Pedigree-based approaches to identify cancer susceptibility genes: non-TP53 Li-Fraumeni Syndrome

Monday, December 02, 2019
3:30 PM - 4:20 PM
UTHealth School of Public Health, Room W304 RAS Building, 1200 Pressler St.

Presenter: Ralf Krahe, PhD
Professor, Department of Genetics
The University of Texas MD Anderson Cancer Center, Houston, TX

Li-Fraumeni Syndrome (LFS) is a rare, clinically and genetically heterogeneous cancer predisposition syndrome characterized by a diverse tumor spectrum, including a high prevalence of sarcomas, breast, brain and adrenal gland cancers. Most cases characterized to date that meet the classic criteria are caused by autosomal dominant germline mutations in the tumor suppressor gene TP53 (p53) on chromosome 17p13.1. However, a subset of patients and families that phenotypically meet the classic or variously relaxed LFS criteria (LFS-like, LFL) lack pathogenic TP53 mutations. This presentation will provide an update on our efforts to identify rare germline variants and genes predisposing to LFL cancers, with possible relevance to multiple sporadic cancers, similar to mutant TP53.