

The American Society of Pharmacognosy

<https://temp.pharmacognosy.us/job/post-doctoral-fellow-in-secondary-metabolism-and-the-human-microbiome/>

Post-Doctoral Fellow in Secondary Metabolism and the Human Microbiome

Description

Applications are invited for a post-doctoral fellow to join the Stubbendieck Laboratory in the Department of Microbiology and Molecular Genetics at Oklahoma State University-Stillwater. This position is initially for one year, with the possibility of yearly extensions up to three years, with the possibility of future renewal. Extensions and renewal are based on availability of funds and annual performance evaluations. The Stubbendieck Laboratory studies how bacteria synthesize and use secondary metabolites to mediate competition and cooperation within host-associated microbiomes. Currently, the laboratory is focused on the microbiomes of the human oral and respiratory tracts, including the mouth, nose, and lower airways in individuals with cystic fibrosis. To characterize how secondary metabolites function in these systems, the laboratory takes an interdisciplinary approach that integrates traditional microbiology, genomic and metagenomic sequencing, genetics, and natural product chemistry. The long-term goals of the Stubbendieck laboratory are to better understand the ecological and mechanistic functions of secondary metabolites in microbiomes and to identify potential avenues for the development of therapeutics.

<https://apply.interfolio.com/141377>

Responsibilities

Expected duties of the post-doctoral fellow will include: 1) development and performance of microbial co-culture assays, 2) extraction, fractionation, and isolation of metabolites from microbial cultures, 3) structural elucidation of microbial metabolites using mass spectrometry and/or nuclear magnetic resonance spectroscopy, and 4) genetic characterization of biosynthetic gene clusters.

Qualifications

Candidates must hold a Ph.D. in microbiology, biochemistry,

Hiring organization

Oklahoma State University

Employment Type

Full-time

Job Location

Stillwater, OK

Date posted

March 27, 2024

Valid through

30.06.2024

chemistry, or a related field. Preference will be given to candidates with previous experience in characterizing natural products or secondary metabolite biosynthetic gene clusters.

Contacts

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