1. RESEARCH CONTRIBUTIONS OVER THE LAST SIX YEARS (2012-2018)

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

Refereed Contributions

Refereed Journal Articles

- R 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)
- R* **John McLevey**, *Alexander Graham*, *Reid McIlroy-Young*, *Pierson Browne*, and Kathryn S. Plaisance. 2018. "Indifferent interdisciplinary: intellectual status and 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 new methods for citation network analysis, collected the data, did the majority of data analysis, and wrote the paper.)
- R* **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 motivates describes in detail a software package co-designed and developed with my former student.)
- R 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 conceptualization, data analysis, and writing the paper.)
- R* **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.
- R* **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

- R **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.)
- R **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

- R* 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.)
- R John McLevey. *A Practical Introduction to Computational Social Science*. Under contract with SAGE, UK. Research methods series.

Journal Articles

- R* Alexander Graham and **John McLevey**. "Collective Intelligence and Diversity Bonuses in Scientific Fields." Preparing for submission to *Scientometrics*.
- R* **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 *Social Networks*.
- R* **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.

Other Refereed Contributions

Conference Presentations

27 conference presentations since 2012, 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

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.

Op-Eds

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

Other 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 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.

2. MOST SIGNIFICANT CAREER CONTRIBUTIONS

R* **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.

3. CONTRIBUTIONS TO STUDENT TRAINING

I am currently supervising or co-supervising four 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 and eight undergraduate students (1 is still a student, 2 are completing master's programs at University of Chicago and Simon Fraser, 1 is a data scientist for the federal government, 1 is a data scientist for Shopify, 1 is a data scientist for Interact, and 1 is a Research Associate at the Berkman Klien Center for Internet at Society at Harvard University, and one works at a local tech startup). 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: Alexander Graham, Pierson Brown, Tyler Crick, Brittany Etmanski, Rachel Wood, Jillian Anderson, Hannah Anderson Mumtahin Monzoor, Joel Becker, Reid McIlroy-Young, Steve McColl, Tiffany Lin

Students involved in MOE Report: Brittany Etmanski, Cathlene Hillier, Jessica Rizk, + 3 undergraduates PhD Dissertations (8 students): Michael Clarke (committee member – defended in 2016), Alexander Graham (co-supervisor with Peter Carrington), Julie Cook (co-supervisor with Jennifer Lynes), Tyler Crick (supervisor), Amelia Howard (supervisor), Pierson Browne (committee member, supervisor Jen Whitson), Rod Missaghian (committee member, supervisor Janice Aurini), Yixi Yang (committee member, supervisor Mark Stoddart at Memorial), Adam Howe (committee member, supervisor David Tindall at UBC), François Lapachelle (committee member, supervisor David Tindall at UBC)

Master's Theses (6 students): Alexander Graham (supervisor, successfully defended 2017), Junyi Wang (committee member, supervisor Derek Robinson, successfully defended in 2017) Chen Chen (reader, supervisor Peter Johnson, successfully defended 2016), Stuart Anderson (reader, supervisor Götz Hoeppe, successfully defended 2017), Nicholas Brandon, MD (committee member, supervisor Shannon Majowicz), Sarah Tang (committee member, supervisor Simron Singh)

Undergraduate Senior Honours Theses (8 students): <u>Rachel Wood</u> (completed 2018), <u>Jessilyn Wolfe</u> (completed 2018), <u>Jillian Anderson</u> (completed 2017), <u>Julia Yaroshinsky</u> (completed 2016), <u>Tiffany Lin</u> (completed 2015), <u>Benjamin Carr</u> (completed 2014), <u>Chelsea Mills</u> (completed 2014), <u>Christina Minji Chung</u> (completed 2014)