The American Society of Pharmacognosy

https://www.pharmacognosy.us/job/postdoctoral-researcher-in-natural-products-chemistry-sang-lab/

Postdoctoral Researcher in Natural Products Chemistry—Sang Lab

Description

The Functional Food Lab at the Center for Excellence in Post-Harvest Technologies at the North Carolina Research Campus in Kannapolis, a unit within the School of Agriculture and Environmental Sciences at North Carolina A&T State University, is seeking a Postdoctoral Research Associate who has research experience in the fields of Natural Products Chemistry and Medicinal Chemistry. Experiences with isolation, purification, structural elucidation and biotransformation of small molecules from plants/functional foods using various liquid chromatographic skills (e.g. TLC, HPLC and sephadex) and spectroscopic chromatography (e.g. NMR and LC/MS) are desirable. The research mainly focuses on discovering major phytochemicals from human diets and their metabolites in rodents and humans, and subsequently developing and validating biomarkers of specific diets in complex biological matrices. The candidate is expected to work independently in interpreting 1D and 2D NMR spectra of new dietary biomarkers and also in LC/MS and/or GC/MS method development and validation of dietary biomarkers in biological samples.

Responsibilities

Experiences with isolation, purification, structural elucidation and biotransformation of small molecules from plants/functional foods using various liquid chromatographic skills (e.g. TLC, HPLC and sephadex) and spectroscopic chromatography (e.g. NMR and LC/MS) are desirable. The research mainly focuses on discovering major phytochemicals from human diets and their metabolites in rodents and humans, and subsequently developing and validating biomarkers of specific diets in complex biological matrices. The candidate is expected to work independently in interpreting 1D and 2D NMR spectra of new dietary biomarkers and also in LC/MS and/or GC/MS method development and validation of dietary biomarkers in biological samples.

Qualifications

Required qualifications:

- Ph.D. in Natural Products Chemistry, Medicinal Chemistry, Food Chemistry, or other closely related fields
- Abundant experience with various liquid chromatographic skills, including but not limited to TLC, open column, and semi- and preparative-HPLC
- Extensive experience with various spectroscopic chromatography, including but not limited to 1D and 2D NMR, GC/MS and LC/MS
- Experience with biotransformation of phytochemicals in cells and in vivo

Hiring organization

post-Doctoral Researcher in Natural Products Chemistry—Sang Lab Organization - North Carolina A&T State University

Employment Type

Full-time

Job Location

Kannapolis, NC

Date posted

May 15, 2023

Valid through

11.07.2023

- Knowledge in qualitative analysis and trace-level analysis of biomolecules in vivo
- Knowledge in chemical derivatization of phytochemicals
- Excellent written and oral communication skills for communicating and publishing scientific results
- Strong ability to work both independently and in a team environment

Contacts

Interested applicants are encouraged to apply with an e-mail containing: a statement of current and future research interests, curriculum vitae, and names and contact information of three references to Dr. Shengmin Sang at ssang@ncat.edu.