Post-Doctoral Position at Johns Hopkins University: Statistical Methods and Computational Tools for Individualized Health Initiative

The Johns Hopkins Individualized Health Initiative (<u>Hopkins inHealth</u>) is a university-wide strategic initiative to turn precision medicine into reality, leveraging the university's multi-disciplinary expertise as well as its best-in-class data analytics infrastructure. We are seeking a post-doctoral fellow to help advance our mission by developing statistical methods and computational tools to analyze complex real-world health data. Potential projects include, but are not limited to, estimating individual patient's health state and trajectory from various sources of measurements, assessing expected benefits and harms of interventions, and predicting patients' future healthcare expenditure by combining the past data with high-dimensional auxiliary data. All these projects have a common goal of providing better healthcare at more affordable costs.

The fellow will be jointly mentored by Prof. Aki Nishimura and Prof. Scott Zeger. The fellow will have opportunities to regularly interact with other members of the Department of Biostatistics as well as of the *in*Health Initiative across Johns Hopkins Schools of Public Health and Medicine. The appointment is for two years with possibility of extension into the third-year. The fellow may start the appointment any time during 2021 and applications are considered until the position is filled.

Qualifications: An ideal applicant should have

- 1. PhD degree and beginnings of a publication record in statistics and data science disciplines, including applied mathematics, biostatistics, computer science/machine learning, along with other quantitative data-intensive fields.
- 2. Expertise in one or more of the following areas: Bayesian methods, computational statistics, longitudinal data analysis, causal inference, large-scale computing, and software development.
- 3. Proficiency in a statistical programming language (e.g. R and Python) as well as in a low-level one (e.g. C++, RCpp, and Cython), or interest in developing such.
- 4. Interest in tacking challenging real-world data and health problems but no prior experience is required and willingness to acquire new skill sets as necessary.

<u>How to Apply</u>: Interested applicants should submit their curriculum vitae, cover letter indicating relevant qualifications and research interests, and contact information of 2 potential references via email to Aki Nishimura at aki.nishimura@jhu.edu.

Johns Hopkins Department of Biostatistics and the broader School of Public Health provides a dynamic, collaborative, and highly intellectual environment for junior investigators to grow and develop their future career. The Johns Hopkins University is an Affirmative Action / Equal Opportunity Employer. There are no citizenship restrictions for this position.