Washington University in St. Louis
School of Medicine

Epidemiology and Clinical Outcomes Research Seminar Series

Hosted by the Division of Public Health Sciences,
Department of Surgery

Karen Sandell Sfanos, Ph.D.

Associate Professor of Pathology, Oncology, and Urology
Director, Prostate Cancer Biorepository Network
Johns Hopkins University School of Medicine

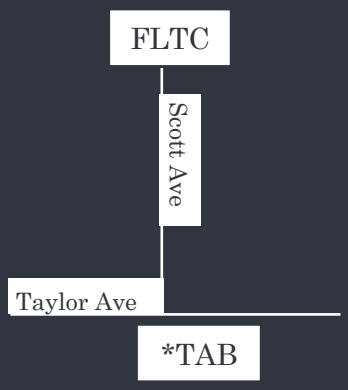
"The Interaction between the Inflammatory Microenvironment and Prostate Cancer Aggressiveness in African American Men: Key Considerations for Biobanking and the Construction of Translational Research Teams "

Wednesday, January 16, 2019
Noon—1:00 pm
Doll and Hill Room
Taylor Avenue Building

The etiological factors driving a more aggressive prostate cancer phenotype in men of African ancestry (Black) men are likely multifactorial, and may include disparities in access to care, diet and lifestyle factors, and environmental exposures. A very consistent finding in previous studies conducted on prostate cancer tissues from Black versus White men is an apparent discrepancy in the expression of genes involved in inflammatory pathways that are more prevalent in tumors from Black men than those of White men. In addition, evidence suggests that key genomic driver alterations in prostate cancer occur at differing frequency in Black and White men, potentially contributing to disparities in clinical outcomes. We hypothesize that differences in the inflammatory microenvironment may interact with somatic genomic alterations to drive racial disparities in prostate cancer outcomes. As such, we are currently conducting an integrated analyses to comprehensively characterize immune cell subsets in the prostate tumor microenvironment of Black men versus White men in association with somatic genomic alterations in the tumor and prostate cancer-specific outcomes. This study has required the construction of multiple race disparity tissue microarray (TMA) sets as well as whole tissue cohorts for RNA *in situ* hybridization studies. This seminar will discuss our efforts to develop assays for the quantification and characterization of immune cell subtypes including T-cells, mast cells, macrophages, and neutrophils in our TMA cohorts in association with clinical-pathologic variables, tumor molecular subtype, and oncologic outcomes. Also discussed with be the results of our analyses of cytokines including IL-1β, IL-6, IL-8, IL-10, CXCL12 and CXCR4 in the tumor microenvironment in relation to race and measures of prostate cancer aggressiveness. A perspective will be given on the key requirement for the construction of a collaborative translational research team with expertise in Pathology, image analysis, Biostatistics, and Epidemiology to effectively accomplish our research goals.

Co-sponsored by the Institute for Public Health, the Department of Obstetrics and Gynecology, the Department of Medicine, and the Department of Anesthesiology

Taylor Avenue Building
600 S. Taylor Avenue
Second Floor 2131
Doll & Hill Teaching Room



For more information:
Danielle Schulte, 314-747-1018
danielles@wustl.edu

www.publichealthsciences.wustl.edu