

1. RESEARCH CONTRIBUTIONS OVER THE LAST SIX YEARS (2013-2019)

In the publications listed below, italics indicate that the co-author was a student at time of publication.

Refereed Contributions

Refereed Journal Articles

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. (I was responsible for about 35% of the work on this paper. I was involved in data collection and coding and article writing)

- * **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. (I was responsible for about 70% of the work on this paper. I co-designed the study with Plaisance, developed statistical methods for citation network analysis, collected the data, did the majority of data analysis, and wrote the paper.)

- * **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. (I was responsible for 75% of the paper, which describes in detail a software package co-designed and developed with my former student.)

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. (I was responsible for 50% of this article, including working with Stokes on conceptualization, data analysis, and writing the paper.)

- * **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.

Refereed Book Chapters

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. (I was responsible for 50% of this chapter, including writing and editing.)

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. (I was responsible for 40% of this chapter, including data collection, analysis, writing and editing.)

Forthcoming Contributions

Books / Monographs

- * Mark Stoddart, Alice Mattoni, and **John McLevey**. *Industrial Development and Eco-Tourisms: Is*

Co-existence Possible Between Oil Exploration and Nature Conservation? Under contract with Palgrave MacMillan. (I am responsible for approximately 25% of the final manuscript.)

John McLevey. *Doing Computational Social Science*. Under contract with SAGE, UK. Research methods series.

Journal Articles

- * **John McLevey**, Alexander Graham, Pierson Browne, and Tyler Crick. “Diversity and Similarity in Social Networks: New Measures for Empirical Research.” Preparing for submission to *Social Networks*.
- * Alexander Graham and **John McLevey**. “Collective Intelligence and Diversity Bonuses in Scientific Fields.” Preparing for submission to *Scientometrics*.
- * **John McLevey**, Pierson Browne, and Alexander Graham. “Remaking the Boundaries of Open and Proprietary Science: A Linked Data Analysis of Multi-Institutional Collaboration in International Biomedical Science.” Preparing for submission to *Research Policy*.
- * **John McLevey**, Mark Stoddart, and Yixi Yang. “The Oil-Tourism Interface in International Media: A Systematic Comparison of Norway, Scotland, and Newfoundland and Labrador.” Preparing for submission to *Global Environmental Change*.

Book Chapters

John McLevey. 2020. “Epistemic and Evidential Cultures and the Scientific Ethos.” In Sara Delamont and Paul Atkinson (eds.) *Sage Research Methods Foundations*. Sage.

Other Refereed Contributions

Conference Presentations

30 conference presentations since 2013, including at annual meetings of: the Canadian Sociological Association (CSA), the American Sociological Association (ASA), the International Network for Social Network Analysis (INSNA, Sunbelt), and a variety of smaller workshops and conferences.

Non-Refereed Contributions

Research Reports

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. (I was responsible for 25% of the work on this report, including conceptualization, data collection and analysis, training and supervising research assistants, writing, and editing).

2. OTHER RESEARCH CONTRIBUTIONS

Selected Open Source Research Software

- * 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.
- * Nate: A Python package for network analysis with text data. Designed and developed by **John McLevey**. Beta first released in 2019. Under active development.

Op-Eds

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

Other Public Writing and Invited Talks

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 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.

3. MOST SIGNIFICANT CAREER CONTRIBUTIONS

- * **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.

Significance: This article — published in a leading interdisciplinary journal focused on methodology in information science, quantitative sociology of science, and bibliometrics (*Journal of Informetrics*, 5-year impact factor: 3.34) — makes an argument for the importance of open and reproducible research workflows, and describes and illustrates the capabilities of a Python package called *metaknowledge*, which I designed and developed with my former student. *metaknowledge* accepts raw data from many publication and citation databases and output a variety of clean datasets suitable for time series analysis, network analysis, historical bibliometrics, and computational text analysis. The paper has been cited 7 times in less than a year, and the *metaknowledge* package itself has been downloaded thousands of times since it was initially released in 2015.

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.

Significance: This report for the Ontario Ministry of Education was based on a large multi-method research project about the use of classroom-integrated robotics for teaching 21st century competencies like collaboration, creativity, and problem solving. I was primarily responsible for the quantitative component of the project. This report was the result of direct and prolonged engagement with policymakers and educators. It is currently being used to inform decisions about the allocation of resources, curriculum development, and new ways of measuring learning outcomes in Ontario school boards.

4. CAREER INTERRUPTIONS AND SPECIAL CIRCUMSTANCES

N/A

5. CONTRIBUTIONS TO STUDENT TRAINING

I am currently supervising or co-supervising five PhD students, was a committee member for two who successfully defended their PhDs, and am currently a committee member for three others. I include my PhD students as co-authors on nearly all articles and book chapters I am working on. In 2016, one of the PhD students I was working with successfully defended his PhD dissertation and is currently a full-time employee at Google. In 2017, my Master’s student defended his thesis and is now one of my PhD students. In addition to the PhD students, I have trained and mentored Master’s and undergraduate students, all listed below.

In 2016, I received an Early Researcher Award from the Ontario Ministry of Research and Innovation. The funds associated with this award are to be used only for student salaries. I have used this award and several SSHRC grants to develop a research lab at University of Waterloo called NetLab. Since I started NetLab, I have employed four PhD students, 1 Master’s student, and nine undergraduate students (1 is still a student, 2 are completing master’s programs at University of Chicago and Simon Fraser, 4 are working as data scientists in government or industry, 1 is a Research Associate at the Berkman Klien Center for Internet at Society at Harvard University). All have received advanced training and mentoring in social science research design and methods, including general linear models, social network analysis, computational text analysis, and time series analysis.

NetLab Students (13 students): Alexander Graham, Pierson Brown, Tyler Crick, Alexis Hill, Brittany Etmanski, Rachel Wood, Jillian Anderson, Hannah Anderson Mumtahn Monzoor, Joel Becker, Reid McIlroy-Young, Steve McColl, Tiffany Lin. **Students involved in MOE Report (6 students):** Brittany Etmanski, Cathlene Hillier, Jessica Rizk, + 3 undergraduates. **PhD Dissertations (10 students):**

Alexander Graham (supervisor), Tyler Crick (supervisor), Amelia Howard (supervisor), Julie Cook (co-supervisor), Pierson Browne (committee member, interim supervisor), Rod Missaghian (committee member, supervisor Janice Aurini), Yixi Yang (committee member, supervisor at Memorial), Adam Howe (committee member, supervisor at UBC), François Lapachelle (committee member, supervisor at UBC), Michael Clarke (committee member – defended in 2016), Noorin Manji (committee member – defended in 2018). **Master’s Theses (6 students):** Alexander Graham (supervisor, defended 2017), Junyi Wang (committee member, defended in 2017) Chen Chen (reader, defended 2016), Stuart Anderson (reader, defended 2017), Nicholas Brandon, MD (committee member, defended in 2018), Sarah Tang (committee member). **Undergraduate Senior Honours Theses (9 students):** Jason Kurian (in progress), 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)