McNair Scholars

California State Polytechnic University, Pomona

The Year of The Scholar

In 2013, 17 of our McNair Alumni completed graduate degrees!

We would like to take this opportunity to congratulate them and hope that these scholars’ accomplishments inspire those who are still in the process of reaching their dream.

Kelly Ablard - Simon Fraser University, Biology, PhD
Amy Arambulo - California State University, Los Angeles, Sociology, Masters
Brian Armenta - University of Nebraska, Lincoln, Psychology, PhD
Ashley Faytol - California State University, Fullerton, Counseling, Masters
Maria Guzman - University of Southern California, Social Work, Masters
Rosemary Keinembabazi - Cal Poly Pomona, Public Administration, Masters
Ida Legesse - University of Southern California, Public Policy, Masters
William Liang - University of Southern California, Pharmacy, PharmD
Jimmy Ly - University of Pennsylvania, Regional Planning, Masters
Airek Mathews - University of California, Los Angeles, Environmental Health Sciences, PhD
Debra de la Torre - Azusa Pacific University, Environmental Policy and Management, Masters
Jessica Moronez - California State University, Fullerton, Sociology, Masters
Ricardo Ortega - University of California, Santa Barbara, Chicana/o Studies, PhD
Matthew Pieratt - Cal Poly Pomona, Electrical Engineering, Masters
Jena Portanova - Cal Poly Pomona, Botany, Masters
Josefina Wilhelm - Hope International University, Counseling, Masters
Patrick B. Williams - Claremont Graduate University, Psychology, PhD

Jessica Moronez and Rosemary Keinembabazi receive their silver medals at the June 2013 McNair Scholars Recognition Luncheon. Director Winny Dong, and Faculty Advisors Wei Bidlack and Frank Torres congratulate them.

Join us next year in celebrating the successes of our current and past cohorts!

Save the date: June 6, 2014

Provide us with updated contact information to make sure you receive your invitation.

Stay Connected:
www.csupomona.edu/~mcnair

CPP Faculty Position Openings:
http://academic.csupomona.edu/ faculty/positions.aspx
**Director's Message**

Since 1999, the McNair Scholars Program at Cal Poly Pomona has served over 200 students and 33 of them have completed their doctorates so far, with 26 additional scholars currently in PhD programs! I hope this newsletter will give you a glimpse of the wonderful things current and past scholars are doing.

Our tremendous success is due to the dedicated staff that has served the program over the past 15 years, the brilliant and wonderful students, and the support of the university, the broader community, and the U.S. Department of Education. If you would like to help us continue to thrive, please consider one of these three ways:

**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. 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**

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. Please help by sending in your donation in the enclosed envelope.

**Giving to the McNair Scholarships**

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.

Thank you. I hope you will stop by and say hello the next time you are near Cal Poly Pomona.

Sincerely,
Dr. Winny Dong
### Introducing McNair Scholars 2013-14

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<tr>
<th>Name</th>
<th>Major</th>
<th>Mentor</th>
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<td>JESUS BARRIGA</td>
<td>Civil Engineering</td>
<td>Dr. Francelina A. Neto</td>
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<tr>
<td>ANA GONZALEZ</td>
<td>Psychology</td>
<td>Dr. Felicia Friendly Thomas</td>
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<tr>
<td>ARAZ BOGHOZIAN</td>
<td>Mechanical Engineering</td>
<td>Dr. Mehrdad Haghi</td>
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<td>ELIZA HERNANDEZ</td>
<td>Biology &amp; Zoology</td>
<td>Dr. Erin Questad</td>
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<td>BRIAN BULAYA</td>
<td>Urban and Regional Planning</td>
<td>Dr. Kyle D. Brown</td>
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<td>ANDREA LAVILLES</td>
<td>Sociology</td>
<td>Dr. Anthony Ocampo</td>
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<td>AARON CASTELLANOS</td>
<td>Electrical Engineering &amp; Physics</td>
<td>Dr. Gerald R. Harp</td>
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<tr>
<td>MARLENA D. LOPEZ</td>
<td>Biology &amp; Zoology</td>
<td>Dr. A. Kristopher Lappin</td>
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<td>LINDSEY DAVIS</td>
<td>Gender, Ethnicity, &amp; Multicultural Studies</td>
<td>Dr. S. Terri Gomez</td>
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<td>TALIN MASIHIMIRZAKHANIAN</td>
<td>Mathematics</td>
<td>Dr. Ryan Szypowski</td>
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<td>LUCAS DE BUREN</td>
<td>Civil Engineering</td>
<td>Dr. Felipe J. Perez</td>
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<td>CYNTHIA M. MCKEE</td>
<td>Food &amp; Nutrition</td>
<td>Dr. Andrew Voss</td>
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<td>NHU DO</td>
<td>Biotechnology</td>
<td>Dr. Nancy E. Buckley</td>
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<td>JOSE MENDEZ</td>
<td>Civil Engineering</td>
<td>Dr. Felipe J. Perez</td>
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<td>GABRIELA GARZA-VAZQUEZ</td>
<td>Biology</td>
<td>Dr. Andrew Voss</td>
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<td>JOCELYN MURILLO</td>
<td>History</td>
<td>Dr. Paul R. Arreola</td>
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<td>DARYL PAITON</td>
<td>Electrical Engineering</td>
<td>Dr. Brita Olson</td>
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<td>AUDREY PAREDES</td>
<td>Gender, Ethnicity, &amp; Multicultural Studies</td>
<td>Dr. S. Terri Gomez</td>
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<td>JULIO PIZANO</td>
<td>History</td>
<td>Dr. Rachel Van</td>
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<tr>
<td>AMANDA RIGGLE</td>
<td>English &amp; Education</td>
<td>Dr. Edward L. Rocklin</td>
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<td>THUAN MINH TRAN</td>
<td>Biotechnology</td>
<td>Dr. Wendy Dixon</td>
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<tr>
<td>JILLIAN WALKER</td>
<td>Zoology &amp; English</td>
<td>Dr. Rakesh Mogul</td>
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### McNair Scholars Program Team

- **Winny Dong**
  - Director
- **Wei Bidlack**
  - Program Faculty Advisor
- **Frank Torres**
  - Director Emeritus
- **Elisa Mitchell**
  - Project Coordinator
- **Katherine Azurin**
  - Project Coordinator
Raul Gonzalez
“Development of a Smartphone Application for Travel Data Collection”
Faculty Advisor: Dr. Xin Ye

Samayyah Williams
“Analyzing the Microbial Population in Woodchip Bioreactor”
Faculty Advisor: Dr. Monica Palomo

Luis Valenzuela
“Effective Smart Grid Techniques for Wind Energy Source Integration”
Faculty Advisor: Dr. Saeed S. Monemi

Elvira Trabanino
“Adsorption Kinetics for the Removal of Azo Dyes using Magnetite Nanoparticles”
Faculty Advisor: Drs. Tanya Faltens and Winny Dong

Ajay Singh
“Revitalization of a Thermogravimetric Analyzer”
Faculty Advisor: Dr. Vilapanur A. Ravi

Miguel Rodriguez
“Fluid Flow: Understanding the Navier-Stokes Equation”
Faculty Advisor: Dr. John Arlo Caine

Christopher Mihiar
“Irrigation Water Policy and Valuation”
Faculty Advisor: Dr. Lynda Rush

Grace Lim
“Stochastic Rumors”
Faculty Advisor: Dr. Randall J. Swift

Vatche Kaprielian
“Radiation Effects on the DBF4 Protein Kinase”
Faculty Advisor: Dr. Wendy Dixon

Dianne Sanchez
“Synthesis and Characterization of α-alanine Coordination Complexes”
Faculty Advisor: Drs. Barbara Burke and Samir Anz

Madilynn Santoyo
“The Cultural Influences on Environmental Behavior in Middle Class Households”
Faculty Advisor: Dr. Denise Lawrence

Melika Shayegh
“Effects of γ-Aminobutyric Acid (GABA) on Motility Parameters of Bovine Sperm”
Faculty Advisor: Dr. Sepehr Eskandari

Kristin Dettmers
“Settling the Waters: Exploring An Iterative Numerical Integration Technique”
Faculty Advisor: Dr. Jenny Switkes

David Kok
“CO2 Capture with Novel Materials”
Faculty Advisor: Drs. Tanya Faltens and Winny Dong

Ericka James
“Non-traditional Students’ Utilization and Satisfaction with Campus Resources”
Faculty Advisor: Dr. Felicia Friendly Thomas

Ann Truong
“Rejection sensitivity in community college transfers to 4-year universities”
Faculty Advisor: Dr. Jeffery S. Mio

Jessica Marquez
“Democratic Transition: An Analysis of Education Enrollment and Employment rates in China”
Faculty Advisor: Dr. Muniz A. Coson

Dora Lopez
“Las hijas Del Campo: Testimonials of Mexican/Chicana College students”
Faculty Advisor: Dr. Corina Benavides-Lopez

Christian J. Murillo
“Risk Factors for Sexual Coercion at Fraternity Parties”
Faculty Advisor: Dr. Erika DeJonghe

Daryl Adkins
“Dancing Bomba: A Diasporic Context for Social Change and Meaning in California”
Faculty Advisor: Dr. Patricia de Freitas

Anna Storti
“But You Don’t Look Like a Lesbian: The Portrayal of Queer Life Through a Feminine Experience”
Faculty Advisor: Dr. Anita Jain

Alejandro Zermeno
“Mexican American Identity and the Impact of Traditional Knowledge and Cultural Practices”
Faculty Advisor: Dr. Anthony C. Ocampo
Scholar Summer Research Experiences: In their own words...

**Raul Gonzalez**  
**UC Berkeley McNair Scholars Symposium**  
“Attending the UC Berkeley Symposium was such an incredible and unforgettable experience. It was my first time flying, first time outside Southern California, and my first time presenting at an outside conference. The conference motivated me even more to continue my fight to become the first one in my family to obtain a doctorate degree.”

**Daryl Adkins**  
**UC Berkeley McNair Scholars Symposium**  
“I left the symposium more inspired to apply straight to doctorate programs this fall. I learned that taking chances/risks is a part of success. Meeting fellow scholars and listening to new interesting and exciting research at the undergraduate level motivated me to keep researching and helped me realize that I have a significant role in the academic world.”

**Edward Guzman**  
**MIT Summer Research Program**  
“The more I dove into my research, the more challenging and exciting it was. I enjoyed learning from my own experience rather than from a book and making small contributions to science.”

**Dianne Sanchez**  
**CPP Summer Research Program**  
“The summer program was beneficial to me because the time allowed me to be productive in the lab as well as preparing my application materials for graduate school. I loved how much my fellow McNair Scholars and I bonded during the program too. I have grown and matured as a scholar throughout the program. I now understand I am capable of doing the high quality of research that is expected at a graduate level.”
Faculty Mentor Profile

Dr. Airek Mathews
McNair Scholars Cohort 8: 2006-2007
2008 - B.S. Chemistry at CPP
2013 - PhD, Environmental Health Sciences at University of California, Los Angeles
PhD Dissertation: “Permeation of Cyclohexanol Through Disposable Nitrile Gloves”

Dr. Airek Mathews was a McNair Scholar and went on to earn his B.S. in Chemistry from California State Polytechnic University, Pomona (CPP) in 2008 and his PhD in Environmental Health Sciences from the University of California, Los Angeles in 2013. His PhD dissertation was titled “Permeation of Cyclohexanol Through Disposable Nitrile Gloves.”

1. **What was the process of narrowing down your dissertation topic?**
   My advisor helped me to narrow down the key aspects that I wanted to focus on. After getting preliminary data, I was able to confirm that my ideas were practical.

2. **What was the most exciting part of your dissertation and defense?**
   The most exciting part of my dissertation was writing the last chapter. At that point, I knew I was almost done. The most exciting part of my defense was when my advisor walked out and congratulated me as Dr. Mathews!

3. **What career options are you considering?**
   Currently I am an Industrial Hygienist/Safety Specialist for the UCLA School of Medicine Pathology and Laboratory Medicine Department. I oversee the safety program and ensure all employees have all the information, techniques, and equipment they need to complete their functions as safely as possible.

4. **Share an experience as a McNair Scholar that was particularly helpful to finishing your doctorate?**
   I think learning how to persevere and complete a project from start to end is what helps in preparing a student for a doctorate program. There are many ups and downs during research, and if you do not learn how to stick with it through the worst part, it’s easy to give up. During the McNair Scholars program, I remember working on my research project, and while it did not look promising, I had to see it through.

5. **What advice do you have for current McNair Scholars?**
   Always aim for the top and never feel that you are not competitive enough to apply to the program that you really have your heart set on. Perseverance will get you past the hump on your PhD journey and on your way to graduation.
Dr. Ricardo Ortega
McNair Scholars Cohort 6: 2004-2005
2006 - B.A. Gender, Ethnicity, and Multicultural Studies at CPP
2013 - PhD, Chicana and Chicano Studies at University of California, Santa Barbara
PhD Dissertation: “Guided by Great Feelings of Love: Using Photovoice and Critical Pedagogy to Document the Life Experiences of Undocumented Latino/a Students in Higher Education”

1. What was the process of narrowing down your dissertation topic?
   I had been involved with undocumented student issues since my days at [CPP] where I started the first scholarship for undocumented students on campus. However, like all dissertations, the exact nature of the research really was not solidified until the end of gathering data. So my advice to all graduate students is to be open to wherever the research takes you.

2. What was the most exciting part of your dissertation and defense?
   The most exciting part of my dissertation was gathering data. I spent a year in the field working with an amazing group of students, and by far that was the most exciting part of my time in graduate school. I wouldn’t describe my defense as exciting, however; it was nerve racking and a relief when it was over.

3. What career options are you considering?
   I am looking into a career in student affairs at a university, or one in the non-profit world. More specifically, I would like to use my degree to continue to work with undocumented student populations in or around higher education.

4. Share an experience as a McNair Scholar that was particularly helpful to finishing your doctorate?
   The one experience that helped in my graduate career more than any other was the process of conducting and finishing my own research project. I believe that those of us grad students who had participated in the McNair program had a little easier time in adjusting to life in graduate school, and for that I am eternally grateful.

5. What advice do you have for current McNair Scholars?
   For those current McNair Scholars who are about to attend graduate school next year, my advice would be to relax. Graduate school is a marathon, and those who finish are the ones who take it slow and practice self care along the way. So take care of yourself, and understand that it is hard to go from feeling you are on top of the mountain to understanding the journey has just started. Enjoy the journey.
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 post-baccalaureate 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 Post-baccalaureate 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.