



Jocelyn (Jocie) Baker

PhD Student and Researcher

Rice University

Tunable Tissue Engineered Model for 3D Culture and Single-Cell Proteomics Investigations of Ewing Sarcoma

Jocelyn (Jocie) Baker is a current Ph.D. student and researcher in the department of Bioengineering at Rice University. She earned her bachelor's of science in bioengineering from the University of Pittsburgh in 2020 where she was a research fellow in the University of Pittsburgh Medical Center's Plastic Surgery Department. As an undergraduate researcher, Jocie was advised by Drs. Kacey G. Marra and Mario G. Solari and utilized tissue engineering approaches to investigate improved treatments for peripheral nerve injuries. Jocie continues to utilize tissue engineering as well as single-cell proteomics approaches in her graduate research projects at Rice where she is advised by Dr. Julea Vlassakis in the Microtechnologies Laboratory for Pediatric Oncology. Her current projects aim to develop in-vivo-representative, single-cell cancer research tools and methods for use in gaining a better understanding of metastatic pathways in Ewing Sarcoma which can be targeted for improved clinical outcomes and quality of life for Ewing sarcoma and other cancer patients.