Welcome McNair Scholars 2016-2017

Mary Carroll  
Major: Kinesiology  
Sheila Griffin  
Major: Psychology  
Melissa Pena  
Major: Geology

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Alumni News

Fall 2016  
Lori “Jae” Cerda  
Lauren Davila  
Lorisa Gallardo  
Andrea Zelaya

Spring 2017  
Amber Bachner  
Vanessa Barker  
Leanna De Leon  
Anna Haga  
Austin “Rose” Heilman  
Maritza Hernandez  
Corbin Lewis  
Jermeka Morrison  
Shane Smith  
Stephanie Tiet  
Kelli Walker

Summer 2017  
Jessa Rubi Castro  
Sheila Griffin  
Michelle McGaha  
Cynthia Soliz  
Megan Woods
## Congratulations to our 2017 McNair Scholars Graduates

<table>
<thead>
<tr>
<th>Student</th>
<th>Degree</th>
<th>Major</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lori “Jae” Cerda</td>
<td>B.A.</td>
<td>Psychology</td>
<td>Fall 2016</td>
</tr>
<tr>
<td>Lauren Davila</td>
<td>B.S.N.</td>
<td>Nursing</td>
<td>Fall 2016</td>
</tr>
<tr>
<td>Lorisa Gallardo</td>
<td>B.S.N.</td>
<td>Nursing</td>
<td>Fall 2016</td>
</tr>
</tbody>
</table>

## McNair Faculty Mentors

Thank you to the following Texas A&M University–Corpus Christi faculty members who support the program by mentoring and directing research. McNair would not be a successful program without their dedication.

### College of Science and Engineering
- Dr. Mark Besonen
- Dr. Eugene Billiot
- Dr. Feri Billiot
- Dr. Chris Bird
- Dr. Gregory Buck
- Dr. Xavier Gonzales
- Dr. James Hogan
- Dr. Scott King
- Dr. Chuntao Liu
- Dr. Ruby Mehrubeoglu
- Dr. Paul Montagna
- Dr. Dorina Murgulet
- Dr. Valeriu Murgulet
- Dr. Christopher Patrick
- Dr. Alaa Sheta
- Dr. Lee Smee
- Dr. Greg Stunz
- Dr. Magesh Thiyagarajan
- Dr. Dugan Um
- Dr. Benjamin Walther
- Dr. Kim Withers
- Dr. Paul Zimba

### College of Education
- Dr. Randy Bonnette
- Dr. Donald Melrose
- Dr. Bethanie Pletcher
- Dr. Frank Spaniol
- Dr. Corinne Valadez

### College of Nursing & Health Sciences
- Ms. Carmen Hernandez
- Dr. Cathy Miller
- Dr. Christina Murphey

### College of Liberal Arts
- Dr. Isabel Araiza
- Dr. Pamela Brouillard
- Dr. Lisa Comparini
- Dr. Charles Etheridge
- Dr. Gina Glanc
- Dr. Mark Hartlaub
- Dr. Sam Hill
- Dr. Amy Houlihan
- Dr. Michael Jin
- Dr. Melissa Jarrell
- Dr. Miguel Moreno
- Dr. Michelle Maresh-Fuehrer
- Dr. Catherine Quick
- Dr. Pamela Meyer
- Dr. Philip Rhoades
- Dr. Michael Ramirez
- Dr. Steve Seldel
- Dr. Carey Rote
- Dr. Anthony Zoccolillo
The TRIO Islanders student organization, in conjunction with the Programs for Academic Student Support (PASS) at Texas A&M University-Corpus Christi, held the first-ever TRIO Awards Banquet on March 25 to honor more than 60 student participants from TRIO Student Support Services, Student Support Services-STEM, Student Support Services-TEACH, McNair Scholars Program, Title V-Project GRAD, and FIRST IN THE WORLD. The banquet provided recognition to students who have excelled in their studies, been active members in the programs, TRIO Islander students were acknowledged for their outstanding community service.

McNair Scholars received the following awards:

**Austin “Rose” Heilman** received the Rising Star Award. Rose is a senior majoring in Psychology and was mentored by Dr. Seidel. Austin “Rose” recently finished research and is set to present her on May 2017 at the 29th APS Annual Convention in Boston, MA. Austin “Rose” has been accepted to Ph.D. in Psychology at the University of Houston.

**Clyde Avalos** received the Outstanding McNair Scholar Award. Clyde is a senior majoring in Mechanical Engineering and is mentored by Dr. Magesh Thiyagarajan for his McNair research project. He will be presenting his research May 2017 at the 44th IEEE International Conference on Plasma in Atlantic City, New Jersey. He will be graduating in December 2017.

**Alfonso Cohuo** received the Outstanding McNair Scholar Award. Alfonso is a senior majoring in Marine Biology and is mentored by Dr. Benjamin Walther for his McNair research project. He presented his research in October 2016 at the National McNair Conference in Miami, FL. He will be graduating in December 2017.

**Michelle McGaha** received the Outstanding McNair Scholar Award. Michelle is a senior majoring in Bio-Medical Science and is mentored by Dr. Xavier Gonzales for her McNair research project. She will be attending the University of Nebraska-Omaha in Fall 2017.

**Corbin Lewis** received the Superstar Award. Corbin is a senior majoring in Chemistry and worked with Dr. Eugene Billiot for his McNair research project. He will be seeking a Ph.D. in Chemistry at the University of California in Riverside in Fall 2017.
Amber Bachner
Major: Psychology
Faculty Mentor: Lisa Comparini, Ph.D.

Vanessa Barker
Major: Psychology/Sociology
Faculty mentor: Isabel Araiza, Ph.D.
Research Project: Do Inclement weather events cause a surge in Emergency Room visits by those who are living in the colonias in Nueces County?

Katrina Cantu
Major: Elementary Education
Faculty mentor: Bethanie Fletcher, Ph.D.
Research Project: Students’ Book Choices During Texas Bluebonnet Book Award Voting.

Mary Carroll
Major: Kinesiology
Faculty mentor: Frank Spaniol, Ph.D.

Jessa Rubi Castro
Major: Psychology
Faculty mentor: Steve Seidel, Ph.D.

Sheila Griffin
Major: Psychology
Faculty mentor: Sam Hill, Ph.D.

Anna Haga
Major: Nursing
Faculty mentor: Carmen Hernandez, RN MSN
<table>
<thead>
<tr>
<th>Name</th>
<th>Major</th>
<th>Faculty Mentor</th>
<th>Research Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Martinez</td>
<td>Electrical Engineering</td>
<td>Cosmina Nicula</td>
<td>Is there a configuration of static magnetic fields that can optimally reduce (or worsen) the skin effect of a conductor?</td>
</tr>
<tr>
<td>Cody Porter</td>
<td>Biology</td>
<td>Xavier Gonzales, Ph.D.</td>
<td>To determine the efficiency of fungi mycelium to filter aquaculture farm effluent to meet discharge limits set by Texas Commission for Environmental Quality (TCEQ) and Environmental Protection Agency (EPA).</td>
</tr>
<tr>
<td>Cynthia Soliz</td>
<td>Biology</td>
<td>Christopher Bird, Ph.D.</td>
<td>Determining genetic relatedness among crassostrea virginica reef to better understand recruitment and develop better restoration methods.</td>
</tr>
<tr>
<td>Kelli Walker</td>
<td>Psychology</td>
<td>Pamela Brouillard, Ph.D.</td>
<td>Attitudes about Direct to Consumer Advertising, Drug Use, and Social Media Use in College Students.</td>
</tr>
<tr>
<td>Megan Woods</td>
<td>Biology</td>
<td>Jeffrey Turner, Ph.D.</td>
<td>How does the Enterococcus population differ before and after heavy rainfall events?</td>
</tr>
</tbody>
</table>
The third McNair Scholars Research Journal article signing was held Wednesday, April 12, in the Mary and Jeff Bell Library at Texas A&M University-Corpus Christi. This unique event allowed the 2016 McNair Scholars to publicly sign their research articles for students, staff, and faculty.

The following Texas A&M University-Corpus Christi McNair scholars participated:

- Lori “Jae” Cerda, “To Give Up or Not? Does Learned Helplessness Effect Problem Solving Behaviors?” Mentor: Dr. Miguel Moreno
- Alfonso Cohuo, “Condition Factors of Fish in Response to Hypoxia Exposure.” Mentor: Dr. Benjamin Walther
- Corbin Lewis, “Investigation of Micelle Formation with Molecular Modeling and NMR.” Mentor: Dr. Eugene Billiot
- Michelle McGaha, “Water Bears: Identification of Marine Tardigrada Within Corpus Christi Bay, A Texas Coastal Waterway.” Mentor: Dr. Xavier Gonzalez
- Jermeka Morrison, “Examining Distracted, Aggressive, and Improper Driving Behaviors in Nueces County 2016.” Mentor: Dr. Phillip Rhoades
- Zoe Ramos, “Effect of Ph and Counterion Choice on the Chiral Separation of Binaphthyl Derivatives by L-Undecyl-Leucine Surfactants.” Mentor: Dr. Fereshteh Billiot
- Elisa Silva, “I’m Not Some Weirdo!: Stigma Management Among Consumers of Japanese Media.” Mentor: Dr. Michael Ramirez

TRiO National Day of Service

On Saturday morning, February 25th, students and staff from the TAMUCC McNair Scholars Program and Student Support Services Programs met to organize and take donations to the Salvation Army. The students had been collecting donation items, such as extra clothes, over the previous four weeks and met early Saturday for breakfast before loading up the donations for the trip to the Salvation Army facility.

TAMUCC’s TRiO programs were able to collect and donate items ranging from clothing, shoes, and handbags to household necessities. The TRIO Community Service Event gives students the chance to give back to their community by engaging in charitable activities to benefit the public. We thank all the campus for the many donations to make a difference in their community by helping the less fortunate.
Scholar Graduates: Where are they Headed

We would like to congratulate the 2016-2017 cohort of graduate scholars. They have done many wonderful things during their time at TAMUCC and are representing the TAMUCC McNair Scholars Program well in their respective graduate programs.

Corbin Lewis: Ph.D. program in Chemistry at the University of California in Riverside.

Matt Brown: Ph.D. program in Psychology at Texas A&M University.

Michelle McGaha: Master’s Program in Business Administration at the University of Nebraska Omaha.

Austin Hellman: Ph.D. program in Psychology at the University of Houston.

Anna Haga: MSN in Nurse Educator program at Texas A&M University-Corpus Christi.

Amber Bachner: Master of Arts in Psychology program at Texas A&M University-Corpus Christi.

Graduate Scholar Spotlight: Mariela Vazquez

The McNair program helped me during the process of applying for graduate schools. A couple of the universities allowed fee waivers because they worked closely with McNair Scholars and aided in reducing the amount of money spent on graduate school applications. I was actively pursuing research prior to McNair through the Louis Stokes Alliance for Minority Participation program and decided to pursue McNair because of the experience they provided for writing a research article. Although I did not publish in the McNair Journal, the experience of writing, editing, and revising the article allowed me to gain insight on the time and effort it takes to publish. McNair helped me in other aspects aside from research, such as adhering to deadlines and preparing a journal for publication. This experience helped me when I needed to write my proposal for the NSF-Graduate Research.

My advice to prospective graduate students or current McNair Scholars is take the graduate process very seriously and find other means to help pay for graduate school applications. McNair did help a lot during this process, but I also searched for other programs, like LSAMP or other minority/women scholarships, that could help with this process. I did not personally take the GRE course paid by McNair, but I would advise scholars to take advantage of the opportunity. Networking at the annual McNair Scholars Conference with other scholars helps expand what other research areas one may go into. Finally, try to apply for as many scholarships and fellowships as possible to increase the possibility of becoming self-funded and therefore increasing the chances of working for your dream professor.
Faculty Mentor Spotlight: Dr. Xavier Gonzales

Dr. Gonzales shares his experience as a McNair Scholar Faculty Mentor

The focus of the McNair Scholars Program is on preparing undergraduate students for doctoral studies through academic research opportunities under the guidance of a Faculty Mentor. The McNair Faculty Mentors are an essential component of this process. One of the many valued Faculty Mentors that has worked with the McNair Scholars Program is Dr. Xavier Gonzales, Professional Assistant Professor of Biomedical Sciences.

1. What characteristics do you look for in your mentees?

When interviewing a potential research student, the first thing I look for is do they have an Excitement for science and research. I want someone to want to do research enough so that I want to spend the extra time to help them. Therefore, I also look to see if someone has the Drive to explore the many puzzle pieces associated with research. I look for someone with Imagination. It is always great to have someone that thinks outside of the box. I look for students that have Maturity. Scientific research has a financial and time cost therefore I want someone that will follow through with their project even when things seem to not be working out. Experiments rarely work perfectly. Lastly, I want someone that is Helpful. In science, we work in teams and we end up with better products when we help each other. Also, I use the term Helpful as in sharing your science either through a poster or some written communication. Therefore, I want someone who wants to let everyone know what they are working on.

2. What is the most rewarding part of being a Mentor?

The most rewarding moment for me as a mentor is the final look of accomplishment by the student when their project finally comes to an end or when they present their work. I also feel proud of my mentees when they reach their goals, especially when they continue to the next level of their education. I keep in contact with my former mentees that are currently in graduate and professional school. It makes me extremely happy to see even the smallest of things like successful completion of another semester or that a project they are now working on is producing promising results. Overall, I am just glad that I could encourage another student to share my love for science.

3. What qualities does a Faculty Mentor need to possess in order to be effective?

As a Faculty Mentor, one should demonstrate patience. A student is not always going to get things done right the first time around. Also, you want to give students an opportunity to learn from their mistakes. Therefore, you should be patient in not resolving problems for them right away. A mentor also should be a cheerleader. Students will get discouraged, especially when experiments are not coming out as expected. A mentor also needs to be a realist with their students. You want to encourage but you also do not want to give false hopes. Therefore, a mentor should always be upfront with their mentee. Most importantly, a Faculty Mentor just needs to be available for their student. Sometimes a student just needs a moment to talk through an experiment. At times, it may have nothing to do at all with research, they just need a moment for someone to hear their frustrations. As mentors, we can get our mentees to go above and beyond for us if they believe that we genuinely care about them.
GIVE US AN UPDATE!

The U.S. Department of Education requires all McNair programs to provide Annual Performance Reports and keep track of alumni until the attainment of a doctoral degree. Alumni can update their information by completing the form below and mailing the information to the McNair Scholars Program – or by contacting Anabel Hernandez at anabel.hernandez@tamucc.edu.

Name: ______________________________________________________________________________
Address: ____________________________________________________________________________
City & State: ___________________________ Zip Code: ____________________________
TAMUCC Cohort Year: _________________________________________________________________
Highest Degree Attained and when: ______________________________________________________
Degree in Progress: Master’s _____ PhD ______ or Education Complete________
Field of Study: _________________________________________________________________
Expected Year of Completion: __________________________________________________________
School in attendance: _________________________________ _______________________________
Email Address: _______________________________________________________________________

Alumni News

Teresa Aguilar (Psychology, 2015) has obtained her master’s degree in Applied Cognition and Neuroscience in December 2016 from the University of Dallas.

Elizabeth Grant (Psychology, 2013) has obtained her master’s degree in Communications in December 2016 from Texas A&M University – Corpus Christi.

Irene Perales (Community and Mental Health, 2012) has obtained her master’s degree in Social Work in August 2016 from the University of Texas in Arlington.

Sarah Pons (Art, 2013) has obtained her master’s degree in Art History in August 2016 from Oklahoma State University.

Amanda Whitmill (Bio-Medical Science, 2011) received her Ph.D. in Cell Biology in August 2016 from the University of North Texas.