Afiya Brown was a McNair Scholar at UCSB in 2011 and 2012 where she studied how gang activities and involvement impact the lives of young Black girls. She was fortunate to have the opportunity to be mentored by Dr. Oshin Wicks, Department of Psychology at UCSB, under whom she acquired her graduate degree in Clinical Psychology and Law, and Society at the University of California, Irvine under the guidance of Dr. Iris Key, working on a project titled: “Public Sociability and the Underappreciation of Black Excellence.” When the program ended, she realized what she always thought about McNair, Mrs. Brown responded that “the McNair process, McRick helped with establishing my time-management skills, and helped me pick a program that actually fits what I wanted to do.” Furthermore, McRick helped me become an expert in presenting my research. The experiences that the UCSB McNair Scholars Program provided for Afiya helped her with her self-identification as an academic who wants excellence with their academic presentations. Her advice for current and future McNair Scholars is “to learn how to adapt, but always remember to stay authentic. And you are just what you are and you must accept you to help you make the best decisions for your future.”

Rachel Scalfone attended the Diversity Summer Workshop Program at Johns Hopkins University. She worked with Dr. David Lovan and Ms. Emily Fish, both from the Center for Public Policy and Social Research, on a project titled, “Unarmed Forces: Towards a Useful Data-Focused Approaches Project: A Survey of Veterans.” In addition, she had the opportunity of attending the project, but she also attended a conference in Stanford, CA, followed by an art presentation and poster presentation on the National Science Foundation Program. According to Rachel, this experience was empowering: “I became more confident. I believe I was able to become a part of the larger world of science and other things that are going on in the world.”

Alok Bohara was selected for the Summer Research Opportunity Program, UCSB, to work in the Department of Ecology, Evolution, and Molecular Biology. Mr. Bohara worked on a research project entitled, “Reexamining the Effect of Temperature on the Behavior of the Mongolian Gerbil.” He was mentored by Dr. Lorena Amiard, Department of Ecology, Evolution, and Molecular Biology. Mr. Bohara also took part in the American Economic Association Summer Training Program, Iowa State University, and the University of Illinois, Chicago. Under the supervision of Dr. Lorena Amiard, he worked on a research project entitled, “Examining the Effect of Temperature on the Behavior of the Mongolian Gerbil.”

Erik Suarez was selected for the Summer Research Opportunity Program, UCSB, to work in the Department of Ecology, Evolution, and Molecular Biology. Mr. Suarez worked on a research project entitled, “Developing a Fluorescent Destabilizing Domain System with UnaG.” He was mentored by Dr. Lorena Amiard, Department of Ecology, Evolution, and Molecular Biology. Mr. Suarez also took part in the American Economic Association Summer Training Program, Iowa State University, and the University of Illinois, Chicago. Under the supervision of Dr. Lorena Amiard, he worked on a research project entitled, “Examining the Effect of Temperature on the Behavior of the Mongolian Gerbil.”

Jong Seoknam, MD, MS General Surgery, UCSF, was selected for the McNair Scholars Program, UCSB. He worked on the topic of, “Outcomes of Hypertrophic Cardiomyopathy.” He was mentored by Dr. Lorena Amiard, Department of Ecology, Evolution, and Molecular Biology. Mr. Seoknam also took part in the American Economic Association Summer Training Program, Iowa State University, and the University of Illinois, Chicago. Under the supervision of Dr. Lorena Amiard, he worked on a research project entitled, “Examining the Effect of Temperature on the Behavior of the Mongolian Gerbil.”

Andrew McDonald is a PhD student in Chemistry at the University of California, Berkeley. His research at UCSB focused on the role of intrinsic diseases of human lungs in disease to the lung. His research involved a collaboration between over 30 universities under the guidance of Dr. Lorena Amiard, Department of Ecology, Evolution, and Molecular Biology. Mr. McDonald also took part in the American Economic Association Summer Training Program, Iowa State University, and the University of Illinois, Chicago. Under the supervision of Dr. Lorena Amiard, he worked on a research project entitled, “Examining the Effect of Temperature on the Behavior of the Mongolian Gerbil.”

Yen Veronika Vang was an International McNair Fellow at the University of Yuma in 2012. Her research was in the area of “Outcomes of Hypertrophic Cardiomyopathy.” She was mentored by Dr. Lorena Amiard, Department of Ecology, Evolution, and Molecular Biology. Mr. Vang also took part in the American Economic Association Summer Training Program, Iowa State University, and the University of Illinois, Chicago. Under the supervision of Dr. Lorena Amiard, he worked on a research project entitled, “Examining the Effect of Temperature on the Behavior of the Mongolian Gerbil.”

McNair Scholars Program 2014!
McNair Seniors

Victor Marta
Research Interests: Cultural Studies, Central American Studies, TESOL, English Language Education
Mentor’s Department: English
Major: Sociology and Chicano/o Studies
Graduation Date: June 2015
Hometown: Palmdale, CA
Minor: History

Iliana J. Avila
Research Interests: Global Popular Music, Hybrid Music, Music Industry
Mentor’s Department: Music
Major: Cultural Anthropology and Global Studies
Graduation Date: June 2015
Hometown: Lancaster, CA

Identities
Research Interests: Organic Chemistry, Synthesis, Chemistry Education
Mentor’s Department: Chemistry
Major: Chemistry
Graduation Date: December 2015
Hometown: Fresno, CA
Minor: Mathematics

Lizette Wences
Research Interests: Media Censorship, Social Movements
Mentor’s Department: Chicano/o Studies
Major: Sociology
Graduation Date: June 2015
Hometown: Los Angeles, CA

Jackie Beatriz Partida
Research Interests: Land Use Policy and Planning, Environmental Studies
Mentor’s Department: History of Public Policy
Major: History of Public Policy
Graduation Date: December 2016
Hometown: Inglewood, CA
Minor: Labor Studies and Spatial Studies

To view this journal and previous journals, please go to: http://mcnair.ucsb.edu/journal.html
Afiya Brown was a McNair Scholar at UCSB in 2011 and 2012 where she studied how gang activities and involvement impact the lives of young black girls. She was fortunate to be approached by the University of California, Los Angeles (UCLA) and the University of Pennsylvania in the fall of 2011 to pursue her doctoral degree in Criminology, Law, and Society at the University of California, Irvine under the guidance of Dr. Lois L. Curran. Brown is working on a project titled “Public Sociability and the Unraveling of Black Girls.” When asked what she remembers most about McNair, Ms. Brown responded that “during the application process, McNair helped with establishing my time-management skills, and helped me pick a program that actually fits what I wanted to do.” Furthermore, “McNair helped me become an expert at presenting my research.” The experience that the UCSB McNair Scholars Program provided for Afiya Brown in her undergraduate education at UCSB was very impactful: “I want you and what you are and what you will do to impact the way you make decisions for your future.”

McNair Class of 2014!

Alok Bohara, he worked on a research project entitled, “Reexamining the Effect of Fatty Acid Oxidation on Cardiac Function in a Mouse Model of Myocardial Infarction.” This summer all McNair Scholars produced impressive original research projects. Nineteen McNair scholars participated in the McNair Program at University of Illinois at Urbana-Champaign. During this summer program they were given the opportunity to work with top scientists and professors as well as get funding for their research projects. Alok Bohara worked with Dr. David Lovelace and an undergraduate student, Erika Fagg, both from the Center for Lipid Metabolism and Function. He said that “McNair’s support was instrumental in my success.”

Rachel Scottotto attended the Diversity Summer Institute Program at Johns Hopkins University where she is currently working on her master’s degree in Chemistry. During her time at Hopkins she worked with Dr. David Lovelace and an undergraduate student, Erika Fagg, both from the Center for Lipid Metabolism and Function. Students like Rachel are very important in helping future McNair Scholars develop the confidence and skills needed to explore graduate school opportunities.

Denzil Bellamy went to Stanford University for his summer program. In his own words, “I always had a passion for nature and I knew I wanted to pursue a career in science.” During this summer he worked under Dr. Alejandro Lopes on the research project, “Effect of Zebrafish skin regeneration on the microgravity environment.” He stated that “the McNair Program was a very important stepping-stone towards my future professional career.”

Jacqueline Partida was selected for the Summer Research Opportunity Program at STI Advanced Materials Group in Los Angeles. During this program she worked under Dr. Alejandro Lopes on the research project, “Effect of Zebrafish skin regeneration on the microgravity environment.” During this summer she was able to work with research scientists and gain hands-on training in a research laboratory. Jacqueline this summer program was very challenging and rewarding: “Having the opportunity to contribute to a company that actually produces something is very rewarding.”

Andy MacDonald is a PhD candidate in Applied Mathematics and Computational Science at UC Berkeley. His research at UCSB focuses on the evolution of viral diseases of humans from Lyme disease to HIV and SIV. He is a Bachelor’s degree from the University of Wisconsin, Madison and a Master’s degree from the University of Michigan, Ann Arbor. While a student at UC Berkeley he was active in the recruitment of students role, especially with underrepresented minorities. MacDonald received his PhD from the Spanish language, music and film in the American Studies department. He has a love for photography and has published a number of articles about music and film. MacDonald is currently employed at the University of California, Berkeley as a postdoctoral scholar. His research involves the use of machine learning and data mining techniques to analyze large datasets related to music and film.

Jong Guk Sohn, MS Electrical Engineering, South Korea University of Science and Technology, South Korea. Jong Guk is currently pursuing his master’s degree in Electrical Engineering at the University of Science and Technology in South Korea. During his time at UCSB he was able to work in a research laboratory and learn about the state of the art in electrical engineering.

Inside McNair News

Research Experiences for Undergraduates at UCSB Summer Program 2014

We were very pleased to announce that Eisenhower International provided some funding to our program for the 2014 Research Experiences for Undergraduates at UCSB Summer Program. This Spring, we have won another grant to support this year’s program. This year, through the Eisenhower grant, we were able to send eight of our STEM and Math majors to the SAIS program in Washington, DC. The students involved in the program were very pleased with their experience and they hope to receive funding in the future to send more students.

NOTE FROM THE DIRECTOR

It is the beginning of the 7th year of the UCSB McNair Scholars Program. Our successes continue. Nine 2014 graduating seniors are now enrolled in graduate school, seven fully funded in Ph.D. programs or internships. At least one student from each of the four McNair campuses is currently an McNair Scholar. Additionally, our science, technology, engineering, and mathematics (STEM) scholars are being funded by Edison International. We were very pleased to announce that Eisenhower International provided some funding to our program for the 2014 Research Experiences for Undergraduates at UCSB Summer Program. This Spring, we have won another grant to support this year’s program. This year, through the Eisenhower grant, we were able to send eight of our STEM and Math majors to the SAIS program in Washington, DC. The students involved in the program were very pleased with their experience and they hope to receive funding in the future to send more students.

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To view this journal and previous journals, please go to: http://mcnair.ucsb.edu/journal.html
**McNair Seniors**

**Economics**

- **Research Interests:** Behavioral Economics, Urban Economics
- **Mentor:** Dr. Jon Sonstelie
- **Graduation Date:** June 2015
- **Hometown:** San Marcos, CA

**Victor Marta**

- **Research Interests:** Cultural Studies, Central American Studies
- **Mentor’s Department:** Mathematics
- **Graduation Date:** June 2015

**Liliana J. Avila**

- **Research Interests:** Linear PDE’s, Fluid Dynamics
- **Mentor’s Department:** Mathematics
- **Graduation Date:** June 2015

**Leslie Rene Castro**

- **Research Interests:** Organic Chemistry, Synthesis
- **Mentor’s Department:** Chemistry and Biochemistry
- **Graduation Date:** June 2015
- **Hometown:** Fresno, CA

**Erik Suarez**

- **Research Interests:** Clinical, Developmental, Behavioral Sciences
- **Mentor’s Department:** Linguistics
- **Graduation Date:** June 2015
- **Major:** Linguistics with Spanish Emphasis

**Lizette Wences**

- **Research Interests:** Media Censorship, Social Justice
- **Mentor:** Dr. Ralph Armbruster
- **Graduation Date:** June 2015

**Jacqueline Beatriz Partida**

- **Research Interests:** Environmental Sustainability in Technology
- **Mentor’s Department:** Geography
- **Graduation Date:** June 2015
- **Major:** Environmental Studies and Chemistry
- **Mentor’s Department:** Molecular, Cellular, Developmental Biology

**Christian Suarez**

- **Research Interests:** Hook Up Culture, Sexuality, Gender Studies
- **Mentor:** Dr. Leila Rupp
- **Graduation Date:** June 2015
- **Hometown:** Los Angeles, CA
- **Major:** Sociology and Feminist Studies

**Michelle Parra**

- **Research Interests:** Race, Gender, and Ethnic Studies
- **Mentor:** Dr. Richard Duran
- **Graduation Date:** June 2015
- **Minor:** Labor Studies and Spatial Studies
- **Major:** History of Public Policy

**Jorge Dominguez**

- **Research Interests:** Macroeconomics, Behavioral Economy
- **Mentor:** Dr. Scott Shell
- **Graduation Date:** June 2016
- **Hometown:** Fremont, CA

**Bob Feng**

- **Research Interests:** Therapeutic Intervention of Disease Mechanisms
- **Mentor:** Dr. Queenie Lau
- **Graduation Date:** June 2016
- **Hometown:** Montebello, California
- **Major:** Molecular, Cellular, Developmental Biology

**Anibal Lopez**

- **Research Interests:** Computing, RNA, Drug Design and Delivery, Gene Therapy
- **Mentor:** Dr. Luc Jaeger
- **Graduation Date:** December 2015
- **Hometown:** Van Nuys, CA
- **Minor:** Cultural Studies
- **Major:** History of Public Policy

**Paola Vargas**

- **Research Interests:** Education Pipeline, Education Policy
- **Mentor:** Dr. Larry Haddix
- **Graduation Date:** June 2016
- **Hometown:** Van Nuys, CA
- **Minor:** Labor Studies and Spatial Studies
- **Major:** History of Public Policy

**Goodbye to Rob**

The McNair Scholars Program was pleased to have Rob Miller serve as a Graduate Mentor for the 2013-2014 academic year. Rob is currently completing his Master of Science in Media Arts and Sciences Technology, Multimedia Engineering and will defend his thesis in December of 2014. He focused his graduate study on music information retrieval, a growing field of research exploring the extraction and semantic information from digital audio signals. He graduated from the University of Maryland, College Park in 2012 with a Bachelor of Music degree. He is also a former McNair Scholar and his undergraduate McNair research project consisted of a content analysis of the background music used in the 2010 presidential campaign between Barack Obama and John McCain. This was his favorite experience for Rob Miller and he enjoyed the opportunity to provide advice about the graduate school experience. He especially enjoyed helping students in the application process. His advice is to link and continue McNair Scholars: “They even provided the exact assignment as if it were a major project.” Rob knew from personal experience that students will show great improvement in their academic work and research. With a master’s in hand, Rob is looking forward to moving into industry in the Bay Area. There he will continue work with the same type of system recognition. The Urban McNair Scholars will miss Rob’s guidance, respect, and patience. We wish Rob good luck in all his future endeavors.

**Our New McNair Scholars**

**ART & POLITICAL SCIENCE**

**Artemio Gutierrez**

- **Mentor:** Dr. Emily McDermott
- **Graduation Date:** June 2016
- **Major:** Political Science

**Diana Gonzales**

- **Mentor:** Dr. Emily McDermott
- **Graduation Date:** June 2016
- **Major:** Political Science

**Hector Lucero**

- **Mentor:** Dr. Emily McDermott
- **Graduation Date:** June 2016
- **Major:** Political Science

**Lindsey Zepeda**

- **Mentor:** Dr. Emily McDermott
- **Graduation Date:** June 2016
- **Major:** Political Science

**COMMERCE**

**Linda Brown**

- **Mentor:** Dr. Emily McDermott
- **Graduation Date:** June 2016
- **Major:** Business Administration

**Camila Espinosa**

- **Mentor:** Dr. Emily McDermott
- **Graduation Date:** June 2016
- **Major:** Business Administration

**Juan Carlos Rodríguez**

- **Mentor:** Dr. Emily McDermott
- **Graduation Date:** June 2016
- **Major:** Business Administration

**Academic Support**

- **McNair Scholars Program:**
  - **Support:** McNair Scholars Program
  - **Address:** University of California, Santa Barbara
  - **Website:** http://mcnair.ucsb.edu

**To view this journal and previous journals, please go to: http://mcnair.ucsb.edu/journal.html**
Afiya Brown was a McNair Scholar at UCSB in 2011 and 2012 where she studied how gang activities and involvement impact youth. Knowing who you are and what you want to accomplish will help you make the best decisions for your future.

Rachel Scott/Rutman attended the Diversity Summer Undergraduate Program at Johns Hopkins University in 2013. During the program, she worked with Dr. David Law and an M.S. level student, Elisa Fitik, both from the JHU CIBRAP lab. They focused on the project, “Getting a Unique Face: Facilitating Positive Outcomes for At-Risk Students: A Pilot Study.” In addition, she had the opportunity to attend the program, but not the conference in Stanford, CA, followed by an oral presentation and poster session for the McNair National Symposium held in Atlanta. According to Rachel, this experience was important: “It helped me learn how to develop the format of a research paper, and in the future, I will be able to develop and present information in a professional setting.”

Rachel Scott/Rutman attended the Diversity Summer Undergraduate Program at Johns Hopkins University in 2013. During the program, she worked with Dr. David Law and an M.S. level student, Elisa Fitik, both from the JHU CIBRAP lab. They focused on the project, “Getting a Unique Face: Facilitating Positive Outcomes for At-Risk Students: A Pilot Study.” In addition, she had the opportunity to attend the program, but not the conference in Stanford, CA, followed by an oral presentation and poster session for the McNair National Symposium held in Atlanta. According to Rachel, this experience was important: “It helped me learn how to develop the format of a research paper, and in the future, I will be able to develop and present information in a professional setting.”

Jacqueline Alves was selected for the Summer Research Opportunity Program at UC Irvine in 2012. During the program, she worked with Dr. Andrea Lopez on the research project, “A Preregistration Study of the Effect of Stereotypes on Implicit Association.” She participated in the Illinois Summer Research Symposium. Additionally, she was selected for the McNair Scholars Program at the University of Illinois, Chicago. Jacqueline was very challenged and rewarding: “I was able to contribute to the company in some way through my project. It was very eye-opening for me to understand that the application of science can have a direct impact on the world.”

Jorge Alvear, Ph.D., Chemistry Graduate, University of California, Riverside. Under the supervision of Dr. Zhan Sheng, he worked on his project, “Development of a Fluorescent Protein Phosphatase Inhibitor.” Jorge was very satisfied with the experience: “I plan to attend a PhD program in the fall and continue working in the field of organic chemotherapy. I hope to get a better understanding of how to design and develop molecules that can be used to treat diseases.”

Michelle Porta was selected for the McNair Summer Research Program at the University of Miami. In 2012, she worked with Dr. Charles R. Davis on the research project, “The influence of Oxidative Stress on the Survival of Mesangial Cells.” In 2013, she worked with Dr. Daisuke Okano on the research project, “The role of Interleukin-6 in the Regulation of Macrophage Function.” Michelle was very satisfied with the experience: “I would recommend this program to any undergraduate who is interested in participating in a research program during the summer. The impact of the program was significant and in-depth and it allowed me to grow as a scientist and to gain a new perspective on how to conduct scientific research.”

For Michelle this was an amazing experience: “I would recommend this program to any undergraduate who is interested in participating in a research program during the summer. The impact of the program was significant and in-depth and it allowed me to grow as a scientist and to gain a new perspective on how to conduct scientific research.”

Dr. Raul Navarro and Dr. Ling Chun-Chen. Benjamin’s research project was on “A Study of the Galactosyltransferase Activity of the Human Milk Oligosaccharide Synthase.” Benjamin presented his project at the 22nd Annual McNair National Conference at UC Berkeley in August. He was very satisfied with the experience: “I definitely say that my research this summer has helped me narrow my research interests. I am more confident in my ability to become a leader in the field of environmental chemistry.”

Benjamin Huffman was selected for the Summer Research Program at UC Berkeley. During the program, he worked with Dr. Michael Mulch on the research project, “The effect of Vitamin D on bone density.” Benjamin was very satisfied with the experience: “I am very happy with my research. I learned a lot and I would highly recommend this program for other students.”

For Benjamin, working in a highly motivated and diverse group of scholars has been an outstanding experience: “I was able to work with a variety of people from many different fields. It was a great opportunity to present his research at the University of New Mexico’s AEA Research Symposium. For Michelle this was an amazing experience: “I would recommend this program to any undergraduate who is interested in participating in a research program during the summer. The impact of the program was significant and in-depth and it allowed me to grow as a scientist and to gain a new perspective on how to conduct scientific research.”

Andy MacDonald is a PhD candidate in the Department of Chemistry at the University of California, Berkeley. His research interests are in the area of organic chemistry, with a focus on the design and synthesis of new molecules that can be used in the development of new drugs. He received his bachelor's degree from the University of Southern California in 2008. Andy has been working in the laboratory of Dr. Richard T. S. Porter, a world-renowned expert in the field of organic chemistry. His current project involves the development of new methods for the synthesis of complex organic compounds.