



## Postdoctoral Scholar in Network Influences on HIV

Northwestern University Feinberg School of Medicine, Chicago, IL Department of Medical Social Sciences

We are looking for a Postdoctoral Scholar to join our team beginning in Fall 2021.

The broad focus of the position will be *Network Influences on HIV*.

The Postdoctoral Scholar will be mentored by both Dr. Michelle Birkett and Dr. Patrick Janulis. Both Drs. Birkett and Janulis are Assistant Professors within the Department of Medical Social Sciences at Northwestern University. Dr. Janulis is also the Quantitative Methodologist for the Third Coast Center for AIDS Research. They both serve as the leadership of the Complex Systems and Health Disparities Research Program (CONNECT) which is focused around elucidating the complex mechanisms driving the health disparities of stigmatized populations, in particular racial/ethnic, gender, and sexual minorities. Drs. Birkett and Janulis hold highly active NIH-supported research portfolios, focused around: 1) the design of network data capture tools (Network Canvas); 2) network impacts on infectious disease disparities; 3) analyzing sexual network data to improve mathematical models of HIV transmission.

We anticipate that the Postdoctoral Scholar's time will be split across at least two projects.

<u>EpiModel 2.0 Description</u>: This NIH/NIAID-funded study (R01AI138783; Site PI: Janulis, PI: Jenness) is a multidisciplinary project to develop statistical methods and software tools for network-based mathematical models of HIV. On this project, the Northwestern site focuses on leveraging data on sexual network and sexual behavior to improve these models and software. The Postdoctoral Scholar will: a) analyze behavioral and sexual network data from a cohort of young MSM, b) explore the impact of findings on mathematical models of HIV and other STIs, and c) participate in the dissemination of findings through publications and conference presentations.

<u>ChiSTIG Description:</u> This NIH/NIMHD-funded study (R01MD014703; PI: Birkett) utilizes existing rich empirical datasets to build a simulation model to serve as a counterfactual laboratory to test competing hypotheses regarding the etiology of infectious disease inequities in HIV for sexual minorities, specifically Black and Hispanic MSM, and potential routes for intervention. The Postdoctoral Scholar will: 1) assist in analyses which demonstrate the how the social networks, sexual networks, and venue networks of marginalized populations differ from majority populations and how they differ in ways which contribute to infectious disease disparities, and b) assist in the dissemination of findings through publications and conference presentations.

The Postdoctoral Scholar will be based in the Department of Medical Social Sciences. The <u>Department of Medical Social Sciences</u> provides a unique home for applied researchers who integrate biomedical and social science approaches to the improvement of health. Its defining features are an emphasis on interdisciplinary research and a strongly collaborative orientation. The department provides rich resources for conducting research, including a broad scientific portfolio with multiple, well-characterized cohorts across the lifespan, psychometric/biostatistical and health informatics cores, expertise in multi-level assessment methods and collaborative relationships across Northwestern's biomedical and social sciences campuses.

**Eligibility:** Completion of the doctorate prior to the start of the position is required for Postdoctoral Scholars. It is preferred that the candidate has a doctorate in the social/behavioral/health sciences or a related field. The candidate must have experience in social network science and quantitative methods as well as an interest in applications to health domains. Additional academic interests in HIV prevention/transmission, LGBTQ health, Stigma, Sexual Networks, Computational Social Science, Bipartite Networks, and Epidemic Modeling are preferred. Additionally, experience with data science or computational social science is welcome.

**To apply:** <u>Postdoctoral Scholar applicants</u> should email application materials to the CONNECT Research Program (connect@northwestern.edu). Applications should include: 1) a CV, 2) a cover letter explaining fit with this position, research experience, and career goals, and 3) the contact information for two references. Consideration of applications will begin immediately and continue until the position is filled.

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are encouraged.