



Transforming Care for Children with Neuroblastoma

Children's National Hospital is at the forefront of research for children with neuroblastoma. Under the leadership of Drs. Anthony Sandler and Patrick Hanley, we seek to translate our promising pediatric neuroblastoma T-cell therapy from bench to bedside. Our lab team has paved the way for clinical trials of immunotherapies for treating neuroblastoma.

Driving T-Cell Therapy

Our program is at the global forefront of immunotherapy research. We are pioneers of T-cell therapies, which train the body's immune system to seek and destroy cancer cells. We conduct these studies with a Good Manufacturing Practices Facility specialized in manufacturing T-cells.

Dr. Sandler's novel research has induced immunity against neuroblastoma tumor cells established in the laboratory. His team have established a method for training a patient's own T-cells to target their tumor tissue. These cells can expand by replicating, which may enable doctors to infuse them into patients as a personalized therapy. In addition to this technique, Dr. Sandler and his team have devised a way to protect children's vital organs from adverse immune reactions to the immunotherapy. This approach is essential to not only improve the cure rates for neuroblastoma but also to foster better lifelong outcomes for survivors.

Support from the Catherine Elizabeth Blair Memorial Foundation will help facilitate:

- Cell production: Ramp up production of autologous T-cells within our specialized Good Manufacturing Practices Facility for all stages of clinical research from animal safety and efficacy studies to in-human trials
- Staffing: Recruit a lead investigator and fund dedicated time for expert hospital faculty—each of whom would complement Dr. Sandler's existing laboratory team—to produce cells and facilitate the trials
- Clinical trials: Facilitate every aspect of the trials from design, IRB approval, recruitment, project management and supplies

Together, Children's National and the Catherine Elizabeth Blair Memorial Foundation will strive to save lives and improve the quality of lifetimes for children with neuroblastoma.