

SAM POWERS

1022 Lamont Street NW ▪ Washington, DC 20010 ▪ 703-943-7737 ▪ samueldarinpowers@gmail.com ▪ sam-powers.github.io

I am an experienced data scientist, quantitative researcher, & visualization designer working to increase equity and transparency in US government and social services. I specialize in equity assessment, procurement analysis, and working well with non-technical partners.

WORK EXPERIENCE

- 2021 – present **OFFICE OF GOVERNMENT CONTRACTING AND BUSINESS DEVELOPMENT, SMALL BUSINESS ADMINISTRATION** Washington, DC
DATA SCIENCE LEAD (GS-14)
- Provide data analytic and statistical consulting services to senior leaders, responding to multiple ad hoc data requests on a daily basis to support procurement policy reform
 - Evaluate small business mentorship programs including equity evaluation of 8(a) Small Disadvantaged Business Program & Women Owned Small Business Contracting
 - Vision and lead contract team to build cohesive data mart and analytics hub, centralizing data across program offices and ensuring standardized, repeatable analyses
 - Investigate and create documentation on how to collect and analyze vital, but opaque, government data systems including federal procurement data system
- 2020–2021 **CENTER FOR THE REDRESS OF INEQUITY THROUGH COMMUNITY ENGAGED SCHOLARSHIP, UNIVERSITY OF VIRGINIA** Charlottesville, VA
Inaugural Community Data Fellow (Graduate Fellowship)
- Managed portfolio of quantitative research & work with a variety of community partners to document inequities & change policy in Charlottesville, VA, & USA social systems
 - Projects ranged from investigating racial inequity in cville stop and frisk practices with local journalists to creating resources to assist food service orgs in equitable COVID-19 response
 - Created partnerships & drove tangible outcomes from research like city adoption of COVID-19 workers' bill of rights & UVA Racial Equity Taskforce analysis of historical activism trends
 - Research published in PNAS, reported by Washington Post, and used as evidence in US court.
- 2019–2021 **UVA HOSPITAL DIVISION OF INFECTIOUS DISEASE & INTERNATIONAL HEALTH** Charlottesville, VA
Research Associate (Part Time)
- Designed equity assessment methods including geographic drive times method to assess spatial inequities (used in 3 papers) and unsupervised methods to identify discriminatory health plan benefit design.
 - Used big data methods to analyze health policy data and coordinated policy partnership with National Alliance of State & Territorial AIDs Directors (NASTAD) creating evidence-based policy recommendations for a more equitable US HIV care delivery system
- 2019–2020 **US FULBRIGHT PROGRAM & AFRICAN CENTER OF EXCELLENCE IN DATA SCIENCE** Kigali, Rwanda
Fulbright Researcher
- Used public records & personal interviews to demonstrate UN's aggregate-level evaluation metrics for the SDGs overlook social & demographic factors, perpetuating inequities
 - Designed dashboards & trainings to pilot use of data visualization in centering equity in policy
 - Lectured at National Institute of Statistics, African Center of Excellence in Data Science, & Institute of Conservation Agriculture on data communication & community engagement
 - Received 2019 IIE Kriesberg Fellowship, the top prize for excellence in research & community service given to one of 4000+ Fulbright research applicants globally each year
-

EDUCATION

- 2020 – 2021 **GRADUATE SCHOOL OF ARTS & SCIENCES, UNIVERSITY OF VIRGINIA** Charlottesville, VA
MA Psychology, Quantitative Methods for Social Research
Courses: Causal inference, supervised & unsupervised ML, item response, structural equation
Thesis Summary: Designed unsupervised ML method to assess equity in healthcare plan design
- 2016 – 2019 **COLLEGE OF ARTS & SCIENCES, UNIVERSITY OF VIRGINIA** Charlottesville, VA
BA Statistics & Religious Studies: 4.0 GPA
- Jefferson Scholar: Full merit scholarship for 4 years of study at UVA (Funded both BA & MA)
Awarded to 35 students in each class for “uncommon scholarship, leadership, & citizenship”
 - Raven Society: Oldest honors society & highest achievement for scholarship at UVA
-

SELECTED CONSULTANT PROJECTS

MEASURING SES | WITH JERSEY CITY SCHOOL DISTRICT | AUGUST – OCTOBER 2021

Applied unsupervised methods to create and validate a census-tract level measurement of socio-economic status in Jersey City, NJ to help the Jersey City School District overhaul their race-based system of admissions into their selective application-based highschool.

VACCINATION EQUITY SCORING | WITH VIRGINIA DEPARTMENT OF HEALTH | JAN – MAY 2021

Created census tract-level equity score to help Blue Ridge Health District prioritize COVID-19 vaccination distribution locations.

COLORADO COURTWATCH | WITH ACLU OF CO | JAN 2020

Researched bond practices in Aurora & Denver courts using data from 1,638 cases from Fall 2019. Analyses suggest racial disparities in cash-bond setting practices may be primarily introduced through prosecution bond request and not judge decision

SKILLS & INTERESTS

PROGRAMMING & DATA TOOLS

R (primary), SAS, STATA, SQL, Python, JavaScript, JQuery, D3, Tableau, RShiny, ArcGIS, QGIS, Git & Github

PROFESSIONAL

Research Methods, Data Visualization, Machine Learning, Spanish Language

SELECTED ACADEMIC PAPERS

Maria Geba, MD, **Samuel Powers, MA**, Brooke Williams, MS, Kathryn R Dort, FNP, Elizabeth T Rogawski McQuade, PhD, Kathleen A McManus, MD, MSCR, A Missed Opportunity: Extragenital Screening for Gonorrhea and Chlamydia Sexually Transmitted Infections in People with HIV in a Southeastern Ryan White HIV/AIDS Program Clinic Setting, *Open Forum Infectious Diseases*, 2022;, ofac322, <https://doi.org/10.1093/ofid/ofac322>

Henderson, K., **Powers, S.**, Claibourn, M., Brown-Iannuzzi, J. L., & Trawalter, S. (2021). Confederate monuments and the history of lynching in the American South: An empirical examination. *Proceedings of the National Academy of Sciences*, 118(42), e2103519118. <https://doi.org/10.1073/pnas.2103519118>

Khazanchi, R., **Powers, S.D.**, Rogawski McQuade, E.T. et al. Inequities in the Geographic Accessibility of COVID-19 Biomedical Therapeutic Trials in the United States. *J GEN INTERN MED* (2021). <https://doi.org/10.1007/s11606-021-07081->

Powers, S. D., Rogawski McQuade, E. T., Killelea, A., Horn, T., & McManus, K. A. (2021, July). Worsening Disparities in State-Level Uptake of Human Immunodeficiency Virus Preexposure Prophylaxis, 2014–2018. In *Open Forum Infectious Diseases* (Vol. 8, No. 7, p. ofab293). US: Oxford University Press.

McManus, K. A., Srikanth, K., **Powers, S. D.**, Dillingham, R., & Rogawski McQuade, E. T. (2021, February). Medicaid Expansion's Impact on Human Immunodeficiency Virus Outcomes in a Nonurban Southeastern Ryan White HIV/AIDS Program Clinic. In *Open Forum Infectious Diseases* (Vol. 8, No. 2, p. ofaa595). US: Oxford University Press.

McManus, K. A., **Powers, S.**, Killelea, A., Tello-Trillo, S., & McQuade, E. R. (2020). Regional Disparities in Qualified Health Plans' Prior Authorization Requirements for HIV Pre-exposure Prophylaxis in the United States. *JAMA Network Open*, 3(6), e207445-e207445.

Binagwaho, A., Rukundo, A., **Powers, S.**, Donahoe, K. B., Agbonyitor, M., Ngabo, F., ... & Fawzi, M. C. S. (2020). Trends in burden and risk factors associated with childhood stunting in Rwanda from 2000 to 2015: policy and program implications. *BMC public health*, 20(1), 1-9.

Powers, S.D. (2021) Coverage that Goes the Distance: Extending Distance Metrics and Clustering Methods to Assess Access to HIV Preventative Care. (Master's Thesis). Available from University of Virginia LibraETD.

https://libraetd.lib.virginia.edu/public_view/pc289k04x. (MA Thesis)