Two Postdoctoral Positions in a Multidisciplinary Entomology-Biomedical Engineering Project

Location:
Department of Chemistry, University of North Carolina at Chapel Hill

Start date:
July 1, 2020 or as soon as possible

Project Description:
Two one-year postdoctoral positions available, with the opportunity for up to two additional years of renewal in a multidisciplinary research laboratory in the Chemistry Department at the University of North Carolina in Chapel Hill. The Lockett laboratory develops 3D culture platforms to understand the molecular and tissue-level regulation for in vitro screens of drugs, potential toxicants, and natural product extracts. The laboratory has focused primarily on human tissue and organ-on-chip devices, focused on breast and colon cancer development.

This new project will construct an insect midgut-on-a-chip platform to screen potential insecticides and elucidate modes of action. In particular, will be the development of an in vitro Spodoptera sp. Midgut model that incorporates a representative architecture and microenvironment to best recapitulate in vivo responses. Candidates with backgrounds in cell culture, molecular biology, and cell line engineering are strongly encouraged to apply. The project will also provide experience in microfabrication, 3D culture techniques, and the development and validation of high-throughput screening assays.

If interested please contact Matthew Lockett, Associate Professor of Chemistry at mlockett@unc.edu to setup a Zoom meeting. More information about the Lockett Lab can be found at http://lockettgroup.weebly.com/.