# John Duggan

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#### **Academic Positions**

Professor, Department of Political Science and Department of Economics (tenure in Political Science), University of Rochester, 2005—present.

Research Associate, W. Allen Wallis Institute of Political Economy, 2012–present.

Director, W. Allen Wallis Institute of Political Economy, University of Rochester, 2002–2012.

Associate Professor, Department of Political Science and Department of Economics (tenure in Political Science), University of Rochester, 2000–2005.

Visiting Associate Professor of Economics, Division of Humanities and Social Sciences, California Institute of Technology, 2002–2003.

Assistant Professor, Department of Political Science and Department of Economics, University of Rochester, 1997–2000.

Visiting Assistant Professor, Wallis Institute of Political Economy, University of Rochester, 1996–97.

Assistant Professor, Department of Economics, Queen's University, 1994–1997.

#### Education

Ph.D. Social Science, 1995, California Institute of Technology.

M.S. Social Science, 1993, California Institute of Technology.

M.A. Economics, 1990, Claremont Graduate School.

B.A. Philosophy, 1987, Whitman College.

#### Honors and Awards

Social Choice and Welfare Prize, 2006 (awarded in alternating years for research in social choice by a scholar not over forty years of age)

National Science Foundation, research grant, 2002–2004 (extended through 2005).

Member of the Council for the Society for Social Choice and Welfare, 2002–2007.

National Science Foundation, research grant, 1999–2001.

Social Science and Humanities Research Council of Canada, research grant, 1996–1999 (1997–1999 declined).

Queen's University Advisory Research Committee, research grant, 1994–1995.

Alfred P. Sloan Doctoral Dissertation Fellowship, 1993–1994.

C.J. Hicks Memorial Fellowship, 1992–1993.

John G. and Martha M. Kelly Merit Scholarship, 1983–1987.

### **Editorial Boards**

Managing editor, Social Choice and Welfare, 2008-present.

Advisory editor, Games and Economic Behavior, 2008-present.

Associate editor, Social Choice and Welfare, 2001–2007.

Associate editor, Mathematical Social Sciences, 2002–2007.

Associate editor, Journal of Economic Theory, 2000–2005.

## Publications in Refereed Journals

"Purification of Bayes Nash Equilibrium with Correlated Types and Interdependent Payoffs" (2015) with Paulo Barelli, *Games and Economic Behavior*, forthcoming.

"Preference Exclusions for Social Rationality" (2015) Social Choice and Welfare, forthcoming.

"May's Theorem in One Dimension" (2015) Journal of Theoretical Politics, forthcoming.

"A Folk Theorem for the One-dimensional Spatial Bargaining Model" (2015) with Seok

- ju Cho, International Journal of Game Theory, forthcoming.
- "Extremal Choice Equilibrium with Applications to Large Games, Stochastic Games, and Endogenous Institutions," (2015) with Paulo Barelli, *Journal of Economic Theory*, 155: 95–130.
- "A Folk Theorem for Repeated Elections with Adverse Selection" (2014) *Political Science Research and Methods*, 2: 213–242.
- "A Note on Semi-Markov Perfect Equilibria in Discounted Stochastic Games" (2014) with Paulo Barelli, *Journal of Economic Theory*, 151: 596–604.
- "Majority Voting over Lotteries: Conditions for Existence of a Decisive Voter" (2014) Economics Bulletin, 34: 263–270.
- "Uncovered Sets" (2013) Social Choice and Welfare, 41: 489–535.
- "Noisy Stochastic Games" (2012) Econometrica, 80: 2017–2045.
- "Dynamic Legislative Policy Making" (2011) with Tasos Kalandrakis, *Journal of Economic Theory*, 147: 1653–1688.
- "General Conditions for Existence of Maximal Elements via the Uncovered Set" (2011) Journal of Mathematical Economics, 47: 755–759.
- "A Spatial Theory of Media Slant and Voter Choice" (2011) with Cesar Martinelli, Review of Economic Studies, 78: 640–666.
- "A Newton Collocation Method for Solving Dynamic Bargaining Games" (2011) with Tasos Kalandrakis, *Social Choice and Welfare*, 36: 611–650.
- "The Case for Responsible Parties" (2009) with Francesco Squintani and Dan Bernhardt, American Political Science Review, 103: 570–587.
- "Voting Equilibria in Multicandidate Elections" (2009) with Yoji Sekiya, *Journal of Public Economic Theory*, 11: 875–889.
- "Private Polling in Elections and Voter Welfare" (2009) with Dan Bernhardt and Francesco Squintani, *Journal of Economic Theory*, 144: 2021–2056.
- "Bargaining Foundations of the Median Voter Theorem" (2009) with Seok-ju Cho, *Journal of Economic Theory*, 144: 851–868.
- "A Dynamic Model of Democratic Elections in Multidimensional Policy Spaces" (2008) with Jeff Banks, Quarterly Journal of Political Science, 3: 269–299.
- "Dynamics of the Presidential Veto: A Computational Analysis" (2008) with Tasos Kalandrakis and Vikram Manjunath, *Mathematical and Computer Modelling*, 48: 1570–1589.

- "Equilibrium Existence for Zero-sum Games and Spatial Models of Elections" (2007) Games and Economic Behavior, 60: 52–74.
- "Electoral Competition with Privately Informed Candidates" (2007) with Dan Bernhardt and Francesco Squintani, Games and Economic Behavior, 58: 1–29.
- "A Systematic Approach to the Construction of Non-empty Choice Sets" (2007) Social Choice and Welfare, 28:491–506.
- "Social Choice and Electoral Competition in the General Spatial Model" (2006) with Jeff Banks and Michel Le Breton, *Journal of Economic Theory*, 126: 194–234.
- "A General Bargaining Model of Legislative Policy-making" (2006) with Jeff Banks, *Quarterly Journal of Political Science*, 1: 49–85.
- "Endogenous Voting Agendas" (2006) Social Choice and Welfare, 27: 495–530.
- "A Social Choice Lemma on Voting Over Lotteries with Applications to a Class of Dynamic Games" (2006) with Jeff Banks, Social Choice and Welfare, 26: 285–304.
- "Repeated Downsian Electoral Competition" (2006) with Mark Fey, *International Journal of Game Theory*, 35: 39–69.
- "A Note on Uniqueness of Electoral Equilibrium When the Median Voter Is Unobserved" (2006) *Economics Letters*, 92: 240–244.
- "Electoral Competition with Policy-Motivated Candidates" (2005) with Mark Fey, Games and Economic Behavior, 51: 490–522.
- "Uniqueness of Stationary Equilibria in a One-dimensional Model of Bargaining" (2003) with Seok-ju Cho, *Journal of Economic Theory*, 113: 118–130.
- "Implementing the Efficient Allocation of Pollution" (2002) with Joanne Roberts, American Economic Review, 92: 1070–1078.
- "Bounds for Mixed Strategy Equilibria and the Spatial Model of Elections" (2002) with Jeff Banks and Michel Le Breton, *Journal of Economic Theory*, 103: 88–105.
- "Nash Implementation with a Private Good" (2002) Economic Theory, 21: 117–131.
- "A Bayesian Model of Voting in Juries" (2001) with Cesar Martinelli, Games and Economic Behavior, 37: 259–294.
- "Mixed Refinements of Shapley's Saddles and Weak Tournaments" (2001) with Michel Le Breton, Social Choice and Welfare, 8: 65–78.
- "A Bargaining Model of Collective Choice" (2000) with Jeff Banks, American Political

Science Review, 94: 73–88.

- "Strategic Manipulability without Resoluteness or Shared Beliefs: Gibbard-Satterthwaite Generalized" (2000) with Tom Schwartz, Social Choice and Welfare, 17: 85–93.
- "Repeated Elections with Asymmetric Information" (2000) Economics and Politics, 12: 109–136.
- "A General Extension Theorem for Binary Relations" (1999) Journal of Economic Theory, 86: 1–16.
- "An Implementation-theoretic Approach to Non-cooperative Foundations" (1999) with Jim Bergin, *Journal of Economic Theory*, 86: 50–76.
- "An Extensive Form Solution to the Adverse Selection Problem in Principal/ Multi-agent Environments" (1998) Review of Economic Design, 3: 167–191.
- "Virtual Bayesian Implementation" (1997) Econometrica, 65: 1175–1199.
- "Hansson's Theorem for Generalized Social Welfare Functions: An Extension" (1997) Social Choice and Welfare, 14: 471–478.
- "Dutta's Minimal Covering Set and Shapley's Saddles" (1996) with Michel Le Breton, *Journal of Economic Theory*, 70: 257–265.
- "Arrow's Theorem in Public Good Environments with Convex Production Technologies" (1996) Journal of Economic Theory, 68: 303–318.
- "A Geometric Proof of Gibbard's Random Dictatorship Theorem" (1996) Economic Theory, 7: 365–369.
- "Functional Voting Operators: The Non-monotonic Case" (1993) with Fund Aleskerov, *Mathematical Social Sciences*, 26: 175–201.

### Contributions to Edited Volumes

- "A Survey of Polling in Elections" (2008) with Dan Bernhardt and Francesco Squintani, in *The Political Economy of Democracy*, Enriquetta Aragones, Carmen Bevia, Humberto Llavador, and Norman Schofield, eds., Fundacion BBVA.
- "Candidate Objectives and Electoral Equilibrium" (2006) in *The Oxford Handbook of Political Economy*, Barry Weingast and Donald Wittman, eds., Oxford: Oxford University Press.
- "Probabilistic Voting in the Spatial Model of Elections: The Theory of Office-motivated Candidates" (2005) with Jeff Banks, in *Social Choice and Strategic Decisions: Essays in Honor of Jeffrey S. Banks*, David Austen-Smith and John Duggan, eds., New York: Springer-Verlag.

#### **Edited Volumes**

Special Issue on Political Economy (2006) with Shlomo Weber, *International Journal of Game Theory*, Volume 35.

Social Choice and Strategic Decisions: Essays in Honor of Jeffrey S. Banks (2005) with David Austen-Smith, New York: Springer-Verlag.

### Plenary and Semi-plenary Lectures

Canadian Public Economics Group, 2011, Waterloo, Canada

Second Brazilian Workshop of the Game Theory Society, 2010, Sao Paulo, Brazil

Political Economy of Bargaining Workshop, 2008, Waterloo, Canada

Meetings of the Society for Social Choice and Welfare, 2004, Istanbul, Turkey

### Teaching

Graduate: mathematical modeling for political scientists, political economy, dynamic and computational modeling, topics in positive political theory (voting, elections, bargaining), topics in mathematical economics (voting, mechanism design).

*Undergraduate:* intermediate microeconomics, game theory, topics in microeconomics (theory of voting, general equilibrium theory).

### Other Professional Activities

**Book Review** On The Theory of Implementation of Socially Optimal Decisions in Economics, by Luis Corchon, (1998) The Economic Journal, 108: 1580–1581.

**Departmental Service** Co-director of Graduate Admissions, Department of Political Science, 2000–2002.

**Grant Reviewing** Israel Science Foundation, National Science Foundation, Social Science and Humanities Research Council of Canada, 2004 NSF panel on Human and Social Dynamics

Refereeing American Journal of Political Science, American Political Science Review, Econometrica, Economic Theory, Economics and Philosophy, Economics and Politics, Economics Bulletin, Games and Economic Behavior, International Economic Review, International Journal of Game Theory, Journal of Economic Behavior and Organization, Journal of Economic Theory, Journal of Mathematical Economics, Journal of Political Economy, Journal of Politics, Mathematical and Computer Modeling, Mathematical Social Sciences,

ORDER, Political Analysis, Review of Economic Design, Review of Economic Studies, Social Choice and Welfare, Theoretical Economics, Theory and Decision.

#### Selection Committee 2008 Social Choice and Welfare Prize

Conference Organization 1999 Wallis Institute Conference on Political Economy (with Per Krusell and Wolfgang Pesendorfer); Political Economy Section at 2000 Meetings of the American Political Science Association; Workshop on Candidate Entry, Exit, and Positioning, June 2000, sponsored by the Wallis Institute and Rochester Political Science Department (with Mark Fey); 2000 Wallis Institute Conference on Political Economy (with Jeff Banks and Mark Fey); 2002 Wallis Institute Conference on Political Economy (with Larry Rothenberg and Francesco Squintani); 2004 Wallis Institute Conference on Political Economy (with Tasos Kalandrakis); Political Economy session, 2005 Winter Meetings of the Econometric Society; Eighth International Meeting of the Society for Social Choice and Welfare, July 2006; 2006 Wallis Institute Conference on Political Economy (with Mark Fey and Larry Rothenberg); Formal Theory Section of the 2007 Meetings of the Southern Political Science Association; 2007 Wallis Institute Conference on Political Economy (with Tasos Kalandrakis and Dave Primo); 2010 Wallis Institute Conference on Political Economy (with Tasos Kalandrakis and Dave Primo); 2011 Wallis Institute Conference on Political Economy (with Mark Fey and Larry Rothenberg), 2013 Wallis Institute Conference on Political Economy (with Avi Acharya and Larry Rothenberg), 2014 Conference in Honor of William Thomson (with Paulo Barelli and Youngsub Chun); 2015 Wallis Institute Conference on Political Economy (with Mark Fey and Larry Rothenberg).