THE UNIVERSITY OF
CHICAGO
MEDICINE

CCHE
The Chicago Center
for HIV Elimination

Postdoctoral Scholar in Computational Modeling and Public Health Research at The University of Chicago

The Department of Medicine and the Chicago Center for HIV Elimination at The University of Chicago announce a post-doctoral scholar position for a computational scientist focusing on public health research. The position is under the direct supervision of Aditya Khanna, Ph.D. and John Schneider MD, MPH and in collaboration with other Center faculty (http://hivelimination.uchicago.edu/people/faculty).

A central characteristic of the successful candidate's research program will be its integration of advanced computational methods to improve outcomes in populations impacted by: (1) HIV and sexually transmitted diseases (STDs); (2) substance use disorder and (3) intersections of the above. The successful candidate's research portfolio will comprise a combination of the following methodologies: (1) predictive analytics (supervised and unsupervised learning, natural language processing); (2) agent-based modeling (dynamically evolving populations, and adaptive feedbacks between individual behaviors and population outcomes), and (3) network analysis (cross-sectional and longitudinal networks). These methods will be applied to empirical data collected from cross-sectional and longitudinal surveys, interventions implemented by academic medical centers and governmental organizations. Research projects are supported by the National Institutes of Health and the Centers for Disease Control and Prevention. The successful candidate will benefit from a dynamic research environment that blends a sophisticated research team with prevention services offered by the Center and partner units. Research findings are thus directly translatable to community interventions and policy change, and feedback between the research and service arms is a unique strength of this position.

Requirements for this position include completion of a doctoral degree in the computational sciences (Ph.D. or equivalent in Statistics, Computer Science, Computational Social Science, Computational Epidemiology, Applied Mathematics, Quantitative Ecology, or related discipline), evidence of published scientific articles, and a strong interest in developing a career in the computational social/health sciences. Candidates are expected to have facility with R or Python, and the ability to write clean, reproducible code. Experience with Java or C++, especially for agent-based or network modeling, is preferred. The ability to work productively within an interdisciplinary research environment is a must.

This position offers a competitive salary, benefits, office space, access to internal sources of pilot project support, travel support to research conferences and access to international UChicago Centers. The position includes opportunities for didactic course work, leadership roles on ongoing projects, grant writing and developing an independent area of research. The candidate will benefit from a rich research environment that includes multiple UChicago affiliates: Center for AIDS Research, Methodology and Advanced Analytics Center Center for Health And Social Sciences, Urban Labs, the Department of Public Health Sciences, National Opinion Research Center and Argonne National Laboratory.

Interested researchers should email a current CV, two representative papers/publications, and names of at least two references to Aditya Khanna (akhanna@medicine.bsd.uchicago.edu).