

## Postdoctoral Position Program in Integrative Nutrition & Complex Diseases Laboratory of Dr. Robert S. Chapkin Texas A&M University

A post-doctoral position is open in Dr. Robert Chapkin's laboratory at Texas A&M University in the NIH-funded Integrative Nutrition & Complex Diseases Program. The laboratory is focused on environmental/nutritional modulation of stem cell biology, cancer biology, membrane biology, and cellular signal processing. One of the main current directions is the development of new tools to study the effects of environmental and microbial bioactive molecules on gut stem cell biology and chronic diseases. Our lab infrastructure includes: Flow cytometry single cell imaging, cell sorting and 3D mouse and human organoid cell culture, cell biology imaging (FLIM, FRET, TIRF) microscopy, super-resolution microscopy, metabolic profiling, epigenetics expertise (RNA Seq, systems biology) among others. Signaling pathways of interest include Wnt signaling, lipid rafts/cytoskeletal interaction, AhR, p53 and EGFR/Ras-dependent signaling.

Active projects in the lab include:

- Effects of environmental and microbial-derived compounds on aryl hydrocarbon mediated gut stem cell function and cancer risk.
- The impact of dietary and microbial bioactives on lipid and protooncogene nanoclustering in model membranes and in vivo (Drosophila, mouse and human organoid models).
- Systems biology and predictive modeling for microbial and host intestinal responses.

The successful candidate must have a PhD degree in nutritional sciences, cell biology, biochemistry/biophysics, systems biology or relevant fields. The candidate must be highly motivated, comfortable with technical challenges and problem solving and able to work collaboratively. Experience with fluorescence microscopy is an asset. Competitive salary and benefits are available commensurate with experience. Fluent English, a track record of strong publications, and a cooperative attitude are a must for this position.

The Chapkin lab has been continuously funded by NIH for 32 years. For more information about the lab see: <a href="http://chapkinlab.tamu.edu">http://chapkinlab.tamu.edu</a>

Please submit your CV and statement of current interests to Dr. Robert Chapkin, <u>r-chapkin@tamu.edu</u>

