Postdoctoral Researcher (The Ohio State University, Comprehensive Cancer Center and Human Nutrition Program)

Position Overview
The Post-Doctoral Researcher will utilize mass spectrometry to identify biomarkers and therapeutic targets by 'Omics' approaches. The successful candidate will perform metabolomic analysis and combine results with systems biology approaches in animal models and humans to identify diagnostic and therapeutic biomarkers for metabolic and cancer diseases. This opportunity will also perform targeted quantitative metabolomics analysis of urine, feces, plasma and tissue samples from cell culture, mouse and human samples using GC-MS and LC-MS. Further, the incumbent will develop and perform metabolic flux studies in animal and cell culture models.

The Post-Doctoral Research will play a pivotal role in all phases of the research cycle including experimental design, sample preparation, and analysis, data analysis and interpretation as well as manuscript preparation. The role will actively engage in method development and validation, reviews of appropriate literature, and supporting the PI through managing multiple projects as well as providing troubleshooting assistance within the laboratory. The ideal candidate is self-motivated, takes initiative, and works well with a variety of personalities and skills levels.

Position Environment
This role will work within the Health and Nutritional Metabolomics Lab directed by Dr. Chris Zhu, Assistant Professor in the Department of Human Sciences and Member of the Comprehensive Cancer Center at The Ohio State University, in Columbus, Ohio. The Zhu laboratory uses targeted/untargeted metabolomics and ambient mass spectrometry along with in vitro model systems, animal models, cell culture studies, and clinical studies to integrate basic research into translational nutrition and medicine. This is a one-year term position with the potential to be renewed for additional year(s) based on performance and funding availability.

If interested in this position, please contact Dr. Chris Zhu (zhu.2484@osu.edu). Please attach CV including education background, publication list and at least three names and email addresses of references. Additionally, please submit a summary of previous and current research and future plan (1-2 pages) in the Cover Letter or Other document attachments within the application.

Requirements
Basic requirements include:
- Ph.D. in Analytical Chemistry, Chemistry, Biochemistry or Life Sciences
- Strong background and hands-on experience in qualitative and/or quantitative mass spectrometry
- Hands-on experience in GC-MS, LC-MS, and HPLC, preferably in small molecule analyses
- Experience in MRM method development
- Strong analytical background and excellent problem-solving skills

Additional desired skills/experience:
- Experience in colon cancer or metabolic disease research areas
- Experience developing and performing metabolic flux assays
- Experience in handling bacterial culture, tissue culture and mouse models preferred
- Experience in comprehensive data analysis using statistical tools preferred