Stephen S. Pettigrew

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Work Experience

University of Pennsylvania Philadelphia, PA
  Deputy Executive Director: Robert A. Fox Leadership Program Dec. 2017–pres.
  Director of Data Sciences: Program on Opinion Research Dec. 2017–pres.
    and Electoral Studies

NBC News New York, NY
  Senior Analyst: Decision Desk and Data Analytics Lab Dec. 2017–pres.

MIT Election Data and Science Lab Cambridge, MA
  Project Manager Apr. 2017–Nov. 2017
  Data Scientist Sept. 2011–Apr. 2017

Education

Harvard University Cambridge, MA
  PhD: Political Science May 2017
  Dissertation: *Long Lines and Voter Purges: The Logistics of Running Elections
          in America*
  Master of Arts: Statistics Mar. 2014

University of Georgia Athens, GA
  Master of Arts: Political Science and International Affairs May 2011
  Bachelor of Arts: Political Science & History (Double Major) May 2011

Peer-Reviewed Publications

"The Downstream Consequences of Long Waits: How Lines at the Precinct Depress Future Turnout."
Electoral Studies 71. June 2021.

"Protecting the Perilous Path of Election Returns: From the Precinct to the News." with Charles
Stewart. *Ohio State Technology Law Journal*. 15: (2). Summer 2020.

"Abstention, Protest, and Residual Votes in the 2016 Election." with Michael Alvarez, Charles Stewart,
and Cameron Wimpy. *Social Science Quarterly*. 101: (3). March 2020.

"The Race Gap in Wait Times: Why Minority Precincts are Underserved by Local Election Officials."
Political Science Quarterly 132: (3). Fall 2017. pp 527-547.

"Comment on 'Estimating the Reproducibility of Psychological Science'" with Daniel Gilbert, Gary
King, and Tim Wilson. *Science* 351: (6277). March 4, 2016.

"Hosting the Olympic Games: An Overstated Advantage in Sports History." with Danyel Reiche.
International Journal of the History of Sport 33: (6-7). March-April 2016. pp 635-647.

"How the West will be Won: Using Monte Carlo Simulations to Estimate the Effects of NHL Realignment." *Journal of Quantitative Analysis in Sports* 10 (3). September 2014. pp 345-356.

"Strategic Politicians, Partisan Roll Calls, and the Tea Party: Evaluating the 2010 Midterm Elections." with Jamie Carson. *Electoral Studies* 32: (1). March 2013. pp 26-36.

Other Political Science Publications

"Uncertainty over a blue wave: NBC News finds Democratic and GOP voter registrations at same level as past election cycles" *NBC News*. Oct. 16, 2018. With John Lapinski, Stephanie Perry, and Rezwana Uddin.

"Improving the Voter Experience: Reducing Polling Place Wait Times by Measuring Lines and Managing Polling Place Resources" *Bipartisan Policy Center*. April 2018. With John Fortier, Tim Harper, Charles Stewart, and Matthew Weil.

"The United States is Getting Better at Running Elections." *The Monkey Cage*. August 9, 2016. With Charles Stewart

"Elections Performance Index: Methodology 2014" *The Pew Charitable Trusts*. August 2016.

"These are the Two Pivotal Senators if There's a Vote to Replace Scalia." *The Monkey Cage*. February 14, 2016.

"The 2014 Elections that Ended in a Tie." *FiveThirtyEight*. December 5, 2014.

"Elections Performance Index: Methodology 2012" *The Pew Charitable Trusts*. April 2014.

"Republican Advantages in Candidate Recruitment in 2014 have Led to an Increasingly Polarized House of Representatives." with Jamie Carson. *London School of Economics American Politics and Policy Blog*. September 17, 2013.

"Elections Performance Index: Methodology 2008-2010" *The Pew Center for the States*. February 2013.

Teaching Experience

PSCI207: Applied Data Science (UPenn) Spring 2018, 2019, 2021; Fall 2019
  with Dr. John Lapinski and Samantha Sangenito
  Topics: R programming • Survey research • Experiments

PSCI107: Introduction to Data Science (UPenn) Fall 2020
  with Dr. Marc Trussler
  Topics: R programming • Data science

17.20: Introduction to the American Political Process (MIT) Spring 2016
  with Dr. Devin Caughey
  Topics: American political institutions • Mass opinion and behavior

Gov2002: Causal Inference Fall 2015
  with Dr. Matt Blackwell
  Topics: Experimental design • Instrumental variables • Regression discontinuity • Matching
  Harvard University Certificate of Distinction in Teaching (2015)

Gov2001: Advanced Quantitative Research Methodology Spring 2014, 2015
  with Dr. Gary King
  Topics: Maximum likelihood estimation • Predictive modeling • Missing data
  Harvard University Certificate of Distinction in Teaching (2014, 2015)

Gov1540: The American Presidency   Fall 2013, 2014, 2015
  with Dr. Roger Porter
  Topics: Presidential power • Interbranch relations • Elections • Presidential decision making
  Harvard University Certificate of Distinction in Teaching (2015)

Harvard Government Math Pre-fresher   Aug. 2013, 2014
  Topics: Probability • Matrix algebra • Calculus • Optimization • R programming

Conference Presentations

"Protecting the Perilous Path of Election Returns: From the Precinct to the News." Symposium on Elections in the Era of Technological Threats and Opportunities. Moritz College of Law. Ohio State University. January 2020. Columbus, OH. With Charles Stewart.

"Education Weighting in the National Exit Poll" *American Association of Public Opinion Researchers Annual Conference.* May 2019. Toronto, ON.

"Moved Out, Moved On: Assessing the Effectiveness of Registration List Maintenance" *Election Sciences, Reform, & Administration Conference.* July 2016. Portland, OR.

"The Downstream Consequences of Long Waits: How Lines at the Precinct Depress Future Turnout" *American Political Science Annual Meeting.* September 2016. Philadelphia, PA.

"How Long Lines Affect Turnout." *Society for Political Methodology Annual Meeting.* July 2016. Houston, TX.

"Home Advantage at the Olympics: Will Brazil Win More Medals than Usual?" *Who Will Win in Rio? Conference.* July 2016. Cambridge, MA.

"The Downstream Consequences of Long Waits: How Lines at the Precinct Depress Future Turnout" *Yale Center for the Study of American Politics Conference.* June 2016. New Haven, CT.

"The Downstream Effects of Long Lines: How Long Waits at the Precinct Depress Future Turnout" *Midwest Political Science Association Annual Meeting.* April 2016. Chicago, IL.

"A Population Model of Voter Registration and Deadwood" *Midwest Political Science Association Annual Meeting.* April 2016. Chicago, IL. With Charles Stewart.

"Why the Home Advantage at the Olympic Games is Overrated: Relating Host Medals to Increased Participation" *World Congress on Elite Sport Policy.* November 2015. Melbourne, Australia. With Danyel Reiche.

"A Population Model of Voter Registration and Deadwood" *New Research on Election Administration and Reform.* June 2015. Cambridge, MA. With Charles Stewart.

"Time Tax: Which Groups Wait in the Longest Lines on Election Day?" *Western Political Science Association Annual Meeting.* April 2015. Las Vegas, NV.

"Assessing the Offensive Productivity of NHL Players using In-game Win Probabilities." *MIT Sloan Sports Analytics Conference.* February 2015. Boston, MA.
    Best research paper award finalist

"How the West will be Won: Using Monte Carlo Simulations to Estimate the Effects of NHL Realignment." *New England Symposium on Statistics in Sports.* September 2013. Cambridge, MA.

"Evaluating New Representatives: How Redistricting Disrupts Congressional Representation" *American Political Science Association Annual Meeting.* August 2013. Chicago, IL. With Brian Schaffner and Stephen Ansolabehere.

"Redistricting and the Personal Vote in 2012" *2013 CCES Sundance Conference.* May 2013. Sundance, UT. With Stephen Ansolabehere.

"The Electoral Value of Seniority: Does Incumbent Tenure Affect the Attitudes of Voters?" *Midwest Political Science Association Annual Meeting.* April 2013. Chicago, IL. With Stephen Ansolabehere.

"Competition and Candidate Emergence Decisions in U.S. House Primaries, 2000-2010" *Midwest Political Science Association Annual Meeting.* April 2012. Chicago, IL.

"Strategic Politicians, the Great Recession, and the Tea Party Movement: Evaluating the 2010 Midterm Elections." *Midwest Political Science Association Annual Meeting.* March 2011. Chicago, IL. With Jamie Carson.

Invited Talks

"What Happens Behind the Scenes on Election Night."
University of Texas at Tyler. March 2021.
New York University. October 2019.
Columbia University. October 2019.
University of Georgia. October 2019.
Dartmouth College. May 2019.

Panel on Efficiency, Security and Equity. Georgia College and State University. Election Integrity Symposium. Spring 2021.

"Leveraging your PhD." Harvard University. March 2018.

"What Happens on Election Night." Second Measure. August 2018.

"Everything is Data: How to Use Numbers to Answer the Questions You've Always Had." University of Georgia Honors Program. October 2015.

Guest lecturer in "Election Law and Participation" seminar. Bates College. May 2015.

Sports Analytics Research and Publications

Winners View: Data analytics consultant	April 2016–June 2016
Philadelphia 76ers: Basketball analytics consultant	July 2014–November 2014
Rink Stats: My hockey analytics blog	June 2013–Present
Wall Street Journal	
The Madness Machine	March 16, 2015
As NBA Playoffs Begin, Odds of Beating the Heat	April 19, 2014
The Stanley Cup: What are the Odds?	April 16, 2014
NCAA Tournament: Our Sorry, Broken Brackets	April 7, 2014
2014 Sochi Olympics: Why Canada will Rule (Again) in Hockey	February 7, 2014
FiveThirtyEight	

Is There Home-Field Advantage At The Olympics? With Danyel Reiche.	August 9, 2016
Playoff Hockey is 36 Percent More Bone-Crushing	April 15, 2015
How To Tell If A March Madness Underdog is Going to Win	March 19, 2015
After Signing Day, Wisconsin Makes The Best Of Its Recruits	February 4, 2015

Deadspin

How Those 3-on-3 Overtime Rules Would Cut Down NHL Shootouts	March 18, 2015
Are Outdoor Hockey Games Really Sloppier?	February 19, 2015
Are Teams Better or Worse in Must-Score Shootout Situations?	December 22, 2014
The *College Gameday* Curse is Real...For Some Teams With Lucas Puente.	September 5, 2014
11 Million Brackets vs. ESPN, CBS, and FOX Experts: Who was Better?	April 10, 2014
How the Long-Change OT Could Cut NHL Shootouts by a Third	March 12, 2014

Awards and Distinctions

APSA Elections, Public Opinion, and Voting Behavior Graduate Student Travel Award - Sept. 2016
Best Research Paper Finalist - 2015 Sloan Sports Analytics Conference
Harvard University Certificate of Distinction in Teaching (four times)
Phi Beta Kappa
University of Georgia Honors International Studies Scholar
University of Georgia Charter Scholar
Eagle Scout

Professional Service

Theses Advised

Bayley Tuch. 2020-2021. "Vote Mirages in the 2020 Election: How Vote-by-Mail Policies Impact the Reporting of Election Results." Undergraduate senior thesis. University of Pennsylvania. Winner of Philo Bennett Prize for best thesis in American politics and/or political theory.

Conferences Organized

Election Sciences, Reform, and Administration Conference. University of Pennsylvania. July 2019.
Political Analytics Conference. Harvard University. April 2016, March 2017, November 2018.
Who Will Win in Rio? Understanding Political, Economic, and Athletic Success at the 2016 Olympic Games. Harvard University. July 2016.

Publicly Available Datasets

November 2018 General Election Results (county level)
November 2016 General Election Results (county level)
U.S. House Primary Election Results (1956-2010)
Cumulative CCES Common Content (2006-2012)
Essential Files to Generate Pew Elections Performance Index
Cleaned 2014 Election Administration and Voting Survey Data
Cleaned 2012 Election Administration and Voting Survey Data
Cleaned 2010 Election Administration and Voting Survey Data
Cleaned 2008 Election Administration and Voting Survey Data

Other Conferences Attended

American Political Science Association Annual Meeting. Washington, DC.	Sept. 2019
Annual Conference of the American Association of Public Opinion Researchers. Toronto, ON.	May 2019
American Political Science Association Annual Meeting. Boston, MA.	Sept. 2018
Election Sciences, Reform, & Administration Conference. Madison, WI.	July 2018
Harvard Experimental Political Science Graduate Student Conference. Cambridge, MA.	March 2016
MIT Sloan Sports Analytics Conference. Boston, MA.	March 2016
New England Symposium on Statistics in Sports. Cambridge, MA.	September 2015
History and Congress Conference. Athens, GA.	May 2012
Society for Political Methodology Annual Meeting. Athens, GA.	July 2014
MIT Sloan Sports Analytics Conference. Boston, MA.	February 2014
MIT Sloan Sports Analytics Conference. Boston, MA.	March 2013
The Measure of Elections Conference. Cambridge, MA.	June 2012
Southern Political Science Association Annual Meeting. New Orleans, LA.	January 2011