

# Kira R. Mills

University of Texas at Dallas  
Richardson, TX  
Phone: (813) 416-7956 Email: [KiraRMills@gmail.com](mailto:KiraRMills@gmail.com)

---

PhD student using Molecular Dynamics simulations to study substrate specificity of proteins and use it for smarter molecular design. Passionate about communication at the teaching, research, and public level, and at improving the accessibility of science and higher education to all communities.

## EDUCATION

**PhD - Chemistry** 2018 - Present  
*University of Texas at Dallas*  
- Advisor: Dr. Steven Nielsen  
- Research Area: Computational chemistry to study proteins

**B.S. - Chemistry, Magna Cum Laude** 2013 - 2018  
*Texas A&M University - Commerce*  
- Advisor: Dr. Bukuo Ni  
- Research Area: Organic synthesis

## EXPERIENCE

**Teaching Assistant** 2018 - Present  
*General Chemistry, University of Texas at Dallas*  
- Aiding student comprehension of concepts in general chemistry and introductory lab techniques  
- Working with instructors and lab coordinator to modify curriculum to improve student comprehension  
- Recognizing common student pitfalls and developing preventative measures to implement during lab period

**Chemistry & Physics Tutor** 2015 - 2018  
*Texas A&M University - Commerce*  
- Taught students in both one-on-one and group settings concepts of introductory chemistry and physics  
- Worked with professors to improve mandatory student workshops  
- Attended and presented at Student Success conference to improve communication skills in STEM students

**Ronald E. McNair Scholar** 2016 - 2018  
*Texas A&M University - Commerce*  
- Developed a 10-week research project in organic synthesis  
- Attended and presented at several conferences  
- Worked to aid understanding of why research is important and what unique struggles underrepresented groups face

**Peer Mentor**

2017 - 2018

*Texas A&M University - Commerce*

- Taught curriculum for a once a week class which covered topics related to freshmen success
- Encouraged student involvement in on-campus activities and organizations
- Connected students to important resources when necessary

**PRESENTATIONS****255th ACS National Meeting***March 2018*

Oral Presentation: "Diarylpyrrolinol silyl ether as organocatalyst for asymmetric cycloaddition to produce spirocyclic  $\delta$ -lactones"

**Texas National McNair Research Conference***February 2018*

Oral Presentation: "Synthesis of spirocyclic  $\delta$ -lactones by asymmetric organocatalytic reactions"

**14<sup>th</sup> Annual Pathways Student Research Symposium***November 2017*

Poster Presentation: "Synthesis of spirocyclic  $\delta$ -lactones..."

**2017 ACS Southwest Regional Meeting (SWRM)***October 2017*

Poster Presentation: "Synthesis of spirocyclic  $\delta$ -lactones..."

**TRiO - McNair Scholars Showcase***October 2017*

Oral Presentation: "Synthesis of spirocyclic  $\delta$ -lactones..."

**Gulf Coast Student Success Conference***November 2016*

Oral Presentation: "Teaching Scientific Writing, Even as a Non-STEM Peer Educator"