



**McNair**  
News

# McNair Scholars Program

## University of Nebraska–Lincoln

Fall 2017

### Welcome, 2017 McNair Cohort!



**Taylor Billington** is a physics major from Bellevue, Nebraska.



**Trevor Fellbaum** is a computer science major from Bellevue, Nebraska.



**Darius Fox** is a nutrition and dietetics major from Bloomington, Illinois.



**Kiley Gilbert** is a psychology major from Pacific Junction, Iowa.



**Ashleigh Herrera** is a chemical engineering major from San Antonio, Texas.



**Carolyn Herrera** is a psychology major from Raymore, Missouri.



**Maham Javaid** is a biological sciences major from Papillion, Nebraska.



**Mahnoor Javaid** is a biological sciences and psychology double major from Papillion, Nebraska.



**Mark Nail** is a mechanical engineering major from Leawood, Kansas.



**Elizabeth Otto** is a psychology major from Lincoln, Nebraska.

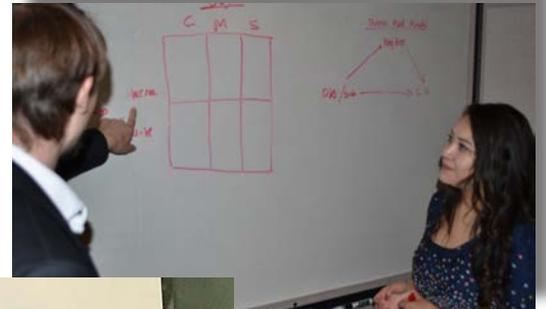
# Students Develop Passion for Research During MSRE

During the McNair Summer Research Experience (MSRE), Scholars have the opportunity to explore their research topic under the guidance of a faculty mentor and to develop skills critical for success in graduate school. After successfully completing their projects during the 2017 MSRE, seven UNL Scholars presented their results at the annual California McNair Symposium at UC-Berkeley. Each year, we ask the Scholars to reflect on what it means to be a McNair Scholar, as well as on their summer research experience and presenting at the Berkeley Conference. We've included their remarks on the following pages.

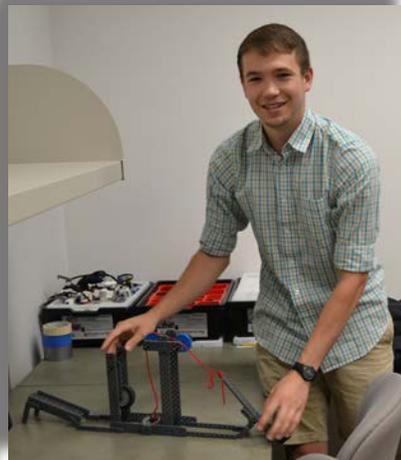


*"To be a scholar requires me to stay true to myself and my ambitions, actively pursuing*

*positive challenges to encourage self-growth. This newfound scholarship was not a product of a single skill building McNair session. Instead, this scholarship developed over the course of the entire experience. The McNair Program provided my ambition with direction, and the confidence to chase it."* – Cole Dempsey



*"I've been described as a scholar since middle school and I used to think 'scholar' was a word people used to describe someone who was smart. Today I do not think that grades are the sole definition of scholar, but it is someone who does not lose their desire to learn beyond the realms of academia. I can say with great assurance that I would indeed use the word scholar as an adjective for myself, especially after this experience."* – Lizeth Fraire



*"The MSRE has been such an incredible opportunity for me to grow as a scholar. I feel much more confident with my future research direction and feel like I have developed a much clearer picture of what research looks like in my field. The resources McNair offers to students is very enabling. I felt like I got out what I put in and then some."* – Colton Harper



*"A McNair Scholar is someone who is pursuing knowledge and is persistent in the realization of their goals. A McNair Scholar is inclusive and supports their fellow scholars. Most importantly a McNair Scholar never stops learning."* – Daisy Guiza Beltran



## MSRE Provides Graduate-Level Challenges



*"As a first-generation student, going to graduate school was not something that was ingrained in me by any means, so for me to be able to experience and learn about what it means to be a graduate student through the program is very valuable."* – **Grecia Macias**



*"During MSRE, my days were filled with conducting research experiments and those were followed by long nights analyzing my results. Even when experiments didn't go as planned, I still managed to push through with the guidance of my faculty mentor and the McNair staff, who were always there for me. That hard work allowed me to get this far in becoming a successful person. When I had the opportunity to present my research, I did it with passion and love."* – **Sonoor Majid**



*"This summer has been one of the most eye opening summers of my life. I learned a great deal about myself and grew both as a person and as a scholar. Before the summer began, I lacked confidence as a researcher, which is essential for graduate school, but that all changed once the McNair summer research program started. I learned that I am a great researcher because I never stop asking questions. I have the desire to find the answers, but most importantly, I have the desire to find the right answers."* – **Amanda Miller**



**Special Thanks** to the faculty, postdoctoral, and graduate student mentors who contributed their time and expertise to work with McNair Scholars during the 2017 McNair Summer Research Experience and who continue to support the Scholars' research and graduate application efforts.

Your support is invaluable to the success of our program!

## *Congratulations to December 2017 McNair Grad!*



**Daniel Rico, Omaha, Nebraska, earned his bachelor's degree in electrical engineering in December 2017. He conducted his McNair research and several UCARE projects with Dr. Francisco Muñoz-Arriola from the Department of Biological Systems Engineering. Daniel has been accepted and will be pursuing a master's degree in computer science and engineering at the University of Nebraska–Lincoln.**

## *2017-18 Postdoctoral & Grad Student Mentors*

The McNair Graduate Student and Postdoctoral Mentoring Program offers our UNL McNair Scholars a supportive community, as well as advice, insight, and encouragement as they conduct research and prepare to enter graduate school. In turn, it offers our mentors a chance to gain experience mentoring a rising scholar associated with one of the nationally-recognized Department of Education TRIO programs.

**We'd like to welcome the 2017-18 McNair postdoctoral and graduate student mentors!** They include: Jenn Andersen, sociology; Michelle Howell, Ph.D., biological sciences; Aditya Immaneni, computer science & engineering; Vincent Perez, biochemistry; Trace Vardsveen, psychology; Lingjun Yu, Ph.D., chemistry; and Mohsen Zahiri, Ph.D., mechanical & materials engineering.

They join continuing graduate mentors: Pooja Ahuja, computer science; Chandra Bautista, psychology; Jess De Silva, mathematics; and Chrissy Richardson, counseling psychology.

Since the UNL McNair Scholars Program began in 1995, we've served **288** students.

Excluding the continuing Scholars, **97.7 percent** have earned their bachelor's degree.

**Thirty-eight** UNL McNair Program alumni have achieved **Ph.D.s**, **128** have earned master's degrees, and **19** have earned professional degrees. Currently, **24** UNL McNair alumni are enrolled in Ph.D. programs, **9** are pursuing master's, and **3** are pursuing professional degrees.

## Scholars Awarded 2017-18 UCARE Grants

UNL McNair Scholars have received research funding from the Undergraduate Creative Activities and Research Experiences (UCARE) Program, funded by the Pepsi Endowment and Program of Excellence funds. Eleven UNL McNair Scholars received awards for Academic Year 2017-18.

Scholar	Project Title and Faculty Research Advisor
Myrianna Bakou	<b>UCARE Project:</b> <i>Predictors of Objectifying Behaviors Using the Social Interaction Model of Objectification</i> <b>Faculty Advisor:</b> Dr. Sarah Gervais, Department of Psychology
Kyly Baxter	<b>UCARE Project:</b> <i>The Relationship between Expectancies for Success and Perceived Cultural Barriers for Rural Latinos</i> ; <b>Faculty Advisor:</b> Dr. Debra Hope, Department of Psychology
Cole Dempsey	<b>UCARE Project:</b> <i>Analysis of a Mobile Support Device for Late-Stage Rehabilitation</i> <b>Faculty Advisor:</b> Dr. Carl Nelson, Department of Mechanical and Materials Engineering
Lizeth Fraire	<b>UCARE Project:</b> <i>Male Objectification in the Workplace</i> <b>Faculty Advisor:</b> Dr. Richard Wiener, Department of Psychology
Kiley Gilbert	<b>UCARE Project:</b> <i>Decisions Concerning Latino Defendants in the Face of Extra Legal Information</i> <b>Faculty Advisor:</b> Dr. Cynthia Willis-Esqueda, Department of Psychology
Daisy Guiza Beltran	<b>UCARE Project:</b> <i>Structural and Mechanical Analysis of Mycobacterium Tuberculosis WhiB7 in Stress Response and Antibiotic Resistance</i> ; <b>Faculty Advisor:</b> Dr. Limei Zhang, Department of Biochemistry
Colton Harper	<b>UCARE Project:</b> <i>Measuring Information Exchange in Engineered Molecular Communications Between Biological Cells</i> ; <b>Faculty Advisor:</b> Dr. Massimiliano Pierobon, Computer Science & Engineering
Maham Javaid	<b>UCARE Project:</b> <i>Determine the Function HESO1 in Maintaining miRNA Activity in Maize</i> <b>Faculty Advisor:</b> Dr. Bin Yu, School of Biological Sciences
Grecia Macias	<b>UCARE Project:</b> <i>Using Heart Rate Variability to Assess Physiological Reactions Caused by Racial Discrimination</i> <b>Faculty Advisor:</b> Dr. Bridget Goosby, Department of Sociology
Sonoor Majid	<b>UCARE Project:</b> <i>Assessing the Levels of DHA in Pregnant Women in Zambia, in Relation to Fetal Brain Development</i> ; <b>Faculty Advisor:</b> Dr. Concetta DiRusso, Department of Biochemistry
Amanda Miller	<b>UCARE Project:</b> <i>The Application of the Predatory Behavior of <i>Lysobacter</i> Can Provide a Useful Method to Combat Algae Blooms</i> ; <b>Faculty Advisor:</b> Dr. Liangcheng Du, Department of Chemistry

## UNL McNair Scholars Research Journal

The UNL McNair Scholars Program publishes an online research journal to showcase researchers who might not otherwise have another outlet for publication. The McNair Scholars Research Journal (MSRJ) is hosted at: <http://digitalcommons.unl.edu/mcnair>. Since Fall 2010 when our program began publishing the MSRJ, there have been almost 8,300 full-text downloads. Between October 1, 2016 and September 30, 2017, there were almost 1,200 full-text downloads. The most downloaded papers of the past 12 months were:

**Cosset, T.** (2010). Child Sexual Abuse Victims and their Families Receiving Services at a Child Advocacy Center: Mental Health and Support Needs. (385 downloads). <http://digitalcommons.unl.edu/mcnairjournal/1/>

**Lundahl, A.,** West, T., Martin, E. K., Campbell, C., Vanderbeek, J., & Hansen, D. J. (2011). Relationship of Obsessive-Compulsive Behaviors of Primary Caregivers with a History of Sexual Abuse and Perfectionism in their Sexually Abused Children. (193 downloads). <http://digitalcommons.unl.edu/mcnairjournal/5/>

**Ali, M.** (2011). Debt Relief or Debt Cycle: A Secondary Analysis of the Heavily Indebted Poor Countries (HIPC) Initiative in African Nations. The UNL McNair Scholars Research Journal. (175 downloads). <http://digitalcommons.unl.edu/mcnairjournal/6/>

## Melissa Norberg, Ph.D. Shares her McNair Story

I grew up in a small, rural town in Nebraska. Few people, myself included, thought I was smart. Rather than taking physics and geometry classes during high school, I opted for remedial math, home economics, and making the high school yearbook. Through what seemed like luck, rather than intellect, I became the high school yearbook editor.

Becoming editor of the yearbook encouraged me to obtain a university degree. While at the University of Nebraska-Lincoln, I took a “Careers in Psychology” class that put me on the path to becoming an academic clinical psychologist. That class taught me that it would be a long and competitive path. So, I followed its advice. I maintained a high GPA, volunteered, and obtained research experience. However, that research experience was in the field of perception, which while highly useful in teaching me about research methodology, it taught me little about conducting clinical research.

During the final year of my undergraduate degree, I was accepted into the McNair program. The McNair program linked me up with Dr. Debra Hope, an academic clinical psychologist. Under Dr. Hope’s supervision, I completed an Honors project that examined the role that clients’ expectations have on therapy outcomes. Conducting research in Dr. Hope’s lab allowed me to gain the exact type of clinical research experience I needed to be accepted into a doctoral program for clinical psychology. During graduate school, I led a team of students in developing an empirically-based instrument to measure clients’ expectations about treatment. This measure was published and has been translated into a handful of different languages by other researchers. Thus, the influence of the McNair Program and Dr. Hope did not end with my undergraduate degree.

I am now an Associate Professor and the Deputy Director of the Centre for Emotional Health at Macquarie University. Macquarie University’s psychology department is ranked within the top 100 psychology departments in the world and the Centre for Emotional Health is one of the premier research centers on anxiety in the world.



**Melissa M. Norberg, Ph.D.**  
UNL McNair Alum  
*Photo Courtesy of Chris Stacey*

Within my current roles, I teach undergraduate and graduate classes, provide empirically-supported treatment to individuals suffering from anxiety and obsessive-compulsive disorders, mentor students and early career researchers, and conduct research that is focused on helping people reduce unwanted behavior. My research has been supported by numerous different funding bodies and has led to over 60 publications. Furthermore, my research output gave me a profile conducive to becoming a Director for the Australian Association for Cognitive and Behaviour Therapy, a national body for professionals interested in evidenced-based practice. In addition, I am currently serving as Convenor for the association’s 38th National Conference.

Thinking back, I wonder what career I would be in if it wasn’t for the McNair Scholars Program. I may not have received the clinical research experience I needed to go directly into a doctoral program after completing my undergraduate degree. I also may not have received the invaluable mentoring that occurred during the program.

I want my story to serve as a motivator to young people, especially disadvantaged females, that they can obtain a successful STEM career. I am a minority, my parents are uneducated, and I grew up in a rural community with limited academic opportunities. The McNair Program was an essential step on my pathway to achieving my dream job—and much more.

**If the UNL McNair Scholars Program or other TRIO programs have made a positive impact on your life, it’s important to share your story in an articulate, respectful manner with your senators and representatives. Stand up and let your voices be heard! These are the contacts for Nebraska:**

Senator Deb Fischer, <https://www.fischer.senate.gov/public/?p=email-deb>

Senator Ben Sasse, <https://www.sasse.senate.gov/public/index.cfm/email-ben>

Congressman Jeff Fortenberry, <https://fortenberry.house.gov/contact/email-me>

Congressman Don Bacon, <https://bacon.house.gov/contact/email>

Congressman Adrian Smith, <https://adriansmith.house.gov/contact-me/email-me>

## Bailey Driven by Passion for Research

McNair Scholars and other potential graduate students often are concerned about whether they will be able to balance the rigors of graduate study with their personal and family responsibilities outside of the laboratory and classroom. We caught up with Dr. Katie (Haferbier) Bailey to learn about her experience balancing her personal life while meeting graduate school expectations. Dr. Bailey earned her Ph.D. in cancer research from the University of Nebraska Medical Center (UNMC) in May 2017.

**“Nothing worth having will come easy. You have to fight for what you want.”**

Dr. Katie Bailey knows firsthand how important it is to find a work-life balance during graduate school. In addition to her obligations as a graduate student, Dr. Bailey was also married and had a child. She noted that the first couple of years of graduate school were the most difficult. In addition to attending to your responsibilities outside of academia, Dr. Bailey said, “You’re trying to balance working in a lab and doing research with class work.”

To balance her personal life and the demands of graduate school, Dr. Bailey treated graduate school like a job. “I would go in and work hard while I was there and then come home to take care of my family,” Bailey commented. When she had to do graduate coursework on the weekends or at night, she credits her husband and family for being a great support system. Her husband was working on his M.D. at the same time, so it was difficult at times because he had a very busy schedule. Bailey shares, “You just have to make it work the best way you can...you need to have a really good support team.”

Dr. Bailey developed the confidence that she could succeed in graduate school by observing her McNair mentor, Dr. Melanie Simpson. Dr. Bailey described the influence that Simpson had on her, emphasizing, “She was very inspiring because she went through undergraduate and graduate school with small children and now has her own independent lab. I realized that it’s possible to have a family and also have a great career.”



Katie (Haferbier) Bailey, Ph.D.  
UNL McNair Scholar (2009-11)



Katie, Zayne, and Zach Bailey

In addition to modeling work-life balance, Dr. Simpson also helped Bailey find her passion for cancer research. Bailey recalled, “Through the McNair Program, I found a mentor and started to do research and realized how much I loved discovering the unknown and potentially finding a new therapy for people who suffer from cancer.”

This passion for research continues to guide Dr. Bailey today. In the near future, Dr. Bailey will start a postdoc in UNMC’s pathology and microbiology department focusing on pancreatic cancer research.

Although completing a postdoc may be difficult, Dr. Bailey’s experiences of juggling responsibilities in and out of the laboratory as a graduate student have prepared her for the difficult work that lies ahead. Dr. Bailey believes that, “Nothing worth having will come easy. You have to fight for what you want.”

Ultimately, Dr. Bailey hopes that her hard work and commitment will allow her to operate her own lab one day so she can continue her cancer research.

When asked for advice for current McNair scholars, Bailey urged students to have strength and courage. “There will be self-doubt about whether you can get through graduate school, but just remember everyone has those feelings,” Bailey encouraged, “If you keep going, eventually you will succeed.”

**McNair Alumni** – keep us informed as you advance through your career, including progress in graduate school, publications, and other milestones. You may update your information at anytime: <http://www.unl.edu/mcnair/scholarupdate.shtml>

# UNL McNair Alumni Earn Advanced Degrees

We applaud these UNL McNair alumni who earned advanced degrees during 2016-17:

## Doctoral degrees

**Morgan (Conley) McCain, Ph.D.** (McNair Scholar 2008–2010) earned a master's degree in counseling psychology in May 2013 from the University of Nebraska–Lincoln and a Ph.D. in counseling psychology in August 2017 from UNL. Dr. McCain is a psychologist at the University of Houston's Counseling and Psychological Services.

**Martin Diaz, Ph.D.** (McNair Scholar 2006–2009) earned a master's degree in electrical engineering from the University of Delaware in December 2011 and a Ph.D. in photovoltaic engineering from the University of New South Wales in March 2017.

**Justin Escamilla, Ph.D.** (McNair Scholar 2009–2011) earned a master's degree in criminology, law, and justice at the University of Illinois at Chicago (UIC) in May 2013 and a Ph.D. in criminology, law, and justice from UIC in May 2017.

**Katie (Haferbier) Bailey, Ph.D.** (McNair Scholar 2009–2011) earned a Ph.D. in cancer research from the University of Nebraska Medical Center (UNMC) in May 2017. She is currently working as a postdoctoral fellow conducting pancreatic cancer research in the Department of Pathology and Microbiology at UNMC.

**Nathan Palmer, Ph.D.** (McNair Scholar 2004–2006) earned a master's degree in sociology from the University of Nebraska–Lincoln in December 2008 and a Ph.D. in sociology from UNL in May 2017. Dr. Palmer is a senior lecturer in the Department of Sociology and Anthropology at Georgia Southern University.

**Erica Rogers, Ph.D.** (McNair Scholar 2004–2006) earned a master's degree in English from the University of Nebraska–Lincoln in August 2012 and a Ph.D. in English at UNL in May 2017. Dr. Rogers is a visiting associate professor-lecturer at the University of Wisconsin-Eau Claire.

**Tyler Scherr, Ph.D.** (McNair Scholar 2009–2011) earned a Ph.D. in pathology and microbiology from the University of Nebraska Medical Center in December 2016. Dr. Scherr is a Licensing Intern at UNeMed, the technology transfer arm of UNMC and UNO.

## Master's degrees

**Jenn (Milliman) Andersen** (McNair Scholar 2013–2015) earned a master's degree in sociology from the University of Nebraska–Lincoln in May 2017. She is pursuing a Ph.D. in sociology at UNL.

**Erandi Herndon** (McNair Scholar 2012–2015) earned a master's degree in marriage and family therapy from Colorado State University in May 2017. She is currently working as a family therapist at La Cocina, which provides Spanish-speaking therapy services for the Latino community, as well as services to therapy groups to help cope with stress.

## Career Updates

**Rebecca Beals, Ph.D.** (McNair Scholar 2007–09) is an assistant professor in the Department of Sociology at the University of Northern Colorado.

**Sahar Hasim, Ph.D.** (McNair Scholar 2006–2008) is a postdoctoral fellow in the Department of Plant Pathology at Auburn University.

**Masoud Mahjouri Samani, Ph.D.** (McNair Scholar 2006–2008) is an assistant professor in the Department of Electrical and Computer Engineering at Auburn University.

**Brian Shreck, Ph.D.** (McNair Scholar 2008–2009) is the Director of the McNair Scholars Program at the University of Wyoming.



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