Postdoctoral Research Position in Computational Biology or Statistical Genetics

A postdoctoral position in computational biology or statistical genetics is available in the lab of Dr. Paul Scheet at the University of Texas MD Anderson Cancer Center in the Department of Epidemiology. Major foci of the lab include the development and application of tools for the analysis of cancer genomic and human genetic data. We are particularly interested in experiments using microarray and next-generation sequencing technologies to characterize tumor and germline genomic variation and the relation of this variation to prognosis, treatment and outcome of disease.

Computational or systems biology. Our lab has recently developed *hapLOH*, a software tool to interrogate subtle mixtures of inherited and cancer genomes within an individual (platform talk at *2012 CSHL Meeting on The Biology of Genomes*). This provides a novel technique for studying large existing and emerging data sets, such as from the TCGA. Additionally, we wish to conduct integrated analyses of disparate data types.

Statistical genetics. Over the last several years, we have been active in developing methods and software for analysis of genome-wide association (GWA) data, including models for haplotype variation and genotype imputation. We lead the analysis team for a family-based GWA study of behavioral phenotypes from the Netherlands Twin Register, and collaborate on studies of pharmacogenomics of treatment for childhood acute lymphoblastic leukemia. These projects demand new methods for analysis.

The lab provides an excellent environment for studying statistical and computational genomics, with access to local, national and international collaborators. Dr. Scheet has NIH-funded projects for statistical methods development and for collaborations at multiple institutions, including St. Jude Children's Research Hospital, Stanford, UC Davis, the VU University (Amsterdam), and the UT Health Sciences Center (Houston). Lab members have academic and real-world experience in bioinformatics, genome sequencing, computer science, and statistics.

MD Anderson has topped U.S. News & World Report's list for cancer care ("America's Best Hospitals") 7 of the last 9 years and is located in the Texas Medical Center (TMC), the world's largest. The proximity of the TMC to Rice University and the Museum District, light rail connections to world-class performing arts and professional sporting venues, and a diverse population make accessible a uniquely cosmopolitan and affordable city.

The applicant should have a strong background in biology or computation and be working towards or have received a Ph.D. (or equivalent) in a field such as the following: computer science, statistics, biostatistics, genetics, quantitative biology or cancer biology. To apply, send a cover letter with information about research experience and interests, a CV, and the names and contact information for 3 references to: pascheet@mdanderson.org. Please visit http://epi.mdanderson.org/scheet for more information.

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