

## Kevin McGregor — Curriculum Vitae

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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  
**Visiting Academic** May 2019 - August 2019  
Division of Microbiology and Infection,  
Warwick Medical School  
Supervisors: Christopher Quince, Ph.D. and Todd Parsons, Ph.D.  
**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*.

	<ol style="list-style-type: none"> <li>Arabzadeh, Azadeh, <b>Kevin McGregor</b>, Valérie Breton, Lauren Van Der Kraak, Uri David Akavia, Celia MT Greenwood, and Nicole Beauchemin. “EPHA2 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.</li> <li><b>Kevin McGregor</b>, 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).</li> <li>Azadeh Arabzadeh, Jeremy Dupaul-Chicoine, Valérie Breton, Sina Haftchenary, Sara Yumeen, Claire Turbide, Maya Saleh, <b>Kevin McGregor</b>, 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.</li> <li>Cheston, M. A., <b>McGregor, K.</b>, 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.</li> </ol>
PUBLICATIONS IN REVISION OR SUBMITTED	<ol style="list-style-type: none"> <li><b>Kevin McGregor</b>, Aurélie Labbe, Celia MT Greenwood. Differential co-occurrence network estimation in microbiome studies. <i>Submitted to Bioinformatics February 2019</i></li> <li>Lea Thaler, Sarah Brassard, Esther Kahan, <b>Kevin McGregor</b>, 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></li> </ol>
CORRESPONDENCE	<ol style="list-style-type: none"> <li>Anderson, Chloé, <b>Kevin McGregor</b>, and James A. Hanley. “Cranberry Capsules for Bacteriuria Plus Pyuria in Nursing Home Residents.” <i>Jama</i> 317.10 (2017): 1077-1078.</li> <li><b>McGregor, Kevin</b>, 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.</li> </ol>
TEACHING EXPERIENCE	<p><b>Instructor</b></p> <ul style="list-style-type: none"> <li><i>EPIB 521 Regression Analysis for Health Sciences</i> Jan-Apr 2018 Department of Epidemiology, Biostatistics, and Occupational Health McGill University</li> <li><i>Seminar Series in Biostatistics (5 lectures)</i> Sept-Oct 2017 Lady Davis Institute for Medical Research Montréal, Québec</li> </ul> <p><b>Teaching Assistant</b></p> <ul style="list-style-type: none"> <li><i>EDPE 676 — Intermediate Statistics</i> Fall 2015, 2016 Department of Educational and Counselling Psychology, McGill University</li> </ul> <p><b>Grader</b></p> <ul style="list-style-type: none"> <li><i>STAT 100 — Elementary Statistics for Applications</i> Winter 2013 University of Regina (Saskatoon Campus)</li> </ul> <p><b>Help Desk Advisor</b></p> <ul style="list-style-type: none"> <li>Computer Science Help Desk May-June 2010 Department of Computer Science, University of Saskatchewan</li> </ul>

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