SUSAN T. PARKER, PhD MPP

750 N. Lakeshore Drive, Suite 900, Chicago, IL 60611
E-mail: susan.parker@northwestern.edu

CURRENT POSITION

2024-present   Research Assistant Professor, Department of Emergency Medicine, Feinberg School of Medicine, Northwestern University

2024-present   Member, Buehler Center for Health Policy and Economics

EDUCATION

2023   Ph.D., Health Policy (Specialization: Economics), University of Michigan, Ann Arbor, MI

2017   MS, Analytics (Applied Data Science), University of Chicago, Chicago, IL

2011   MPP, Public Policy, University of Chicago, Chicago, IL

2009   BA, International Relations, Michigan State University, East Lansing, MI

PREVIOUS EMPLOYMENT

2023-24   Postdoctoral Research Fellow, Community to Community (C2C) Public Policy Initiative, School of Public Policy and Urban Affairs & Bouvé College of Health Sciences, Northeastern University

2016-18   Senior Data Scientist, CivicScape, Chicago, IL

2015-16   Data Scientist, Midwest Physician Administrative Services, Downers Grove, IL

2013-15   Research Manager, University of Chicago Crime Lab, Chicago, IL

2011-13   Analyst, Obama for America, Chicago, IL

PUBLICATIONS: Peer-Reviewed

2025   Parker, Susan T. "Supervised Natural Language Processing Classification of Violent Death Narratives: Development and Assessment of a Compact Large Language Model." *JMIR AI. https://doi.org/10.2196/68212*.

2024   Parker, Susan T.. "The Association Between Concealed Handgun License Laws and Concealed Handgun License Adoption, 2002-2019." *American Journal of Preventive Medicine. https://doi.org/10.1016/j.amepre.2024.07.009*.

2024   Gilbert, Lauren, Parker, Susan T., Schechter, Lauren. "The Effects of Lockdown Orders on Domestic Violence: Evidence from Medical Records." *Review of Economics of the Household. https://doi.org/10.1007/s11150-024-09696-8*

2022   Barber, Catherine., Cook, Philip. J., & Parker, Susan T. The emerging infrastructure of US firearms injury data. *Preventive Medicine.* https://doi.org/10.1016/j.ypmed.2022.107129

2022   Parker, Susan T. Measuring gun violence in police data sources: transitioning to NIBRS. *Injury Epidemiology,* 9(1). https://doi.org/10.1186/s40621-022-00376-8

2020	Parker, Susan T. Estimating Nonfatal Gunshot Injury Locations With Natural Language Processing and Machine Learning Models. *JAMA Network Open,* 3(10). https://doi.org/10.1001/jamanetworkopen.2020.20664
2017	Collins, Megan, Parker, Susan T., Scott, Thomas. L., Wellford Charles. F. A Comparative Analysis of Crime Guns: Implications for Reducing Violence. *RSF: The Russell Sage Foundation Journal of the Social Sciences,* 3(5). https://doi.org/10.7758/rsf.2017.3.5.05
2015	Cook, Philip J., Parker, Susan T., Pollack, Harold. A. Sources of guns to dangerous people: what we learn by asking them. *Preventive Medicine,* 79. https://doi.org/10.1016/j.ypmed.2015.04.021

PUBLICATIONS: Not Peer Reviewed

2025	Azrael, Deborah., Parker, Susan T. "Trends in Stolen Firearms from 2018 to 2022: Leveraging Data for Informed Crime Policy." Council on Criminal Justice. https://counciloncj.org/trends-in-gun-theft/
2025	Barber, Catherine., Cook, Philip J., Parker, Susan T. "Nonfatal Firearm Injury Surveillance: An Update." *Submitted.*
2022	Cook, P. J., Parker, Susan T. Correcting Misinformation on Firearm Injury Intent. *JAMA Network Open.* 5(12). https://doi:10.1001/jamanetworkopen.2022.46434
2022	Cook, P. J., Parker, Susan T. Reducing Youth Firearm Carrying: Focus on the Parents. *JAMA Network Open.* 5(4). https://doi.org/10.1001/jamanetworkopen.2022.5136
2021	Parker, Susan T. "Measuring Gun Violence Using Police Data." in Roman, John K and Philip J. Cook, eds. Improving Data Infrastructure to Reduce Firearms Violence. Chicago, IL: NORC at the University of Chicago, 2021.

Working Papers

Gangaram, Anjelica., Parker, Susan T., "The Effects of School Shootings on Firearm Behaviors." *Under Review.*

Parker, Susan T. , Ross, Matthew B., Ross, Steven L. "The Impact of Prohibiting Pretextual Enforcement on Traffic Stops, Accidents, and Crime." *NBER Working Paper. Under Review.*

Parker, Susan T. "Jumping the Gun: The Effects of Permitless Carry Laws on Crime." *Under Review.*

Parker, Susan T., Fischer, Sam., Miller, Matthew., Azrael, Deborah. "Identifying Suicides that Occur in the Presence of Police Using Natural Language Processing (NLP)." *Preparing for Submission.*

Lauren A. Magee, Alberto Ortega, Susan Parker, DeAndra Dycus, Kendale Adams. "Victim Assistance Units and Solving Nonfatal Shootings." *Preparing for Submission.*

In Progress

Han, Yuling, Gong, Xiaofeng, Parker, Susan T., Ross, Matthew., B., Ross, Steven L., "Testing for Discrimination in Police Traffic Stops using Telemetric Mobility Data." *Preparing Manuscript.*

Parker, Susan T., Schechter, Lauren. "Family Violence Effects of Social Safety Net Incentives for Child Support Cooperation."

Lauren A. Magee, Susan Parker. "Identifying Barriers to Solving Fatal and Nonfatal Shootings: A Large Language Model Approach."

AWARDS AND FELLOWSHIPS

2025	Northwestern University Clinical and Translational Science (NUCATS) Pilot Grant Award ($50,000)
2024	National Violent Death Reporting System (NVDRS) New Investigator Award ($7,000)
2022	Rackham Graduate Student Conference Travel Grant ($900)
2022	Martha and Ernest Hammel Graduate Student Research Award, joint with Anjelica Gangaram ($3,100)
2021	Microsoft Computational Justice Award ($20,000 computing credit)
2020	Walter J. McNerney Award - COVID-19 Rapid Small Grant Award ($10,000)
2019	Rackham Pre-Doctoral Research Award ($1,500)
2019	Firearm Safety Among Children and Teens (FACTS) Student Poster Award
2015	Capstone thesis award, University of Chicago Analytics Program
2009	Phi Beta Kappa
2005-09	Skandalaris Family Foundation Scholarship

SPONSORED RESEARCH

Title: Do Lethality Assessment Programs Improve Domestic Violence Outcomes? ($64,000)
Role: Principal Investigator
Source: Arnold Ventures - Planning Grant
Dates: 09/01/2025-08/31/2026

Title: Reducing Barriers to Developing and Applying Accurate and Fair Natural Language Processing (NLP) Methods to the National Violent Death Reporting System ($175,000)
Role: Co-Investigator
Source: Centers for Disease Control (CDC) / American Public Health Association (APHA) Data Science Demonstration Project Grant
Dates: 04/01/2023-04/01/2024

Title: The Effect of School Shootings on Firearm Behaviors ($17,000)
Role: Co-Principal Investigator
Source: University of Michigan School of Public Health / Public Health IDEAS for Preventing Firearm Injuries Initiative
Dates: 06/01/2022-01/31/2023

Title: The Effect of Pandemic Shutdown Orders on Domestic Violence ($33,000)
Role: Co-Principal Investigator
Source: Gates Foundation - Covid 19 Research Database Research Accelerator Program
Dates: 08/01/2021-08/01/2022

Title: The Effect of Concealed Carry Laws on Firearm Injury
Role: Project Director, Grant Author
Source: National Gun Collaborative for Gun Violence Research (NCGVR) ($235,000)
Dates: 07/15/2019-12/31/2021

CONFERENCES AND SEMINARS

2025	NBER Economics of Firearms Markets - 10/2025, NORC Innovation Day - 06/2025, ASHEcon Discussant, Organizer - 06/2025
2024	The Center for Neighborhood Engaged Research & Science (CORNERS) - Northwestern University - 12/2024, National Research Conference for Prevention of

Firearm-Related Harms - 12/2024, APPAM - 11/2024, University of Indiana - 10/2024, APHA / CDC Data Science Demonstration Conference - 8/2024, ASHEcon Presenter, Organizer - 6/2024, National Institute for Statistical Science (NISS) 2nd IOF Workshop on Gun Violence - 5/2024. Johns Hopkins Bloomberg School of Public Health - 3/2024.

2023   APPAM - 11/2023, National Research Conference for Prevention of Firearm-Related Harms - 11/2023. ASHEcon Presenter, Organizer - 6/2023, University of Massachusetts Boston Department of Urban Public Health - 2/2023, University of Iowa School of Public Health (Online) - 2/2023, Georgia Tech School of Public Policy - 2/2023.

2022   State University of New York (SUNY)-Albany School of Criminal Justice - 12/2022, National Firearm Injury Conference - 11/2022, Rutgers-Camden Department of Health Sciences (Online) - 11/2022, American Public Health Association (APHA) - 11/2022.

2021   FACTS Symposium (Online - 11/2022, Data Foundation, NORC, NPSC Webinar - 10/2022, Law Enforcement and Public Health (Online) - 3/2022.

2020   American Society of Criminology. Canceled due to COVID-19. FACTS Annual Symposium - 09/2020.

2015   American Society of Criminology - 11/2015. International Association of Chiefs of Police - 10/2015, Law and Society Association - 5/2015, American Public Health Association - 11/2015

TEACHING
Instructor - Introduction to SQL, Advanced SQL, Introduction to Python, Introduction to Machine Learning, 2016-2018

Graduate Student Courses
Graduate Teaching Assistant - Health Economics II, Fall 2019
Graduate Teaching Assistant - Health Economics I, Winter 2020
Graduate Teaching Assistant - Data Driven Methods for Public Health, Winter 2021
Graduate Teaching Assistant - Quantitative Methods for Social Science, Spring 2021

SERVICE
Journal reviewer: American Journal of Epidemiology, American Journal of Preventive Medicine, American Journal of Public Health, Health Economics, The Lancet - Child and Adolescent Health, JAMA Network-Open, Journal of Experimental Criminology, Journal of Crime and Justice, Journal of Medical Informatics Research, Preventive Medicine

Internal Committee Member, University of Michigan Health Services Organization and Policy (HSOP) Admissions and Doctoral Committee (2022)

External Membership, Firearm Data Infrastructure Working Group, American Society of Health Economists (ASHEcon), Association for Public Policy Analysis and Management (APPAM)

Abstract Reviewer, National Research Conference for Prevention of Firearm-Related Harms

SKILLS
AWS, R, Python, SQL (PostGreSQL, PostGIS, Snowflake, Trino), STATA, Unix