Glen McGee, PhD

Department of Biostatistics
Harvard T.H. Chan School of Public Health
Boston, MA 02115
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Citizenship: Canadian

Education

PhD in Biostatistics 2014–2019
Harvard University, Cambridge, MA
Dissertation: Topics in Cluster-Correlated Data
Committee: Sebastien Haneuse, Brent Coull, Sharon-Lise Normand

MA in Biostatistics 2014–2016
Harvard University, Cambridge, MA

BScH in Mathematics and Economics 2010–2014
Queens University, Kingston, ON

Research & Consulting

Postdoctoral Researcher 2019–
Statistical methods for multigenerational studies in epidemiology
Modelling high-dimensional mixtures of environmental pollutants
Non-random ascertainment of disease in electronic medical records

Doctoral Researcher 2015–2019
Informatively empty clusters in multigenerational studies
  Motivated by non-mothers in third-generation ADHD research
Exposure misclassification when cluster size is informative
  Motivated by recall bias in reporting multigenerational exposures
Outcome-dependent sampling designs for correlated data
  Motivated by hospital profiling using Medicare claims data

Research Assistant 2016–2019
Correcting for measurement error in case-crossover designs

Statistical Consultant 2017–2018
Time series analysis of the effectiveness of pneumonia vaccine (Ecuador)
Analysis of malpractice claims against resident physicians (USA)

Biostatistics Student Consultant 2016–2019
Biostatistics Student Consulting Center, Harvard University, Boston, MA

Summer Research Assistant Summer 2013
Financial Studies Division, Bank of Canada, Ottawa, ON
  Statistical modelling of non-bank payment database

Teaching

Course Instructor
Harvard University
Introductory Probability August 2018
Introductory Probability August 2017

Teaching (Continued)

Teaching Assistant

Harvard University

Statistical Methods	Fall 2018
Analysis of Multivariate and Longitudinal Data	Spring 2017
Statistical Methods I	Fall 2016
Regression and ANOVA in Experimental Research	Fall 2015

Queens University (grading only)

Linear Algebra	Fall 2013
Introduction to Linear Algebra	Spring 2012

Advising Experience

Ruofan Bie (Biostatistics; MS student) — Summer 2019—
Co-advising project on small sample bias in GEE and marginalized multilevel models

Editorial

Statistical Reviewer for JAMA Network Open — 2019—

Ad-Hoc Referee:
Biometrics
American Journal of Epidemiology
JAMA Network Open
Epidemiologic Methods

Computing Experience

R (Expert)
Including: `Rcpp (C++); tidyverse; ggplot2; ShinyR; Plotly; R-Markdown`
Some experience: Python; Stata; SAS

Awards

Certificate of Distinction in Teaching (Department of Biostatistics)	2019
ENAR Distinguished Student Paper Award	2019
International Conference on Health Policy Statistics Travel Award	2018
Harvard University Certificate of Distinction in Teaching (Derek Bok Center)	2016
Albert Harold Lightstone Scholarship	2013
Nellie and Ralph Jeffery Award in Mathematics	2012, 2013
James H Rattray Scholarship in Science	2012
Queen's Appeal Undergraduate Scholarship	2011
Annie Bentley Lillie Prize In First Year Calculus	2011
Dean's Honour List with Distinction	2010, 2011
Queen's University Excellence Scholarship	2010

Professional Associations

ASA Member — 2018–2019

Publications & Submitted Manuscripts

McGee, G., Weisskopf, M. G., Kioumourtzoglou, M. A., Coull, B. A., and Haneuse, S. (2019). "Informatively empty clusters with application to multigenerational studies". *Biostatistics.* DOI:10.1093/biostatistics/kxz005

McGee, G., Schildcrout, J., Normand, S.-L. and Haneuse, S. (2019). "Outcome-Dependent Sampling in Cluster-Correlated Data Settings with Application to Hospital Profiling." *Journal of the Royal Statistical Society: Series A.* DOI:10.1111/rssa.12503

Coull, B., Lee, S., **McGee, G.**, Manjourides, J., Mittleman, M., and Wellenius, G. (2019). "Corrections for Measurement Error Due to Delayed Onset of Illness for Case-Crossover Designs." *Biometrics* (In press). DOI:10.1111/biom.13173

Glover, M., **McGee, G.**, Wilkinson, D., Singh, S., Bolick, A., Betensky, R., Harvey, H. B., Weinstein, D., and Schaffer, A. (2019). "Characteristics of Paid Malpractice Claims Among Resident Physicians from 2001-2015." *Academic Medicine* (In press). DOI:10.1097/ACM.0000000000003039

McGee, G., Kioumourtzoglou, M.-A., Weisskopf, M., Haneuse, S., and Coull, B. "On the Interplay Between Exposure Misclassification and Informative Cluster Size in Multigenerational Studies." *Under review.* arXiv preprint arXiv:1910.07438

McGee, G., Perkins, N., Mumford, S., Kioumourtzoglou, M.-A., Weisskopf, M., Schildcrout, J., Coull, B., Schisterman, E., and Haneuse, S. "Methodological Issues in Population-Based Studies of Multigenerational Effects." *In revisions at American Journal of Epidemiology.*

Manuscripts In Preparation

Bie, R., Haneuse, S., Huey, N., Schildcrout, J. and **McGee, G.** "Small Sample Bias in Population-Averaged Models: Comparing Generalized Estimating Equations and Marginalized Multilevel Models." *In preparation*

Sotomayor, R. Toscano, C., Sanchez, X., Vilema, M., Rivas, J., Ghisays, G., Haneuse, S., Weinberger, D., **McGee, G**. and de Oliveira, L. "Impact of pneumococcal conjugate vaccine on pneumonia hospitalization and mortality in children and elderly in Ecuador: time series analyses." *In preparation*

Presentations

2020 Invited Seminar, Department of Statistics and Actuarial Science, University of Waterloo, ON. "Methodological Problems in Multigenerational Epidemiology."

2019 Invited Seminar, International Conference on Computational and Methodological Statistics (CMStatistics 2019), London, UK. "Outcome-Dependent Sampling with Application to Hospital Profiling."

2019 Invited Seminar, Department of Biostatistics, Vanderbilt University Medical Center, Nashville, TN. "Methodological Problems in Multigenerational Epidemiology."

2019 Oral presentation, Nurses Health Study Meeting, Brigham and Women's Hospital, Boston, MA. "On the Interplay Between Exposure Misclassification and Informative Cluster Size."

2019 Contributed Oral Presentation, ENAR Spring Meeting, Philadelphia, PA. "Informatively Empty Clusters with Application to Transgenerational Studies."

2019 Quantitative Issues in Cancer Research Working Seminar, Department of Biostatistics, Harvard University, Boston, MA. "Methodological Considerations for Studies of Multigenerational and Transgenerational Effects."

2019 Invited seminar, Department of Mathematics and Statistics, York University, Toronto, ON. "Informatively Empty Clusters and Multigenerational Studies."

2018 Oral presentation, Nurses Health Study Meeting, Brigham and Women's Hospital, Boston, MA. "Informatively Empty Clusters with Application to Transgenerational Studies."

2018 Contributed oral presentation, Joint Statistical Meetings, Vancouver, BC. "On the Impact of Empty Clusters."

2018 Working Group on Outcome-Dependent Sampling, National Institute of Child Health and Human Development (NIH), Bethesda, MD. "Statistical Considerations for Transgenerational Studies."

2018 Poster presentation, Harvard/MIT ACE Science Advisory Committee Meeting, Boston, MA. "Corrections for Measurement Error Due to Delayed Onset of Illness for Case-Crossover Designs."

2018 Contributed oral presentation, International Conference on Health Policy Statistics, Charleston, SC. "Outcome-Dependent Sampling in Cluster-Correlated Data Settings with Application to Hospital Profiling."

2017 Contributed oral presentation, Eastern North American Region Spring Meeting, Washington, DC. "Outcome-Dependent Sampling in Cluster-Correlated Data Settings with Application to Hospital Profiling."

2016 Invited seminar, Environmental Statistics Seminar Series, Harvard University. "Corrections for Measurement Error Due to Delayed Onset of Illness in Case-Crossover Designs."

2016 Working Group on Outcome-Dependent Sampling, National Institute of Child Health and Human Development (NIH), Bethesda, MD. "Mixed Effects Models Under Outcome Dependent Sampling."

2015 P01/Environmental Statistics Retreat, Wellesley College Club, MA. "Mixed Effects Models Under Outcome Dependent Sampling."

2015 Summer Research Presentation, Department of Biostatistics, Harvard University, Boston, MA. "Generalized Linear Mixed Models Under Outcome Dependent Sampling."

2013 Oral presentation, Financial Stability Department, Bank of Canada."The Role of Non-Banks in the Payment Industry: Adoption and Use."