

PhD Student Position in Food Science & Precision Nutrition

The **Wu Lab** at the University of Massachusetts Amherst (Department of Food Science) is seeking a highly motivated PhD student with a **full research assistantship** to join our team in **Spring 2026**. Our research focuses on **Functional Foods, Precision Nutrition, and Gut Microbiome**. Projects in the lab include, but are not limited to:

- Investigating **sex-specific mechanisms** in obesity-associated colorectal cancer (CRC) and **dietary prevention strategies**
- Exploring the **interactions between diet and physical activity** in the development of metabolic dysfunction
- Understanding the role of the **gut microbiome and microbial metabolites** in the nutritional prevention of chronic diseases
- Advancing the **translational potential** of findings through cutting-edge 3D ex vivo models (e.g., **organoids**)

Requirements:

1. A bachelor's or master's degree (or equivalent) in food science, nutrition, molecular biology, biochemistry, biology, animal science, microbiology, kinesiology, or a related field
2. Strong experience with **preclinical models** (e.g., animal/rodent models, cell and organoid cultures)
3. Solid training in **molecular biology and biochemical techniques** (e.g., qPCR, Western blot, ELISA, flow cytometry, immunohistochemistry)
4. Experience in **omics data analysis** (e.g., microbiome, metabolomics, or transcriptomics)
5. A record of scientific presentations and/or publications
6. High motivation to work in a multidisciplinary, collaborative environment
7. Proficiency in English (written and spoken)

If you are interested, please send your resume to Xian Wu xwu@umass.edu.