



**Graduate Student Recruitment
Laboratory of Robert S. Chapkin
Program in Integrative Nutrition & Complex Diseases
Texas A&M University**

The Chapkin laboratory at Texas A&M University has an opening for a graduate student with an interest in one or more of the following areas: obesity, intestinal stem cells, epigenetics, metabolic profiling in preclinical models, gut-microbe crosstalk, membrane biology, immunology and/or computational biology/bioinformatics. Our lab studies the effects of natural dietary and microbial bioactive molecules on chronic diseases, with particular interest in molecular mechanisms of action. Lab methods include flow cytometry, cell culture, confocal (FLIM, FRET, TIRF) super resolution microscopy, metabolite analysis, RNA Seq, ChIP Seq, microRNA analysis among others. Pathways of interest include Wnt signaling, lipid rafts/cytoskeletal interaction, AhR, Myc and EGFR/Ras-dependent signaling.

Active projects in the lab include:

- Effects of dietary and microbial-derived compounds on cell membrane structure and function.
- Development of a novel noninvasive methodology to monitor host/microbe interaction.
- Investigation of the role of dietary and microbial ligands as modifiers of inflammation and colon cancer development.
- Synergistic effects of systemic and luminal metabolites on intestinal stem cells and differentiated colonocytes.

The graduate student candidate should be highly motivated, comfortable with technical challenges and problem solving and able to work collaboratively. Interest in microscopy is an asset. Competitive stipend and benefits are available. For more information about the lab see: <http://chapkinlab.tamu.edu> , <http://www.ncbi.nlm.nih.gov/sites/myncbi/robert.chapkin.1/bibliography/41155665/public/?sort=date&direction=ascending>

Please submit your CV and statement of interests to Dr. Laurie Davidson
L-davidson@tamu.edu