

Throughout my time in the Biomedical Engineering program at Louisiana Tech, I have had the privilege of truly experiencing as much as possible from this program and the College. The most impactful opportunities have included being an officer for the Biomedical Engineering Society (BMES), serving as an ambassador for the College of Engineering and Science (COES), and finally conducting research within the Neural Technologies Laboratory.

During the summer preceding my senior year, I initiated my research journey within the Neural Technologies Laboratory under the leadership of Dr. Elisa Castagnola. The laboratory is dedicated to pioneering research in the integration of flexible neural devices with glassy carbon materials, enabling simultaneous electrophysiological recording and electrochemical detection. My focus centered on the intricate process of double pattern fabrication for flexible, implantable all glassy carbon microelectrode arrays tailored for neurochemical sensing.

Following months of meticulous optimization and extensive data collection, I had the amazing opportunity to present my summer research at the 39<sup>th</sup> annual Southern Biomedical Engineering Conference. I was honored to be awarded first place in the undergraduate presentation competition during this distinguished conference. I am also thrilled to announce my first publication as the first author for the paper titled “Batch Fabrication of Microelectrode Arrays with Glassy Carbon Microelectrodes and Interconnections for Neurochemical Sensing: Promises and Challenges.” This immersive laboratory experience bolstered my confidence and deepened my passion for the biomedical field.

As an officer for BMES and an ambassador for COES, my dedication to biomedical engineering was deeply influenced by giving tours to potential students and the many interactions with the first- and second-year biomedical engineering students. Their enthusiasm, curiosity, and relentless pursuit of knowledge served as a constant source of inspiration, fueling my passion and reinforcing my commitment to this program.

Through engaging with these students, witnessing their transformative growth and sharing in their triumphs, I am continually reminded of the profound significance student involvement can have within a program. Together, future students, current students and alums can forge a dynamic community driven by a shared vision of harnessing technology to enhance healthcare, improve quality of life, and make a meaningful impact on the world.

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