

## Post-Doctoral Research Associate in Natural Products Chemistry

### Description

Job Description – Post-Doctoral Research Associate in Natural Products Chemistry—Sang Lab 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 food science. 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. Required qualifications: •Ph.D. in Natural Products Chemistry, Medicinal Chemistry, Food Chemistry, Nutrition/Food Science, 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 •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 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](mailto:ssang@ncat.edu).

Responsibilities – 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, Nutrition/Food Science, or other closely related fields •Abundant experience with various liquid chromatographic skills, including but not limited to TLC, open column, and

### Hiring organization

<https://www.ncat.edu/caes/agricultural-research/ceph/index.php>

### Date posted

April 6, 2022

### Valid through

04.05.2022

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•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

Contact – Dr. Shengmin Sang, [ssang@ncat.edu](mailto:ssang@ncat.edu)

Comments –

Job Confirmation # – 206035493

Post End Date – 05/04/2022

### **Contacts**

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<https://www.ncat.edu/caes/agricultural-research/cepht/index.php>