Postdoctoral Position Available

Pharmacogenomic Transcriptome Analysis

Research Group of Steven Brenner
University of California, Berkeley

Project background and description
The goal of the UCSF Pharmacogenetics of Membrane Transporters (PMT) project is to discover the genetic basis of differing responses by patients to drugs that interact with membrane transporters. The PMT project is part of the nationwide Pharmacogenetics Research Network (PGRN). PGRN has commenced a network-wide RNA-seq project to sequence the transcriptomes of at least twenty-five samples each of at least four tissues: liver, kidney, heart, and brain. The goal of this project is to establish the expression levels of genes and their splice isoforms across the different tissues, with a focus on the genes of interest to the pharmacogenetics community at large and the PMT group in particular.

The appointed researcher will develop and apply statistical and computational methods for the identification alternative splicing events and the inference of isoform-level expression, based on high-throughput sequencing data. These data will be used to determine variation in splice isoform expression between different tissues.

Position requirements
The candidate should have a Ph.D. (in statistics, biostatistics, computational biology, or a related field) with a strong publication record and strong professional references. The ideal candidate should have demonstrated interests and experience in the analysis of genomic data, ideally recent high-throughput sequencing data from the Illumina Genome Analyzer; strong knowledge of molecular biology; extensive programming experience pertinent to the analysis of large and diverse datasets (UNIX operating system; R, C/C++, Java, Perl/Python languages; MySQL database); work well in a multi-disciplinary team. Excellent communication skills are required for effective interaction with the multidisciplinary cohort of researchers in our laboratory and with collaborators.

Interested applicants should have statement of interest, CV, transcript, and at least three letters of reference sent to jobs@compbio.berkeley.edu. For more information, see http://compbio.berkeley.edu/

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The Berkeley academic environment

The Brenner lab is an interdisciplinary research group at the University of California, Berkeley, one of the world's premiere research universities. We are associated with the Department of Plant and Microbial Biology, the Department of Molecular and Cell Biology, the Department of Bioengineering, as well as the University of California, San Francisco and Lawrence Berkeley National Lab. Our key collaborators on this project are members of the PMT Consortium.

The University of California, Berkeley ranks first nationally in the number of graduate programs in the top 10 in their fields, according to the most recent National Research Council study. Berkeley is committed to diversity in its staff, faculty, and student body, and invites all qualified people to apply, including minorities and women, veterans and individuals with disabilities. Information about Berkeley's outstanding benefits are at: http://atyourservice.ucop.edu/forms_pubs/ misc/benefits_of_belonging.pdf. The University of California is an Equal Opportunity/Affirmative Action Employer. Please refer to the University's statement on confidentiality, found at http://apo.chance.berkeley.edu/evalltr.html.

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