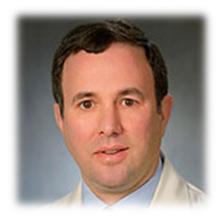


NIDDK P30 Center for Molecular Studies in Digestive and Liver Diseases Research Seminar



Jonathan Katz, MD Associate Professor of Medicine Director, Molecular Pathology and Imaging Core Director, Undergraduate Student Scholars Program Department of Medicine, Gastroenterology Division University of Pennsylvania Perelman School of Medicine

"Cytoprotective Mechanisms in Esophageal Epithelia"
Thursday, May 26, 2022
12:00 – 1:00 PM EST
901 Biomedical Research Building
Zoom Link

Dr. Katz's research is focused broadly on functional analyses of gastrointestinal epithelial proliferation, differentiation, and carcinogenesis, using both in vivo and in vitro approaches, including murine models and innovative three-dimensional tissue culture systems. To dissect the critical pathways regulating gastrointestinal epithelial homeostasis and disease, we have focused predominantly on the roles of two critical transcriptional regulators in the Krüppel-like factor (KLF) family of proteins, KLF4 and KLF5, with a particular focus on the biology of the squamous-lined esophagus. Both KLF4 and KLF5 have been implicated in key cellular process such differentiation, inflammation, stemness, and carcinogenesis in a number of tissues and cell types. Current areas of investigation in our laboratory include the functional interactions between KLF4 and the non-canonical Wnt ligand WNT5A and between KLF5 and the tumor suppressor p53. Overall, these studies seek to define the specific factors which control the balance between proliferation and differentiation in gastrointestinal epithelia and the elements which disrupt this balance during mucosal injury and carcinogenesis.