Postdoctoral Associate

Integrating Health Data Science & GIScience at Illinois

We are seeking a Postdoctoral Scholar at the Healthy Regions & Policies Lab (Dept of Geography & Geographic Information Science, University of Illinois at Urbana-Champaign).

Postdoctoral Role

The postdoc will primarily work on an NIH/NIDA-funded project, the LOUD Study, that seeks to localize opioid use disorder response to increase medication access. Their work will focus on validating and refining multivariate,neighborhood-level accessibility measures (co-developed by the team) with community-level Medicaid claims data and existing spatial access and vulnerability measures.

A portion of effort will come from the RWJF-funded SDOH & Place Project, enabling the postdoc to expand and disseminate research on the social determinants of health to a wider audience.

Expertise in R and/or SQL is highly desired, as is prior experience working with claims data and CMS ResDAC (Research Data Assistance Center) systems, or related systems. Experience with geospatial data, spatial analyses, and geographic approaches is strongly preferred. The analysis team will use R for reproducibility, though some engineering workflows will be in Python. Solid data cleaning & ETL practices will be considered fundamental to this role.

The Postdoctoral Scholar will have opportunities to advance their research, as well both teach and evaluate modules developed as part of the project. They will benefit from an expansive mentoring program and find mentors and conversation partners among faculty, postdoctoral fellows, and graduate students both within and outside the study team and home department who are engaged in research on related topics.

Application Process

Applicants must have a Ph.D. in epidemiology, biostatistics, geography/GIScience, public health, social science, or related discipline by the starting date.

The ideal candidate will have experience with data wrangling and analysis needed for public health research (*required*), the basics of geography & GIScience (*recommended*), experience using open-source software and/or coding or scripting languages (ex. R, SQL, Python) (*required*), excellent communication and writing skills (*required*), and familiarity and willingness to learn git and GitHub, and other open source/science tools.

Applicants should value collaboration over competition, and be able to fill a mentorship role for students within the lab environment.

Applicants should apply at: go.illinois.edu/herop-postdoc and include a cover letter, curriculum vitae (CV), research interest statement (a discussion of past research, expertise, and research interests), and contact information for three references. Because the topic of this project spans disciplines, the applicant must make a case for how their background, experience, and research interests align.

The anticipated hiring range is $60,000-$70,000 per year, dependent on experience. This position is benefits eligible (ie. health, dental, and vision insurance) and family friendly. Additional benefits unique to this position include computing equipment, vacation, flexible scheduling, and hybrid-work possibility. Read more on housing and transportation options at the UIUC Graduate College website. The cost of living in CU is approximately 13% lower than the national average, and the area also boasts excellent public transportation infrastructure and a vibrant biking community. While we are open to remote applicants, we have a strong preference for in-person academic staff to be a part of the community experience here.

Please apply by **July 1, 2025**. The start of the position can be September 2025 or January 2026, or a date agreed upon by the team. Applications will be reviewed weekly until the position is filled. The initial appointment is for one year, with the possibility of renewal pending satisfactory performance through 2028.

About the Lab

HEROP integrates innovative GIScience and public health to explore, understand, and promote healthy regions and policies. We primarily study the social and spatial determinants of health and their related structural drivers: how they're conceptualized, modeled, and how they collectively contribute to over half of most health outcomes. Our group is dedicated to Open Science and open source methodology & applications, developing and managing multiple public data dashboards to support researchers, practitioners, and advocates. The lab is directed by Dr. Marynia Kolak, a health geographer and quantitative social scientist..

The lab also leads the Geospatial Core for the Methodology and Advanced Analytics Resource Center (MAARC), an NIH funded research center based at the University of Chicago that seeks reduce opioid use disorder and overdose, revolutionize opioid interventions, and impact associated epidemics such as mental health disorders, HCV, and HIV.

HeRoP Lab is housed at the Department of Geography & GIScience at the University of Illinois at Urbana-Champaign. We are also active participants of the university Center for Social and Behavioral Science and Interdisciplinary Health Sciences Institute (IHSI), as well as the National Center for Supercomputing Applications. Illinois is among the nation's most distinguished teaching and research institutions, ranked in the top 10 public universities by U.S. News & World Report in 2025.