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JOHNS HOPKINS
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Job Opportunity: Postdoctoral Fellow in Biostatistics, Johns Hopkins University

Description of the institute

The Department of Biostatistics at Johns Hopkins University is one of the top Biostatistics Departments in the United States, and in the world. The Bloomberg School of Public Health, in which the Department of Biostatistics resides, has been the No. 1 graduate program in the field of public health for more than 20 years by US News & Reports.

The department offers a vibrant and collaborative research environment, with a diverse group of faculty and students working on a wide range of topics, including epidemiology, genetic and other “omics” data analysis, clinical trials, and health services research. The department also offers a variety of training and educational opportunities, including a highly regarded PhD program and a Master of Public Health degree with a concentration in biostatistics.

Description of position:

We are seeking a highly motivated and talented Postdoctoral Research Fellow to join our team and contribute to the analysis of multi-omics data generated using bio-samples from the AMANHI (Alliance for Maternal and Newborn Health Improvement) project in Bangladesh and the MOMI (Multi-omics for Mothers and Infants) - a collaborative consortium of six biorepositories from Asia and Africa involving 20,000 mother-infants. The successful candidate will be supervised by Drs. [Ni Zhao](#) and Professor [Nilanjan Chatterjee](#) from Hopkins Biostatistics Department and collaborate with top-notch researchers in the Department of International Health, including Professor [Abdullah Baqui](#) and [Dr. Rasheda Khanam](#), and researchers from our international sites. The successful candidate will be able to access a wide range of omics data, including genetics, metabolomics, epigenetics, and proteomics from all cohorts of MOMI and AMANHI. These datasets feature large sample sizes and encompass genetically and socioeconomically diverse study populations, offering a rich resource for exploring various maternal-neonatal outcomes. Furthermore, we actively encourage and promote our candidate to take the lead in pioneering statistical innovations tailored to analyze large-scale, multi-omics datasets. The AMANHI and MOMI cohorts, with their complex study designs and diverse omics

data, serve as a fertile ground for the creation of innovative analytical tools, providing a unique opportunity for methodological development.

The Alliance for Maternal and Newborn Health Improvement (AMANHI) Project: The AMANHI is a multi-country study including Bangladesh, Pakistan, and Tanzania, funded by the Bill and Melinda Gates Foundation and coordinated by World Health Organization. The overarching goal of this project is to establish biobanks to facilitate discoveries of biomarkers of adverse pregnancy outcomes (maternal, fetal, and neonatal health outcomes) as new and more feasible methods become available. An additional goal is to identify biological mechanisms underlying the causes of the adverse outcomes including preeclampsia, spontaneous preterm birth (sPTB), stillbirth, and intrauterine growth restrictions (IUGR) to create a platform to generate new approaches to treatment and prevention.

Multi-omics for Mother and Infants (MOMI) Consortium: The MOMI is a global initiative founded by the Bill and Melinda Gates Foundation that is dedicated to identifying new predictive biomarkers for preterm birth, preeclampsia, stillbirth, and fetal growth restriction. MOMI brings together six distinct cohorts from South Asia and sub-Saharan Africa, including the AMANHI.

Quantification of candidate:

- A Ph.D. in statistics, biostatistics, bioinformatics, computer science or a related field
- Excellence in programming languages such as R, Python or C
- Experience in analyzing multi-omics data preferred, but not required
- Strong communication and teamwork capabilities
- The ability to work independently and proficiently
- Ability to meet timeline
- A record of publications in peer-reviewed journals is advantageous.

Salary and Benefits: Johns Hopkins offers comparative salary and benefit, including health and dental insurance.

Instructions for applying:

Application Information: Applicants should send a CV, a short research statement, and names and contacts of at least two referees to nzhao10@jhu.edu and/or nchatte2@jhu.edu . Review of applications will begin immediately and continue until the position is filled.