Position Type:
Postdoctoral Position at the NIH

Position Title:
Untargeted Metabolomics

Position Description:
The Informatics Core of the Division of Preclinical Innovation (DPI) at the National Center for Advancing Translational Sciences (NCATs) is seeking a postdoctoral fellow with experience in untargeted, mass-spectrometry-based metabolomics. We are an interdisciplinary team of bioinformaticians, chemists, and molecular biologists applying a metabolomics and multiomics analysis approach to identify dysregulated pathways and putative therapeutic targets. The team has access to state-of-the art technologies, including a Thermo Scientific Orbitrap Fusion Lumos Tribrid MS with a FAIMS Pro module, an Agilent RapidFire 365 – QQQ (6470) high-throughput MS system, a Waters Xevo G2-XS QTOF with ACQUITY Bio UPLC, and a Bruker rapifleX MALDI TOF/TOF system. See https://ncats.nih.gov/staff/mathee and https://ncats.nih.gov/preclinical/core/informatics/about for further details.

Core Responsibilities:
- Implementing existing extraction and LC-MS research protocols
- Developing new, robust, and reproducible extraction and LC-MS research protocols, including approach validation
- Working closely with bioinformaticians to evaluate the quality and reproducibility of metabolomic measurements and analysis, and to integrate metabolomic data with other omic data (e.g. transcriptome, microbiome, etc.)
- Compiling data and conducting preliminary statistical analyses (e.g. PCA, univariate and multivariate testing, etc.)
- Presenting results to the team and to the wider scientific community
- Drafting manuscripts and publishing results in peer-reviewed journals
- Developing and implementing novel approaches when standard approaches are not sufficient

Qualifications:
- PhD in metabolomics, biochemistry, analytical chemistry, or related field
- Demonstrated hands-on experience in generating high quality untargeted, LC-MS based metabolomic data
- Demonstrated experience handling a large number of samples (e.g. hundreds)
- Demonstrated experience in data deconvolution and filtering, data quality assessment, particularly mass-spectrometry data (e.g. LC-MS, MS2, MSn, etc.)
- Basic knowledge and understanding of statistical analyses and functional interpretation of multi-omics data (e.g. principal components analysis, univariate/multivariate statistical methods, pathway enrichment methods, network analysis, etc.)
- Strong verbal and written communication skills in English
- Strong organizational skills and record keeping
- Ability to work in a diverse and dynamic multi-disciplinary team and desire to acquire new skills as required for research studies
- Ability to manage multiple research studies simultaneously
- Knowledge of R is a plus
- Applicant must be eligible to work in the United States for any employer

How to Apply:
Please contact Dr. Ewy Mathé at ewy.mathe@nih.gov and include the following: 1) a full CV that includes a statement of research interests and career goals; 2) a 1-2 page research summary, 3) a list of contact information for 3 references. Salary is commensurate with other fellowship opportunities and the position is renewable for up to 5 years.

The review of applications will begin immediately and will continue until the position is filled.

Employer Name:
National Center for Advancing Translational Sciences
Division of Preclinical Innovation
Analytical Chemistry Core Facility

Position Location:
Rockville, Maryland

Disclaimer:
The NIH is dedicated to building a diverse community in its training and employment programs. NIH is an Equal Opportunity Employer.