

Annamarie Thompson

Dear Honors Undergraduate Research Program Committee:

I would like to extend my sincerest thanks for the Shackouls Honors College's support of my recent trip to the Society of Toxicology's 63rd Annual Meeting and ToxExpo in Salt Lake City, Utah. Traveling to this national conference allowed me to present my research from Mississippi State while learning about the latest cutting-edge research in the field of toxicology.

While at the conference, I attended various lectures and scientific talks as well as poster and oral presentations. I also had the opportunity to attend the ToxExpo each day, where numerous industry companies, research firms, and vendors displayed their work and resources. This allowed me to learn more about the field I am working in as well as the broader spectrum of toxicology research.

On Monday, I attended the opening plenary session which featured a talk on "The Evolution of BioTech into TechBio." This session focused on the newest uses of AI in research, highlighting how machine learning can be used as a powerful tool to develop data processing algorithms. Following the plenary session, I attended five 15-minute presentations on the mechanisms of carcinogenicity. I made an effort to attend talks and poster sessions with a focus in carcinogenicity since I plan to focus my future research in oncology. I also supported my fellow Mississippi State colleagues by visiting Dr. Barbara Kaplan's and Arpita Deb's poster session on Monday. I listened to a brief talk on leadership and empowering women in science and finished the day by going to a session focusing on vascularized organ-on-chip models, a topic recently discussed in my Biophysical Properties of Materials course at MSU.

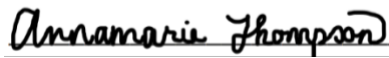
On Tuesday, I began the day by attending two talks on the safety of aspartame consumption. This has recently been a "hot topic" in toxicology research with some claiming aspartame is carcinogenic. I enjoyed learning about the conclusions of studies on this topic and the consensus toxicologists have arrived at regarding the safety of aspartame. Following these talks, I presented my poster "Gender-specific Impacts of Exposure to a Mixture of Organochlorine Pesticide Metabolite Persistent Organic Pollutants on Diabetic Wound Healing" during the POPs poster session. I had the opportunity to showcase my project to other experts in toxicology while gaining insight and suggestions on ways to further my research and potential future directions for my work. Tuesday afternoon, I attended a lecture delivered by the Society of Toxicology's 2024 Merit Award recipient. This lecture was entitled "Are Humans REALLY Just Big Rats and Mice? A Tale of Three 'Toxins'" and evaluated the accuracy of rats and mice as models of the human body in four case studies.

On Wednesday, I attended the carcinogenesis poster session, a series of talks on ocular toxicology, and a plenary keynote presentation on drug safety and moving from drug discovery to human implementation. The talks on ocular toxicology were of particular interest to me

because this is a field I am unfamiliar with. Learning about the research ongoing in ocular toxicology as well as the methods used in this research broadened my knowledge. The presentation on drug safety was also fascinating as I hope to one day conduct oncology research that leads to clinical trials and drug implementation in patients.

Overall, my trip to the Society of Toxicology's 63rd Annual Meeting and ToxExpo was a wonderful experience. I learned a great deal about the current state of toxicology research that I would not have been exposed to otherwise. I presented my research on the national stage which marked the achievement of a personal goal. I grew closer with my lab mates and colleagues at Mississippi State and experienced a place I had never traveled to before. I was even inspired with ideas that may inform the topic of my honors thesis. Overall, the SOT conference better equipped me for the research I will continue to do at Mississippi State as well as the future research I will do in graduate school. It broadened my horizons and grew me intellectually. I cannot overstate my gratitude for the financial support I received from honors that made my travel possible. This was a highly impactful experience and one that grew and furthered my excitement and passion for research.

With many thanks,

A handwritten signature in black ink that reads "Annamarie Thompson". The signature is written in a cursive, flowing style.

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