

Why Research is Important to Me

John Y.H. Kim, MD, Baylor College of Medicine, Houston, TX



Pediatrics became the focus of my clinical interests because of its intrinsic orientation toward developmental issues. I have since had the great fortune of serving children and their families who have charged me with my life's work. No group of patients and families appeared to need productive translational research more desperately than those suffering from brain tumors. Therefore, during my post-doctoral research, I sought to apply emerging concepts and advances in genomics and developmental neurobiology to address problems in pediatric neuro-oncology. Specific areas of concentration have been

(1) the application of molecular and cellular biological techniques to cell culture systems (including primary human brain tumors), (2) the development and use of complementary mouse models, and (3) the integration of clinical data as essential guidance for my translational research. My research program applies wide range of emergent and established methodologies to identify molecules of clinical significance and their cellular mechanisms in medulloblastoma. The overall challenge is to develop biologically based approaches to exploit the endogenous vulnerability of medulloblastoma to committing apoptosis that would carry the promise of more effective and less toxic therapies.