

Johns Hopkins University - Postdoctoral Analytical Chemist

The McMeniman group at Johns Hopkins Bloomberg School of Public Health, Baltimore, MD is actively recruiting a postdoctoral analytical chemist to study human scent chemistry using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) methods. We seek a highly motivated, proactive individual with demonstrated experience in GC/MS and/or related analytical chemistry methods such as LC-MS or PTR-MS to support an interdisciplinary research program aimed at defining the molecular and cellular basis of mosquito attraction to human scent and malaria transmission. The recruited individual will be primarily responsible for standard and comprehensive TD-GC/MS method generation and analysis of headspace samples derived from humans differing in attractiveness to mosquitoes and malaria infection status; and metabolomic analyses of other matrices including whole blood, plasma and sebum.

The recruited postdoctoral scientist will be expected to work as part of a collaborative laboratory team primarily based at Johns Hopkins Malaria Research Institute in Baltimore MD, and travel internationally to Zambia periodically to assist in biospecimen collection and method optimization. Translational goals of the research program include engineering synthetic human scent mimics that effectively trap mosquitoes to combat malaria and developing new biomarkers for next-generation malaria diagnostics. Analytical chemists with basic and applied interests in topics such as the human volatilome, skin microbiome, infectious diseases, diagnostics, chemosensory biology, materials science and fragrance-based product development are encouraged to apply.

Post-doctoral scientists will be compensated according to the NIH rate commensurate with experience, subject to current University policy at the time of hire: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-25-105.html

The McMeniman Group (https://www.mcmenimanlab.org/) studies mosquito chemosensory biology and is affiliated to the Johns Hopkins Malaria Research Institute, Department of Molecular Microbiology & Immunology, Bloomberg School of Public Health; and Department of Neuroscience, School of Medicine, Johns Hopkins University, Baltimore. Our laboratory houses state-of-the-art facilities for TD-GC/MS and TD-GCxGC-ToFMS, mosquito behavioral analysis, and has established a large semi-field facility for screening inter-individual differences in human attractiveness to mosquitoes in Zambia. Anticipated start date for this position is August 1, 2025 or thereafter. Appointments will be renewed subject to University policy on an annual basis for up to 5 years, with potential for extension of the position thereafter subject to funding. Candidates with Master's level qualifications and demonstrated experience, or qualified candidates with >6 years total postdoctoral experience seeking employment at the Research Associate level (salary USD \$60,000-\$90,000 commensurate with experience) will also be considered. Interested candidates should email a cover letter stating specific interest and career goals along with their CV to:

Dr Conor McMeniman
Johns Hopkins Malaria Research Institute
Department of Molecular Microbiology & Immunology
Johns Hopkins Bloomberg School of Public Health
615 N. Wolfe Street, E5644, Baltimore, MD 21205

Email: cmcmeni1@jhu.edu