



## **2 Fully-Funded Post-Doctoral Fellowships**

Developmental Neurogenomics Unit (DNU)  
National Institute of Mental Health  
National Institutes of Health  
Department of Health and Human Services  
Bethesda, MD

The National Institute of Mental Health (NIMH), a major research component of the National Institutes of Health (NIH), and the Department of Health and Human Services (DHHS), is seeking exceptional candidates for **2 Post-Doctoral Fellow positions** in the Intramural Research Program (IRP) Developmental Neurogenomics Unit (DNU) headed by Dr. Armin Raznahan M.D. Ph.D.

**The DNU combines cutting edge neuroimaging and genomic research methods to better-understand human brain patterning in health and disease.** The Unit pursues (1) large-scale neuroimaging studies of brain development in health, which seek to parse the phenotypic architecture of human brains as a bridge between genes/environments and behavior, and (2) deep-phenotypic studies of groups with diverse rare genetic disorders that model risk for adverse neurodevelopmental outcomes. The DNU innovates data integration across 3 axes: typical and atypical development; different genetically-defined groups; and different levels of biological organization (i.e. molecular features, brain networks/gradients and behavior). Studies are conducted in globally-unique longitudinal cohorts of patients and controls with ultra-deep phenotypic data (already gathered), as well as large scale public datasets (e.g. Human Connectome project and UK Biobank).

**Two Post-Doctoral Fellow positions are available for creative and highly motivated individuals interested in (1) studying human brain patterning in relation to age, sex, genetic variation and clinical profiles, and (2) developing new approaches to model brain-behavior relationships in health and disease.** Ideal candidates will have experience in advanced analysis of multimodal neuroimaging and/or transcriptomic data. Applicants should have a recent Ph.D. in Neuroscience, Psychology, Genetics, Computer Science, Bioinformatics, or related fields (or be within 1 year of completing their degree). Proficiency in R, Python or MATLAB is essential. Competence in one or more of the following broad analytic areas is highly desirable: spline-based trajectory modelling, graph-theory, non-linear dimension-reduction, and machine-learning.

**The DNU is based within the NIMH Human Genetic Branch and works in a highly collaborative and multidisciplinary model.** Thus, an incoming Postdoctoral Fellow with primary experience in neuroimaging science could gain exposure to transcriptomic analyses, and vice versa for an incoming Postdoctoral Fellow with primary training in analysis of gene-expression data.

**The Post-Doctoral positions will provide excellent opportunities for career-development along diverse paths.** The positions will offer several avenues to apply for grants, build collaborative academic networks, and also explore paths into industry, policy and start-up sectors.

Salary will be commensurate with education and experience. Applicants are invited to submit a curriculum vitae including publication list, a one-page summary of research interests, and names and contact details of three referees to Dr. Armin Raznahan by email at [raznahan@mail.nih.gov](mailto:raznahan@mail.nih.gov). The National Institutes of Health is an equal opportunity employer.