

**Saluda (Abby) Abigail Stapleton, Winner of Undergraduate Award for Excellence in Chemistry**  
**By Sarbjeet Kaur, Director of Student Awards**



The Undergraduate Award for Excellence in Chemistry is given to a senior woman chemistry student in an accredited college or university that grants a four-year degree in chemistry. The 2024 winner is Saluda (Abby) Abigail Stapleton of Furman University (Greenville, South Carolina). Abby was nominated by Prof. Meghan Breen.

Abby was born into a family of scientists, and her passion for scientific discovery began at an early age. During her sophomore year of high school, she began university level research investigating the role of epigenetics in retinal development with mentor Dr. Ray Enke at James Madison University. Abby's journey continued at Furman University advancing her academics with studies in chemistry and data analytics and contributing to research projects in two Furman laboratories. During her time in the laboratory of Dr. Linnea Freeman, she collected data supporting the connection between sex, diet, and antibiotics on the gut microbiome which was recently published in *Biology of Sex Differences*. Abby's research in the lab of Dr. Meghan Breen probes the mechanism of drug resistance in a pathogenic yeast species by characterizing post-translational modifications of a transcription factor that regulates transcription of drug efflux pump genes. Currently, Abby is under training at The University of Arizona College of Medicine-Tucson's NIH funded MD/PhD program. Abby's upcoming steps will equip her to advance medicine and enhance patient care through her future roles as a clinician and research scientist.