Seminar Title: Engineering Forward approaches to Childhood Cancer

Time: 3:00-4:00 PM, Friday, Oct 23, 2015
Location: ECE 101: Langford Lab

Speaker:
Charles Keller
Children’s Cancer Therapy Development Institute

Abstract:
Are you an Engineer? Do you want to contribute to scientific discovery of effective clinical trials for those childhood cancers that are most in need of treatments to save kids’ lives?
Now, more than ever, such devastating maladies demand aggressive multi-disciplinary approaches to researching and developing effective therapies. We can all help by pooling our knowledge and by working together to serve critical needs of humanity. Teams of engineers and biologists can collaborate on challenges in the treatment of cancer as well as prevention of recurrence.
The range of options to address these needs may consist of advanced analytics for new drug therapies, sensing technologies, bioengineering methods and other ideas that emerge from your involvement in this cause. Skills in any of the above areas and a passion to make a difference will be key ingredients to success and fulfillment.
Please come for a talk to stimulate our collective thinking about what we are facing and what is possible. In this talk, we will provide an overview of childhood cancers, history of therapy development, current research challenges and opportunities. Children’s Cancer Therapy Development Institute (cc-TDI) is a 501(c)(3) non-profit organization with a bold vision to make childhood cancer universally survivable, regardless of diagnosis. For more information, click www.cc-TDI.org or email charles@cc-TDI.org.

Speaker Bio:
Charles’s research focuses on the development of more effective, less toxic therapies for childhood cancers. His special interest is advanced disease that has spread beyond the initial location of the cancer. Charles co-chairs the brain tumor developmental therapeutics committee (CNS-DVL) of the Children’s Oncology Group and is a member of the soft tissue sarcoma (STS) committee of Children’s Oncology Group, and recently completed a 5-year rotation as a Standing Member of the National Cancer Institute NCI-I Study Section. Charles attended Tulane University where he received a degree in Biomedical Engineering prior to attending Baylor College of Medicine where he received his M.D. degree. After completing his internship and residency in Pediatrics at Texas Children's Hospital, Charles trained in Pediatric Hematology-Oncology at the University of Utah and with 2007 Nobel laureate, Mario Capecchi. Charles has authored over 80 scientific publications and is a recognized expert in the biology of childhood sarcomas and the preclinical investigation of childhood cancers. Charles is also a co-founder of First Ascent Biomedical, a company developing personalized medical approaches to therapy for canine and human solid tumor patients.