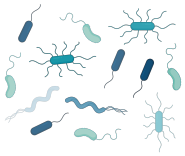
Member: Yash Choksi, MD
Rank: Assistant Professor
Department: Medicine
VDDRC Status: Full Member
Research Group: GII





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. PMCID: PMC10939980.

Digestive Diseases-Related Grants

Grant Number	Title	Project Period	Annual Direct Costs
R01DK141803	Defining the role of GPX3 in eosinophilic esophagitis	03/15/2025-01/31/2030	$387,338
VA I01BX006820	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 study how oxidative stress modifies epithelial-stromal and epithelial-immune interactions. Our lab accomplishes this using human samples, organoid culture, air-liquid interface culture, and mouse models. cant 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

New Assistant Director, VDDRC
New Co-Director, Pilot & Feasibility Program
Promotion to VDDRC Full Member
Academy of Investigators, Former Member
Pilot & Feasibility Award Recipient in the last 10 years
Pilot & Feasibility Project Reviewer
Retreat Speaker
Retreat Poster Judge
Seminar Speaker

VDDRC Collaborations

I have ongoing collaborations with numerous VDDRC members, including Drs. Acra, Algood, Byndloss, Cassat, Coburn, Coffey, Collins, Flynn, Goettel, Goldenring, Hiremath, Kaji, Lau, E. Lee, Mahadevan-Jansen, Markham, Markle, Meenderink, Peek, Piazuelo, Schneider, Scoville, Washington, Williams, K. 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. PMCID: PMC11339313.

Future VDDRC Core Use

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