

Houston Methodist Research Institute Center for Neuroregeneration

NEURAL CONTROL OF ORGAN DISEASE AND REGENERATION

COURSE DESCRIPTION

This course will focus on the neural control of organ degeneration and regeneration. This course is intended to complement research in organ regeneration, stem cell biology and tissue engineering by addressing the gaps in our knowledge of how the nervous system influences not only organ development, but also disease evolution and organ degeneration. The course will be team taught with each session comprised of clinical perspective on development and disease followed by an introduction to specific organ system regeneration approaches. Each session will conclude with class participation in formulating research questions and problem-solving. A diverse faculty has been incorporated into the training program, featuring labs from Baylor College of Medicine, Rice University, University of Texas Health Science Center–Houston, University of Houston and the Houston Methodist Research Institute.

30-Jan	Dr. Phil Horner	Welcome and Program Overview
6-Feb	Dr. Bob Rostomily Dr. Robert Krencik	Neural Control of Stem Cell and Tumor Development
13-Feb	Dr. Eamonn Quigley Dr. Tor Savidge	Neural control of inflammatory bowel and gut biome
20-Feb	Dr. Rose Khavari Dr. Alvaro Munoz	Neuromodulation of pelvic disorders
27-Feb	Dr. Phil Horner Dr. Osama Gaber	Neural Control of metabolic disorders
6-Mar	Dr. Scott Olson Dr. Charles Cox	Neural injury and immune dysfunction/autonomic Dysreflexia
13-Mar	Dr. Alan Prossin Dr. Terry Walters	Neural activity and psychiatric disorders
20-Mar		Spring Break!
27-Mar	Dr. Noah Shroyer Dr. Allison Speer	Gut and musculoskeletal development
3-Apr	Dr. Manish Shah Dr. Yong Li	Neural degeneration and musculoskeletal disease
10-Apr	Dr. Matt Rasband Dr. Brian Dalm	Neural activity and axon function in pain

