Scott de Marchi

216 W Woodridge Dr.
Durham, NC 27707
demarchi@duke.edu
336-212-2091 (cell)

Experience

Professor of Political Science and Director of Decision Science, Duke University, 2014 - present.
Associate Professor of Political Science, Duke University, 2006 - 2013.
Assistant Professor of Political Science, Duke University, 1999 – 2005.
Assistant Professor of Political Science, Washington University, 1998 – 1999.
Consultant on Computational Modeling and Econometrics, Coopers and Lybrand, LLP, *Emerging Solutions Group*, 1996-1999.

Education

Ph.D. Political Science, December 1998. University of North Carolina – Chapel Hill.
Dissertation: "Cognition, Information, and Electoral Dynamics."
Dissertation Committee: Michael Munger (co-chair), George Rabinowitz (co-chair), William Keech, Marco Steenbergen, Terry Sullivan.
Fields: Methods (applied statistics and game theory), Voting Behavior, Computational Political Economy.
M.A. coursework and thesis completed in European Intellectual History (degree waived), 1993. University of North Carolina – Chapel Hill.
B.S. and B.A. Computer Science and History, 1990. Wake Forest University. *Cum laude* and with Honors.

Publications

Books

The Governance Cycle in Parliamentary Democracies: A Computational Social Science Approach (with Michael Laver). *Forthcoming*. *Cambridge University Press (Studies in Comparative Politics)*.
You Are What You Choose: The Habits of Mind That Really Determine How We Make Decisions (with Jay Hamilton). 2009. *Penguin*.
Computational and Mathematical Modeling in the Social Sciences. 2005. *Cambridge University Press*.

Articles

The Complexity of Polarization. 2022. *Proceedings of the National Academy of Sciences*.
Documentation Status and Self-rated Physical Health among Latinx Young Adult Immigrants (with Stafford, A.M., Tanna, A., Moreno Bueno, K., Nagy, G.A., Felsman, I. C., Cholera, R., Evans, K., Posada, E., & Gonzalez-Guarda, R.). 2022. *Journal of Racial and Ethnic Health Disparities*.
Policy and the Structure of Roll Call Voting in the US House (with Spencer Dorsey and Michael Ensley). 2021. *Journal of Public Policy*.

Government formation as logrolling in high-dimensional issue spaces (with Michael Laver). 2020. *Journal of Politics*.

Computational and Machine Learning Models: The Necessity of Connecting Theory and Empirics (with Brandon Stewart). 2020. In Sage Handbook of Research Methods in Political Science.

Cabinet Formation and Portfolio Distribution in European Multi-party Systems (with Josh Cutler, Max Gallop, Florian Hollenbach, Michael Laver, and Matthias Orlowski). 2016. *British Journal of Political Science*.

Are These Boots Made for Walking? Ideological Change among U.S. House Members (with Michael Ensley and Michael Tofias). 2014. In The State of the Parties. Rowman & Littlefield.

Agent Based Models (with Scott Page). 2013. *Annual Review of Political Science*.

Congressional Bargaining in Presidential Time: Give and Take, Anticipation, and the Constitutional Rationalization of Dead Ducks (with Terry Sullivan). 2011. *Journal of Politics*.

Negotiation in legislatures over government formation (with Michael Laver and Hande Mutlu). 2010. *Public Choice*.

District Complexity as an Advantage in Congressional Elections (with Michael Ensley and Michael Tofias). 2009. *American Journal of Political Science*. Reprinted in the AJPS *Congressional Elections special issue*.

Computational and Agent Based Models (with Scott Page). 2008. *Oxford Handbook of Political Science Methodology*.

Costly Search and the Advantages of Incumbency: Some Experimental Results (with Michael Ensley and Michael Munger). 2008. *Public Choice*.

Party and Constituency in the U.S. Senate, 1933-2004 (with John Aldrich, Michael Brady, Ian McDonald, Brendan Nyhan, David Rohde, and Michael Tofias). 2008. In Why Not Parties? University of Chicago Press.

Trust, but Verify: Assessing the Accuracy of Self-reported Pollution Data (with James Hamilton). 2006. *Journal of Risk and Uncertainty*.

Untangling Neural Networks (with Chris Gelpi and Jeff Grynaviski). 2004. *American Political Science Review*. 98(2).

A Computational Model of Voter Sophistication, Ideology and Candidate Position-taking. 2003. In Computational Models in Political Economy. MIT Press.

The President's Ability to Capitalize on Approval for Legislative Success (with Brandice Canes-Wrone). 2002. *Journal of Politics*, 64(2).

Adaptive Models and Electoral Instability. 1999. *Journal of Theoretical Politics*. 11(3): 393-419.

Ideology and the Construction of Nationality: The Canadian Elections of 1993 (with Melvin Hinich and Michael Munger). 1998. *Public Choice*. 97(3): 401-28.

Adaptive Models and the Power of the Incumbent. Scott de Marchi. 1997. *Santa Fe Institute Paper Series*. Paper #97-06-058.

Working Papers

Casual Inference, or How I Learned to Stop Worrying and Love Hypothesis Testing (with Justin Esarey and Joseph Young). Presented at *PolMeth XXXVII*.

The Complexity of Informal Institutions (with Jack Knight).

Decisive or Distracted: the Effects of United States Constraint on Security Networks (with Ha Eun Choi, Max Gallop, and Shahryar Minhas). *Under Review*.

Deep Inequalities (with John Gerring). *Under Review*.

Latino/a Immigrants, Acculturation Stress, and Resilience: The Impact of Documentation Status (with Irene Felsman, Anna Holleman, Aasha Henderson, Gabriela Nagy,

Allison Stafford, and Rosa Gonzalez-Guarda). 2021. Presented to the *Annual Meeting of the American Sociological Association*.

Legislative bargaining with shocked reversion points: an application to portfolio allocation (with Michael Laver and Georg Vanberg).

Solving Coalition Bargaining with Constrained Fictitious Play Monte Carlo Counterfactual Regret (with Daniel de Marchi). *Under review*.

Non-refereed Papers and Reviews

A Political Science Peer Review and Publication Consortium (with Gerring, J., Hartman, A., Nalepa, M., Pemstein, D., & Seim, B.). 2022. SSRN paper.

Review for *Perspectives on Politics* (with Scott Page): R. Michael Alvarez's (editor) Computational Social Science: Discovery and Prediction (Cambridge, 2016).

The Promise and Limits of Social Science Modeling in the Department of Defense (with Brian Efird and John Nagl). National Defense University paper.

Complication Rate and Effectiveness of Paravertebral Nerve Block in Outpatient Surgery (with Monica Lupo, Karen C. Nielsen, Ricardo Pietrobon, Chad Cook, Richard Moon, and Stephen M. Klein). 2008. DUMC paper.

Review for the *American Political Science Review*: Arthur Lupia, Matthew McCubbins, and Samuel Popkin's (editors) Elements of Reason (Cambridge, 2000).

Review for *Presidential Studies Quarterly*: David Epstein and Sharyn O'Halloran's Delegating Powers (Cambridge, 1999).

Current Grants

Co-Principal Investigator (with Sean Gailmard, Maggie Penn, and Rocio Titiunik). 2018 – 2020. National Science Foundation: Empirical Implications of Theoretical Models (EITM).

Previous Grants

Co-Principal Investigator (with Erik Wibbels). 2018 – 2022. US AID: Enabling and Protecting Civic Spaces.

Co-Principal Investigator. 2010 – 2017. National Science Foundation: Empirical Implications of Theoretical Models (EITM).

Co-Principal Investigator. 2013 – 2014. National Science Foundation: Dynamics of Coupled Natural and Human Systems.

Arts and Science Research Council grant. 2006, 2017. Duke University.

Micro-Incentives Research Center grant. 2006. Duke University.

Co-Principal Investigator (with James Hamilton). 2002. National Science Foundation: Decision, Risk, and Management Sciences Program.

Doctoral Dissertation Research. 1997. National Science Foundation: Political Science Program.

Professional Activities

Awards, Honors, and External Service

Director, NSF's Empirical Implications of Theoretical Models, Duke University. 2013, 2016, 2021.

Associate Member, Nuffield College, Oxford. 2022 – present.

External Consultant / Subject Matter Expert in Modeling, Department of Defense (various). 2008 – present.

Member, Editorial Board *Political Science Research and Methods*, 2018 – present.

Member, *Cyberinfrastructure for Sustained Scientific Innovation Panel*, National Science Foundation. 2018.
Member, *System Sciences Panel*, National Institutes of Health. 2008 – 2017.
Faculty, *Ralph Bunche Summer Institute*. 2001 - 2017.
Recipient, Exceptional Faculty Service Award, Duke University. 2015.
Member, Editorial Board *Journal of Politics*. 2014 – 2017.
External Fellow, *National Defense University*. 2010 – 2013.
Faculty, *Graduate Workshop in Computational Economics*, Santa Fe Institute. 2010.
Member, *Advisory Panel on modeling group violence*, Department of Homeland Security. 2010.
Member, *Editorial Board*, Political Analysis. 2008-2010.
Member, *Senior Advisory Committee*, Defense Advanced Research Projects Agency (DARPA). 2008-2009.
Panelist, *Human and Social Dynamics* (HSD) Program, National Science Foundation. 2008.
Lead Faculty, *Empirical Implications of Theoretical Models*, Duke University. 2003, 2004, 2007, 2008, 2016, 2018.
Panelist, *Integrative Graduate Education and Research Traineeship* (IGERT) Program, National Science Foundation. 2005.
Fellow-at-large, *Santa Fe Institute*. Appointed in 1999.
Faculty, *Graduate Workshop in Computational Economics*, Santa Fe Institute. 1999.
Participant, *Graduate Workshop in Computational Economics*, Santa Fe Institute. 1996.

Departmental and University Service

Founding Director, Decision Science program. 2016 – present.
Chair, Methods Field, Dept. of Political Science. 2005 – 2009; 2011 – 2013; 2016-2018; 2019 - present.
Chair, Institutions Field. Dept. of Political Science. 2018 – 2019.
Associate Chair, Dept. of Political Science, 2009 – 2010, 2013 – 2016.
Co-Director, Program in Advanced Research in the Social Sciences (PARISS). 2007 - 2015.
Member, Arts and Sciences Curriculum Committee. 2008 – 2014.
Member, Steering Committee, Social Science Research Institute. 2012 – 2014.
Chair, Arts and Sciences Committee on Faculty Research. 2006 - 2012.
Director of Undergraduate Studies, Department of Political Science. 2010 – 2012.
Member of the Graduate Affairs / Admissions Committee. 2000, 2001, 2007, 2008, 2012.
Member of the Search Committee. 1999, 2001, 2004, 2006, 2008, 2012.
Founding Director, Modeling Economic and Social Systems (undergraduate FOCUS program), Duke University. 2009.
Director, Visions of Freedom (undergraduate FOCUS program), Duke University. 2004 – 2009.
Member of the Board of Advisors, Social Science Research Institute (SSRI). 2007 - 20010.
Director, Department of Political Science Honors Program. 2004 - 2006.
Member of the Faculty Research Committee. 2005-2007.
Member of the Kimberly Jenkins University Professor Search Committee. 2003 - 2004.
Member of the Social Science Information Technology Working Group. 2005.
Member of the Social Science Research Initiative Committee. 2003 - 2004.
Member of the Task Force on Data Analysis for the Social Sciences (DASS). 2005.

Referee

American Journal of Political Science, American Political Science Review, Austrian Science Fund, British Journal of Political Science, Cambridge University Press, Electoral Studies, Harvard Business Review, Journal of the American Statistical Association, Journal of Artificial Societies and Social Simulation, Journal of Conflict Resolution, Journal of Defense Modeling and Simulation, Journal of Peace Research, Journal of Politics, Journal of Theoretical Politics, MIT Press, National Science Foundation, National Institutes of Health, Political Analysis, Political Behavior, Political Research Quarterly, Political Science Research Methods, Political Psychology, Proceedings of the National Academy of Sciences, Princeton University Press, Public Administration Review, Public Choice, Public Opinion Quarterly, Social Choice and Welfare, Social Networks, Sociological Methods and Research, World Politics

Teaching

Graduate Courses

- Computational Political Economy
- Electoral Behavior
- Game Theory
- Institutions Core
- Intermediate Statistical Methods
- Introduction to Machine Learning
- Introduction to Statistical Analysis
- Machine Learning and NLP
- MLE and Non-parametric Statistics
- Modeling Counterinsurgencies
- Predicting Votes: A Machine Learning Approach
- Readings in Real Analysis
- Research Design / Scope and Methods

Undergraduate Courses

- Campaigns and Elections
- Introduction to Decision Science
- Introduction to Game Theory
- Introduction to Machine Learning (FOCUS Program)
- Hierarchy and Spontaneous Order (FOCUS Program)
- Introduction to Statistics and Research Design (Ralph Bunche Summer Institute)
- Honors Seminar in the Major
- Predicting Politics: Congressional Roll Call Voting
- Statistical Methods and Research Design