Welcome to the 2015 McNair Cohort

Myrianna Bakou, a psychology major from Bennington, Nebraska, is working with Dr. Sarah Gervais, Department of Psychology.

Kyly Baxter, a psychology major from Lincoln, Nebraska, is working with Dr. Debra Hope, Department of Psychology.

Jazmin Castillo, a fisheries & wildlife major from South Sioux City, Nebraska, is working with Dr. John Carroll, School of Natural Resources.

Shimin Deng, a mathematics major from Scottsbluff, Nebraska, is working with Dr. Yu Jin, Department of Mathematics.

Catelyn Evans, a biological systems engineering major from Omaha, Nebraska, is working with Dr. Yuguo Lei, Department of Chemical & Biomolecular Engineering.

Brianna McKay, a nutrition science major from Grand Island, Nebraska, is working with Dr. Joel Cramer, Nutrition & Health Sciences.

Sara Reyes, a psychology major from Norfolk, Nebraska, is working with Dr. Rebecca Brock, Department of Psychology.

Kimberly Ruiz, a child, youth and family studies major from Grand Island, Nebraska, is working with Dr. Cynthia Willis-Esqueda, Department of Psychology.

Brandi Russell, a biochemistry major from Aberdeen, South Dakota, is working with Dr. Nicole Buan, Department of Biochemistry.

Elliot Sandfort, a computer engineering major from Lincoln, Nebraska, is working with Dr. Leen-Kiat Soh, Department of Computer Science & Engineering.

MaLeaha Semerad, a child, youth, and family studies major from Dodge, Nebraska, is working with Dr. Gilbert Parra, Department of Child, Youth and Family Studies.

**McNair Scholars**

"True courage comes in enduring, persevering, and believing in oneself."  
*Ronald E. McNair, Ph.D.*
Scholars Gain Skills to Succeed at the Graduate Level

Through the McNair Scholars Program, Scholars have the opportunity to conduct research under the guidance of a faculty mentor and to develop skills critical for success in graduate school. After successfully completing their projects during the 2015 McNair Summer Research Experience, eight UNL Scholars presented their results at the annual California McNair Symposium. We’ve asked the Scholars to reflect on the summer research experience and what it was like to present their research findings at a national conference.

“Participation in the McNair Scholars Program over the past year has been a great experience. I had the opportunity to conduct research, to learn more about graduate school, and to connect with other students preparing to enter graduate school. All of these experiences helped me develop as a student and further plan my career goals. The McNair Summer Research Experience exposed me to challenges I might face while in graduate school. Even with sufficient planning, experiments will go wrong. It is important to keep an open mind and positive outlook to keep from feeling discouraged.”
– Brittney Bridger-Burton

“Through my experiences in my classes, labs, working alongside my McNair scholar peers, my mentors, and the McNair staff, I’ve learned that being a scholar goes far beyond the label. Today, I say with pride and confidence that I’m a scholar who has worked hard, thought independently, overcome challenges, formed important academic relationships, and I have a continuously evolving passion for the degree and the research I am pursuing.”
– Amanda Dale

“The road to a doctoral degree will be difficult, but through the McNair Scholars Program I have learned that I do not have to traverse this path alone, and that I am capable of conducting meaningful research at the graduate level.”
– José Lemus

“Knowing that I have a group of individuals who want to see me succeed and are willing to help me get to graduate school relieves a lot of the anxiety I feel about applying to graduate school. This past year the McNair Program has given me the clarity and confidence I need to get into graduate school. I can’t wait to see what my remaining years as a scholar have in store for me.”
– Jaquelin Garcia-Castorena
“From finding a mentor to preparing a research presentation, I feel I’ve accomplished numerous tasks with the help of the McNair Program and Summer Research Experience. Seeing professors that care about first generation students was very comforting. I also learned the importance of supporting and obtaining support from my fellow scholars.”
– Zully Perez Sierra

“When my project was finished and I was standing in front of my peers explaining my work, I felt at home. I always felt that teaching and presenting in an academic setting was something I wanted to do, but now I know it’s something I can do naturally, and can do well.”
– Andreas Miles-Novelo

“Special Thanks to the faculty, postdoctoral, and graduate student mentors who contributed their time and expertise to work with McNair Scholars during the 2015 McNair Summer Research Experience and who continue to be involved in the Scholars’ research and graduate application efforts. Your support is invaluable to the success of our program!

“I’m really thankful I had the chance to be a part of this program and to have had the experiences it provided. It helped me to clarify my goals and set me on the path toward achieving them, as well as helping with momentum and enthusiasm in doing it. The McNair Program has given me a strong start and I know I’ll finish even stronger.”
– Alicia Michelle Rogers

“The McNair Summer Research Experience was some of the toughest weeks I’ve had during my time at UNL. However, it was very informative, and I gained a lot of valuable experience. Overall, I felt MSRE was very influential in confirming my decision to pursue a Ph.D. I feel better informed for the path that lies ahead of me, and for that I’m very grateful. I feel that I’m much more serious about my commitment to a Ph.D. Not only that, I feel more confident that I can actually do it.”
– Megan Smith

“From my project was finished and I was standing in front of my peers explaining my work, I felt at home. I always felt that teaching and presenting in an academic setting was something I wanted to do, but now I know it’s something I can do naturally, and can do well.”
– Andreas Miles-Novelo

“At my project was finished and I was standing in front of my peers explaining my work, I felt at home. I always felt that teaching and presenting in an academic setting was something I wanted to do, but now I know it’s something I can do naturally, and can do well.”
– Andreas Miles-Novelo

“The McNair Summer Research Experience was some of the toughest weeks I’ve had during my time at UNL. However, it was very informative, and I gained a lot of valuable experience. Overall, I felt MSRE was very influential in confirming my decision to pursue a Ph.D. I feel better informed for the path that lies ahead of me, and for that I’m very grateful. I feel that I’m much more serious about my commitment to a Ph.D. Not only that, I feel more confident that I can actually do it.”
– Megan Smith
**Postdoctoral and Graduate Student Mentors**

The McNair Graduate Student and Postdoctoral Mentoring Program offers our UNL McNair Scholars a supportive community, as well as practical guidance, insight, and encouragement as they conduct research and prepare to enter graduate school.

We’d like to welcome the 2015-16 McNair postdoctoral and graduate student mentors! They include: Jennie Catlett, biochemistry; Joao Carlos Gomes Neto, food science and technology; Surabhi Naik, Ph.D., biochemistry; Chase Pfeifer, mechanical & materials engineering; Abbey Riemer, psychology; Zachary Stewart, agronomy & horticulture; and Mohsen Zahiri, mechanical & materials engineering. They join continuing graduate mentors: Josh Haby, law psychology; John Jacisin, earth & atmospheric sciences; and Katherine Smith, biological systems engineering.

**Scholars Receive Undergraduate Research Funding**

UNL McNair Scholars receive support from a variety of grants and programs, that allows them to remain engaged in research with their faculty mentors. Our Scholars have been granted research funding from the following programs for Summer 2015 and the 2015-16 Academic Year: the Undergraduate Creative Activities and Research Experiences (UCARE) Program, funded by the Pepsi Endowment and Program of Excellence funds; The American Society for Microbiology (ASM) Fellowship; the IANR Agricultural Research Division Undergraduate Student Research Program award; and the INBRE award, an NIH-Funded grant administered through the School of Biological Sciences. Those who received awards for Summer 2015 and Academic Year 2015-16 were:

<table>
<thead>
<tr>
<th>Scholar</th>
<th>Award, Project Title, and Faculty Research Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brittney Bridger-Burton</td>
<td><strong>UCARE Project</strong>: Experimental Design for Non-Destructive Thermal Sensing of Ceramic Armor  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Kevin Cole, Department of Mechanical &amp; Materials Engineering</td>
</tr>
<tr>
<td>Jazmin Castillo</td>
<td><strong>IANR Project</strong>: Estimation of Distribution and Abundance of the Spotted Hyena (Crocuta crocuta) in the Northern Tuli Game Reserve, Botswana  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Wayne Riekhof, School of Biological Sciences</td>
</tr>
<tr>
<td>Amanda Dale</td>
<td><strong>UCARE Project</strong>: Affirmative Consent and Perceptions of Sexual Assault on College Campuses  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Sarah Gervais, Department of Psychology</td>
</tr>
<tr>
<td>Jaquelin Garcia-Castorena</td>
<td><strong>INBRE Project</strong>: Discovery of Yeast Genes Involved in Lyso-phospholipid Transport and Metabolism in Cells  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Wayne Riekhof, School of Biological Sciences</td>
</tr>
<tr>
<td>José Lemus</td>
<td><strong>UCARE Project</strong>: The Effect of Education Attainment Inequality in the Long-Term Economic Growth in Six Different American Cities  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Hendrik van den Berg, Department of Economics</td>
</tr>
<tr>
<td>Andreas Miles-Novelo</td>
<td><strong>UCARE Project</strong>: Affirmative Consent and Perceptions of Sexual Assault on College Campuses  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Sarah Gervais, Department of Psychology</td>
</tr>
<tr>
<td>Zully Perez Sierra</td>
<td><strong>UCARE Project</strong>: Investigation of the Effectiveness the Pheroid Nanoparticle to Deliver Micronutrients to Corn  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Hendrik Viljoen, Department of Chemical &amp; Biomolecular Engineering</td>
</tr>
<tr>
<td>Adrienne Ricker</td>
<td><strong>UCARE Project</strong>: Regression Analysis of Turtle Biodiversity and Climate Variables and Its Application to Miocene Great Plains Turtle Fauna  &lt;br&gt; <strong>Faculty Advisors</strong>: Dr. Jason Head and Dr. Ross Secord, Department of Earth &amp; Atmospheric Sciences</td>
</tr>
<tr>
<td>Daniel Rico</td>
<td><strong>IANR Project</strong>: Toward a Seasonal Agricultural Drought Forecast System  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Francisco Munoz-Arriola, Department of Biological Systems Engineering</td>
</tr>
<tr>
<td></td>
<td><strong>UCARE Project</strong>: Optimal Trading Strategies of Nebraska’s Wind Energy in the Integrated Market of the Southwest Power Pool (SPP)  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Liyan Qu, Department of Electrical &amp; Computer Engineering</td>
</tr>
<tr>
<td>A. Michelle Rogers</td>
<td><strong>UCARE Project</strong>: Understanding the Role of Antibodies on Kaposi’s Sarcoma-Associated Herpesvirus in Recently Infected Zambian Children  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Charles Wood, Nebraska Center for Virology &amp; School of Biological Sciences</td>
</tr>
<tr>
<td>Megan Smith</td>
<td><strong>ASM Fellowship Project</strong>: Physiological Purpose of Chondroitin Adhesion Proteins in the Human archaeon, Methanobrevibacter smithii  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Nicole Buan, Department of Biochemistry  &lt;br&gt; <strong>UCARE Project</strong>: Understanding Syntrophy Between Two Human Symbionts, Bacteroides thetaiaotaomicron and Methanobrevibacter smithii  &lt;br&gt; <strong>Faculty Advisor</strong>: Dr. Nicole Buan, Department of Biochemistry</td>
</tr>
</tbody>
</table>
UNL McNair Scholars Program Celebrates 20 Years

The McNair Scholars Program received its first grant from the U.S. Department of Education in September 1995. The program was originally housed with Multi-Cultural Affairs and the other TRIO Programs. Co-Directors for the first grant were Jimmi Smith, Multicultural Affairs, and Dr. Merlin Lawson, Dean of Graduate Studies. In 2003, the program was moved to the Office of Graduate Studies, under the guidance of Dr. Ellen Weissinger, then Dean of Graduate Studies. Dr. Laurie Bellows, now Associate Dean of Graduate Studies and McNair Program Director, along with Carol Boehler, Program Coordinator, assumed responsibility for the Program in 2005.

Although many things have changed around the world and here at UNL in the past 20 years, two things have remained steadfast: UNL’s commitment to a quality undergraduate education and the McNair Scholars Program’s commitment to leveling the playing field and providing opportunities for the first generation and underrepresented students we serve. Special appreciation goes to the faculty, postdocs, and graduate students who have mentored our Scholars over the past 20 years. Their support is the reason we have such a successful McNair Program at UNL.

Here’s what some of our alumni have said about their McNair experience.

“T he McNair Scholars Program received its first grant from the U.S. Department of Education in September 1995. The program was originally housed with Multi-Cultural Affairs and the other TRIO Programs. Co-Directors for the first grant were Jimmi Smith, Multicultural Affairs, and Dr. Merlin Lawson, Dean of Graduate Studies. In 2003, the program was moved to the Office of Graduate Studies, under the guidance of Dr. Ellen Weissinger, then Dean of Graduate Studies. Dr. Laurie Bellows, now Associate Dean of Graduate Studies and McNair Program Director, along with Carol Boehler, Program Coordinator, assumed responsibility for the Program in 2005.

Although many things have changed around the world and here at UNL in the past 20 years, two things have remained steadfast: UNL’s commitment to a quality undergraduate education and the McNair Scholars Program’s commitment to leveling the playing field and providing opportunities for the first generation and underrepresented students we serve. Special appreciation goes to the faculty, postdocs, and graduate students who have mentored our Scholars over the past 20 years. Their support is the reason we have such a successful McNair Program at UNL.

Here’s what some of our alumni have said about their McNair experience.

“My greatest McNair memory is having the mentorship from Dr. Wes Sime, who continues to be a mentor to me. Without his guidance, I would have never known that being a mental health professional and providing performance psychology to athletes was possible. I would have never been introduced to biofeedback and alternative ways to work with ADHD. I would have never known about graduate school and I would have never believed in my ability to be successful in this field. I cherish the knowledge I received from being a McNair Scholar.” – Sheriece Sadberry, Ph.D. (McNair Scholar 2001-03)

“The day you become a McNair Scholar you join a family. Unlike anything else on your CV, the title of McNair Scholar will always signal that you are a worthwhile investment, a well-trained scholar and a community leader.” – Nathan Palmer, M.A. (McNair Scholar 2004-06)

“The research experience I gained through the McNair Program prepared me for my graduate program at Delaware, which in turn prepared me for my graduate program at the University of New South Wales. I’ve felt one step ahead throughout my postgrad experience.” – Martin Diaz, M.S. (McNair Scholar 2006-09)

“My mentor Sara Beal supported me in every step of my summer research project and her support continued as I prepared for graduate school. During my senior year, I had severe senioritis and I wanted to take it ‘easy’ during my final semester. When I told Sarah my plan to take an acting class I distinctly remember her saying, ‘What does acting have to do with your future as a psychologist?’ She convinced me to take an advanced statistics class instead. I was bitter at first, but seven years later with many stats classes under my belt, I am thankful for her guidance.” – Morgan (Conley) McCain, M.A. (McNair Scholar 2008-2010)

“My experiences with my McNair mentor, Dr. Susan Jacobs, and the UNL McNair team really prepared me for graduate school in ways I did not fully understand as a cohort member. Looking back, I realize I gained advantages in research, writing, presentation skills, statistical analytical methods, and more. McNair gave me realistic expectations about what a research institution was like. Also, my experiences with McNair gave me an appreciation for stimulating undergraduate interest in research and academia, which is something I strive to imbue in my students who come through my classroom.” – Karise (Carrillo) Curtis, M.A. (McNair Scholar 2009-11)

“Before participating in the McNair program and the Berkeley conference, I doubted myself. I once told myself that I was not ‘scholarly’ enough to conduct research, let alone present my research findings in front of my peers, other faculty, and McNair staff. However because of the reassurance provided, I gained a new perspective on research and was motivated to tackle research with a new excitement and interest.” – Kenneth Herron (McNair Scholar 2011-2014)

“I came into the program with strong credentials; however, I left with exemplary skills, newfound talents, and a renewed confidence in my abilities. The Summer Research Experience allowed me to develop my interests, define my goals, and ultimately provided me with the tools needed to be a strong candidate for competitive graduate programs. You jump-started my research interests, coached me through the process of scientific writing and provided me with conferences to present my work, all while keeping me on track with application materials. The McNair Scholars Program is not just a line to add to a vitae. It is the single most important thing that happened to me as an undergraduate.” – Kassie Guenther (McNair Scholar 2013-2015)
Graduate school afforded her flexibility with her time, which was convenient because she also had two small children. Meza was able to schedule when she took courses, taught, and researched, which helped her balance family and career.

At the beginning of her graduate career, she had a teaching assistantship and taught calculus. Later she was given full responsibility for teaching introductory statistics courses. As Dr. Meza pointed out, “Teaching the introductory statistics course was essential experience and training for my work as a faculty member. Employers are looking for students with teaching experience and many Ph.D. students don’t have the opportunity to gain teaching experience.”

Through her advisor, Dr. Partha Lahiri, Jane received funding from a graduate research assistantship with Gallup, which provided her the opportunity to solve real-world problems and experience analyzing real data. She was also invited to present her work in Washington, D.C.

Multiple opportunities in graduate school prepared Dr. Meza for her career as a professor. In addition to teaching mathematics and statistics courses, she served as a student member of a faculty search committee. There, she saw first-hand how the committee deliberated and what qualities stood out during the selection process. Those insights proved useful as she developed skills during graduate school and later applied for faculty jobs.

A graduate degree and the teaching experience gained along the way can also advance you in other careers. Meza advised: “If you are considering graduate school, I think it’s helpful to understand how a graduate degree will help you with your career. For some careers a graduate degree is vital and for others it is not, but it may give you an advantage over other applicants,” she added.

After earning her Ph.D., Meza went directly into a faculty position at UNMC. What she likes most about working in academia is getting to do something new every day. She revealed, “I like the flexibility to research what I am interested in and I like collaborating with so many talented people. I love working with students and seeing them progress in their careers after they graduate.”

Alumni Spotlight: Jane Meza, Ph.D.

Since its founding in 1995, the University of Nebraska–Lincoln McNair Scholars Program has prepared hundreds of undergraduates for the next stage of their careers, including Dr. Jane Meza, the first UNL McNair alum to earn a Ph.D.

Today, Dr. Meza holds a faculty position at the University of Nebraska Medical Center (UNMC) in Omaha, where she is the Senior Associate Dean, Professor, and Chair of the Department of Biostatistics.

When asked how her career developed, starting with her first foray into research as an undergraduate, Jane shared, “As an undergraduate, I had a great advisor, Dr. Gordon Woodward, who encouraged me to study statistics. That was some of the best advice I ever received.” She took honors courses as well as one class with Dr. Jim Lewis, who was the Chair of the Department of Mathematics at the time. “Dr. Lewis was a great teacher and mentor,” she added.

Dr. Meza attributes her later success to the undergraduate research experience she gained through the McNair Scholars Program. She noted, “The McNair Program prepared me for graduate study because I was able to work with Dr. Jian-Jian Ren to study and learn how to prove theorems and develop new statistical techniques.” Together with Dr. Ren, they proved a theory in survival analysis. Meza added, “I had never been exposed to this area of statistics and it turned out to be something that I use almost every day in my work at UNMC.”

Research beyond the normal undergraduate coursework has proven fruitful for Dr. Meza’s career. She stressed that early research experience is “vital to graduate study; having someone work closely with me to develop these skills was very helpful.”

Jane entered a master’s program directly after earning her bachelor’s degree. She recalled, “This allowed me to keep the momentum going as far as my school work, and I was worried if I started working it would be difficult to go back to school again. I know that this was the right decision for me.”

Dr. Jane Meza
Senior Associate Dean, Professor and Chair
Department of Biostatistics
College of Public Health
University of Nebraska Medical Center
UNL McNair Scholar 1995–1996

McNair by the Numbers

Since the UNL McNair Scholars Program began in 1995, we’ve served 271 students. Excluding the 27 current Scholars, 238 of 244 – or 97.5 percent – have earned their bachelor’s degrees. Twenty-eight UNL McNair Program alumni have achieved Ph.D.s, 18 have earned professional degrees, and 116 have earned master’s degrees.

Currently, 30 UNL McNair alumni are enrolled in Ph.D. programs, 7 are pursuing master’s degrees, and 3 are pursuing professional degrees.
Alumni Awarded Prestigious Graduate Fellowships

Congratulations to these UNL McNair Alumni who were awarded fellowships during the past year:

**Rei Alcalde** (McNair Scholar 2010-2013) was awarded the W.M. Keck Foundation Graduate Fellowship. He is pursuing a civil and environmental engineering Ph.D. at the University of Texas at Austin.

**Michelle Haikalis** (McNair Scholar 2009-12) was awarded a three-year (2015-2018) NIH National Research Service Award (NRSA), supported by the National Institute on Alcohol Abuse and Alcoholism (NIAAA).

**Arlo McKee** (McNair Scholar 2003-06) was awarded a 2015-16 Pioneer Graduate Fellowship, funded by Pioneer Natural Resources. Arlo is pursuing a Ph.D. in geographic information systems at the University of Texas at Dallas.

**Jason Thomas** (McNair Scholar 2012-14) was awarded the Monsanto Fellows Graduate Assistantship, which will support his second through fourth years of graduate school. Jason is pursuing a Ph.D. in plant biological sciences at the University of Minnesota-Twin Cities.

Recent McNair Alumni Publications


*Indicates equal contribution by authors.
Alumni News: Advanced Degrees

Congratulations to these alumni who have recently earned advanced degrees:

Doctoral degrees

Anitra (Mallory) Warrior (McNair Scholar 2004-05) earned a master's degree in educational psychology from the University of Nebraska–Lincoln in December 2007, and a Ph.D. in psychological studies in education from UNL in August 2015. Dr. Warrior is currently working with the Minority Health Disparities Initiative and, together with the Nebraska Indian Center, is coordinating activities for the Nebraska Intertribal Health and Research Coalition.

Brian Shreck (McNair Scholar 2008-2009) earned a Ph.D. in political science from Texas A&M University in December 2015. Dr. Shreck is currently a postdoctoral research scholar with the Department of Political Science and National Wind Institute at Texas Tech University.

Melissa Tehee (McNair Scholar 2003-2005) earned a master's degree in psychology from Western Washington University in June 2007, a J.D. degree at the University of Arizona in May 2012, and a Ph.D. in clinical psychology, policy, and law at the University of Arizona in August 2015. Dr. Tehee is an Assistant Professor in the Department of Psychology, and the Director of the American Indian Support Project at Utah State University.

Master’s degrees

Mollie (Dittmer) Topil (McNair Scholar 2010-12) earned a master's degree in counseling from Doane College in December 2014. She is currently a mental health practitioner working in sex offender services at the Lincoln Regional Center.

Tony Gorman (McNair Scholar 2003-05) earned a master's degree in public media from Ohio University in August 2015. He is currently the general manager of KDLL 91.9 FM, a public radio station in Kenai, Alaska.

Michael Gubbels (McNair Scholar 2008-2011) earned a master’s degree in computer science, focused on human-computer interaction, from the University of Maryland-College Park in August 2015.

Brittany Jones (McNair Scholar 2010-2012) earned a master's degree in counselor education and a graduate certificate in marriage, couple, and family counseling from the University of Central Florida in December 2014.

Brandon Levander (McNair Scholar 2004-2006) earned a master's degree in engineering from the University of Nebraska–Lincoln in December 2014.

McNair Alumni: Thanks to all the UNL McNair Alumni who have completed the annual McNair Survey!
You may update your information at anytime: http://www.unl.edu/mcnair/scholarupdate.shtml

Research Journal Hosted on Digital Commons

The UNL McNair Scholars Program publishes an online research journal comprised of nine original articles written by Scholars under the guidance of their faculty mentors. The Journal is hosted at: http://digitalcommons.unl.edu/mcnair

Since Fall 2010, when our program began publishing the MSRJ, there have been over 6,000 full-text downloads. Between January 1 and November 30, 2015, there were 1,333 full-text downloads. The most frequently downloaded papers of the past 11 months were:

