

ANESTHESIOLOGY/NEUROSCIENCE GRADUATE PROGRAM
MEDICINE

SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students

APPLICATION DEADLINE: 03/01/2024

PROJECT TITLE: Neurobiology of pain

Steve Davidson
College of Medicine
MSB 3410
Cincinnati, OH. 45267
steve.davidson@uc.edu
phone: 513 558 7688

Project Description

The Davidson lab investigates the neurobiology of pain at the levels of the brain and the peripheral nervous system. Projects involve modulating specific neural circuits between the cortex and deeper structures within the brain to determine the contributions of these neural circuits to behaviors related to pain and stress. Projects also examine morphology, anatomy, and physiology of pain signaling neurons in vitro. Methods in the lab include surgery, behavior, cell culture, electrophysiology, live cell calcium imaging, fluorescent microscopy, immunohistochemistry, genetic models, and others.