Post-doctoral vacancy: Research Chemist/Phytochemical Scientist

Join our NIH-funded study of dietary supplements! This project supports the Dietary Supplement Ingredient Database (DSID; (https://dsid.od.nih.gov/), a database for information on analytically verified dietary supplement content.

The DSID website provides online calculators converting labeled levels into analytically derived estimates of ingredients in dietary supplement products sold in the US. Funded by the National Institutes of Health (NIH) for over 15 years, the DSID project has a team that includes a chemist, biologists, IT analysts and statisticians.

The research is based on fundamental principles of public health, nutrition and analytical chemistry. For multivitamin/mineral and omega-3 fatty acid studies, dietary supplement samples are purchased according to statistically developed sampling plans for products representative of the US market. The products are sent to contracted laboratories for the analysis of ingredient content. Botanical dietary supplements, including green tea, turmeric and cranberry products have been analyzed in smaller studies. In addition to determining how the analytical content of supplements compares to label claims, we also assess the performance quality of dietary supplements using United States Pharmacopeia protocols for disintegration and dissolution testing. New studies planned include comparison of results for different methods for quantifying cranberry proanthocyanidin content of cranberry DS, and analysis of new folate ingredients in DS, including 5-methyltetrahydrofolate (5-MTHF; both generic and trademarked ingredients) and folinic acid.

Laboratory data and other related information are stored in Microsoft Access in-house databases. SAS and R programs are utilized for evaluation and statistical analysis of large datasets of laboratory data. Results are reported on the project website, at monthly meetings with the office of Dietary Supplements at NIH, and in articles published in peer-reviewed journals.

Note #1: This is not a laboratory position. Samples, including quality control materials, are sent to collaborating and contracted laboratories for analysis.

Note #2: This position is a post-doctoral position and only those who received a PhD within the last 5 years are eligible to be hired. Once hired, this time limit does not apply.

Minimum qualifications: The candidate must have a PhD in chemistry, or a related science and must have completed this degree less than 5 years ago. At least 2 years of experience with analytical chemistry required. Experience with dietary supplements, phytochemicals, and dosage form quality testing preferred.

Required: Experience coordinating research programs; experience with analytical chemistry and laboratory quality control; experience with statistical methods; manuscript/grant proposal writing experience; excellent communication and analytical thinking skills required. Must be able to work both collaboratively in a team environment and independently, with a high degree of initiative and self-motivation; must possess excellent time and project management skills and be able to handle multiple priorities and resolve complex problems within deadlines.

Other Preferences: Experience with the management of technical personnel; experience with complex data analysis, database management, web design.

The successful candidate will coordinate multiple directions/elements of this research program including study design and laboratory data assessment and analysis. This position requires the ability to use technical knowledge to make judgments and decisions, and to work independently as well as cooperatively as a team member to achieve project goals within deadlines.

This is a full time contracted position for one year, with additional years possible. Health and retirement benefits are included and salary is commensurate with qualifications. This position is on-site in Beltsville, MD. When applying, please send a resume and a cover letter.

Interested candidates may send their resume and cover letter to: Karen Andrews, karen.andrews@usda.gov