Postdoctoral Fellowship in single cell bioinformatics (closing date March 1st, 2021)

Bring your skills in single cell transcriptomics and train in neuroimaging and psychiatric genetics

The NIMH’s Human Genetics Branch, Section on Developmental Neurogenomics (SDN, PI Armin Raznahan MD PhD) is seeking a postdoctoral scholar to spearhead integration of single cell transcriptomic and neuroimaging views of the human brain in health and disease.

This fully-funded postdoctoral fellowship is perfectly suited for a highly-motivated and creative team player with (i) training in Computational Biology, Genomics or related fields, (ii) skills in analysis of single cell transcriptomic data (preferably, but not necessarily from brain), and (iii) an interest in linking these skills and findings up to neuroimaging and psychiatric genetics research. However, there is a broad range of training opportunities in the post, and we welcome all applicants who are interested in working with us, and have: a PhD or MD; demonstrated expertise in applying computational methods to understand complex biological systems.

The SDN bridges basic and clinical neuroscience. We have developed tools for integration of transcriptomic and neuroimaging data, to build new multiscale models of the human brain in health (Reardon, Seidlitz et al, Science, 2018 / Liu et al, PNAS, 2020) and disease (Seidlitz et al, Nat Comms, 2020). We are now embarking on an exciting next phase of work rooted in large, newly-generated sets of single nucleus RNAseq data from adult human brains that are ripe for analysis (>250 samples from 9 cortical regions). The successful applicant will take the lead in working with these uniquely large and diverse datasets to better understand how cellular patterning of the human brain (i) varies as a function of sex and brain region, (ii) relates to measures of brain structure and function derived from multimodal in vivo neuroimaging, and (iii) concentrates genetic risk for neuropsychiatric disease.

The SDN is part of the NIMH Intramural Research Program, a large and thriving neuroscience research community spanning basic, translational and clinical work. The SDN is highly collaborative, and lab members have the opportunity to connect and cross-work with SDN-partner institutions (e.g., UCLA, Penn, McGill, Oxford, Cambridge) Training and career development are highly prioritized within the SDN, and by NIMH IRP more broadly – so that this postdoctoral fellowship will provide the perfect springboard into your next career phase – be that in academia, industry or other fields.

Salary will be commensurate with education and experience. The NIH is an equal opportunities employer. This post could potentially work in a remote mode, as an alternative to the traditional on-site model.

For questions, or to submit an application, please contact Dr. Armin Raznahan (raznahana@mail.nih.gov). Applications should be submitted as a single PDF and include (1) A cover letter, (2) curriculum vitae, and (3) two published or in press papers that best reflect the contributions of the candidate to the field.