

Greg Ridgeway

Rebecca W. Bushnell Professor of Criminology

University of Pennsylvania — Philadelphia, PA

(215) 573-9109 · gridge@upenn.edu

Education

- **Ph.D. – Statistics (1999)**

Dissertation: *Generalization of Boosting Algorithms and Applications of Bayesian Inference to Massive Datasets*

[Department of Statistics](#), University of Washington, Seattle, WA

Advisors: [David Madigan](#) and [Thomas Richardson](#)

- **M.S. – Statistics (1997)**

[Department of Statistics](#), University of Washington, Seattle, WA

- **B.S. – Statistics (1995)**

[California Polytechnic State University](#), San Luis Obispo, CA

Professional Experience

- **8/2014–present**, [Department of Criminology](#) and [Department of Statistics and Data Science](#), University of Pennsylvania

- Rebecca W. Bushnell Professor of Criminology (7/2022–present)

- Full Professor (7/2020–present)

- [Data-Driven Discovery Initiative](#), Co-director (2021–present)

- Chair, Department of Criminology (7/2019–6/2025)

- Associate Professor (8/2014–6/2020)

- Undergraduate Chair (7/2023–6/2024)

- [Quattrone Center for the Fair Administration of Justice](#), Penn Law (8/2015–present)
- [Center for Causal Inference](#), Perelman School of Medicine (8/2016–present)
- [Graduate Group in Epidemiology and Biostatistics](#), Perelman School of Medicine (12/2017–present)
- [Warren Center for Network and Data Science](#), SEAS (3/2023–present)
- [Population Studies Center](#) (1/2024–present)
- **1/2021–12/2025**, Co-editor-in-chief, [Journal of Quantitative Criminology](#)
- **7/2012–7/2014**, [National Institute of Justice](#), U.S. Department of Justice
Directed the Department of Justice’s science agency (approximately 80 staff; \$250M/year), advancing science and innovation in forensics, technology, and social science
 - Acting Director (1/2013–7/2014)
 - Deputy Director, Senior Executive Service (7/2012–7/2014)
- **7/2000–6/2012**, [RAND Corporation](#)
Led a major research portfolio on policing, courts, corrections, gangs, guns, drugs, and justice policy (approximately 50-person research team; ~40 proposals/year; ~\$10M/year projects)
 - RAND Safety & Justice Program, Director (1/2009–6/2012)
 - RAND Center on Quality Policing, Director (1/2008–6/2012)
 - RAND Safety & Justice Program, Acting Director (11/2007–1/2009)
 - [RAND Statistics Group](#), Senior Statistician (5/2007–6/2012)
 - RAND Safety & Justice Program, Associate Director (8/2006–11/2007)
 - [RAND Statistics Group](https://www.rand.org/statistics.html, Full Statistician (5/2003–5/2007)
 - [RAND Statistics Group](https://www.rand.org/statistics.html, Associate Statistician (7/2000–5/2003)
- **7/2001–8/2001**, Department of Sociology, University of Washington — Visiting Scholar
- **9/1999–6/2000**, Department of Statistics, University of Washington — Lecturer
- **6/1996–9/1997**, [Microsoft Research](#) — Research assistant

- **9/1993–9/1995**, California Department of Mental Health, [Atascadero State Hospital](#) — Research assistant (Clinical Safety Project)
- **8/1994–9/1995**, UC Berkeley Cooperative Extension — Research assistant (Integrated Hardwood Range Management Program)

University Service

- **2021–present**, Co-director, Data Driven Discovery Initiative
Launched a new data science initiative; staffing; post-doc program; data science for social good; seed grants; data science minor (with Bhuv Jain)
- **2022–present**, Committee member, Senate Committee on Students and Educational Policy
Advises on admissions, instruction, academic integrity, teaching evaluation, grading policies, student records, disciplinary systems, and campus environment
- **2019–2025**, Chair, Department of Criminology
Stimulated grant- and donor-funded research (especially Philadelphia justice policy analysis); secured strategic senior hires; seeded crime policy lab
- **2021–2024**, Committee member, Committee on Planning and Priorities
Advises SAS on emerging issues in education, research, and operations
- **2019–2021**, SAS Data Driven Discovery Working Group
Strategic planning on hiring, programming, data science coverage, and new opportunities
- **2014–2023**, Director, Master of Science in Criminology program
Admissions; career planning; alumni network; placements; joint programs (Fels, SP2, Law)
- **2018–2022**, Committee member, Committee on Undergraduate Education
Advises Dean and faculty on SAS undergraduate educational mission
- **2018–2020**, Committee member, Vice Provost for Education Fellowship Selection Committee
Selects nominees for limited-submission fellowships

Awards

- **2025**, [Fellow](#), American Society of Criminology
- **2024**, [Fellow](#), Academy of Experimental Criminology
- **2013**, [Fellow](#), American Statistical Association
- **2007**, American Statistical Association [Outstanding Statistical Application Award](#) (with J. Grogger) for “Testing for racial profiling in traffic stops from behind a veil of darkness.”
RAND Gold Medal Award for contributions advancing RAND’s mission.
- **2005**, Commendation by ATF Los Angeles Field Division and the Attorney General of California for contributions to reducing firearms-related crimes in Los Angeles.
RAND President’s Choice Award for developing pioneering methods for racial profiling.

- **1999**, Z.W. Birnbaum Award (UW Department of Statistics) for excellence in research and presentation.

Patent Awards

- **2014**
— US Patent [8,719,210](#): “System and Method for Medical Treatment Hypothesis Testing.” Granted May 6, 2014
- **2013**
— US Patent [8,538,906](#): “System and method for medical treatment hypothesis testing using relative likelihood of treatment results.” Granted September 17, 2013
- **2003**
— US Patent [6,606,613](#): “Methods and apparatus for using task models to help computer users complete tasks.” Granted August 12, 2003
- **2001**
— US Patent [6,330,554](#): “Methods and apparatus using task models for targeting marketing information to computer users based on a task being performed.” Granted December 11, 2001
— US Patent [6,195,622](#): “Methods and apparatus for building attribute transition probability models for use in pre-fetching resources.” Granted February 27, 2001
- **2000**
— US Patent [6,154,767](#): “Methods and apparatus for using attribute transition probability models for pre-fetching resources.” Granted November 28, 2000
— US Patent [6,088,718](#): “Methods and apparatus for using resource transition probability models for pre-fetching resources.” Granted July 11, 2000
— US Patent [6,012,052](#): “Methods and apparatus for building resource transition probability models for use in pre-fetching resources, editing resource link topology, building resource link topology templates, and collaborative filtering.” Granted January 4, 2000

Grants and Contracts

- **2020–2023** — Principal Investigator, “[Prosecutors and Criminal Justice Reform: Independent Research Partnership with the Philadelphia District Attorney’s Office](#),” Arnold Ventures, \$2,509,009 (with Aurelie Ouss)
- **2020–2022** — Co-Principal Investigator, “Evaluation of Philadelphia Group Violence Intervention,” Urban Affairs Coalition and Philadelphia Office of Violence Prevention, \$150,269 (with Ruth Moyer)
- **2020–2022** — Principal Investigator, “Crime Prevention Through Intelligence & Information Sharing,” Neubauer Family Foundation, \$543,298 (with Aaron Chalfin)

- **2016** — Site PI, “Disrupting Illegal Gun Transfers,” NIJ (prime: RAND), 2013-R2-CX-0016, \$42,118
- **2015–2016** — Site PI, “Replication of the Cardiff Violence Prevention Model in the United States,” RWJF (prime: NFCDC&PI), Grant 72352, \$213,572
- **2011–2012** — Program Director, “Developing the Center of Research and Security Studies,” Ministry of Interior, Abu Dhabi, \$1,500,000
- **2010–2012** — Co-PI, “NLECTC Information and Geospatial Technology Center of Excellence,” NIJ 2010-IJ-CX-K007, \$6,000,000 (with John Hollywood)
- **2010–2012** — Co-PI, “Experimental Evaluation of the BJA DMI Training and Technical Assistance Initiative,” BJA 2010-DJ-BX-1672, \$2,900,000 (with Beau Kilmer and Jessica Saunders)
- **2010–2012** — Co-PI, “Enabling the Police to Serve the Needs of 21st Century Israel,” Israel Ministry of Public Security and RAND Israel Policy Fund, \$1,600,000 (with Steven Popper)
- **2010–2012** — Principal Investigator, “Predictive Policing Analytic and Evaluation Research Support,” NIJ 2009-IJ-CX-K114, \$1,084,846
- **2008–2010** — Principal Investigator, “Case weighting for federal public defender services,” AOUSC USCA08F0404, \$564,510 (with Nick Pace)
- **2008–2012** — Principal Investigator, “Evaluation of the Los Angeles County Juvenile Justice Crime Prevention Act Programs,” LA County Probation, \$1,610,000 (with Terry Fain and Susan Turner)
- **2008** — Principal Investigator, “Development of internal benchmarking system,” New York City Police Foundation, \$32,000
- **2007** — Principal Investigator, “Assessment of racial bias in NYPD stop, question, and frisk practices,” New York City Police Foundation, \$120,000
- **2007–2008** — Principal Investigator, “Strategies for improving police recruiting,” San Diego Police Department, \$160,000
- **2006–2007** — Co-PI, “Analysis of Graduate Driver Licensing - Lower Risk Exposure or Better Driving?,” NICHD 1R03HD052547-01, \$184,122 (with Pinar Karaca-Mandic)
- **2004–2009** — Principal Investigator, “Improving Police-Community Relations in Cincinnati,” City of Cincinnati 45X0028, \$1,581,300
- **2002–2004** — Principal Investigator, “DOJ Racial Profiling Initiative,” City of Oakland EM3.20.02, \$75,000
- **2001–2008** — Co-PI, “Strategic Disruption of Firearms Markets,” NIJ 2001-IJ-CX-0028,

\$647,952 (with George Tita)

- **2001–2002** — Principal Investigator, “Data mining and Columbia counterdrug strategies,” Office of the Secretary of Defense (three projects) \$57,845, \$27,965, \$19,165

Publications

Working papers

Ridgeway, G., & Loeffler, C. (2027). “Crime Statistics,” *Annual Review of Statistics and Its Applications*, 14.

Gyourko, J. R., & Ridgeway, G. “Safeguarding the Credit Records of Youth in Foster Care: What Interventions Reduce Risk of Child Identity Fraud?”

Peer-reviewed articles

G. Ridgeway (to appear). “[A Conditional Ordinal Stereotype Model to Estimate Police Officers’ Propensity to Escalate Force](#),” *Journal of the American Statistical Association*. ([Data and code](#))

F.A. Amaral, C. Loeffler, & G. Ridgeway (2024). “[Prosecutorial discretion not to invoke the criminal process and its impact on firearm cases](#),” *Journal of Criminal Justice*, 95:102313.

J.R. Gyourko & G. Ridgeway (2024). “[Predictors of Identity Fraud Victimization of Adolescent Youth in Foster Care](#),” *Victims & Offenders*.

V. Nguyen & G. Ridgeway (2023). “[Judges on the Benchmark: Developing a Sentencing Feedback System](#),” *Justice Quarterly*, 41(1):1–37.

E.C. South, J.M. MacDonald, V.W. Tam, G. Ridgeway, C.C. Branas (2023). “[Effect of Abandoned Housing Interventions on Gun Violence, Perceptions of Safety, and Substance Use in Black Neighborhoods: A Citywide Cluster Randomized Trial](#),” *JAMA Internal Medicine* 183(1):31-39.

Z. F. Meisel, F. Shofer, A. Dolan, E. B. Goldberg, K. V. Rhodes, E. P. Hess, V. R. Bellamkonda, J. Perrone, C. C. Cannuscio, L. Becker, M. A. Rodgers, M. M. Zyla, J. J. Bell, S. McCollum, E. Engel-Rebitzer, M. J. Nguemini Tiako, G. Ridgeway, and M. M. Schapira (2022). “[A multicentered randomized controlled trial comparing the effectiveness of pain treatment communication tools in emergency department patients with back pain or kidney stone pain](#),” *American Journal of Public Health* 112(S1):S45-S55.

G. Ridgeway, J. Rosenberger, and L. Xue (2021). “[Statisticians Engage in Gun Violence Research](#),” *Statistics and Public Policy* 8(1):73-79.

Y. Wu and G. Ridgeway (2021). “[Effect of Public Transit on Crime: Evidence from SEPTA strikes in Philadelphia](#),” *Journal of Experimental Criminology* 17:267-286.

G. Ridgeway, B. Cave, J. Grieco, and C.E. Loeffler (2021). “[A Conditional Likelihood Model of the Relationship Between Officer Features and Rounds Discharged in Police Shootings](#),” *Journal of Quantitative Criminology* 37(1):303-326.

- R. Moyer and G. Ridgeway (2020). “[The Effect of Outpatient Methadone Maintenance Treatment Facilities on Place-Based Crime](#),” *Journal of Experimental Criminology* 16(2):227–245.
- G. Ridgeway, R. Moyer, and S. Bushway (2020). “[Sentencing Scorecards: Reducing Racial Disparities in Prison Sentences at Their Source](#),” *Criminology & Public Policy* 19(4):1113-1138.
- G. Ridgeway (2020). “[The Role of Individual Officer Characteristics in Police Shootings](#),” *The ANNALS of the American Academy of Political and Social Science* 687(1):58-66. (technical appendix showing the decomposition of information)
- G. Ridgeway, J. Grogger, R.A. Moyer, and J.M. MacDonald (2019). “[Effect of Gang Injunctions on Crime: A Study of Los Angeles from 1988-2014](#),” *Journal of Quantitative Criminology* 35(3):517-541.
- C.E. Loeffler, J.M. Hyatt, and G. Ridgeway (2019). “[Measuring Self-Reported Wrongful Convictions Among Prisoners](#),” *Journal of Quantitative Criminology* 35(2):259-286.
- R. Moyer, J.M. MacDonald, G. Ridgeway, and C. Branas (2019). “[Effect of Remediating Blighted Vacant Land on Shootings: A Citywide Cluster Randomized Trial](#),” *American Journal of Public Health* 109(1):140-144.
- G. Ridgeway, M. Nørgaard, T.B. Rasmussen, W.D. Finkle, L. Pedersen, H.E. Bøtker, and H.T. Sørensen (2019). “[Benchmarking Danish Hospitals on Mortality and Readmission Rates After Cardiovascular Admission](#),” *Clinical Epidemiology* 11:67-80.
- Ridgeway, G. (2019). “[Experiments in Criminology](#),” *Annual Review of Statistics and Its Applications*, 6:37–61.
- O. Mitchell and G. Ridgeway (2018). “[Assessing the Fairness and Effectiveness of Bicycle Stops in Tampa](#),” *Police Quarterly* 21(4):461-485.
- J. Lyons, V. Desai, Y. Xu, G. Ridgeway, W. Finkle, P. Solari, S. Sullivan, S. Lanes (2018). “[Development and Validation of an Algorithm for Identifying Patients with Hemophilia A in an Administrative Claims Database](#),” *Value in Health* 21(9):1098-1103.
- S.F. Jacoby, L.M. Kollar, G. Ridgeway, S.A. Sumner (2018). “[Health System and Law Enforcement Synergies for Injury Surveillance, Control and Prevention: A Scoping Review](#),” *Injury Prevention* 24:305-311.
- V. Bacak and G. Ridgeway (2018). “[Availability of Health-Related Programs in Private and Public Prisons](#),” *Journal of Correctional Health Care* 24(1):62-70.
- S.-L. Faraji, G. Ridgeway, and Y. Wu (2018). “[Effect of Emergency Winter Homeless Shelters on Property Crime](#),” *Journal of Experimental Criminology* 14(2):129-140.
- G. Ridgeway (2018). “[Policing in the Era of Big Data](#),” *Annual Review of Criminology*, 1:401–419.
- R. Umbach, A. Raine, and G. Ridgeway (2017). “[Aggression and Lost Sleep: a Daylight Saving Time Natural Experiment](#),” *Journal of Experimental Criminology* 13(4):439-453.
- G. Ridgeway (2017). “[Stop-and-Frisk is Essential... and Requires Restraint](#),” *Journal of Policy Analysis and Management* 36(3):683–689 (with discussion and rejoinder).
- G. Ridgeway and J.M. MacDonald (2017). “[Effect of Rail Transit on Crime: A Study of Los Angeles from 1988-2014](#),” *Journal of Quantitative Criminology* 33(2):277-291.

- G. Ridgeway and B. Kilmer (2016). “[Bayesian inference for the distribution of grams of marijuana in a joint](#),” *Drug and Alcohol Dependence* 165:175–180.
- G. Ridgeway (2016). “[Officer Risk Factors Associated with Police Shootings: A Matched Case-Control Study](#),” *Statistics and Public Policy* 3(1):1-6.
- G. Ridgeway, S. Kovalchik, B.A. Griffin, and M.U. Kabeto (2015). “[Propensity score analysis with survey weighted data](#),” *Journal of Causal Inference* 3(2):237-249.
- J. Saunders, R. Lundberg, A.A. Braga, G. Ridgeway, and J. Miles (2015). “[A Synthetic Control Approach to Evaluating Placed-Based Crime Interventions](#),” *Journal of Quantitative Criminology* 31(3):413-434.
- W.D. Finkle, S. Greenland, G. Ridgeway, J.L. Adams, M.A. Frasco, M.B. Cook, J.F. Fraumeni, R.N. Hoover (2014). “[Increased Risk of Non-fatal Myocardial Infarction Following Testosterone Therapy Prescription in Men](#),” *PLOS One* 9(1):e85805.
- G. Ridgeway & J.M. MacDonald. “[A Method for Internal Benchmarking of Criminal Justice System Performance](#),” *Crime & Delinquency* 60(1):145–162.
- A.A. Braga, G.J. Wintemute, G.L. Pierce, P.J. Cook, and G. Ridgeway (2012). “[Interpreting the empirical evidence on illegal gun market dynamics](#),” *Journal of Urban Health* 89(5):779-93.
- D. Golinelli, G. Ridgeway, H. Rhoades, J. Tucker and S. Wenzel (2012). “[Bias and variance trade-offs when combining propensity score weighting and regression: with an application to HIV status and homeless men](#),” *Health Services and Outcomes Research Methodology* 12(2-3):104-118.
- W.D. Finkle, J.S. Der, S. Greenland, J.L. Adams, G. Ridgeway, T. Blaschke, Z. Wang, R.M. Dell, and K.B. VanRiper (2011). “[Risk of Fractures Requiring Hospitalization After an Initial Prescription for Zolpidem, Alprazolam, Lorazepam, or Diazepam in Older Adults](#),” *Journal of the American Geriatrics Society* 59(10):1883-1890.
- G. Ridgeway, A. Braga, G. Tita, and G. Pierce (2011). “[Intervening in gun markets: An experiment to assess the impact of targeted gun law messaging](#),” *Journal of Experimental Criminology* 7(1):103-109.
- J.M. MacDonald, R.J. Stokes, D. Cohen, A. Kofner, and G. Ridgeway (2010). “[The Effect of Light Rail Transit on Body Mass Index and Physical Activity](#),” *American Journal of Preventive Medicine* 39(2):105–112.
- P. Karaca-Mandic and G. Ridgeway (2010). “[Behavioral Impact of Graduated Driver Licensing on Teenage Driving Risk and Exposure](#),” *Journal of Health Economics* 29:48-61.
- G. Ridgeway and J.M. MacDonald (2009). “[Doubly Robust Internal Benchmarking and False Discovery Rates for Detecting Racial Bias in Police Stops](#),” *Journal of the American Statistical Association* 104(486):661–668.
- R. Lin, T.A. Louis, S.M. Paddock, G. Ridgeway (2009). “[Ranking USRDS provider specific SMRs from 1998-2001](#),” *Health Services and Outcomes Research Methodology* 9(1):22-38.
- R.J. Stokes, J.M. MacDonald, and G. Ridgeway (2008). “[Estimating the effects of light rail transit on health care costs](#),” *Health & Place* 14(1):45-58.
- MacDonald, J.M., R.J. Stokes, G. Ridgeway, and K.J. Riley (2007). “[Race, Neighborhood context, and perceptions of injustice by the police](#),” *Urban Studies* 44(13):2567-2585.

- D.F. McCaffrey, A.R. Morral, and G. Ridgeway, B.A. Griffin (2007). “[Interpreting treatment effects when cases are institutionalized after treatment](#),” *Drug and Alcohol Dependence* 89(2-3):126-138.
- G. Tita and G. Ridgeway (2007). “[The impact of gang formation on local patterns and levels of crime](#),” *Journal of Research in Crime and Delinquency* 44(2):208-237.
- R.N. Bluthenthal, G. Ridgeway, T. Schell, R. Anderson, N.M. Flynn, and A.H. Kral (2007). “[Examination of the association between syringe exchange program \(SEP\) dispensation policy and SEP client-level syringe coverage among injection drug users](#),” *Addiction* 102(4):638-646.
- R. Boer, Y. Zheng, A. Overton, G. Ridgeway, D. Cohen (2007). “[Neighborhood Design and Walking Trips in 10 U.S. Metropolitan Areas](#),” *American Journal of Preventive Medicine* 32(4):298-304.
- R. Lin, T.A. Louis, S.M. Paddock, and G. Ridgeway (2006). “[Loss Function Based Ranking in Two-Stage Hierarchical Models](#),” *Bayesian Analysis* 1(4):915-946.
- G. Tita, A. Braga, G. Ridgeway, G. Pierce (2006). “[The criminal purchase of firearm ammunition in Los Angeles, California](#),” *Injury Prevention* 12:308-311.
- J. Grogger and G. Ridgeway (2006). “[Testing for racial profiling in traffic stops from behind a veil of darkness](#),” *Journal of the American Statistical Association* 101(475):878-887. [ASA 2007 Outstanding Statistical Application Award](#)
- S.M. Paddock, G. Ridgeway, R. Lin, T.A. Louis (2006). “[Flexible distributions for triple-goal estimates in two-stage hierarchical models](#),” *Computational Statistics and Data Analysis* 50(11):3243-3262.
- G. Ridgeway (2006). “[Assessing the effect of race bias in post-traffic stop outcomes using propensity scores](#),” *Journal of Quantitative Criminology* 22(1):1-29. [Example code](#) and [dataset](#).
- D.A. Cohen, T.A. Farley, K. Mason, G. Ridgeway (2006). “[The collectivity of sexual behaviour](#),” *International Journal of STD & AIDS* 17(3):151-156.
- C. Guarino, G. Ridgeway, M. Chun, and R. Buddin (2005). “[Latent Variable Analysis: A New Approach to University Ranking](#),” *Higher Education in Europe* 30(2):147-165.
- D. McCaffrey, G. Ridgeway, A. Morral (2004). “[Propensity score estimation with boosted regression for evaluating adolescent substance abuse treatment](#),” *Psychological Methods* 9(4):403-425. [Included in J. Miles and B. Stucky (editors) (2014). *Quantitative Psychology*, SAGE Publications.]
- A.R. Morral, D.F. McCaffrey, G. Ridgeway (2004). “[Effectiveness of community-based treatment for substance abusing adolescents: 12-month outcomes from a case-control evaluation of a Phoenix Academy](#),” *Psychology of Addictive Behaviors* 18(3):257-268.
- G. Ridgeway and D. Madigan (2003). “[A sequential Monte Carlo method for Bayesian analysis of massive datasets](#),” *Data Mining and Knowledge Discovery* 7(3):301-319.
- D. Relles, G. Ridgeway, and G. Carter (2003). “[Data mining and the implementation of a prospective payment system for inpatient rehabilitation](#),” *Health Services and Outcomes Research Methodology* 3:247-266.
- G.M. Carter, D.A. Relles, G. Ridgeway, C.M. Rimes (2003). “[Measuring function for Medicare inpatient rehabilitation payment](#),” *Health Care Financing Review* 24(3):25-44.

- G. Ridgeway and D. Madigan (2002). “[Bayesian analysis of massive datasets via particle filters](#),” *Proceedings of the Eighth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, 5-13.
- D. Madigan, N. Raghavan, W. DuMouchel, M. Nason, C. Posse, and G. Ridgeway (2002). “[Instance construction via likelihood-based data squashing](#),” *Data Mining and Knowledge Discovery* 6(2):173-190.
- G. Ridgeway (2002). “[Looking for Lumps: Boosting and bagging for density estimation](#),” *Computational Statistics and Data Analysis* 38(4):379-392. ([R script](#))
- D. Rusk, K. Lin, D. Swartz, and G. Ridgeway (2002). “[Bayesian Updating of Damage Size Probabilities for Aircraft Structural Life-Cycle Management](#),” *Journal of Aircraft* 39(4):689-696.
- G. Ridgeway, D. Madigan, T. Richardson, and J. O’Kane (1998). “[Interpretable boosted naïve Bayes classification](#),” *Proceedings, Fourth International Conference on Knowledge Discovery and Data Mining* (R. Agrawal, P. Stolorz, G. Piatetsky-Shapiro, eds.), 101-104.

Peer-reviewed reports

- G. Ridgeway, O. Mitchell, S. Gunderman, C. Alexander, J. Letten (2016). [An Examination of Racial Disparities in Bicycle Stops and Citations Made by the Tampa Police Department](#), COPS-W0801.
- T. Fain, S. Turner, and G. Ridgeway (2012). [Los Angeles County Juvenile Justice Crime Prevention Act: Fiscal Year 2009-2010 Report](#), RAND TR-988.
- N.M. Pace, G. Ridgeway, J.M. Anderson, C. Fan, M. Horta (2011). [Case Weights for Federal Defender Organizations](#), RAND TR-1007-AOUSC.
- T. Fain, S. Turner, and G. Ridgeway (2011). [Los Angeles County Juvenile Justice Crime Prevention Act: Fiscal Year 2008-2009 Report](#), RAND TR-832.
- G. Ridgeway, L.W. Castaneda, A.B. Cross, E. Wilke, and J. Saunders (2010). “The Experience of Domestic Agencies: Police, Fire, and Federal Agencies,” in [Sexual Orientation and U.S. Military Personnel Policy](#), RAND MG-1056-OSD. Volume received 2011 Policy Impact Award from the American Association for Public Opinion Research.
- L.W. Castaneda and G. Ridgeway (2010). [Today’s Police and Sheriff Recruits: Insights from the Newest Members of America’s Law Enforcement Community](#), RAND MG-992-DOJ.
- T. Fain, S. Turner, and G. Ridgeway (2010). [Los Angeles County Juvenile Justice Crime Prevention Act: Fiscal Year 2007-2008 Report](#), RAND TR-746.
- G. Ridgeway (2009). [Cincinnati Police Department’s Traffic Stops: Applying RAND’s Framework to Analyze Racial Disparities](#), RAND MG-914-CC.
- N. Lim, C. Matthies, G. Ridgeway, B. Gifford (2009). [To Protect and to Serve: Enhancing the Efficiency of LAPD Recruiting](#), RAND MG-881-RMPF. (Nominated by LAPD and received honorable mention from IACP’s Excellence in Law Enforcement Research Award.)
- G.F. Treverton, C. Matthies, K.J. Cunningham, J. Goulka, G. Ridgeway, A. Wong (2009). [Film Piracy, Organized Crime, and Terrorism](#), RAND MG-742-MPA.

- G. Ridgeway, T.L. Schell, B. Gifford, J. Saunders, S. Turner, K.J. Riley, T.L. Dixon (2009). *Police-Community Relations in Cincinnati*, RAND MG-853-CC.
- G. Ridgeway, N. Lim, B. Gifford, C. Koper, C. Matthies, S. Hajiamiri, A. Huynh (2008). *Strategies for Improving Officer Recruitment in the San Diego Police Department*, RAND MG-724-SDPD.
- B.D. Rostker, L.M. Hanser, W.M. Hix, C. Jensen, A.R. Morral, G. Ridgeway, T.L. Schell (2008). *Evaluation of the New York City Police Department Firearm Training and Firearm-Discharge Review Process*, RAND MG-717-NYPD.
- G. Ridgeway, G.L. Pierce, A.A. Braga, G. Tita, G. Wintemute, W. Roberts (2008). *Strategies for Disrupting Illegal Firearm Markets: A Case Study of Los Angeles*, RAND TR-512-NIJ.
- G. Ridgeway (2007). *Analysis of Racial Disparities in the New York Police Department's Stop, Question, and Frisk Practices*, RAND TR-534-NYCPF.
- T.L. Schell, G. Ridgeway, T.L. Dixon, S. Turner, K.J. Riley (2007). *Police-Community Relations in Cincinnati: Year Three Evaluation Report*, RAND TR-535-CC.
- G. Ridgeway, T. Schell, K.J. Riley, S. Turner, T.L. Dixon (2006). *Police-Community Relations in Cincinnati: Year Two Evaluation Report*, RAND TR-445-CC.
- A.R. Morral, D.F. McCaffrey, G. Ridgeway, A. Mukherji, C. Beighley (2006). *The Relative Effectiveness of 10 Adolescent Substance Abuse Treatment Programs in the United States*, TR-346.
- K. Jack Riley, S. Turner, J. MacDonald, G. Ridgeway, T. Schell, J. Wilson, T.L. Dixon, T. Fain, D. Barnes-Proby, and B. Fulton (2005). *Police-Community Relations in Cincinnati*, RAND TR-333.
- K.J. Riley, N. Rodriguez, G. Ridgeway, D. Barnes-Proby, N. Griffith Forge, V. Webb (2005). *Just Cause or Just Because? Prosecution and Plea-Bargaining Resulting in Prison Sentences on Low-Level Drug Charges in California and Arizona*, RAND MG-288-RWJ.
- D.A. Relles, G. Ridgeway, G.M. Carter, M. Beeuwkes Buntin (2005). *Possible Refinements to the Construction of Function-Related Groups for the Inpatient Rehabilitation Facility Prospective Payment System*, TR-207-CMS.
- L.M. Davis, K.J. Riley, G. Ridgeway, J.E. Pace, S. Cotton-Nelson, P. Steinberg, K. Damphousse, and B.L. Smith (2004). *When Terrorism Hits Home: How Prepared Are State and Local Law Enforcement?*, RAND MG-104-MIPT. [Download research brief \(pdf\)](#)
- G. Ridgeway, K.J. Riley, J. Grogger (2004). *Analysis of Oakland's stop and search data*, Chapter 9 in *Promoting Cooperative Strategies to Reduce Racial Profiling*, Oakland Police Department.
- G. Tita, K.J. Riley, G. Ridgeway, C. Grammich, A.F. Abrahamse, and P. Greenwood (2003). *Reducing Gun Violence in East Los Angeles: Results from an Intervention*, RAND MR-1764-NIJ. (Listed in the 2004 guide of University Press Books Selected for Public and Secondary School Libraries.)
- L.J. Hickman, T. Fain, S. Turner, G.K. Ridgeway, B. Raymond, and J.R. Lockwood (2003). *Evaluation of the Impact of Seattle's DWLS Impound Law*, WR-117-SEA.
- G.M. Carter, M. Beeuwkes Buntin, O. Hayden, S.M. Paddock, D.A. Relles, G.K. Ridgeway, M.E. Totten, B.O. Wynn (2002). *Analyses for the Initial Implementation of the Inpatient Rehabilitation Facility Prospective Payment System*. MR-1500.

Book chapters

G. Ridgeway and J.M. MacDonald (2010). *Methods for Assessing Racially Biased Policing* in *Race, Ethnicity and Policing: New and Essential Readings* (S.K. Rice & M.D. White, eds.), New York University Press.

G. Ridgeway (2003). *Strategies and Methods for Prediction* in *The Handbook of Data Mining* (N. Ye, ed.), Lawrence Erlbaum Associates, Mahwah, NJ.

D. Madigan and G. Ridgeway (2003). *Bayesian Learning and Inference* in *The Handbook of Data Mining*(<https://www.routledge.com/The-Handbook-of-Data-Mining/Ye/p/book/9780805849073>) (N. Ye, ed.), Lawrence Erlbaum Associates, Mahwah, NJ.

A. Morral, M. Reti, D. McCaffrey, G. Ridgeway (2001). *Phoenix Academy treatment outcomes: Preliminary findings from the adolescent outcomes study*. NIDA Research Monograph 182:111–112.

D. Madigan, N. Raghavan, W. DuMouchel, M. Nason, C. Posse, and G. Ridgeway (2001). *Instance Construction via Likelihood-Based Data Squashing* in *Instance Selection and Construction for Data Mining* (H. Liu & H. Motoda, eds.), Kluwer Academic Publishers.

Commentaries and letters

G. Ridgeway (2020). “[Transparency, Statistics, and Justice System Knowledge Is Essential for Science of Risk Assessment](#),” *Harvard Data Science Review* 2(1).

G. Ridgeway (2013). “[Linking Prediction and Prevention](#),” Policy Essay, *Criminology & Public Policy* 12(3):545–550.

G. Ridgeway and P. Heaton (2011). “[Save Money - Hire Police](#),” Commentary, *Los Angeles Times*, November 22, 2011.

G. Ridgeway and N. Lim (2009). “[The Decline of Racial Profiling](#),” Commentary on cnn.com, July 30, 2009.

G. Ridgeway (2009). “[Summary of the RAND Report on NYPD’s Stop, Question, and Frisk](#),” Testimony presented before the New York City Council Committee on Public Safety and Committee on Civil Rights on April 30, 2009, CT-329.

G. Ridgeway (2008). “[Study Focuses on NYPD Racial Profiling](#),” NPR News & Notes, 8 May 2008.

K.J. Riley and G. Ridgeway (2007). “[Police Need to Do a Better Job of Explaining Stop-and-Frisk](#),” Commentary, *New York Daily News*, December 6, 2007.

G. Ridgeway (2007). “[Laws Are No Substitute to Vigilance](#),” Special to washingtonpost.com’s Think Tank Town, April 18, 2007.

K.J. Riley and G. Ridgeway (2005). “[Racial Profiling Won’t Stop Terror](#),” Special to washingtonpost.com’s Think Tank Town, October 11, 2006.

G. Ridgeway (2005). “[Racial Profiling: Still a Worry](#),” Letter to the Editor, *Washington Post*, September 6, 2005, Page A24.

G. Ridgeway (2004). “[Commentary: Racial Profiling, Not Always Black and White](#),” *RAND Review* 28(2):46.

K.J. Riley and G. Ridgeway (2004). “[Measuring racial profiling by police](#),” *Law Enforcement News*.

G. Ridgeway and K.J. Riley (2004). “[Police-search statistics don’t lie, but statisticians can](#),” Op-ed, *Dallas Morning News*, February 22, 2004.

Reports, discussions, and conference papers

G. Ridgeway (2023). [Data Analysis of Priests and Brothers Substantiated as Child Sex Abusers Associated with the Illinois Dioceses](#), Report on Catholic Clergy Child Sex Abuse in Illinois, Office of the Attorney General, State of Illinois. pp. 605-633.

A. Chalfin, J.M. MacDonald, G. Ridgeway, R. Ryley (2022). [Crime Prevention Through Intelligence and Information Sharing: An Evaluation of an Information Intervention at the Philadelphia Police Department](#), Penn Crime and Justice Policy Lab Report.

N. Lim and G. Ridgeway (2015). [Progress After Ferguson? Good Ideas Need Good Implementation](#), Commentary on RAND.org.

G. Ridgeway (2013). [The Pitfalls of Prediction](#), *NIJ Journal* 271:34–40.

G. Ridgeway and D.F. McCaffrey (2007). [Comment on ‘Demystifying Double Robustness: A Comparison of Alternative Strategies for Estimating a Population Mean from Incomplete Data’ by Kang and Schafer](#), *Statistical Science* 22(4):540–543.

G. Ridgeway (2007). [Review of All of Nonparametric Statistics by Larry Wasserman](#), *Journal of the American Statistical Association* 102(477):389–389.

G. Ridgeway (April 15, 2006). [Generalized Boosted Models: A guide to the gbm package](#), R vignette.

G. Ridgeway, D.F. McCaffrey, A.R. Morral (June 26, 2006). [Toolkit for Weighting and Analysis of Nonequivalent Groups: A tutorial for the twang package](#), R vignette.

G. Tita, K.J. Riley, G. Ridgeway, and P.W. Greenwood (2005). [Reducing Gun Violence: Operation Ceasefire in Los Angeles](#), NIJ Research Report NCJ 192378.

D. Madigan and G. Ridgeway (2004). [Discussion of “Least Angle Regression”](#), *Annals of Statistics* 32(2):465–469.

D. Rusk, K. Lin, D. Swartz, and G. Ridgeway (2001). “[Bayesian Updating of Damage Size Probabilities for Aircraft Structural Life-Cycle Management](#)”, *Proceedings of the 42nd Structures, Structural Dynamics, and Materials Conference, Non-Deterministic Approaches Forum*.

G. Ridgeway (2000). [Discussion of “Additive Logistic Regression: a Statistical View of Boosting,” by J. Friedman, T. Hastie, and R. Tibshirani](#), *Annals of Statistics* 28(2):393–400.

G. Ridgeway (2000). [Looking for Lumps: Boosting and bagging for density estimation](#), In *Proceedings of the International Meeting on Nonlinear Methods and Data Mining* (S. Borra & A. Di Ciaccio, eds.), pp. 11–25.

- G. Ridgeway (2000). *Prediction in the Era of Massive Datasets*, Proceedings of *Statistical Modelling for Data Mining* (P. Giudici, ed.), pp. 109–119.
- G. Ridgeway (1999). *The state of boosting*, *Computing Science and Statistics* 31:172–181.
- G. Ridgeway (1999). *Generalization of Boosting Algorithms and Applications of Bayesian Inference for Massive Datasets*, Ph.D. dissertation, Dept. of Statistics, Univ. of Washington.
- G. Ridgeway, D. Madigan, and T. Richardson (1999). *Boosting Methodology for Regression Problems*, *Proceedings of Artificial Intelligence and Statistics '99* (D. Heckerman & J. Whittaker, eds.), pp. 152–161.
- G. Ridgeway, T. Richardson, and D. Madigan (1999). *Discussion of “Bump Hunting in High-Dimensional Data”*, *Statistics and Computing* 9(2):150–152.
- J.W. O’Kane, G. Ridgeway, and D. Madigan (1999). *Statistical Analysis of Clinical Variables to Predict the Outcome of Surgical Intervention in Patients with Knee Complaints*, Technical report.
- G. Ridgeway and S. Altschuler (1998). *Clustering Finite Discrete Markov Chains*, *Proceedings of the Section on Physical and Engineering Sciences*, pp. 228–229.
- G. Ridgeway (1997). *Finite discrete Markov process clustering*, Technical report MSR-TR-97-24, Microsoft Research, September 1997.
- G. Ridgeway (1996). *Distributed Open Resources for Understanding Statistics — DORUS*, September 1996.

Software development

- **Conditional ordinal stereotype model for police use-of-force**
A conditional likelihood version of Anderson’s ordinal stereotype model, designed to estimate an individual officer’s propensity to escalate force (C++/R)
Development: <https://github.com/gregridgeway/COS-police-use-of-force>
- **fastDR — Fast Doubly Robust Estimation**
Implements doubly robust treatment effect estimation using boosted propensity scores and weighted GLMs
Development: <https://github.com/gregridgeway/fastDR>
- **gbm3 — Generalized Boosted Regression Models**
Latest version of gradient boosting and related models (C++ engine, R frontend)
Development: <https://github.com/gbm-developers/gbm3>
- **gbm — Generalized Boosted Regression Models**
Original version of gradient boosted models (C++ engine, R frontend)
Development: <https://github.com/gbm-developers/gbm>

Presentations

2025

- “Fairness Regularized Risk Assessment Models: Balancing Risk Prediction and Racial and Ethnic Equality,” November, Washington DC, American Society of Criminology. (with Rhys Hester and Ryan Labrecque).
- “Landscape of Criminal Justice Data Sources,” March, American Statistical Association, Committee on Law and Justice Statistics public webinar. [video](#) (password: M7P=o\$Df)

2024

- “Which police officers escalate force?” September, University of Tennessee - Memphis, Bio-statistics seminar series.

2023

- “Conditional Likelihood for Use-of-Force,” November, [Ingram Olkin Forum: Statistical Challenges in the Analysis of Police Use of Force](#), Carleton College, Northfield, MN.
- “Scorecards, Benchmarking, and the Search for Unusual Hospitals, Communities, and Cops,” July, Center for Statistical Research and Methodology, United States Bureau of the Census.
- “Conditional likelihood and use-of-force,” March, University of Massachusetts, Lowell.
- “Scorecards, Benchmarking, and the Search for Unusual Hospitals, Communities, and Cops,” February, [Penn Association of Senior and Emeritus Faculty \(PASEF\)](#).

2021

- “Officer Features and Shooting Risk,” March, ENAR, virtual.
- “Modern Benchmarking and the Search for Unusual Hospitals, Communities, and Cops,” March, Council of State Governments.
- “Exploring a RAND Approach to Measuring Racial Disparity: A Case Example and Dialogue,” January, Center to Advance Racial Equity Policy, RAND Corporation.

2020

- “Officer Features and Shooting Risk,” November, [APPAM Fall Research Conference](#), virtual.

- “Modern Benchmarking and the Search for Unusual Hospitals, Communities, and Cops,” [Keynote, Health Policy Statistics Section](#), August, Joint Statistical Meetings, virtual.
- “Officer Features and Shooting Risk,” August, Joint Statistical Meetings, virtual.

2019

- “Officer Features and Shooting Risk,” June, [Inaugural Ingram Olkin S3 Forum: Gun Violence - The Statistical Issues](#), American Statistical Association, Alexandria, VA. [video](#)
- “Statistics of Police Shootings and Racial Profiling,” April, [Center for Practice and Research at the Intersection of Information, Society, and Methodology](#), New York University, New York, NY.
- “Racial Profiling, Bad Cops, and Police Shootings,” March, Department of Statistics, Iowa State University, Ames, IA.
- “Racial Profiling, Bad Cops, and Police Shootings,” February, Natural Sciences Colloquium, Colgate University, Hamilton, NY.
- “Officer Features and Shooting Risk,” February, AAPSS Workshop on Police Shootings, University of Pennsylvania, Philadelphia, PA.

2018

- “Criminological Data Science,” September, Fields Institute, University of Toronto, Toronto, Canada.

2017

- “Racial Profiling, Bad Cops, and Police Shootings,” November, [Social and Decision Analytics Lab](#), Virginia Tech, Arlington, VA.
- “Criminal Justice Predictions,” September, National Academy of Sciences, Workshop on Predictive Analytics for Human Services and Education, Washington, DC.
- “Computation and Criminology,” September, Current Challenges in Computing: Computational Social Science (CCubed), Napa, CA.
- “Officer Risk Factors Associated with Police Shootings: A Matched Case-Control Study,” February, American Association for the Advancement of Science (AAAS), Boston, MA.
- “Propensity score analysis with survey weighted data,” March, Eastern North American Region of the Biometric Society (ENAR), Washington, DC.
- “Statistical Applications in Crime and Justice,” March, Southern California chapter of the American Statistical Association (SCASA) Annual Applied Statistics Workshop, Duarte, CA.

2016

- “Racial Profiling, Bad Cops, and Police Shootings,” March, Department of Statistics Colloquium, University of Pennsylvania, Philadelphia, PA.
- “Effect of Rail Transit on Crime: A Study of Los Angeles from 1988-2014,” January, Population Studies Center Colloquium, Philadelphia, PA.

2015

- “Criminal justice system benchmarking: An approach for studying sentencing disparities in New York State,” October, New York Sentencing Commission, New York, NY.
- “Transit systems and their effect on crime in communities: Three decades of crime and transit in Los Angeles,” November, Association for Public Policy Analysis and Management, Miami, FL.
- “Benchmarking Justice Performance,” June, Research Coordination Network on Understanding Guilty Pleas, Albany, NY.
- “Discussion of Plea Bargaining in Wisconsin,” June, Research Coordination Network on Understanding Guilty Pleas, Albany, NY.
- “Advancing forensic science at the National Institute of Justice,” April, Committee on Strengthening Forensic Science at the National Institute of Justice, National Academy of Sciences, Washington, DC.

2014

- “Estimating officer risk factors for police shootings,” December, Department of Criminology, University of Pennsylvania, Philadelphia.

2012

- “Methods for racial profiling analysis,” March, Claremont Colleges, Claremont.

2011

- “[Analysis in Support of Public Safety](#),” September, Contemporary Challenges for Strategic Planning of Public Safety, Ministerio de Seguridad, Buenos Aires, Argentina.
- “[Racial Profiling Analysis in a Post-Beer Summit World](#),” March, Google Tech Talks, Santa Monica. ([video](#))

2010

- “What research can do for policing,” September, International Association of Law Enforcement Planners, Scottsdale.
- “Police Performance and the Analysis of Racial Profiling,” September, International Association of Law Enforcement Planners, Scottsdale.
- “What research can do for policing,” April, Southern California Chiefs of Police Association, Palm Springs.

2009

- “[Methods for racial profiling analysis](#),” October, University of Pennsylvania, Philadelphia, Department of Criminology.
- “[Operación cese al fuego, Los Ángeles](#),” Crimen organizado, pandillas y tráfico de armas, triángulo de inseguridad, September, CEDAN - Centro de Diálogo y Análisis Sobre América del Norte, Tecnológico de Monterrey, Campus Ciudad de México.

2008

- “[Methods for racial profiling analysis](#),” October, University of California, Santa Barbara, Department of Probability and Statistics.
- “[A Discussion of Disease Prediction and Model Validation](#),” Discussion for an invited session at the Joint Statistical Meetings, August, Denver.
- “[Racial Disparities in the New York Police Department’s Stop, Question, Frisk Practices](#),” February, The 2nd Fyfe Police Accountability Conference: Stop and Frisk Policy, Practice and Research, [John Jay College](#), New York.

2007

- “The criminal purchase of firearm ammunition,” March, Association for Criminal Justice Research, Sacramento.
- “[Methods for racial profiling analysis](#),” February, University of Cincinnati.
- “Improving Community-Police Relations: Year 2 Results,” January, Testimony to the Public Safety Subcommittee of the Cincinnati City Council.

2006

- “[Internal benchmarking using propensity scores for detecting racial bias in police traffic stops](#),” November, American Society of Criminology, Los Angeles.
- “[Internal benchmarking using propensity scores for detecting racial bias in police traffic stops](#),” September, Junior Empirical Legal Scholars Conference, Cornell Law School.
- “[Racial profiling](#),” February, [UCLA Biostatistics Seminar Series](#).

2005

- “Assessing the effect of race bias in post-traffic stop outcomes using propensity scores,” November, [American Society of Criminology](#), Toronto, Canada.
- “Ammunition Purchases in the City of Los Angeles,” November, [American Society of Criminology](#), Toronto, Canada.
- “Model Selection for Estimating Propensity Scores,” June, WNAR Conference, Fairbanks, AK.
- “Analysis of Post-Stop Outcomes: Citations, Search, and Stop Duration,” April, [Fourth National Symposium on Racial Profiling](#), Rosemont, IL.
- “Strategies for the analysis of observational data,” January, UCLA Division of Geriatrics, Los Angeles, CA.

2004

- “Just Cause or Just Because? Prosecution and Plea Bargaining among Low-Level Drug Offenders in California,” November, American Society of Criminology, Nashville, TN.
- “Not Always Black and White: More Credible Approaches for Detecting Racial Profiling,” November, RAND Board of Trustees Meeting, Santa Monica, CA.
- “Racial Profiling: Not Always Black and White,” October, Statistics and Computer Science Seminar Series, University of California, Irvine, CA.
- “Racial Profiling: Not Always Black and White,” September, One RAND Colloquium, Washington, DC.
- “Racial Profiling: Not Always Black and White,” September, Biostatistics Seminar Series, Johns-Hopkins University, Baltimore, MD.
- “Racial Profiling: Not Always Black and White,” September, RAND Civil Justice Board of Overseers Meeting, Washington, DC.
- “Post-processing boosted regression models: model and variable selection,” Invited session at the [Joint Statistical Meetings](#), August, Toronto, Canada.
- “Enhancing Evidence: Causal Modeling Using Observational Treatment Data,” with Dan McCaffrey and Andrew Morral. Research Methodology Workshop at [Complexities of Co-Occurring Conditions](#), June, Washington, DC.
- “Racial Profiling: Not Always Black and White,” June, Congressional briefing, Washington, DC.
- “Estimating the causal effect of time in treatment using propensity scores,” with Dan McCaffrey and Andrew Morral. Poster presentation at the 2004 meeting of the [College on Problems of Drug Dependence](#), June, San Juan, Puerto Rico.
- “Racial Profiling: Not Always Black and White,” May, One RAND Colloquium, Santa Monica, CA.
- “Statistics, Machine Learning, and Public Policy Analysis - Propensity score analysis of observational data,” April, [Stern Business School](#), New York University, New York. [Download slides pdf](#)
- “Retooling propensity score techniques with machine learning for evaluating solutions to the Los Angeles drug abuse epidemic,” March, [DIMACS Working Group on Data Mining and Epidemiology](#), Rutgers University, Piscataway, NJ. [Download slides](#)

2003

- “A Bayesian assessment of the impact of a gun violence reduction initiative in Hollenbeck,” September, [The 7th Case Studies in Bayesian Statistics Workshop](#), Carnegie Mellon University, Pittsburgh, PA. Poster.
- “Propensity scores and causal analysis of observational data,” May, [Division of General Internal Medicine & Health Services Research Seminar Series](#), UCLA, Los Angeles, CA.

2002

- “Bayesian analysis of massive datasets via particle filters,” November, [Department of Statistics](#), UCLA, Los Angeles, CA.
- “Generalized boosted modeling with application to propensity scores,” October, [Department of Statistics and Actuarial Science](#), University of Central Florida, Orlando, FL.
- “Bayesian analysis of massive datasets via particle filters,” October, [Department of Statistics](#), Florida State University, Tallahassee, FL.
- “Bayesian analysis of massive datasets via particle filters,” July, The Eighth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining ([KDD2002](#)), Edmonton, Canada.
- “Statistical Techniques for the Implementation of a Prospective Payment System for Inpatient Rehabilitation,” June, [Academy for Health Services Research and Health Policy Annual Research Meeting](#), Washington, DC. Invited paper for the session on Medicare Reimbursement for Post Acute & Long Term Care: Research Informing Policy.
- “Data Mining for the Development of Public Policy,” April, 34th Symposium on the Interface of Computing and Statistics ([Interface 2002](#)), Montreal, Canada. Invited paper for the KDD Featured Session on Data Mining.
- “Predicting Dropouts: Boosting Algorithms and the Identification of Academically At-Risk Youth,” (with [Paul LePore](#)) February, University of Washington, Center for Statistics and the Social Sciences ([CSSS](#)), Seattle, Washington. CSSS Seminar Series.

2001

- “Data mining and the Implementation of a Prospective Payment System for Inpatient Rehabilitation,” December, [2001 International Conference on Health Policy Research](#), Boston. Invited paper for the session on Data Mining for Health Services Research.
- “Strategies for Boosting and Prediction,” October, [Department of Statistics](#), California Polytechnic State University, San Luis Obispo.
- “Strategies for Boosting and Prediction,” May, [Department of Statistics](#), University of California Riverside.
- “Hypothesis Screening for Serologic Characteristics Associated with Prednisone Using SurroMed Technology,” April, [SurroMed](#), Mountain View, CA.

2000

- “Strategies for Boosting and Prediction,” December, Information and Computer Sciences, University of California Irvine.
- “Strategies for Boosting and Prediction,” Statistics and Applied Probability Seminar, November, University of California Santa Barbara.
- “[Prediction in the Era of Massive Datasets](#),” Workshop on Statistics and Data Mining (SDM2000), October, Pavia, Italy. Invited tutorial presentation.
- “[Looking for Lumps: Boosting and Bagging for density estimation](#),” International Meeting on Nonlinear Methods and Data Mining (NMDM 2000), Rome, Italy, September. Invited presentation. [Download pdf](#)
- “Data mining,” RAND short course series, Santa Monica, CA, September.
- “[Modern prediction methods using Bagging and Boosting](#),” [Center for Statistics and the Social Sciences](#), February, Seattle, Washington. CSSS Seminar Series.

1999

- “Combining Estimators to Improve Performance: Bundling, Bagging, Boosting, and Bayesian Model Averaging,” (with [John Elder](#)) Fifth International Conference on Knowledge Discovery and Data Mining (KDD-99), August, San Diego, California. Tutorial presentation. [Download pdf](#)
- “[The state of boosting](#),” 31st Symposium on the Interface: Models, Predictions, and Computing ([Interface 1999](#)), June, Schaumburg, Illinois. Invited talk for the session on Data Mining.
- “[A Method for Bayesian Inference in Massive Datasets](#),” [Boeing](#), March, Bellevue, Washington. Invited seminar presentation.
- “[Boosting Methodology for Regression Problems](#),” Seventh International Workshop on Artificial Intelligence and Statistics ([Uncertainty 1999](#)), January, Fort Lauderdale, Florida.

1998

- “[Interpretable Boosted Naïve Bayes Classification](#),” Fourth International Conference on Knowledge Discovery and Data Mining (KDD-98), August, New York, New York. Plenary presentation on classification research.
- “[Boosting and the naïve Bayes classifier](#),” [Microsoft Research](#), July, Redmond, Washington.
- “[Application of finite discrete Markov process clustering for understanding Web usage](#),” Spring Research Conference on Statistics in Industry and Technology (SRC98), Section on Physical and Engineering Sciences, June, Santa Fe, New Mexico.

1997

- Mathematical Techniques to Mine Massive Data Sets ([M3D](#)), August, Chicago, Illinois. Invited participant.

1996

- Second International Conference on Knowledge Discovery and Data Mining ([KDD-96](#)), August, Portland, Oregon. Conference participant.

Professional activities

- 2021–2025 — Editor-in-chief, *Journal of Quantitative Criminology* (with John MacDonald)
- 2025–2028 — Committee member, ASA Committee on Law and Justice Statistics
- 2023–2024 — Chair, ASA Committee on Law and Justice Statistics
- 2021–2024 — Committee member, Policy Committee, American Society of Criminology
- 2018–2020 — Associate Editor, *Journal of Quantitative Criminology*
- 2016–2018 — Editorial board, *Journal of Quantitative Criminology*
- 2019–2020 — Committee member, Nominations Committee, American Society of Criminology
- 2009–2010 — Committee member, ASA Committee on Law and Justice Statistics
- 2004–2008 — Associate Editor, *Bayesian Analysis*

Teaching experience and student advising

Course notes

- **Criminal Justice Data Analytics** (CRIM4002/6002) [R4Crim](#)
- **Machine Learning for Social Science** (CRIM4012/6012) [ML4SocialScience](#)

Ph.D. students (committee roles)

- 2024 — John Gyourko, *Credit Checks and Credit Freezes for Children and Youth in Foster Care: Tracking, Remediating, and Preventing Identity Fraud Victimization* (committee member)
- 2023 — Alex Knorre, *Essays on Gun Violence in the United States* (committee member)
- 2023 — David Mitre Becerril, *The Effects of Neighborhood Investments on Public Safety* (committee member)
- 2022 — Viet Nguyen, *Understanding the trade-offs for less punitive sentencing practices* (committee member)
- 2020 — Ruth Moyer, *Changes Within the Urban Environment and Their Effect on Crime and the Criminal Justice System* (committee chair)
- 2020 — Jacob Kaplan, *The Effect of Lighting and Building Security on Crime* (committee member)
- 2020 — Yuhao Wu, *Empirical Studies of the Effects of Legal Reforms on the Criminal Justice System in China* (committee member)