EMMA DAVIES SMITH

Postdoctoral Research Fellow in Biostatistics

Department of Biostatistics

Harvard T.H. Chan School of Public Health

655 Huntington Ave, Building 2, 4th Floor

Boston, MA 02115

Email: esmith@hsph.harvard.edu

Website: statisticelle.com

LinkedIn: linkedin.com/in/emmajeansmith/

Twitter: @GirlMeetsStats

EDUCATION

2019 to 2023 **Ph.D. Epidemiology and Biostatistics, Biostatistics**

Schulich School of Medicine & Dentistry, Western University

Nonparametric Methods for the Analysis of Cluster Randomization Trials with Multiple Endpoints

Dr. Guangyong (GY) Zou and Dr. Vipul Jairath

2016 to 2017 **M.Sc. Mathematics & Statistics, Applied Statistics**

College of Physical & Engineering Sciences, University of Guelph

Quantifying Health with Missing Data: Measuring the Impact of Fecal Microbiota Transplantation on Health-Related Quality of Life

Dr. Anthony F. Desmond and Dr. Peter T. Kim

2011 to 2015 **B.Sc.H. Mathematics & Statistics, Statistics (Mathematics Minor)**

College of Physical & Engineering Sciences, University of Guelph

RESEARCH INTERESTS

- Randomized controlled trials
- Nonparametric methods
- Causal inference
- Missing data

TEACHING INTERESTS

- Regression methods
- Statistical inference
- Statistical programming
- Machine learning

RESEARCH EXPERIENCE

Sept 2023 to now **Postdoctoral Research Fellow**

Department of Biostatistics, Harvard T.H. Chan School of Public Health

RESEARCH EXPERIENCE CONTINUED

2019 to 2023 **Graduate Research Assistant**
       Department of Epidemiology & Biostatistics, Western University

Summer 2017 **Graduate Research Assistant**
       Department of Mathematics & Statistics, University of Guelph

Fall 2016 **Graduate Student Assistant**
       Data Resource Centre, McLaughlin Library, University of Guelph

Summer/Fall 2016 **Associate Statistical Consultant**
       Community Engaged Scholarship Institute, University of Guelph

2016 to 2017 **Research Assistant**
       Infectious Disease & Microbiology, St. Joseph's Healthcare Hamilton

Summer 2015 **Undergraduate Research Assistant**
       Department of Mathematics & Statistics, University of Guelph

TEACHING EXPERIENCE

See [Teaching Dossier](#) for more detail, including teaching philosophy and student feedback.

2021 to 2023 **Graduate Teaching Assistant**
       Department of Epidemiology & Biostatistics, Western University

Fall 2022 **Guest Lecturer**
       Department of Family Medicine, Western University

2016 to 2017 **Graduate Teaching Assistant**
       Department of Mathematics & Statistics, University of Guelph

ACADEMIC AND ADMINISTRATIVE EXPERIENCE

2020 to 2021 **Society of Graduate Students (SOGS) Representative**
       Western Epidemiology & Biostatistics Student Council

2020 to 2021 **Organizer / Facilitator**
       Western Epidemiology & Biostatistics Journal Club

Summer 2016 **Coordinator**
       Southern Ontario Graduate Mathematics & Statistics Conference

2014 to 2015 **Student Representative**
       Department of Mathematics & Statistics Curriculum Committee

2014 to 2015 **Secretary**
       University of Guelph Mathematics and Statistics Club

PROFESSIONAL EXPERIENCE

2018 to 2019   **Data Scientist**
                    Machine Learning, Adknown Inc.
2017 to 2018   **Statistical Analyst**
                    Insight & Discovery, Canadian Operations, Sun Life Financial

HONOURS AND AWARDS

2021 to 2023	**Ontario Graduate Scholarship**	**Western University**
	Provincial / Research	$15,000 CAD / year x 2
2020 to 2021	**Dean's Research Scholarship**	**Western University**
	Institutional / Research	$14,000 CAD
2019 to 2023	**Graduate Research Scholarship**	**Western University**
	Institutional / Academic	$7,000 CAD / year x 4
2016 to 2017	**Canada Graduate Scholarship (CGS-M)**	**University of Guelph**
	National / Research	$17,500 CAD
2016 to 2017	**Graduate Tuition Scholarship**	**University of Guelph**
	Institutional / Academic	$16,000 CAD
Declined	**Ontario Graduate Scholarship**	**University of Guelph**
	Provincial / Research	$15,000 CAD
2015	**Gordon Ashton Scholarship**	**University of Guelph**
	Institutional / Academic	$500 CAD
2015	**Statistics Graduation Prize**	**University of Guelph**
	Institutional / Academic	$500 CAD
2014	**Tucker Scholarship for Women**	**University of Guelph**
	Institutional / Leadership	$500 CAD

ARTICLES PUBLISHED IN PEER-REVIEWED JOURNALS

1. Zou, G., **Smith, E.**, Zou, L., Qiu, S., Shu, D. (2023). A rank-based approach to design and analysis of pretest-posttest randomized trials, with application to COVID-19 ordinal scale data. *Contemporary Clinical Trials,* 126: 107085*.* doi: 10.1016/j.cct.2023.107085

2. Zou, G., **Smith, E.**, & Jairath, V. (2022). A nonparametric approach to confidence intervals for concordance index and difference between correlated indices. *Journal of Biopharmaceutical Statistics*, 32(5): 1-28. doi: 10.1080/10543406.2022.2030747

3. Speicher, D.J., Luinstra, K., **Smith, E.J.**, Castriciano, S., Smieja, M. (2020) Non-invasive detection of IgG antibodies from common pathogenic viruses using oral flocked swabs. Diagnostic Microbiology and Infectious Disease. 97(3): 115038. doi: 10.1016/j.diagmicrobio.2020.115038

OTHER PEER-REVIEWED CONTRIBUTIONS

1. Lee, C., Kim, P., **Smith, E.** (2017, May 6-9) Outcome of Fecal Microbiota Transplantation for recurrent *Clostridium Difficile* infection on quality of life. [Poster]. Digestive Disease Week, Chicago, Illinois. doi: 10.1016/S0016-5085(17)33230-4

NON-PEER-REVIEWED CONTRIBUTIONS

1. **Smith, E.** (February 2020). Intro to Shiny for interactive graphics and data visualization. [Tutorial]. R-Ladies, London, Ontario.
2. **Smith, E.** (2016, July 13) Quantifying Health: Measuring the Impact of Fecal Microbiota Transplantation on Quality of Life. [Presentation]. The Canadian Statistical Sciences Institute Joint Analysis of Neuroimaging Data Meeting, Victoria, British Columbia.

PROFESSIONAL DEVELOPMENT

- **April 2022:** SAS Certified Business Analyst Using SAS 9: Regression and Modeling
- **August 2021:** SAS Certified Specialist, Base Programming Using SAS 9.4
- **June 2021:** Project Management, Essential Elements I & II (UWO OYF program)
- **August 2020:** Teaching Assistant Training Program (UWO CTL)