



June 29, 2020

From the Children's Hospital of Pittsburgh Foundation:

The Department of Hematology/Oncology and Dr. Kelly Bailey shared good news in Ewing sarcoma research and, specifically, progress you may appreciate in research that the Brian Morden Foundation supported. Outlined below is a brief overview.

- Dr. Kelly Bailey is currently preparing a manuscript analyzing patient relapsed tumor cell lines and DNA damage work for submission to the journal Cancer Research. She is also preparing a manuscript featuring single cell sequencing data of Ewing and osteosarcoma tumor immune infiltrates to the scientific journal Immunity. Publication will allow Dr. Bailey to share findings and collaborate with others in the field. Knowing your support helped to make this possible, she looks forward to recognizing donors in both publications.
- With COVID restrictions lifted, they are now proceeding with the humanized Ewing sarcoma mouse model. Dr. Bailey has the first set of mice prepared. They are also now working to develop a humanized rat model because rats have larger bones allowing researchers to more easily place cells. This is important because Ewing sarcoma is a bone cancer and it is necessary to understand the tumor in its "natural environment".
- She recently applied for samples from a national biobank so her lab will have a more diverse, larger sample size. We're hopeful this will strengthen findings in the tumor immune infiltrate studies.
- She has seen promising outcomes in experiments to understand how immune cells (NK cells) interact with Ewing tumor cells. This is a very preliminary but critical piece in the overall strategy for understanding potential treatment.
- The Department of Pediatric Hematology/Oncology is welcoming pediatric oncology fellows to the lab starting July 6th. Jessie Daley will be working with Dr. Bailey for two years. Her focus will be looking at the impact of TGF-b (a cytokine that can suppress the immune system) in Ewing Sarcoma.

This progress is fueled by philanthropic support. We are grateful for your partnership as we work to advance research and treatment for patients with Ewing sarcoma.