

Postdoctoral Scholar

We are seeking a **Postdoctoral Scholar** to work on a new project to advance health equity with improved social determinant of health (SDOH) data discovery and community practice tools for health researchers, policymakers, and community organizations.

@Healthy Regions & Policies Lab @Department of Geography & GIScience @UIUC

The Project

The PLACE PROJECT, funded in part by the Robert Wood Johnson Foundation and led by Principal Investigator Marynia Kolak PhD, will work to demystify application design thinking crucial to developing web applications centered on neighborhood health. Our main goal will be to develop, fortify, and advance an open ecosystem for communities that makes developing web applications with SDOH data for health equity more accessible, enjoyable, and empowering. At the core of SDOH data is a deep connection to neighborhoods, people, & place, thus a focus on geographic thinking and utilization of geospatial data is essential.

The project team will develop a flexible community toolkit to introduce and support the complex process of planning a web application with geospatial data about community health. Community members will learn how to define and better understand the potential uses of their application ideas, specify needs, design solutions, and then evaluate. Open-source software will be presented as effective options to application development for building prototypes or final versions, empowering community members to build capacity locally and remain cost-effective. We'll also build out a new map-based search platform for SDOH data discovery that will curate and integrate validated geospatial data relevant to public health at multiple scales. We're excited to link cutting edge work on map-based search via [GeoBlacklight](#), and partner with a national network of librarians, user experience researchers & designers, search & metadata experts, and computer scientists.

Job Description

The Postdoctoral Scholar will engage in innovative research on communication of human-centered design principles in public health web applications that use social determinants of health data, co-lead content generation for the community toolkit, assist with toolkit evaluation design, and support the data discovery platform generation. They may additionally choose to specialize in a specific component of the project, according to their background or interest, for example:

- Study of human-computer interaction, UI/UX tenets with an emphasis on cartography and geovisualization with an application to public health.
- Extending and/or optimizing FOSS4G (free and open-source software for geospatial) projects to be more user-friendly, accessible, and adopted within a public health audience.
- Spatial data infrastructure development with attention to health equity, equitable governance, and community engagement using innovative technology stacks & stakeholder partnerships.
- Addressing structural racism and other inequities within public health measurements and SDOH geospatial datasets, using a trauma-informed approach.

Application Process

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 department who are engaged in research on related topics.

Applicants must have a Ph.D. in geography/GIScience, library science, education, public health, social science, human-computer interaction, or related discipline by the starting date.

The ideal candidate will have experience with the basics of geography & GIScience, experience with GIS using open-source software and/or coding languages (ex. GeoDa, QGIS, R, or python), excellent communication and writing skills, community engagement experience and/or interest, and familiarity and willingness to learn git and GitHub, and other open source/science tools.

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 multiple disciplines, the applicant must make a case for how their background, experience, and research interests align. For example, experience with community engagement, communications, design, and instructional workshops (eg. The Carpentries) may all be beneficial when discussing motivation for application.

The anticipated hiring range is \$50,000-\$60,000 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 remote-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.

Please apply by March 1, 2023. The start of the position can be May 2023, July 2023, or September 2023. Applications will be reviewed weekly until the position is filled. The appointment is for two years, with the possibility of renewal pending satisfactory performance and continued funding.

About the Lab

HEROP integrates innovative GIScience, public health, and statistical approaches to explore, understand, and promote healthy regions and policies. Our group is dedicated to Open Science and open source methodology & applications. We are committed to research translation for policy & public use. We're interested in how place drives, interacts with, and influences health for different people, in different ways. To explore this further, we look at neighborhoods as complex systems with spatial signals that help decode their stories. Our research portfolio includes funding by the Robert Wood Johnson Foundation, National Institutes of Health, and National Aeronautics & Space Administration.

HEROP Lab is housed at the [Department of Geography & GIScience](#) at the [University of Illinois at Urbana-Champaign](#). The University of Illinois at Urbana-Champaign is among the nation's most distinguished teaching and research institutions, home to the second largest academic library in the United States and the largest map collection among public universities. Geography & GIS at Illinois is a vibrant and diverse department at the forefront of geographic and geospatial research and education.