Post-Doctoral Fellow in Computational & Statistical Genomics

Pasaniuc and Gandal Labs at UCLA

An NIH-funded post-doctoral fellowship position is immediately available shared between the labs of Drs. Michael Gandal and Bogdan Pasaniuc within the David Geffen School of Medicine and the Semel Institute for Neuroscience and Human Behavior at UCLA. We are seeking ambitious applicants with a strong background in genetics, computational biology, and/or computer science who are interested in working at the interface of human disease and genetics.

The appointed researcher will be embedded in an interdisciplinary team of statistical geneticists, bioinformaticians, as well as wet lab scientists, computational biologists, and clinicians. The successful candidate will be responsible for developing and extending new statistical genetic/genomic methodologies integrating results from genome-wide association studies (GWAS) with large-scale functional genomic datasets of human brain, specifically focusing on transcript-isoform level regulation, to gain biological insights into the biological mechanisms underlying psychiatric disorders including autism and schizophrenia. This project builds directly on the transcriptome-wide association (TWAS) approach developed in the Pasaniuc lab (Gusev et al., *Nature Genetics*, 2016) and applied in the Gandal lab to prioritize new candidate psychiatric disorder risk genes (Gandal et al., *Science*, 2018).

Job requirements:

- PhD in genetics/genomics, computer science, statistics, engineering, biomedical informatics, quantitative neuroscience, or a related field.
- Programming competence demonstrated in at least one or more of these programming languages: Python, R, Java, C++, Matlab.
- Experience with high-performance computing.
- The ability to work with heterogeneous high-throughput biological data.
- Knowledge and deployment of advanced statistical concepts used in genomic data analysis including nonparametric tests, ANOVA, mixed models.
- Knowledge and experience working with genomic data - advantage.
- Ability to work in a Linux environment - advantage.
- Software tool development experience: source control (git), packaging, documentation - advantage.
- Demonstrated ability for independent and critical thinking, strong organization skills, oral and written communication skills in English, and ability to communicate clearly in an interdisciplinary environment.

UCLA is an equal opportunity/affirmative action employer.

Please submit your CV/resume, and names and contact information for 2 references to Bogdan Pasaniuc (pasaniuc@ucla.edu) and Michael Gandal (mgandal@mednet.ucla.edu)