

# Dr. John McLevey

Knowledge Integration, Sociology & Legal Studies

University of Waterloo, Waterloo, ON, Canada

[johnmclevey.com](http://johnmclevey.com) | [networkslab.org](http://networkslab.org)

[john.mclevey@uwaterloo.ca](mailto:john.mclevey@uwaterloo.ca)

(647) 921-2044

Citizenship: Canadian

## APPOINTMENTS

2019-Present. Associate Professor (with tenure), University of Waterloo. [Department of Knowledge Integration, Department of Sociology and Legal Studies](#). Approved Doctoral Dissertation Supervisor (ADDS) Status.

2013-2019. Assistant Professor, University of Waterloo. [Department of Knowledge Integration, Department of Sociology and Legal Studies](#). Approved Doctoral Dissertation Supervisor (ADDS) Status.

## AFFILIATIONS

Spring 2019. Visiting Scholar, Department of Political and Social Sciences. [Scuola Normale Superiore](#). Florence, Italy.

2014-Present. Affiliate Researcher, [Waterloo Institute for Complexity and Innovation](#)

2014-Present. Fellow, [Balsillie School of International Affairs](#)

2018-Present. Forum on Science, Policy, and Society. Co-Organizer and Instructor for [Science Outside the Lab, North](#).

2019-2020. Member of the Leadership Team. “Knowledge Development and Exchange Hub: Child and Youth Mental Health Promotion,” Project Co-Leads Drs. Barb Riley and Janice Popp. Funded by the Public Health Agency of Canada.

2014-2017. Board Member, [University of Waterloo Survey Research Centre](#)

## EDUCATION

2013. PhD, Sociology, McMaster University. Hamilton, ON, Canada.

2009. MA, Sociology, McMaster University. Hamilton, ON, Canada.

2008. BA Honours, Sociology, Political Science, Memorial University. St. John's, NL, Canada.

## RESEARCH AREAS

Computational Social Science; Social Networks; Political Sociology; Affect, Emotions, and Cultural Cognition; Environmental Sociology; Sociology of Science

Within computational social science, my primary areas of expertise and interest are in probabilistic modelling and Bayesian data analysis; causal inference with graphical models; natural language processing; latent variable models, and scientific computing practices that prioritize transparency and reproducibility.

## PEER REVIEWED PUBLICATIONS

The table below provides a high-level overview of my peer-reviewed publications since 2013. Full citation information is provided below. In all subsections, *student co-authors are indicated in italics*. Of the two edited special issues of journals, one (*Social Networks*, on the theme of social networks and climate change) is still in progress.

Type	Count since 2013
Books / Monographs	2
Journal Articles	12
Peer Reviewed Chapters in Edited Volumes	4
Edited Special Issues of Journals	2
Policy Reports / Research Reports	5
Works Translated and Republished	1
Journal Articles Under Review	1
Book Manuscripts Under Review	1
Edited Volumes in Progress	1
Non-Refereed Reviews	2

### *Books / Research Monographs*

1. John McLevey. 2021. *Doing Computational Social Science*. London, UK: Sage. Research methods and data science series.
2. Mark Stoddart, Alice Mattoni, and John McLevey. 2020. *Industrial Development and Eco-Tourisms: Is Co-existence Possible Between Oil Exploration and Nature Conservation?* Palgrave MacMillan.

### *Peer Reviewed Journal Articles*

**John McLevey**, Tyler Crick, Pierson Browne, and Darrin Durant. Forthcoming 2021. "Word Embeddings and the Structural and Cultural Foundations of Democracy and Autocracy, 1900-2020." *Canadian Review of Sociology*.

David Tindall, Yasmin Koop-Monteiro, Alexander Graham, and John McLevey. Forthcoming 2021. "Social Network Analysis as Big Data and Computational Social Science." *Canadian Review of Sociology*.

Kathryn S. Plaisance, Janet Michaud, and **John McLevey**. Forthcoming 2021. "Pathways of Influence: Understanding the Impacts of Philosophy of Science in Scientific Domains." *Synthese*.

Mark Stoddart, **John McLevey**, Vanessa Schweizer, and Catherine Wong. 2020. "Climate Change and Energy Futures: Theoretical Frameworks, Epistemological Issues, and Methodological Perspectives." Introduction to an edited special issue of *Society & Natural Resources*.

Kathryn S. Plaisance, Alexander V. Graham, **John McLevey**, and Janet Michaud. 2019. "Show Me the Numbers: A Quantitative Portrait of the Attitudes, Experiences, and Values of Philosophers of Science." *Synthese*. 1-31.

- Owen Gallupe, **John McLevey**, and Sarah Brown. 2018. "Selection or Influence? A Meta-Analysis of the Association between Peer and Personal Offending." *Journal of Quantitative Criminology*. 1-23.
- John McLevey**, Alexander Graham, Reid McIlroy-Young, Pierson Browne, and Kathryn S. Plaisance. 2018. "Interdisciplinarity and Insularity in the Diffusion of Knowledge: An Analysis of Disciplinary Boundaries Between Philosophy of Science and the Sciences." *Scientometrics*. 117(1):331-349.
- John McLevey** and Reid McIlroy-Young. 2017. "Introducing *metaknowledge*: Software for Computational Research in Information Science, Network Analysis, and Science of Science." *The Journal of Informetrics*. 11: 176-197.
- Allyson Stokes and **John McLevey** (equal authors). 2016. "From Porter to Bourdieu: The Evolving Specialty Structure of English Canadian Sociology, 1966- 2014." *Canadian Review of Sociology / Revue canadienne de sociologie*. 53(2):176-202.
- John McLevey. 2015. "Understanding Policy Research in Liminal Spaces: Think Tank Responses to Diverging Principles of Legitimacy." *Social Studies of Science*. 45(2):270-293.
- John McLevey. 2014. "Think Tanks, Funding, and the Politics of Policy Knowledge in Canada." *Canadian Review of Sociology / Revue canadienne de sociologie*. 51(1):54-75.

#### PEER REVIEWED BOOK CHAPTERS IN EDITED VOLUMES

- John McLevey, Pierson Browne, and Tyler Crick. Forthcoming. "Reproducibility, Transparency, and Principled Data Processing." In Uwe Engel and Anabel Quan-Haase (eds.) *Handbook of Computational Social Science*. Routledge.
- David Tindall, Mark Stoddart, **John McLevey**, Lorien Jasny, Dana R. Fisher, Jennifer Earl, and Mario Diani. Forthcoming. "The Challenges and Opportunities of Ego-Network Analysis of Social Movements and Collective Action." In Mario Small, Brea Perry, Bernice Pescosolido, and Edward Smith (Eds.) *Personal Networks: Classic Readings and New Directions in Ego-centric Analysis*. Cambridge: Cambridge University Press.
- John McLevey**, Allyson Stokes, and Amelia Howard. 2018. "Pierre Bourdieu's Uneven Influence on Anglophone Canadian Sociology." Thomas Medvetz and Jeff Sallaz (eds) *The Oxford Handbook of Pierre Bourdieu*. Oxford: Oxford University Press. [This chapter is being translated into French and published in Franck Poupeau and Amín Pérez (eds.) 2021. *Bourdieu and the Americas*. Institut des Hautes Etudes de Amerique Latine Presses.]
- John McLevey** and Ryan Deschamps. 2018. "The Sociology of Public Policy Formation and Implementation." William Outhwaite and Stephen Turner (eds) *The SAGE Handbook of Political Sociology*. SAGE.

#### POLICY & RESEARCH REPORTS

- John McLevey**, Pierson Browne, Tyler Crick, and Jillian Anderson. 2020. "Applied Computer Vision for Disinformation Research: An Analysis of Twitter's Elections Integrity Data on Russian and Chinese Information Operations." Research report for the Crime & Security Research Institute, Cardiff University.
- John McLevey**, Pierson Browne, and Tyler Crick. 2020. "Online Deception & Dynamic Narrative Networks." Research report for the Crime & Security Research Institute, Cardiff University.

- Gorbet, Rob, Janice Aurini, Jessica Risk, Allyson Stokes, **John McLevey**, and Nicole Figueiredo. 2020. "COVID-19 Pandemic and Canadian Schooling." Prepared for Education Onward Council in consultation with Fair-Chance Learning.
- Aurini, Janice, Rob Gorbet, **John McLevey**, Jessica Rizk, Allyson Stokes (Alphabetical). 2019. "White Paper on Ed-Tech Connect: An Intersectoral Workshop on Education, Technology, and 21st Century Labour." Funded by SSHRC Connections Grant.
- Janice Aurini, John McLevey, Allyson Stokes, and Rob Gorbet. 2017. "Classroom Robotics and Acquisition of 21st Century Competencies: An Action Research Study of Nine Ontario School Boards." Report for the Council of Ontario Directors of Education (CODE) and the Ministry of Education, Ontario.

## SPECIAL ISSUES OF PEER-REVIEWED JOURNALS

- Mark Stoddart, John McLevey, Vanessa Schweizer, and Catherine Wong (editors). 2020 *Climate Change and Energy Futures*. Special issue of *Society and Natural Resources*.
- David Tindall, John McLevey, and Nina Kolleck (editors). *Social Networks and Climate Change*. Special issue / section of *Social Networks*. Papers currently in review stage.

## REVIEWS AND OTHER NON-REFEREED PUBLICATIONS

- John McLevey. 2019. "[Epistemic and Evidential Cultures](#)." Paul Atkinson, Sara Delamont, Richard Williams and Alex Cernat (eds). *Sage Research Methods Foundations Online*.
- John McLevey. 2019. Review of David Johnson (2017) *A Fractured Profession: Commercialization and Conflict in Academic Science*. Baltimore: Johns Hopkins University Press. Review published in *American Journal of Sociology*. 125(1).

## MANUSCRIPTS UNDER REVIEW

- HM Collins, R Evans, M Innes, W Mason-Wilkes, E Kennedy, and J McLevey (Collins as lead author with others listed alphabetically). *The Face to Face Principle and the Internet: Science, Trust, Truth and Democracy*. Complete book manuscript under review at Cardiff University Press.
- Sasha Graham, **John McLevey**, Tyler Crick, Pierson Browne. "Information Complementarity and Control: Reconsidering Structural Holes Theory with Evidence from 21 Scientific Fields." Revise and Resubmit from *Social Networks*.

## EDITED VOLUMES IN PROGRESS

- John McLevey, John Scott, and Peter Carrington (eds). *The Sage Handbook of Social Network Analysis, Volume 2*. London: Sage. (Finalizing contract with Sage early 2021).

## RESEARCH GRANTS

Total Value of Research Grants since 2013: **\$1,271,149**

- 2020-2025. John McLevey (PI), Anabel Quan-Haase (Co-Applicant), David Tindall (Co-Applicant), Collaborators: Darrin Durant, Deena Abul-Fottouh, Owen Gallupe, Martin Innes. “Disinformation, Democracy, and Online Political Deliberation.” [SSHRC Insight Grant](#), \$219,003 + \$20,000 research supplement from the Department of Canadian Heritage Initiative for Digital Citizenship.
- 2020-2025. Kathryn S. Plaisance (PI), Kevin Elliott (Collaborator), Michael O’Rourke (Collaborator), Lisbeth Berbary (Collaborator), John McLevey (Collaborator). “Engaging Science with Philosophy: Best Practices for Fostering Effective Collaboration.” [SSHRC Insight Grant](#), \$154,406.
2019. Janice Aurini, Allyson Stokes, **John McLevey**, Jessica Riztk, and Rob Gorbet. “Ed-Tech Connect: An Intersectoral Workshop on Education, Technology, and 21<sup>st</sup> Century Labour.” [SSHRC Connection Grant](#), \$16,400 (plus matching funds).
- 2018-2019. Mark Stoddart (PI), **John McLevey**, (Co-Applicant), John Sandlos (Co-Applicant), Vanessa Schweizer (Co-Applicant), Catherine Mei Ling Wong (Co-Applicant). Climate Change and Energy Futures Workshop: Challenges and Opportunities for Global and Interdisciplinary Research. [SSHRC Connection Grant](#), \$24,373 (plus \$14,339 in matching funds from Memorial University and University of Waterloo).
- 2016-2022. David Tindall (PI), **John McLevey** (Co-Applicant), Mark Stoddart (Co-Applicant). Collaborators: Mario Diani, Jennifer Earl, Dana R Fisher, Philip Leifeld, Andrew Jorgenson, Philippe Le Billon, Don Grant, Moses Boudourides. [Social Science and Humanities Research Council of Canada \(SSHRC\)](#), [Insight Grant](#) Application. “Making sense of climate action: Understanding social mobilization to curb anthropogenic climate change through advances in social network analysis,” \$282,672
- 2016-2020 **John McLevey** (PI), Ontario [Early Researcher Award](#), Ministry of Research and Innovation, “Information and Idea Diffusion in an Open Source Collaboration Network,” \$150,000.
- 2016-2018 **John McLevey** (PI), Owen Gallupe (Collaborator) and Martin Cooke (Collaborator), [Social Science and Humanities Research Council of Canada \(SSHRC\)](#), Insight Development Grant, “Remaking the Boundaries of Open and Proprietary Science: A Longitudinal Study of Biomedical Research and Development Networks in Canada” \$67,790.
- 2016-2018 Katie Plaisance (PI) and **John McLevey** (Co-Applicant), [Social Science and Humanities Research Council of Canada \(SSHRC\)](#), Insight Development Grant, “Increasing the Impact of Philosophy of Science in Scientific Domains,” \$59,302
- 2015-2016 **John McLevey** (PI) and Vanessa Schweizer (Co-Applicant), Basillie School of International Affairs, Major Workshops Grant, “Challenges and Opportunities for Governance of Socio-Ecological Systems in Comparative Perspective,” \$8,400.
- 2015-2020 Mark Stoddart (PI) and **John McLevey** (Co-Applicant), [Social Science and Humanities Research Council of Canada \(SSHRC\)](#), Insight Grant, “The Oil-Tourism Interface and Social-Ecological Change in the North Atlantic,” \$188,423.
- 2014-2016 **John McLevey** (PI), [Social Science and Humanities Research Council of Canada \(SSHRC\)](#), [Insight Development Grant](#), “Collaborative Design in Online Networks,” \$74,814.
- 2013 University of Waterloo, Faculty Research Startup Grant, \$15,000.

## TEACHING GRANTS

2015-2016 John McLevey (PI), LITE Seed Grant, Centre for Teaching Excellence, University of Waterloo, “A Data-Driven and Interactive Approach to Enhancing Student Learning about Disciplinary and Interdisciplinary Knowledge Production,” \$4,765.20.

## AWARDS AND SELECTED SCHOLARSHIPS

2017. Outstanding Performance Award. University of Waterloo.

2010–2013. [Joseph-Armand Bombardier Canada Graduate Scholarship](#), Category A, SSHRC Doctoral Scholarship, \$105,000.

2010–2011. Ontario Graduate Scholarship, \$15,000. Declined.

2009–2013. PhD Graduate Scholarship, McMaster University, \$52,000. Declined. (\$10,000 replaced by Ontario Graduate Fellowship in 2009–2010, replaced by SSHRC CGS 2010–2013)

2009–2010. Ontario Graduate Fellowship, \$12,000. Sociology Department Top Up, \$3,000.

2009. University Gold Medal for Academic Excellence in Sociology, Memorial University.

## POLICY RESEARCH CONTRACTS

2020. John McLevey. “Applied Computer Vision and Ensemble Machine Learning for Disinformation Research.” Crime & Security Research Institute, Cardiff University.

2020. John McLevey. “Automated Detection of ‘Bursty’ Concepts, Claims, and Narratives in Social Media Data.” Crime & Security Research Institute, Cardiff University.

2016-2017. Janice Aurini (Co-PI), John McLevey (Co-PI), Rob Gorbet (Co-Applicant). “Assessing the Impact of Classroom-Integrated Robotics on the Cultivation of 21<sup>st</sup> Century Competencies.” Contract with Council of Ontario Directors of Education (CODE) for the Ontario Ministry of Education.

## OPEN SOURCE RESEARCH SOFTWARE

**dcss**: A Python package accompanying John McLevey (2021) *Doing Computational Social Science*. Includes curated datasets and a large collection of utility functions for data processing and working with statistical and machine learning models. Currently in beta and under active development.

**bnet**: A Python implementation of probabilistic models for belief network analysis, relational class analysis, and correlational class analysis (all network-based methods for analyzing shared cultural schemas from survey data). Developed by John McLevey. Currently in beta and under active development.

**metaknowledge**: A Python package for quantitative and social networks research in the sociology of science and information science. Developed by Reid McIlroy-Young and John McLevey. First released in 2015. Under active development. Website and documentation: <http://networkslab.org/metaknowledge/>.

**Nate**: A Python package for network-based text analysis. Developed by John McLevey, Pierson Browne, and Tyler Crick. Under active development. Website and documentation: <http://networkslab.org/nate/>.



**pdpp**: A Python package for principled data processing, Python. Developed by Pierson Browne, Tyler Crick, Rachel Wood, and John McLevey. First released in 2015. Under active development. Website: <https://github.com/UWNETLAB/pdpp>.

**tidyextractors**: A Python package for extracting quantitative datasets from source code repositories, email mbox files, and social media APIs (currently Twitter). Developed and maintained by NetLab RA Joel Becker with NetLab support. Website and documentation: <http://networkslab.org/tidyextractors/>.

Contributions to Jonathan de Bruin's Python package **recordlinkage**: A Python package for linking records across multiple data sources when there is no unique ID available. NetLab contributions are focused on implementing new comparison and fusion algorithms that are necessary for advancing my grant-funded empirical research on the structure and evolution of cross-sectoral collaboration networks in science and technology. Most NetLab contributions to *recordlinkage* are implemented by Joel Becker (RA) and occasionally Jillian Anderson (RA), and then submitted to Jonathan de Bruin as pull requests.

**gitnet**: A Python package for mining source code repository and mailing list data and generating network datasets. Developed by Joel Becker, Jillian Anderson, Steve McColl, and John McLevey. First released in 2016. *gitnet* is still publicly available and functional, but development efforts and maintenance have shifted to *tidyextractors* and other Python packages. Website and documentation: <http://networkslab.org/gitnet/>

## OP-EDS, PUBLIC TALKS, NON-REVIEWED WRITING

Allyson Stokes and John McLevey. 2017. "The Cultural Sociology Research Cluster in the Canadian Sociological Association and the CSA 2017 Annual Meeting." Newsletter of the Culture Section of the American Sociological Association.

Occasional technical blog posts on the [NetLab blog](#)

Comments at XMD Graduate Students Symposium, Big Data & Society. organized by Dr. Beth Coleman, University of Waterloo. Critical Media Lab, Kitchener Waterloo, April 9, 2017.

Comments at *Talk Science* event, organized by students and local community members involved with *Evidence for Democracy*. Waterloo, ON. September 28, 2015.

"[Tory war on evidence claims another casualty](#)" with Liam Swiss. *Toronto Star* Op-Ed published on September 24 2014, section A15.

## CONFERENCE PRESENTATIONS

October 2019. John McLevey. "Disinformation, Democracy, and Influence in Online Political Discussion Networks." Disinformation Symposium, hosted by the Cardiff University Crime & Security Research Institute. Hensol Castle, Vale of Glamorgan, Wales UK.

July 2019. John McLevey. "What do open online communities of specialists need tacit knowledge for anyway?" SEESHOP 2019. Helsinki, Finland.

June 2019. John McLevey, Alexander Graham, Tyler Crick, and Pierson Browne (reverse alphabetical). "Measuring Social and Cognitive Distance in Collaboration Networks Constructed From Observational Data." Advances in Socio-Semantic Network Analysis session, Sunbelt. Montréal QC, Canada.

- June 2019. Janice Aurini, Allyson Stokes, Jessica Rizk, John McLevey, and Rob Gorbet. “How Do Educational Innovations Diffuse and Persist?” Networked Innovation 1 session, Sunbelt. Montréal QC, Canada.
- June 2019. Pierson Browne, Tyler Crick, Alexander Graham, and John McLevey (alphabetical) “Cognitive Diversity and the Production of High Impact Science.” Networked Innovation 2 session, Sunbelt. Montréal QC, Canada.
- June 2019. Janice Aurini, Allyson Stokes, Jessica Rizk, John McLevey, and Rob Gorbet. “How Do Educational Innovations Diffuse and Persist?” Sociology of Education session, Canadian Sociological Association Meetings, University of British Columbia, Vancouver BC, Canada.
- April 2019. John McLevey. “Measuring Belief Homophily and Cognitive Similarity in Social and Political Networks to Advance the Advocacy Coalition Framework (and Other Policy Theories).” Climate Change and Social Networks Workshop. Freie Universität Berlin, Berlin Germany.
2019. Stoddart, Mark C.J., Alice Mattoni, and John McLevey. “Industrial Development and Eco-Tourisms: Is Co-existence Possible between Oil Exploration and Nature Conservation.” Department of Geography Blue Box Seminar Series. Memorial University, St. John’s, Newfoundland and Labrador.
2018. Stoddart, Mark C.J., Alice Mattoni, and John McLevey. “Climate Change and Contact Points between Offshore Oil and Nature-based Tourism in Northern Coastal Societies.” 2018 Arctic Circle Assembly, Reykjavik, Iceland.
- June 2018. John McLevey, Alexander Graham, and Pierson Browne. “Remaking the boundaries of open and proprietary science: A multiple networks analysis of patenting and publishing in biomedical science.” Sunbelt XXXVIII (Annual meetings of the International Network for Social Network Analysis), Utrecht, Netherlands.
- June 2018. Alexander V. Graham Pierson Browne Jeffery M. Barrett, and John McLevey. “RankDir: A New ERGM Term for Improving Goodness of Fit in Exponential Random Graph Models of Directed Acyclic Graphs.” Sunbelt XXXVIII (Annual meetings of the International Network for Social Network Analysis), Utrecht, Netherlands.
- April 2018. John McLevey and Alexander Graham. “Smart Collaboration & Boundary Spanning for High Impact Climate Science.” 3rd Spring Campus, University Alliance for Sustainability. Freie Universität Berlin. Berlin, Germany.
- August 2017 John McLevey. “Environmental crises, policy, and scientific change: Insights from a computational model.” Presented at the annual American Sociological Association meetings, Montréal, QC, Canada.
- June 2017 John McLevey and Reid McIlroy-Young. “*metaknowledge*: open source software for networks research on science” Presented at the annual Sunbelt meeting, International Network for Social Network Analysis (INSNA), Beijing, China.
- May 2017 John McLevey. Panelist in “Assessing Pierre Bourdieu’s Legacy,” organized by the joint culture/theory research cluster committee at the Canadian Sociological Association meetings at Ryerson University. Toronto, ON, Canada.
- May 2017 John McLevey, Mark Stoddart, and Yixi Yang. “The Oil-Tourism Interface in International Media: A Systematic Comparison of Norway, Scotland, and Newfoundland and Labrador.” Presented at the Canadian Sociological Association annual meeting. Toronto, ON, Canada.
- May 2017 John McLevey. “How do face-to-face and virtual networks shape the development of specialist expertise?” Presented at SEESHOP 2017, Geneva, Switzerland.



- August 2016 Vanina Leschziner, John McLevey, and Neil McLaughlin. “The American Fame Game: Academic Status and Public Renown in Post-War Social Sciences.” Presented at the Annual Meetings of the American Sociological Association, Section on Science, Knowledge, and Technology session, Seattle, WA.
- May 2016 “Expertise and Experience in Dynamic Social Networks: Developing A Co-evolution Model for SEE.” Presented at [SEESHOP 9](#) (Studies of Expertise and Experience), Cardiff Wales, UK.
- April 2016 Kirsten Wright, Owen Gallupe, and John McLevey. “DrugAgent: Measuring the Effect of Restrictive Deterrence on the Resilience of Agent Based Drug Markets.” Presented at the [Fields Institute](#) “YSI Complexity and Economics Workshop.” Toronto, ON, Canada.
- April 2016 John McLevey, Katie Plaisance, Reid McIlroy-Young, and Alexander Graham. “Is there a citation penalty for scientifically relevant philosophy of science?” Presented by John McLevey and Alexander Graham at Sunbelt XXXVI (Annual meetings of the International Network for Social Network Analysis), Newport Beach, CA.
- November 2015 Owen Gallupe, Sarah Brown, and John McLevey. “Selection or Influence? A Meta-Analysis of the Association between Peer and Personal Offending.” Presented at the Annual Meetings of the American Society of Criminology, Washington, D.C.
- August 2015 “Conflict and Cooperation in Large Collaboration Networks: An Analysis of Linux Kernel Development.” Presented at the Annual Meetings of the American Sociological Association, Chicago, IL. Session: Sociology of Technology.
- June 2015 “Conflict and Cooperation in Large Collaboration Networks: An Analysis of Linux Kernel Development.” Presented at Sunbelt meetings, International Network for Social Network Analysis (INSNA), Brighton, UK.
- May 2015 “Conflict and Cooperation in Large Collaboration Networks: An Analysis of Linux Kernel Development.” Presented at the Annual Meetings of the Canadian Sociological Association, Ottawa, ON. Session: Innovation in Social Research: New Data, New Questions, New Analytics.
- May 2015 John McLevey, Amelia Howard, Alexander Graham, and Tiffany Lin. “Expertise, Stratification, and the Uncertain Democracy of Large Free / Open Source Developer Communities.” Presented at [SEESHOP 9](#) (Studies of Expertise and Experience), Cardiff Wales, UK.
- August 2014 “Think Tanks in the Space of Opinion: Tactics for Creating Uncertainty about the Scientific Consensus on Climate Change.” Presented at the Annual Meetings of the American Sociological Association, San Francisco, CA.
- June 2014 “Struggling Over Climate Expertise: ‘Consensus’ and ‘Skepticism’ in the Space of Opinion.” Presented at [SEESHOP 8](#) (Studies of Expertise and Experience), *Communities of Integration*, Waterloo, ON, Canada.
- May 2014 Allyson Stokes and John McLevey. “The Invisible Colleges of Sociology in Canada: A Network Analysis, 1995-2014” Annual meetings of the Canadian Sociology Association, Brock University, St. Catharines, ON, Canada.
- May 2014 “Funding, Fame, and Politics in the Think Tank World.” Presented at *The Science Policy Interface: International Comparisons*, hosted by The Balsillie School of International Affairs, Waterloo, ON, Canada.
- April 2014 Vanina Leschziner, Neil McLaughlin, and John McLevey (equal authors). “The American Fame Game: Public Renown and Academic Status in the Social Sciences.” Presented in *Public*

- Intellectuals and Power*, Cambridge, MA. Harvard University.
- August 2014 “Think Tanks in the Space of Opinion: Tactics for Creating Uncertainty about the Scientific Consensus on Climate Change.” Accepted for presentation at the Annual Meetings of the American Sociological Association, San Francisco, CA.
- October 2013 Comments on papers in the session “Chastened Dreams and New Departures: American Scientific Culture(s) in Ferment from the 1960s to 1980s” for the conference “Total Money Makeover: Culture and the Economization of Everything,” organized by the Canadian Association of American Studies (CAAS), University of Waterloo.
- August 2013 “How do Think Tanks Produce and Promote Policy Ideas?” Presented in the “Sociology of Knowledge” regular session (“Knowledge and the State”), Annual Meetings of the American Sociological Association, New York, New York, US.
- June 2013 “Think Tanks on Climate Change: Moral Views, Scientific Credibility, and Political Contexts.” Presented in “The Sociology of Climate Change,” Annual meetings of the Canadian Sociology Association, University of Victoria, Victoria, BC, Canada.
- June 2013 Vanina Leschziner, Neil McLaughlin, and John McLevey (equal authors). “The American Fame Game: Academic Status and Public Renown in the Social Sciences.” Presented in the “The Role of Public Intellectualism in Academe,” Annual meetings of the Canadian Sociology Association, University of Victoria, Victoria, BC, Canada.
- June 2012 “Epistemic Cultures in the Production of Policy Expertise” Annual Qualitative Analysis Conference, Memorial University, St John’s NL, Canada.
- May 2012 “Translation Work and the Marketing of Policy Expertise: Leads from Research on Canadian Think Tanks.” Annual meetings of the Canadian Sociology Association, University of Waterloo and Wilfrid Laurier University, Waterloo ON, Canada. Sociology of Science session.
- Aug 2011 “Rhythms and Reason Giving: Understanding Academic Involvement in Canadian Think Tanks.” Annual meetings of the American Sociology Association, Las Vegas, NV. Refinement of a paper presented in Philadelphia earlier that year.
- April 2011 Invited participant in NYLON workshop “Cultures of Circulation.” Ottawa ON, Canada.
- Feb 2011 (Previous version of) “Rhythms and Reason Giving: Understanding Academic Involvement in Canadian Think Tanks.” Annual meetings of the Eastern Sociology Society, Philadelphia PA, US. Regular Session on “Constructing Workplaces and Professional Domains.”
- May 2010 “How and Why Do Academics Get Involved with Think Tanks?” Annual Qualitative Analysis Conference, Wilfrid Laurier University, Brantford ON, Canada.
- June 2010 “Contesting Education: A Comparative Frame Analysis of Opinion Pieces by The Fraser Institute and The Canadian Centre for Policy Alternatives.” Annual meetings of the Canadian Sociology Association, Concordia University, Montreal QC, Canada.
- June 2010 (with Lisa Kowalchuk and Neil McLaughlin) “Public Intellectual Work: Uses of the Canadian Op-Ed Column.” Annual meetings of the Canadian Sociology Association, Concordia University, Montreal QC, Canada.
- May 2010 (Previous version of) “Contesting Education: A Comparative Frame Analysis of Opinion Pieces by The Fraser Institute and The Canadian Centre for Policy Alternatives.” Annual Qualitative Analysis Conference, Wilfrid Laurier University, Brantford ON, Canada.
- May 2009 “Understanding Marginality, Ambiguous Outcomes, and Failure in Social Movements Research and the Sociology of Ideas.” Annual meetings of the Canadian Sociology

Association, Carleton University, Ottawa ON, Canada.

## INVITED TALKS

### *Invited Research Talks*

- February 2021. John McLevey. “Reproducibility and Principled Data Processing for Computational Science”. Toronto Data Workshop on Reproducibility, Department of Statistical Sciences, University of Toronto.
- December 2019. John McLevey. “Democracies in Crisis? Online Deception, Disinformation, and Political Polarization.” Invited talk in the York University Science and Technology Studies Seminar Series.
- Nov 15, 2017 “Gender discrimination in open source software development: findings from a large-scale field study.” Guest lecture in Gender Equity course in Knowledge Integration, University of Waterloo.
- Nov 13, 2017. “A Primer on Computational Sociology.” Guest lecture in Sociology Theory grad seminar, Sociology & Legal Studies, University of Waterloo.
- March 2, 2016 “Network Structure and the ‘Chain of Trust’ in Linux Development: Lessons for Working with Data Scraped from the Web.” Guest lecture in Research Methods class in Sociology, Wilfrid Laurier University
- May 2017, Panelist on “SSHRC’s new data management policies: what do they mean for your knowledge making practices?” at the 2017 Canadian Sociological Association meetings, Ryerson University.
- Oct 28, 2016, “Open Science and the Uncertain Future of University-Industry Partnerships in Biomedical Research and Development.” Environment Seminar Series: Open Data, Open Science. Faculty of Environment, University of Waterloo.
- Dec 2, 2014 “Collaborating On-Line: An Analysis of Communication Networks for Linux Kernel Developers.” [Waterloo Institute for Complexity and Innovation](#) Speaker Series, University of Waterloo.
- Sept 20, 2013 “Think Tanks, Funding, and Politics of Policy Knowledge,” Knowledge Integration Seminar Series, Faculty of Environment, University of Waterloo.

### *Invited Teaching Talks*

- March 1, 2016 John McLevey and Patrick Famaran (UG student), “Using Technology to Facilitate Collaboration,” Centre for Teaching Excellence Educational Technology Week.
- March 1, 2016 “Enhancing Student Learning by Bringing Data into the Classroom.” GREEN TEA speaker series, University of Waterloo.

## TEACHING

### *Courses Designed, Developed, and Offered since 2013*

- Bullshit, Bias, and Bad Arguments (undergraduate online)
- Computational Social Science (undergraduate online, graduate online)
- Research Design and Methods (undergraduate lecture)

“Big Data” and Social Science Research (undergraduate seminar)  
Data Visualization (undergraduate seminar)  
KI Thesis / Senior Research Project  
The Art & Science of Learning (undergraduate lecture)  
Sociology of Science and Technology (undergraduate seminar)  
Open Science and Technology (undergraduate seminar)  
Creativity and Innovation (undergraduate lecture)

### ***Independent Studies Courses***

Disinformation and Online Influence  
Social Network Analysis (4x)  
Reproducibility and Replication in the Sciences  
Systematic Reviews and Methods for Evidence Synthesis  
Sociology of Science  
Computational Sociology  
The Sociology of Expertise and Science Policy  
Sociology of Organizations

## **STUDENT SUPERVISION**

### ***PhD Dissertations in Progress***

#### ***As Supervisor (4 Students)***

- Pierson Browne (supervisor, in progress)
- Alexander Graham (supervisor, in progress)
- Tyler Crick (supervisor, in progress)
- Amelia Howard (supervisor, in progress)

#### ***As Committee Member (6 Students)***

- Julie Cook (committee member, supervisor Jennifer Lynes)
- Yixi Yang (committee member, supervisor Mark Stoddart - Memorial University)
- Adam Howe (committee member, supervisor David Tindall - UBC)
- Yasmin Koop-Monteiro (committee member, supervisor David Tindall - UBC)
- François Lachapelle (committee member, supervisor David Tindall - UBC)
- Peter Duggins (committee member, supervisor Chris Elias Smith, Systems Design Engineering)

### ***PhD Dissertations, Successfully Defended***

#### ***As Committee Member (5 Students)***

- Rod Missaghian (committee member, supervisor Janice Aurini, defended 2020)
- Moutasem Zakkar (committee member, supervisors Craig Janes and Plinio Morita, defended 2020)
- Brittany Etmanski (committee member, supervisor Owen Gallupe, defended 2019)
- Noorin Manji (committee member, supervisor Lorne Dawson, defended 2018)

- Michael Clarke (committee member, supervisor Kieran Bonner, defended 2016)

### *Master's Theses, Successfully Defended (7 Students)*

- Emerson LaCroix (committee member, supervisor Janice Aurini, defended 2018)
- Sarah Tang (committee member, supervisor Simron Singh, defended 2018)
- Alexander Graham (supervisor, defended 2017)
- Nicholas Brandon, MD (committee member, supervisor Shannon Majowicz, defended 2018)
- Junyi Wang (committee member, supervisor Derek Robinson, defended 2017)
- Stuart Anderson (reader, supervisor Götz Hoeppe, defended 2017)
- Chen Chen (reader, supervisor Peter Johnson, defended 2016)

### *Undergraduate Senior Honors Theses (10 Students)*

- Harrison Lobb (in progress)
- Jason Kurian (completed 2019)
- Rachel Wood (completed 2018)
- Jessilyn Wolfe (completed 2018)
- Jillian Anderson (completed 2017)
- Julia Yaroshinsky (completed 2016)
- Tiffany Lin (completed 2015)
- Benjamin Carr (completed 2014)
- Chelsea Mills (completed 2014)
- Christina Minji Chung (completed 2014)

## OTHER TEACHING AND GRADUATE STUDENT MENTORING

2018-Present. Co-Instructor (with Eric Kennedy) for [Science Outside the Lab \(SotL\) North](#). A week long intensive course in science policy held annually in Ottawa and Montréal. Each course cohort is ~ 14 graduate students from science and engineering disciplines across Canada.

### *Research Methods Workshops (Designed and Instructed)*

- 2020. Research Methods Workshop (5 days), GESIS Spring Seminar, Leibniz Institute for the Social Sciences, Cologne Germany. "Working with Digital Behavioural Data." Co-designed and instructed with Jillian Anderson.
- 2019. Research Methods Workshop (1 day), Transilvania Summer School in Research Methods. "Using Network Analysis to (Partially) Automate Literature Reviews"
- 2019. Research Methods Workshop (2 days) instructed at University of British Columbia, Department of Sociology. "[Introduction to Big Data and Automated Text Analysis for Social Scientists](#)"
- 2019. Research Methods Workshop (2 days) instructed at University of Waterloo. "[\(Partially\) Automating Literature Reviews for Knowledge Synthesis and Discovery](#)."
- 2019. Research Methods Workshop (2 days) instructed at University of Waterloo. "[How to Analyze Networks with R](#)"



2019. Research Methods Workshop (1 day) instructed at University of Waterloo. “[Automated Content Analysis for Social Scientists](#)”

## SERVICE

### *Service to the Profession*

2019, Member of the Scientific Committee for Sunbelt XXXIX Conference in Montréal, International Network for Social Network Analysis (INSNA).  
 2016-2019, Communications Officer, Member of the Executive Council, Canadian Sociological Association.  
 2019-present. Co-organizer (with Rochelle Côté) and liaison with the Canadian Sociological Association for the [Social Networks Research Cluster](#)  
 2014-present. Organizer and liaison with the Canadian Sociological Association for the [Sociology of Science, Technology, and Knowledge Research Cluster](#)

### Conference Session Organizing

2020. Sessions on disinformation, computational methods, climate change, and social movements at the 2020 Sunbelt meetings in Paris, France (held remotely)  
 2019. Sessions for *Social Networks* Research Cluster, CSA  
 2019. Sessions for *Sociology of Science, Technology, and Knowledge* Research Cluster, CSA  
 2019. *Social Networks and Sociology* panel (with Dr. Rochelle Côté), CSA  
 2017. *Practical Advice on Communicating Sociological Research* panel, CSA  
 2017. *Sociology of Science and Knowledge*, CSA  
 2016. *Sociology of Science and Knowledge*, CSA  
 2015. *Political Sociology of Science*, CSA  
 2015. *Sociology of Science*, CSA  
 2014. *Sociology of Technology*, CSA  
 2014. *Sociology of Culture* (with Dr. Allyson Stokes), CSA

### Peer Reviewing (Journal Articles)

*American Journal of Sociology*  
*Canadian Review of Sociology*  
*Social Networks*  
*Science and Public Policy*  
*Scientometrics*  
*Sociological Theory*  
*Social Studies of Science*  
*Canadian Journal of Sociology*  
*Methodological Innovations*  
*Acta Sociologica*

### Peer Reviewing (Grants)

- 2019. Peer Reviewer for the 2019 SSHRC Insight Grant Awards Competition (Multi-disciplinary)
- 2017. Observer for the 2018 SSHRC Postdoctoral Awards Competition
- 2018. Evaluator for 2017 SSHRC Insight Development Grants Competition

### Peer Reviewing (Books)

- 2019. 1 book manuscript for Sage, UK. Quantitative research methods series.
- 2018. 1 book manuscript for Sage, UK. Quantitative research methods series.

### Peer Reviewing (Other)

- 2020. Chapter for Luke Sloan and Anabel Quan-Haase (eds). *The SAGE Handbook for Social Media Research Methods*, 2<sup>nd</sup> edition. London: Sage.
- 2020. Sage Campus. (Online research design classes)
- 2018. Sage Campus. (Online research methods classes)

### *University of Waterloo*

- 2020 Faculty Association University of Waterloo (FAUW), Member of Council of Representatives, Department of Knowledge Integration.
- 2019 Committee member, Tenure and Promotions Committee, Department of Knowledge Integration.
- 2018 Search and selection committee member for two Canada Research Chairs in Environment and Sustainability, Faculty of Environment.
- 2018 Panelist on the SSHRC Insight Development Grants Panel, organized by Ruth Knechtel from the University of Waterloo Office of Research.
- 2017-2018 Committee member for university-level “Research excellence and crossing disciplinary lines” committee, which developed a white paper to inform the development of the next University of Waterloo strategic plan. Part of my contribution included a network analysis of inter- and intra-faculty collaboration networks on campus.
- 2016 Informal committee designing a Master’s in Data Science at the University of Waterloo, joint initiative of the Faculty of Arts and Faculty of Environment.
- 2016-Present Member of Communications Outcomes Committee in the Faculty of Environment.
- 2016 Internal External Examiner for PhD Dissertation in the Department of Applied Mathematics, University of Waterloo. John Lang, “Mathematical Modelling of Social Factors in Decision Making Processes at the Individual and Population Levels.” Dissertation Supervisors: Drs. Hans De Sterck and Daniel M. Abrams.
- 2016 Internal External Examiner for PhD Dissertation in the Department of Philosophy, University of Waterloo. Benjamin Nelson, “The Depictions of Unwritten Law.” Committee Members: Brian Orend, Heather Douglas, and Matt Doucet.
- 2016-Present Member of the University of Waterloo Task Force on Bibliometrics.
- 2016-2017 Committee Member on the Faculty of Environment Committee on the University of Waterloo [HeForShe](#) Campaign to make gender equality a top institutional priority.

2016 Co-organized (with Ian Milligan) a [Software Carpentry](#) workshop at the University of Waterloo focusing on shell scripting, git, and Python for social scientific and historical research.

2016-Present Faculty Advisor, [University of Waterloo iGEM](#) (International Genetically Engineered Machine) Team, Policy & Practices Subgroup, Mathematical Modeling Subgroup (occasionally). 2016 Gold Medal Winners.

2014-Present Board Member, [University of Waterloo Survey Research Centre](#)

2014-2015 Faculty of Environment representative on the Arts Faculty Council

2014-2017 Department of Knowledge Integration representative on the Environment Faculty Council

2014-2015 Member of the English Language Competency Committee in the Faculty of Environment

2014 Faculty of Environment Teaching and Learning Committee

2014 Gave a talk on creativity and innovation to Grade 11 students at Waterloo Unlimited. Title: "Where do good ideas come from? A social network perspective."

2014 Internal External Examiner for PhD Dissertation in the Department of Psychology, University of Waterloo. Nathaniel Barr, "Reasoned connections: Complex creativity and dual-process theories of cognition." Dissertation Advisor: Jonathon Fugelsang.

### *McMaster University*

2011–2012 Selection Committee member for two tenure-track hires in Sociology

2010–2012 Chair of Graduate Student Caucus

2011–2012 PhD (ABD) Representative on the Graduate Committee

2009–2010 PhD Representative on the Graduate Committee

2009–2010 Co-Organizer, Culture and Politics workshop

2009–2012 Co-Organizer of Jane Synge Memorial Conferences

2009–2012 Peer Mentor in Sociology Peer Mentoring Program

2008–2009 Union Steward, Sociology (CUPE 3906)

### ADDITIONAL RESEARCH METHODS / TECHNICAL TRAINING

Technical / methods workshops attended at Sunbelt 2016, Newport Beach, USA: (1) Understanding Diffusion with `netdiffuseR`, (2) Moving beyond Descriptives: Basic Network Statistics with `statnet`, (3) Exponential Family Random Graph Modeling (ERGMs) Using `statnet`, (4) Introduction to Egocentric Network Data Analysis with ERGMs and TERGMs Using `statnet`

Technical / methods workshops attended at Sunbelt 2015, Brighton, UK: (1) Networks in Python: The *networkx* Package, Parts 1 & 2, (2) Mining of large social networks from Twitter, Facebook and LinkedIn using Python, (3) Social Network Approaches for Behavior Change, (4) Visualizing Social Networks. How to Create Meaningful and Compelling Network Drawings. Qualitative Comparative Analysis and Fuzzy Sets. Arizona Methods Workshops, held at University of Arizona. January, 2012.

Hierarchical Linear Models. Inter-University Consortium for Political and Social Research (ICPSR), held at University of Massachusetts, Amherst. June, 2011.

## **PROFESSIONAL MEMBERSHIPS**

Canadian Sociological Association, American Sociological Association, International Network for Social Network Analysis, Society for Social Studies of Science, Sociologists for Women in Society