

Kevin McGregor — Curriculum Vitae

CONTACT INFORMATION
kevin.mcgregor@mail.mcgill.ca
WEBSITE
<http://www.kevmcgregor.com>

RESEARCH INTERESTS
Statistical genetics, analysis of microbiome data, epigenomics, high-dimensional data

LANGUAGES SPOKEN
English, French (full professional proficiency)

EDUCATION
McGill University, Montréal, QC

Ph.D., Biostatistics, *Expected*: June 2020

- Thesis Topic: *A penalized approach to estimating network changes in the human microbiome*
- Supervisors: Celia M.T. Greenwood, Ph.D. and Aurélie Labbe, Ph.D.

M.Sc., Biostatistics, November 2015

- Topic: *Methods for estimating changes in DNA methylation in the presence of cell type heterogeneity*
- Supervisors: Aurélie Labbe, Ph.D. and Celia M.T. Greenwood, Ph.D.

University of Saskatchewan, Saskatoon, SK

B.Sc. (Hons), Statistics, June 2013

- *Graduated with high honours*

RESEARCH EXPERIENCE
Undergraduate Research Assistant May 2011 - August 2013
Department of Mathematics and Statistics,
University of Saskatchewan
Supervisors: Christine Soteros, Ph.D., and Michael Szafron, Ph.D.

REFEREED JOURNAL PUBLICATIONS

1. Thiviya Jeyakumar, Nassima Fodil, Lauren Van Der Kraak, Charles Meunier, Romain Cayrol, **Kevin McGregor**, David Langlais, Celia Greenwood, Nicole Beauchemin, Philippe Gros; P145 Inactivation of IRF1 causes susceptibility to colitis-associated colorectal cancer. *Inflammatory Bowel Diseases*, Volume 25, Issue Supplement.1, 7 February 2019, Pages S66
2. Kathryn LaRusso, Geraldine Schaack, Tiffany Fung, **Kevin McGregor**, Justin Long, Marie-Pier Dumas, Zahia Attari, Yasmine Yousef, Hidy Girgis, Rajam Raghunathan, Ana Sant'Anna. Should You Pick the PICC? Prolonged Use of Peripherally Inserted Central Venous Catheters in Children with Intestinal Failure. *Revised and resubmitted to Journal of Pediatric Surgery*
3. Howard Steiger, Linda Booij, Esther Kahan, **Kevin McGregor**, Lea Thaler, Aurelie Labbe, Ridha Joobar, Mimi Israël, Moshe Szyf, Luis B. Agellon, Emilie Fletcher, Lise Gauvin, Annie St-Hilaire, Erika Rossi. A longitudinal, epigenomewide study of DNA methylation in Anorexia Nervosa: Results in actively ill, partially weight restored, long-term remitted, and non-eating-disordered women. *Accepted in Journal of Psychiatry and Neuroscience*.
4. Arabzadeh, Azadeh, **Kevin McGregor**, Valérie Breton, Lauren Van Der Kraak, Uri David Akavia, Celia MT Greenwood, and Nicole Beauchemin. "EPHA2

	<p>signaling is impacted by carcinoembryonic antigen cell adhesion molecule 1-L expression in colorectal cancer liver metastasis in a cell context-dependent manner.” <i>Oncotarget</i> 8, no. 61 (2017): 104330.</p> <ol style="list-style-type: none"> 5. Kevin McGregor, Sasha Bernatsky, Ines Colmegna, Marie Hudson, Tomi Pastinen, Aurélie Labbe, Celia MT Greenwood (2016). An evaluation of methods correcting for cell type heterogeneity in DNA methylation studies. <i>Genome Biology</i>, 2016 17(84). 6. Azadeh Arabzadeh, Jeremy Dupaul-Chicoine, Valérie Breton, Sina Haftchenary, Sara Yumeen, Claire Turbide, Maya Saleh, Kevin McGregor, Celia M T Greenwood, Uri David Akavia, Richard S Blumberg, Patrick T Gunning, Nicole Beauchemin (2015). Carcinoembryonic Antigen Cell Adhesion Molecule 1 long isoform modulates malignancy of poorly differentiated colon cancer cells. <i>Gut</i>, gutjnl-2014. 7. Cheston, M. A., McGregor, K., Soteros, C. E., Szafron, M. L. (2014). New evidence on the asymptotics of knotted lattice polygons via local strand-passage models. <i>Journal of Statistical Mechanics: Theory and Experiment</i>, 2014(2), P02014.
PUBLICATIONS IN REVISION OR SUBMITTED	<ol style="list-style-type: none"> 1. Kevin McGregor, Aurélie Labbe, Celia MT Greenwood. Differential co-occurrence network estimation in microbiome studies. <i>Submitted to Bioinformatics February 2019</i> 2. Lea Thaler, Sarah Brassard, Esther Kahan, Kevin McGregor, Aurelie Labbe, Mimi Israel, and Howard Steiger. Methylation of the OXTR gene in women with Anorexia Nervosa: Relationship to Social Behavior. <i>In revision for Journal of Psychiatric Research</i>
CORRESPONDENCE	<ol style="list-style-type: none"> 1. Anderson, Chloé, Kevin McGregor, and James A. Hanley. “Cranberry Capsules for Bacteriuria Plus Pyuria in Nursing Home Residents.” <i>Jama</i> 317.10 (2017): 1077-1078. 2. McGregor, Kevin, Aurélie Labbe, and Celia MT Greenwood. “Response to: Correcting for cell-type effects in DNA methylation studies: reference-based method outperforms latent variable approaches in empirical studies.” <i>Genome biology</i> 18.1 (2017): 25.
TEACHING EXPERIENCE	<p>Instructor</p> <ul style="list-style-type: none"> • <i>EPIB 521 Regression Analysis for Health Sciences</i> Jan-Apr 2018 Department of Epidemiology, Biostatistics, and Occupational Health McGill University • <i>Seminar Series in Biostatistics (5 lectures)</i> Sept-Oct 2017 Lady Davis Institute for Medical Research Montréal, Québec <p>Teaching Assistant</p> <ul style="list-style-type: none"> • <i>EDPE 676 — Intermediate Statistics</i> Fall 2015, 2016 Department of Educational and Counselling Psychology, McGill University <p>Grader</p> <ul style="list-style-type: none"> • <i>STAT 100 — Elementary Statistics for Applications</i> Winter 2013 University of Regina (Saskatoon Campus) <p>Help Desk Advisor</p> <ul style="list-style-type: none"> • Computer Science Help Desk May-June 2010 Department of Computer Science, University of Saskatchewan

REVIEWER WORK	<ul style="list-style-type: none"> Article co-reviewed for Genome Biology Article reviewed for International Journal of Epidemiology 	2017 2017
OTHER ACADEMIC ACTIVITIES	<ul style="list-style-type: none"> Local Arrangement Chair Canadian Statistics Student Conference Statistical Society of Canada Biostatistics Academic Representative Department of Epidemiology, Biostatistics, and Occupational Health McGill University Biostatistics Academic Representative Department of Epidemiology, Biostatistics, and Occupational Health McGill University Co-organized successful CANSSI Distinguished Visitor application Department of Epidemiology, Biostatistics, and Occupational Health McGill University Speaker: Hilary Parker Ph.D. 	Sept 2017 - June 2018 2017-18 2016-17 March 2017
OTHER PROJECTS	<ul style="list-style-type: none"> Statistical analysis and consulting (various projects) Course translation (French to English) HEC Montréal - Analyse et inférence statistique - 6-619-15 	2016-present Fall 2018
AWARDS	<p>Awards — McGill University</p> <ul style="list-style-type: none"> FRQS Doctoral award (\$21,000/year) Faculty of Medicine Internal Studentship (\$12,000) Faculty of Medicine Internal Studentship (\$12,000) Graduate excellence award Ph.D. (\$10,000) Graduate excellence award M.Sc. (\$4,000) <p>Awards — University of Saskatchewan</p> <ul style="list-style-type: none"> Most Outstanding Graduate in Statistics Dean's List Honours Scholarship (\$1500) Saskatchewan Curling Association Athlete Assistance Award (\$1100) Edgar Alexander Garton Scholarship (\$1000) Entrance Scholarship (\$3000) <p>Travel Awards</p> <ul style="list-style-type: none"> Queen Elizabeth Scholar: "Quantitative Biology and Medical Genetics for the World" (\$6,000) 2017 Microbiome Summer School: Big Data Analytics for Omics Science (All conference expenses covered) Workshop on Statistical Issues in Biomarkers and Drug Co-Development (\$500) <p>Other Awards</p> <ul style="list-style-type: none"> Statistical Society of Canada Student Conference Award for best undergraduate poster (co-authored with Marla Cheston) 	2018-2020 2017 2016 2015 2013 2013 2013 2013 2009 2009 2008 2019 2017 2014 2013
PRESENTATIONS	<p>Contributed talks</p> <ul style="list-style-type: none"> Statistical Society of Canada Annual Meeting, Montréal QC (Bio)Statistics Student Research and Career Day, McGill University Statistical Society of Canada Annual Meeting, Winnipeg MB 4th Annual Human and Statistical Genetics Meeting, Vancouver, BC 	Jun 2018 Sept 2017 Jun 2017 Apr 2015

Posters

- American Society of Human Genetics Annual Meeting, San Diego, CA Oct 2018
- Canadian Human and Statistical Genetics Meeting Jun 2018
Harrison Hot Springs, BC
- Causal Challenge, Workshop on Statistical Causal Inference Jul 2016
and Applications to Genetics, Montréal, QC
- EBOH 50th anniversary conference, Montréal, QC Apr 2015
- 4th Annual Human and Statistical Genetics Meeting, Vancouver, BC Apr 2015
- Workshop on Statistical Issues in Biomarker and Drug Co-development Nov 2014
Fields Institute, Toronto, ON
- Statistical Society of Canada Annual Meeting May 2014
Case Study Competition, Toronto, ON
- Statistical Society of Canada Student Conference May 2013
Student poster competition, Edmonton, AB