

# CHRISTOPHER PRENER

📍 St. Louis, Missouri

I am a **medical and urban sociologist** with an interest in disparities in infectious disease outcomes and **vaccination**. I specialize in **health disparities** research, **geospatial** mapping and analyses, and data acquisition. I am an **open science** advocate and an avid **R programmer** with expertise in data processing, visualization, and communication as well as **open source research software engineering**.



## 🎓 Education

- 2015 ● **Northeastern University** 📍 Boston, MA  
Ph.D. in Sociology
- 2010 ● **Northeastern University** 📍 Boston, MA  
M.A. in Sociology
- 2008 ● **St. Lawrence University** 📍 Canton, NY  
B.A. in Sociology and History  
*Honors, Magna Cum Laude, Phi Beta Kappa*

## 💼 Professional Experience

- 2022 ● **Director, Vaccines RWE Biocurator Scientist**  
Pfizer, Inc.
  - Developed 2 software packages for integrating social determinants of health data with real world data sources
  - Delivered increased research value by leveraging non-traditional demographic, social, and spatial data sources for real world evidence studies
- 2016 ● **Assistant Professor, Sociology** 📍 St. Louis, MO  
Saint Louis University
  - Published 13 empirical and 4 methodological articles both independently and collaboratively and wrote a solo-authored book, all with an interdisciplinary focus
  - Taught courses on statistics, spatial data analysis, and health disparities, winning 4 teaching and mentoring awards
  - Engineered 8 completed research software packages for managing large or complex data manipulation processes, particularly for geospatial data
  - Maintained a 2 year long open source COVID-19 [data project](#), [website](#), and [newsletter](#) highlighting outcomes and spatial patterns in Missouri

## 📶 Connect

- ✉ [chris.prenner@gmail.com](mailto:chris.prenner@gmail.com)
- 🌐 [chris-prenner.github.io](https://chris-prenner.github.io)
- 🔗 [github.com/chris-prenner](https://github.com/chris-prenner)
- 👤 [Google Scholar](#)
- 🌐 [LinkedIn](#)

## ⚙️ Skills

- Statistical analysis, including multivariable, multi-level, and spatial modeling using R
- Qualitative data collection and analyses for ethnographic field work and interview data
- Data acquisition, including via web scraping and API access
- Geospatial data management and creation as well as map production and data visualization in R, leaflet, ArcGIS, and QGIS
- Interactive report development with Quarto and RMarkdown
- Advanced R programming and package development
- Project management with Git and GitHub

- 2015 ● **Non-Tenure Track Instructor, Sociology** 📍 St. Louis, MO  
Saint Louis University
- Built a student research team focused on creating novel data sets to address social science research questions in St. Louis
  - Launched a data science seminar series to provide training in R, RMarkdown, Git, and other open science tools that served 30-50 learners per year
- 2012 ● **Research Assistant** 📍 Boston, MA  
Northeastern University, Institute of Urban Health Research
- Devised iPad-based data collection tools for interviewing and psychometric testing to accelerate data analysis in an NIH-funded R01 study with 300 participants
  - Established standardized procedures for medical record data reviews and electronic health records data integrations
- 2008 ● **Teaching Assistant** 📍 Boston, MA  
Northeastern University
- Taught 2 sections (50+ students) of introductory statistics and 1 section (40+ students) of an urban sociology course as the instructor of record from 2011 to 2012
  - Supported instructors' teaching goals in four classes with 50 to 500 students per course for an addition 6 courses for 2008 to 2011

## 📖 Selected Publications

- 2022 ● **Medicine at the Margins: EMS Workers in Urban America**  
Fordham University Press  
Prener, C. [🔗 Publisher](#)
- 2021 ● **Excess mortality in the United States in 2020: Forecasting and anomaly detection.**  
*American Journal of Infection Control* 49.9: 1189-1190.  
Wiemken, T. L., et al. [🔗 Full Text](#)
- 2021 ● **Measuring the Effect of Place, Socioeconomic Status, and Racism on Coronary Heart Disease: Recent Trends and Missed Opportunities.**  
*Current Epidemiology Reports* 8.4: 190-199.  
Prener, C., S. Gebauer, and K. L. Gilbert. [🔗 Full Text](#)
- 2021 ● **SARS-CoV-2 screening testing in schools for children with intellectual and developmental disabilities.**  
*Journal of Neurodevelopmental Disorders* 13.1: 1-11.  
Sherby, M. R., et al. [🔗 Full Text](#)

## 📦 Package Portfolio

- [areal](#) - areal weighted interpolation
- [biscale](#) - bivariate mapping with ggplot2
- [censusxy](#) - batch geocoding with the U.S. Census Bureau API
- [qualmap](#) - opinionated approach qualitative GIS in R
- [testDriveR](#) - data and a RMarkdown template for teaching

## 📖 All Publications

See [my website](#) for a full list of Peer reviewed publications