

# University of Wyoming McNair Scholars Summer 2018 Newsletter



## 2017-2018 McNair Scholars:

Front Row (L to R): James Hedeem, Clay Carper, Alex Greenwald, Ashley Harris, Tara Brunner, Taylor Orton, Natalie Thibault

Back Row (L to R): Shaelynn Kaufman, Marissa Murr, Olivia Terry, Veronica Spaulding, Monique Weaver, Logan Fairborne, Jonét Jennings

Photo Credit: Renegade Images

August 2018

## Greetings from the UW McNair Program

It has been an eventful year for the University of Wyoming McNair Scholars Program, now in its 26th year of continuous service to the University of Wyoming. This year, 13 new talented and driven scholars joined the program and we bid farewell to 18 who graduated from UW and are moving on to the next chapters of their lives and academic careers. For many of them, this includes enrollment in graduate school this fall. Some are staying at UW to continue working with faculty under whom they conducted research as McNair Scholars, while others are moving on to new adventures elsewhere, including the University of Illinois, University of Iowa, University of Nevada, and University of Nebraska at Omaha. ***For a list of where each student is going to graduate school, see the story on our graduates on p. 3. Congratulations to all the graduates!***

## New Cohort of Scholars Joins UW McNair

This year's new Scholars come from a variety of academic disciplines, ranging from Criminal Justice to Astrophysics. These students were accepted into the program during fall 2017 and early spring 2018, and began the intensive process of framing and undertaking original research projects with a series of workshops beginning in February. The workshops covered topics such as identifying and narrowing a research topic, identifying and contacting potential faculty mentors, and writing a literature review and research proposal, as well as broader, holistic topics such as academic professionalism and the "imposter phenomenon." The students then completed their funded eight-week summer research internship, which culminated in presenting their completed research at the 26th Annual UW McNair Scholars Research Symposium on July 30. ***See p. 3 for more about the current Scholars and their exciting research projects.***

### Inside this issue:

Scholar Spotlight: Scholar Interns at National Laboratory	2
Meet the 2018 Summer Research Interns	3
Scholars Entering Graduate School	3
McNair by the Numbers	4
Alumni Updates	4
Contact Information	4

# Scholar Spotlight: UW McNair Alumna Completes Internship at National Laboratory

Photo by Renegade Images

This summer, UW McNair Scholar Olivia Terry completed a summer internship at the Lawrence Berkeley National Laboratory (LBL) in Berkeley, California. The internship was part of a U.S. Department of Energy program called Student Undergraduate Laboratory Internship (SULI). Olivia graduated from UW in May 2018 with her Bachelor of Science degree in Geology & Geophysics, and soon thereafter headed west to pursue this opportunity to conduct research under the mentorship of cutting-edge specialists in her field.

During her internship, Olivia worked in the Energy Geosciences Division at LBL with Dr. Bhavna Arora. Her research project this summer analyzed the effects of “biosouring” in oil reservoirs. This is a process by which microorganisms flourish in an oil reservoir when seawater is injected into the reservoir to direct the flow of oil toward a production well, Olivia explains. The microbes reduce the quality of the oil, produce hydrogen sulfide (which is corrosive to equipment and hazardous to workers on the surface), and produce “biofilms,” which clog fractures and thus impede oil recovery efforts. “My purpose for the summer was to use experiments to analyze how biofilms form in different fracture orientations so that simulations used in reactive transport models can use these parameters to predict how an oil reservoir that has soured will be affected by biofilm accumulation.”

That was pretty surreal.” She says that meeting and making friends with other interns was another highlight of the experience, and she looks forward to maintaining those professional relationships throughout her career.

When asked how her experience as a McNair Scholar at UW helped prepare her to apply for and complete this internship, Olivia believes that being a McNair Scholar and having conducted her own original research project increased her odds of being accepted into the SULI program. Olivia also says that the assignments she was required to complete as a McNair Scholar, such as writing a literature review to help organize her thoughts for a research project, were essential for the environment in which she worked at LBL. And having research experience through the McNair Program helped her to prepare for what a demanding lab setting would be like, as well as understanding that the research process does not always go according to plan. “[I]t helped me mentally prepare for when our plans for the week were delayed or when we had to redo a procedure. Research can be exhausting; sometimes you just have to go for a walk and clear your head.”



“I was able to see how research scientists interact, collaborate, and produce an experiment. It was a wonderful and insightful experience.”

Olivia says her experience this summer working in a national laboratory taught her multiple important lessons. “I would say the biggest lesson I have learned at LBL is the importance of teamwork and communication. In today’s world, teamwork is necessary for almost everything. This is especially true when dealing with multiple factors such as growing microorganisms, preparing rock, testing flow characteristics, keeping a sterile environment, and ensuring the small day-to-day tasks are finished... Once I arrived at LBL, I realized that my project was not only my mentor and I, but multiple scientists and multiple organizations. This was crucial for understanding all of the factors that go into creating an experiment. I was able to see how research scientists interact, collaborate, and produce an experiment. It was a wonderful and insightful experience.”

Asked what were the highlights of her internship, Olivia says that meeting research scientists is high on her list. “I was having lunch with scientists whose papers I read in seminars.

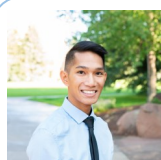
Olivia will return to UW this fall as a graduate student in the Department of Geology & Geophysics, where she will begin working toward her master’s degree and continue working with Dr. John Kaszuba, who mentored her undergraduate research. Ultimately, she plans to earn her Ph.D. in Geology. Olivia says this summer internship experience at the national laboratory has been influential on her educational and professional goals. “I would say this experience has been a great insight into working at a national laboratory. It has broadened my view on which schools to apply to for my Ph.D. I think overall it has affirmed that I want to work in a national lab one day.”

Congratulations on all your achievements thus far, Olivia! We are excited to see where your hard work and dedication take you next!

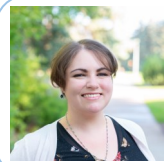
# Meet the 2018 McNair Summer Research Interns



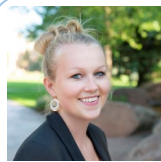
**Andrea Alzalde**  
**Major:** Psychology  
**Project:** "Sexual Assault, Victimization, Perpetration, and Associated Beliefs among High-Risk College Groups"  
**Mentor:** Dr. Matt Gray  
**Hometown:** Milwaukee, WI



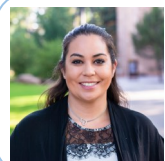
**Jelard Aquino**  
**Major:** Physiology  
**Project:** "Comparative Analysis of RNAseq Data of White Pine Blister Rust on Five-Needle Pines"  
**Mentor:** Dr. Vikram Chhatre  
**Hometown:** Cheyenne, WY



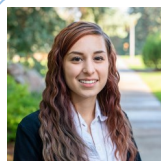
**Jessica Evans**  
**Major:** Sociology  
**Project:** "Voluntary Association Participation in Small Town Iowa"  
**Mentor:** Dr. Matthew Painter  
**Hometown:** Rock Springs, WY



**Autumn Hopkin**  
**Major:** Kinesiology & Health  
**Project:** "A Unimanual Coordination Task for the Detection of mTBI History"  
**Mentor:** Dr. Qin "Arthur" Zhu  
**Hometown:** Greybull, WY



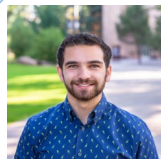
**Shelby Mikkelson**  
**Major:** Criminal Justice  
**Project:** "Forever Punished: How Society Punishes Ex-Felons"  
**Mentor:** Dr. Kimberly Schweitzer  
**Hometown:** Laramie, WY



**Kayla Mohler**  
**Major:** Psychology  
**Project:** "A Study on the Ideological Constructs that Influence Rape Myth Acceptance"  
**Mentor:** Dr. Matt Gray  
**Hometown:** Cheyenne, WY



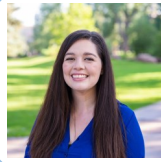
**McKenzie Peterson**  
**Major:** Geology & Geophysics  
**Project:** "The Mobility of Rare Earth Elements in the Sherman Granite Aquifer"  
**Mentor:** Dr. John Kaszuba  
**Hometown:** Star Valley, WY



**Joshua Sheinberg**  
**Major:** Economics & Statistics  
**Project:** "Regression vs. ANOVA: Which to Choose?"  
**Mentor:** Dr. Stephen Bieber  
**Hometown:** Broomfield, CO



**Rebecca Sorber**  
**Major:** Astronomy & Physics  
**Project:** "Did a Planet Survive a Post-Main Sequence Evolutionary Event?"  
**Mentor:** Dr. Hannah Jang-Condell  
**Hometown:** Laramie, WY



**Alexis Trujillo**  
**Major:** Psychology  
**Project:** "Are Internalizing Symptoms Associated with Criminal Behavior in Married Couples?"  
**Mentor:** Dr. Robin Barry  
**Hometown:** Loveland, CO



**Holly Trujillo**  
**Major:** Communication Disorders  
**Project:** "Speech Language Pathologists Serving Students with Traumatic Brain Injury: A Qualitative Study"  
**Mentors:** Dr. Erin Bush & Dr. Mary Jo Cooley Hidecker  
**Hometown:** Sheridan, WY



**Kaylee Tuttle**  
**Major:** Mathematics & Education  
**Project:** "Secondary Prospective Teachers' Understanding of the Cognitive Demand of Mathematics Tasks"  
**Mentor:** Dr. Michelle Chamberlin  
**Hometown:** Rock Springs, WY



**Juan Diego Vintimilla Cordoba**  
**Major:** Psychology  
**Project:** "The Role of Self-Compassion During Interactions in a Second Language"  
**Mentor:** Dr. Benjamin Wilkowski  
**Hometown:** Cuenca, Ecuador

**Photos by Renegade Images**

[wyomingrenegadeimages.com](http://wyomingrenegadeimages.com)

## Scholars Entering Graduate School

- **Tara Brunner**, Psychology, graduated from UW in May 2018 and is going to the University of Nebraska at Omaha for her Master of Social Work degree.
- **Clay Carper**, Mathematics, graduated from UW in December 2017 and began his master's degree in Mathematics at UW in the spring 2018 semester.
- **Alex Greenwald**, Environment & Natural Resources/Geography, graduated from UW in May 2018 and is going to the University of Nevada, Reno for his master's degree in Geography.
- **Joshua Hopkin**, Communication & Journalism/Political Science, graduated from UW in May 2018 and will begin pursuing his Master of Public Administration degree at UW in the fall.
- **Shaelynn Kaufman**, Geology & Geophysics, graduated from UW in May 2018 and is going to the University of Illinois for her Ph.D. in Geology.
- **Olivia Terry**, Geology & Geophysics, graduated from UW in May 2018 and will begin her master's degree in Geology & Geophysics at UW in the fall.
- **Alexandra "Monique" Weaver**, Biology, graduated from UW in May 2018 and is going to the University of Iowa for her Ph.D. in Genetics.

# University of Wyoming McNair by the Numbers

## Did you know?

Given its beginning in **1992**, the UW McNair Scholars Program is one of the longest standing McNair programs in the country. Since that time, we have **served 340 students**, with **62 earned Ph.D.s**. Among the 2016 graduating cohort, **83% enrolled in graduate school immediately following graduation**. Among the 2006 graduating cohort, **30% earned a doctoral degree** within 10 years of graduating from UW.

## Alumni Updates

- **Erin Anders**, UW McNair Class of 2013, earned her Ph.D. in Crop & Soil Sciences from Michigan State University in May 2018.
- **Nathan Fletcher**, UW McNair Class of 2012, earned his Ph.D. in Chemical Engineering from the Colorado School of Mines in December 2017.
- **Ashley Hopkin**, UW McNair Class of 2016, earned her master's degree in Communication Disorders from the University of Kansas in May 2018.
- **Dylan McCurdy**, UW McNair Class of 2016, earned his master's degree in Communication & Journalism from the University of Wyoming in May 2018 and is headed to the University of Hawaii to pursue his Ph.D.
- **Michael Trujillo**, UW McNair Class of 2015, earned his master's degree in Political Science from Portland State University in August 2018.

## Contact Information

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