

POSTDOCTORAL POSITION: VECTOR GENOMICS and BIOLOGY

January 11, 2022

The Norris laboratory, located in the Department of Molecular Microbiology and Immunology at Johns Hopkins Bloomberg School of Public Health in Baltimore, is seeking a highly motivated individual for a postdoctoral position focusing on mosquito vector genomics and biology. The Norris laboratory is interested in understanding genetic diversity and molecular markers/barcodes that can be used to confirm mosquito identity. This involves development and validation of molecular genetic tools, phylogenetic analysis including spatiotemporal population level studies, and association with vector-borne pathogen incidence.

This postdoctoral position will work as part of a multi-institutional and cross-disciplinary research team. The research program, entitled *Computing the Biome*, funded by the National Science Foundation's Convergence Accelerator program is centered on using mosquitoes as biosensors for detecting the presence of vertebrates, microbes, and viruses in the environment. The NSF-funded effort will be deployed in an urban center and selected mosquito samples will be sequenced and this data will be used to drive studies of mosquito genomics at Johns Hopkins University.

The postdoctoral fellow will be responsible for analyzing genetic barcode data as well as mosquito genomic data from collaborative metagenomic analyses. A thorough understanding of mosquito biology and mosquito genomics is required. The responsibilities include isolation of nucleic acids for sequencing and PCR studies, development of barcode based tools for mosquito identification, assembly and annotation of mosquito genome data as it becomes available, and association of genetic data with biology of interest (i.e. mosquito immunity, microbial load association, ecological associations, etc...). Thus, a combination of computational, programming and molecular bench skills is required. This individual will work closely with collaborators from academic, industry and government partners.

The position is available immediately for one year (with the possibility of renewal for a 2nd year contingent on satisfactory performance). We are looking to fill the position as soon as possible and the position will remain open until filled. Salary is based on the NIH postdoc salary scale. Applicants should submit a CV, statement of research interests, writing/publication sample and contact information of three references. Contact: Dr. Douglas Norris douglas.norris@jhu.edu

