Postdoctoral Fellow in Biostatistics/Bioinformatics
Laboratory of Clinical Immunology and Microbiology (LCIM)
National Institute of Allergy and Infectious Diseases (NIAID)
National Institutes of Health (NIH)

The Neuroimmunological Diseases Section (NDS) of LCIM, NIAID Division of Intramural Research (DIR) is seeking a bioinformatics postdoctoral researcher.

The mission of NDS is to improve understanding of the mechanisms in central nervous system (CNS) injury, neuroprotection, and repair leading to effective treatments or cure of neuroimmunological diseases, especially multiple sclerosis (MS).

The postdoctoral fellow will use and develop advanced statistical and machine learning methodologies to analyze existing and to-be-collected quality-controlled and curated multimodal longitudinal patient data from NDS clinical protocols to construct statistical models of clinical utility. These may include:

- Genetics: whole exome sequencing and whole genome single nucleotide polymorphism (SNP) arrays
- Proteomics: More than 5,000 proteins measured in cerebrospinal fluid (CSF) and serum
- Cellular: multicolor flow cytometry data in CSF and serum
- Quantitative imaging: brain MRI and optical coherence tomography and extensive clinical data, including fully digitalized neurological examinations and extensive quantitative data collected using smartphones)

The fellow will benefit from a dynamic learning environment with a strong emphasis on reproducible science (including validation of derived models in independent cohorts), a multidisciplinary team of clinicians and scientists, strong domain-expertise guidance, and access to NIH state-of-the-art resources and support.

**Required Qualifications**

- Ph.D. or equivalent degree in bioinformatics, biostatistics, biomathematics, or a related field with a strong computational component
- Documented experience performing advanced statistical analyses on large, complex datasets in a programming language such as R and/or Python
- Creative thinking, self-motivation, a strong work ethic, and an interest in developing and applying statistical methodologies to solving clinically relevant questions
- Ability to collaborate with a multidisciplinary team of researchers and clinicians from NIH and outside collaborators

**Preferred Qualifications**

- Experience, or interest in, applying Linux batch scripts in a high-performance computing environment
- Experience querying data from relational database systems
- Strong written and oral communication skills
To Apply

Candidates are invited to submit a full curriculum vitae (CV) including publication list, a one-page summary of research interests, and names and contact details of three references to Dr. Bibiana Bielekova by email at bibi.bielekova@nih.gov.

Visit Research Training at NIAID for more information about joining NIAID’s dynamic atmosphere!

*HHS, NIH, and NIAID are equal opportunity employers.*