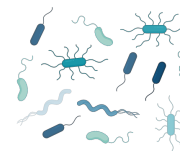


Member: Yash Choksi, MD
Rank: Assistant Professor
Department: Medicine
VDDRC Status: Full Member
Research Group: GII



Rationale for VDDRC Membership

My research interests, previously funded by a VDDRC Pilot Award, are related to understanding esophageal inflammation and tumorigenesis, particularly (1) the role of eosinophils in esophageal squamous cell carcinogenesis and (2) the mechanisms by which oxidative stress can perturb esophageal epithelial homeostasis in EoE. One VDDRC-related publication is: Jacobse J, Brown R, Revetta F, Vaezi M, Buendia MA, Williams CS, Higginbotham T, Washington MK, Goettel J, Hiremath G, **Choksi YA**. A synthesis and subgroup analysis of the eosinophilic esophagitis tissue transcriptome. *J Allergy Clin Immunol*. 2024 ;153(3):759-771. PMID: PMC10939980.

Digestive Diseases-Related Grants

Grant Number	Title	Project Period	Annual Direct Costs
5R01DK141803-02	Defining the role of GPX3 in eosinophilic esophagitis	03/15/2025-01/31/2030	\$387,338
Veterans Administration 1I01BX006820-01A1	Defining the role of eosinophils in the development of esophageal malignancy	04/01/2026-03/31/2030	\$380,000

Summary of Digestive Disease Research

My research program focuses on the intersection of epithelial biology and mucosal immunology in esophageal inflammation and disease. Specifically, I am interested in how oxidative stress modifies epithelial-stromal and epithelial-immune interactions. Our lab accomplishes this by utilizing human samples, organoid culturing, air-liquid interface culturing, and mouse modeling. Our significant experience in biobanking helps us achieve these goals and discovering how these pathways can deepen our understanding of EoE and esophageal carcinogenesis is the fundamental question my lab seeks to answer.

VDDRC-Related Training and Activities

Assistant Director, VDDRC
Co-Director, Pilot & Feasibility Program
Academy of Investigators, Former Member
Pilot & Feasibility Award Recipient
Pilot & Feasibility Project Reviewer
Retreat Speaker

VDDRC Collaborations

I have ongoing collaborations with numerous VDDRC members, including Drs. Acra, Algood, Coburn, Coffey, Collins, Goettel, Goldenring, Hiremath, Kaji, Lau, Lee, Mahadevan-Jansen, Markham, Peek, Piazuelo, Washington, Williams, Wilson, and Yan. A representative collaborative publication is: Li J, Simmons AJ, Hawkins CV, Chiron S, Ramirez-Solano MA, Tasneem N, Kaur H, Xu Y, Revetta F, Vega PN, Bao S, Cui C, Tyree RN, Raber LW, Conner AN, Pilat JM, Jacobse J, McNamara KM, Allaman MM, Raffa GA, Gobert AP, Asim M, Goettel JA, **Choksi YA**, Beaulieu DB, Dalal RL, Horst SN, Pabla BS, Huo Y, Landman BA, Roland JT, Scoville EA, Schwartz DA, Washington MK, Shyr Y, Wilson KT, Coburn LA, Lau KS, Liu Q. Identification and multimodal characterization of a specialized epithelial cell type associated with Crohn's disease. *Nat Commun*. 2024 Aug 22;15(1):7204. PMID: PMC11339313.

Future VDDRC Core Use

Our group will continue to use the Translational Analysis Core to evaluate our models of disease, as well as the Cell Imaging, Flow Cytometry, and MS/Omics Cores to investigate our organoid models.