had done. On the surface, the McNair program offers workshops and a chance to do research; but underneath, I've gained valuable training that I will use in years to come and the confidence that I will thrive in graduate school.

“McNair program offers workshops and a chance to do research; but underneath, I’ve gained valuable training that I will use in years to come and the confidence that I will thrive in graduate school,”



Rachelle Berry



Veronica Carmona

*Pictured:
Cal Poly Pomona McNair
Scholars during Undergraduate
Summer Research Symposium at
Cal Poly Pomona July 26, 2012.*

Alumna Profile: **Le Ondra Clark, Ph.D.**



1) What year did you graduate from CPP? In what major?

2003, Major: Psychology, Minors: Quantitative Research, African American Studies.

2) Which McNair Cohort were you in?

2000-2001.

3) From which institution and when did you receive your PhD (and other doctorate degrees)?

University of Wisconsin-Madison, Masters of Science in 2005: Community Counseling; Ph.D. in 2010: Counseling Psychology.

4) What was your PhD dissertation title?

Seeing Through Our Clients' Eyes: An Assessment of Cultural Competence in a Community Mental Health Agency.

5) Please share a favorite memory of Cal Poly Pomona.

Walking in Founders Day Parade representing the Student Alumni Association which I was the President of during my junior year. Participating as a member of the Track and Field team and Cheerleading team at Cal Poly. Serving as President of Kappa Delta Sorority.

6) Please share an experience as a McNair Scholar that was particularly helpful to finishing your doctorate.

Traveling to UC Berkeley, UC Los Angeles, UC Riverside and the University of Puerto Rico San Juan to present my McNair research study.

7) What are some of your current hobbies?

Eating exotic foods, Traveling with my husband, Charles Harvey, whom I met at UW Madison, Dancing.

Guess the Truth about Le Ondra

Two of these statements about Le Ondra Clark are true.

Can you guess which ones?

1. Ms. County of San Bernardino from 1998-2000.
2. Has a dog named Tinkerbell.
3. Helped to found the Black Graduate and Professional Student Organization at the University of Wisconsin, Madison.

About Le Ondra

After graduating from the UW Madison in 2009, Le Ondra Clark moved to Southern California where she completed an internship at the University of Southern California Childrens Hospital Los Angeles. After internship, she completed a post-doc at UCLA's Mattell Children's Hospital. Currently, Le Ondra works in politics at the California State Capitol. She is a consultant to the Senate Business, Professions and Economic Development Committee. In this position, Le Ondra oversees legislation that impacts 21 health boards across the State as well as monitoring the functions of these boards.

Featured Mentor: Dr. Faye Wachs, Associate Professor, Sociology

1) Where and when did you receive your PhD?
University of Southern California.

2) What was your PhD dissertation topic?
Gender relations in adult participatory recreational sport.



3) Why did you decide to pursue a doctorate?
My father is a professor (now emeritus) and I grew up surrounded by professors and visiting UCLA all the time. I knew from a very early age I wanted to be a professor, and obviously one needs a PhD. for that! In addition, I never wanted to work in the food service industry again. When I was admitted to UC Berkeley as an undergraduate, I shopped for my major, taking a wide range of introductory classes, and sociology felt like “home” to me. Suddenly I found people who saw the world the way I did. I fell in love with research methods as a clear way to answer difficult social questions. I never looked back.

4) What were the biggest obstacles to obtaining your PhD? Because I chose an unusual field of study (Sport and the body in sociology), many people did not take me or my work seriously. It was difficult to find the right program for me, and once there, convincing people (my fellow grad students, other faculty) that it was a worthwhile area of study was very difficult. It is also much harder to get funding for this type of work.

5) What were your best experiences in obtaining your PhD? The amazing people I met in graduate school. I still publish with several of my friends and my advisor from graduate school. They remain some of my best friends.

6) When did you decide to become a faculty member?
When I was about 12 years old. It was faculty, ACLU law or private investigator.

7) Why did you choose to volunteer your time as a McNair mentor?
My grandfather was an immigrant and a cab driver. My father was able to obtain his PhD only by being part of ROTC. It is very difficult to achieve a higher level of education without some form of support. People talk a lot about institutional change and social inequality. I hear all the time about how we need to diversify our faculty, field and organizations. But people seem to want to have this just magically happen. McNair is an actual practical way to make it happen. McNair gives people who might never have even considered graduate school a chance that they might not have otherwise. I consider it a privilege and an honor to be part of the program.

8) Any words of advice?
Just keep going forward. It doesn't matter how long it takes. Ursula LeGuin wrote in her novel, *The Dispossessed*, “I am not working against time, I am working with it.” People get really hung up on finishing work by a certain date. Research takes as long as it takes. It's better to take your time on a project that is brilliant, well done and captures your passion, than to do lots of mediocre publications. That's my second piece of advice. Someone will always tell you what you study, how you study it, and your conclusions are worthless. Stand up for yourself and your work. Constructive criticism is great, but if someone is just tearing you down, ignore them; that's about their insecurities, not your work. And never consider yourself done! Always strive to change and grow.

Guess the Truth about Dr. Wachs

Two of these statements about Dr. Wachs are true.

Can you guess which ones?

1. Scuba dove through the 2004 tsunami.
2. Jumped off a 55 foot cliff into the ocean.
3. Speaks four languages fluently.

Presenting Research is an Important part of Scholar Development

Below is a partial List of Professional Research Presentations Made by McNair Scholars between Nov. 2011 – Nov. 2012.

Sevana Baghdasarian, “Correlation and Prediction of Properties of Biodiesel Blends”, American Chemical Society 43rd Western Regional Meeting, Pasadena, 11/11/2011.

Brian Ramirez, “Mechanics of Deformation and Fracture of Soft Fiber Reinforced Composites”, 49th Annual Technical Meeting Society of Engineering Science, Georgia Tech, October 10, 2012.

Lucy Li, “DNA Damage in Human T cells by Human Prosthetic Ion Shedding and Debris Particles”, Southern California Conference for Undergraduate Research (SCCUR), CSU Channel Islands, November 17, 2012.

Kristin Dettmers, “Hammering out the Details: A Numerical Integration Technique”, Pacific Coast Undergraduate Mathematics Conference, Pomona, March 10, 2012

Sevana Baghdasarian, “Modeling Properties of Biodiesel Blends”, American Institute of Chemical Engineers Annual Meeting, Pittsburgh, Nov. 1, 2012.

Alumnus Profile: Jeffrey J. Kim, DDS PhD



1) What year did you graduate from CPP? In what major?
2002. BS in biology.

2) Which McNair Cohort were you in?
Second cohort (2001-2002).

3) From which institution and when did you receive your PhD (and other doctorate degrees)?
DDS from UCLA (Class of 2008) and PhD in oral biology and medicine from UCLA (Class of 2011).

4) What was your PhD dissertation title?
CDK2AP1 regulates WNT signaling in mESC self-renewal and differentiation through DNA methylation.

5) Please share a favorite memory of Cal Poly Pomona.
2002 McNair graduation ceremony and luncheon at the Kellogg West Dining Hall.

6) Please share an experience as a McNair Scholar that was particularly helpful to finishing your doctorate.
The McNair Scholar program gave me an opportunity to prepare myself to think critically, to come up with scientific experimental designs and to present my findings clearly.

About Jeffrey

In 2008, Jeffrey Kim graduated from UCLA's School of Dentistry to become a Doctor of Dental Surgery (DDS). In 2011, he completed a Doctor of Philosophy (PhD), Division of Oral Biology and Medicine, UCLA, Los Angeles, CA. Currently he is part of the teaching faculty in the Restorative department, School of Dentistry at UCLA and has worked as an Associate dentist, Culver City, CA. He is also currently conducting research as a post-doctoral research fellow in the Laboratory of Stem Cell and Cancer Epigenetics at UCLA.

7) What are some of your current hobbies?
I like to ride my Suzuki SV650R on Pacific Coast Highway on Saturdays.

Guess the Truth about Jeffrey

Two of these statements about Jeffrey Kim are true. Can you guess which ones?

1. Backpacked through India.
2. One of five children.
3. Went to school for 26 years.

About TRIO and the McNair Scholars Program

The Federal TRIO Programs (TRIO) are Federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds. TRIO includes eight programs targeted to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to postbaccalaureate programs.

Designed to assist first-generation, low-income students and those who are underrepresented at the graduate and doctoral level, the program at Cal Poly Pomona was first funded in 1999. The Ronald E. McNair Postbaccalaureate Achievement Program is named for Dr. Ronald E. McNair, one of those who perished aboard the space shuttle Challenger in January 1986.

The McNair Scholars Program at Cal Poly Pomona is a one- or two-year program designed to improve students' research skills and prepare them for entering graduate schools and advanced study. This education grant provides an internship opportunity for students to learn how to do research, present their findings at a summer symposium and at national conferences, and successfully apply for and enter graduate school. Through the efforts of the students themselves, the faculty mentors, and the program staff, these students can achieve their goals.

Introducing Baby Olivia

McNair Scholars program assistant director, Mary Ferrel, welcomed a new member to her family.

Olivia Ferrel was born happy and healthy on August 30, 2012. She weighed 8 lbs 12 oz. Mom and family are doing well.



Ronald E. McNair Scholars Program

Bldg. 8, Room 306
3801 West Temple Avenue
Pomona, CA 91768

www.csupomona.edu/mcnair

(909) 869-3381

mcnair@csupomona.edu



Developing Leaders
Through Graduate Education