Post-doctoral Positions in Precision Medicine, Big Data and Statistical Genetics/Genomics

Applications are being sought for multiple post-doctoral positions for conducting methodological and applied research in the interface of cutting-edge areas of precision medicine, big data and statistical genetics/genomics. The candidates will join the research team of Dr. Nilanjan Chatterjee, who recently joined the Johns Hopkins University as a Bloomberg Distinguished Professor with joint appointments in the Department of Biostatistics of the Bloomberg School of Public Health and the Department of Oncology, School of Medicine. Dr. Chatterjee and his post-doctoral fellows will be key members of the Johns Hopkins Individualized Health Initiative (Hopkins inHealth) a signature initiative of the University, Health System and Applied Physics Lab. The candidates will have opportunity to participate in a broad research program that involves development and applications of quantitative methods applicable to modern population-based studies. Broad scientific goals include discovery of new biomarkers, understanding disease mechanisms, modeling risk and developing risk-stratified approaches to disease prevention. Examples of ongoing projects include, but not limited to, large scale studies of genetic association and interactions using data generated from both array- and sequence-based technologies; integration of external genomic annotation and functional data in analysis of genetic association studies; modeling gene-environment interactions; assessing interactions between susceptibility SNPs and somatic mutation patterns in tumor tissues; development and evaluation of risk prediction models incorporating genetic susceptibility, biomarkers and epidemiologic risk-factors; and techniques for model calibration and model synthesis using information from external big-data sources.

Candidates should have a PhD in Statistics, Biostatistics, Computer Science or similar quantitative fields. The candidates should have strong computational skill and ability to manage work with large datasets. Women and under-represented minority candidates are particularly encouraged to apply. Interested candidates should email CV, a research statement and three reference letters to Melanie E. Smolter (msmolte1@jhu.edu). Applications received by December 15th, 2015 will be considered in the first round of review, but the positions will remain open until filled. If you have questions about the positions, please contact Dr. Nilanjan Chatterjee (nilanjan@jhu.edu).