

Goldsmith, Kelly

Dr. Goldsmith's research focuses on the molecular mechanisms of chemotherapy resistance in the pediatric solid tumor, neuroblastoma (NBL), in order to translate novel therapeutics into early phase clinical trials for this highly lethal disease. Her laboratory has worked to define and target apoptotic heterogeneity in neuroblastoma using small molecule Bcl-2 antagonists which formed the basis for a first in pediatrics Phase 1 trial of ABT-199 (Venetoclax) in leukemia, lymphoma and neuroblastoma (NCT03236857, clinicaltrials.gov). Her preclinical data showing activity of the HMG CoA reductase, simvastatin, in neuroblastoma set the stage for a Phase 1 trial of simvastatin in combination with topotecan/cyclophosphamide for recurrent/refractory CNS and solid tumors (NCT02390843, clinicaltrials.gov). Dr. Goldsmith is the Clinical Director of the Neuroblastoma and MIBG Therapy Programs and the Aflac Precision Medicine Program at The Children's Healthcare of Atlanta (CHOA). Nationally, she is a member of the Neuroblastoma Committee of the Children's Oncology Group (COG), Institutional PI and member of the New Approaches to Neuroblastoma Therapy (NANT) Consortium, and a member of the Pediatric and Adolescent Solid Tumor Steering Committee of CTEP/NIH. Ongoing Research endeavors include developing a first in pediatrics novel cellular therapy platform of expanded Gamma Delta (gd) T cells for the treatment of patients with refractory and recurrent neuroblastoma in collaboration with Drs. Trent Spencer and Chris Doering at CHOA. She is also working to identify novel cell surface proteomic targets to derive novel immunotherapy approaches for aggressive pediatric solid tumors in collaboration with scientists from CHOA and Georgia Institute of Technology. Dr. Goldsmith is co-chair of a NANT Phase 1 trial of the anti-GD2 antibody, dinutuximab, in combination with 131-I-MIBG radiotherapy for NBL, co-chair of a NANT Phase I Study of the ALK inhibitor lorlatinib for refractory and relapsed NB, and co-chair of a Phase 2 trial through the COG of dinutuximab given in combination with chemotherapy +/- the agent DFMO for patients in first relapse of NBL. All of these experiences and ongoing investigations underscore her drive to discover and facilitate pre-clinical findings into molecular and immunotherapy-driven clinical trials to improve outcomes for children with high-risk and refractory neuroblastoma.