Postdoctoral position – Transcriptomic Imputation & Psychiatric Genomics

Two postdoctoral positions are available in the Huckins Lab, with a primary focus on the development and application of Transcriptomic and multi-omic Imputation models.

Transcriptomic Imputation (TI) approaches leverage large, well-curated eQTL reference panels in order to predict gene expression from genotype. TI models can be applied to any large collection of genotypes (i.e., GWAS) to obtain predicted genetically regulated gene expression in cases and controls, and thereby identify associations between gene expression and disease. These higher-level genic associations may provide greater interpretability.

As part of the Huckins Lab, you will help to extend and improve these methods to incorporate new well-curated transcriptome, histone modification, and microbiome datasets, in order to build predictors of multi-omic data from genotypes. At every stage of our analysis, we will apply these predictors to schizophrenia, bipolar disorder and anorexia nervosa GWAS data in order to reveal more about multi-omic risk for these psychiatric disorders.

Postdoctoral candidates may propose to focus either on development of these models, including, for example, proposing novel statistical approaches, leveraging knowledge of eQTL architecture, extending models to include new populations (etc); or on the application of these models to psychiatric GWAS data, and interpretation of results.

Your skills

A successful candidate will be motivated and enthusiastic about understanding the neurobiology of psychiatric disorders, and will show a wide interest in the work of the psychiatric genomics division. Ideally, you will enjoy communicating and explaining your work to peers and students, and have experience writing clearly and succinctly.

This position will require strong coding and/or programming skills. In particular, working knowledge of R & UNIX will be essential. Individuals with non-computational backgrounds but knowledge + experience of bioinformatics, and a desire to increase their computational skills, are also invited to apply.

Education: PhD in Human Genetics/Statistical Genetics, or similar.

Environment

The Huckins Lab is part of the Pamela Sklar Division of Psychiatric Genomics, in the Icahn School of Medicine, New York. As a division, our focus is on understanding the causes, outcomes, and treatment of psychiatric disorders. Our researchers have diverse interests and backgrounds, including computational, wet-lab and clinical research teams, as well as post-doctoral fellows, grad students, and bioinformaticians. We hope that you will work collaboratively with this diverse groups of researchers, and will contribute to our goal of understanding psychiatric disease.

The Icahn School of Medicine at Mount Sinai offers a range of support for postdoctoral fellows, including grant writing and resume workshops; generous internal funding opportunities; seminars and symposia on professional development; support and funding tailored specifically to under-represented groups in STEM; international personnel office to support immigration needs. Further information may be found here: http://icahn.mssm.edu/education/postdoc

Terms and Benefits

The Icahn School of Medicine at Mount Sinai provides excellent benefits to postdoctoral fellows, including subsidized housing on the Upper East Side of Manhattan (http://icahn.mssm.edu/education/postdoc/housing).
We also provide a range of benefits to parents and carers, including child care; on-site lactation rooms; parent's social and support groups; financial support with child and dependent care. We will take family schedules and commitments into account when scheduling our lab activities and meetings.

Salary will be commensurate with years of experience, and is set above NIH guidelines to counter NYC living expenses.

The Huckins Lab does not tolerate harassment of anybody, in any form. All members of the lab are required to abide by our code of conduct at all lab-related events. (https://github.com/laurahuckins/HuckinsLab/)

How to apply

To apply for this position, email a cover letter and up-to-date CV to laura.huckins @ mssm.edu
Please include the names & contact details for two references in your application.

We will consider all applicants without discrimination on grounds of disability, sexual orientation, pregnancy or maternity leave status, race or national or ethnic origin, age, religion or belief, gender identity and expression, marital status, protected veteran status (if applicable) or any other characteristic protected by law.