
CONTACT INFORMATION	Email: maxime.turgeon@mail.mcgill.ca	Personal website: http://maxturgeon.ca/
RESEARCH INTERESTS	High-dimensional data, dimension reduction techniques, multivariate analysis, statistical genetics, competing risk analysis	
EDUCATION	University McGill , Montréal, QC Ph.D., Biostatistics, <i>Expected</i> : December 2018 <ul style="list-style-type: none">• Thesis Topic: <i>Principal component of explained variance: High-dimensional estimation and inference</i>• Advisors: Celia M.T. Greenwood, Ph.D and Aurélie Labbe, Ph.D M.Sc., Mathematics, September 2013 <ul style="list-style-type: none">• Topic: <i>A relative fundamental lemma for $U(4)$</i>• Advisor: Jayce R. Getz, Ph.D University of Ottawa , Ottawa, ON B.Sc., Mathematics (Honours), April 2011 <ul style="list-style-type: none">• <i>Summa Cum Laude</i>• Topic: <i>Representation theory of p-adic algebraic groups</i>• Advisor: Monica Nevins, Ph.D	
EMPLOYMENT HISTORY	Senior Biostatistical & Study Design Strategies Specialist Strategic Health and Information Performance Support, Saskatoon Health Region, Saskatoon, SK Manager: Leanne Blahut, MSc, PMP <ul style="list-style-type: none">• Provide statistical support for the Saskatoon Health Region, through evaluation of quality improvement program and assessment of reports from the Canadian Institute for Health Information• Provide statistical and study design support to the Saskatchewan Centre for Patient-Oriented Research (SCPOR), particularly as it pertains to the use of provincial and regional administrative data for conducting observational studies• Provide methodological and statistical support for the provincial Clinical Quality Improvement Program (CQIP)	Sep 2016–
RESEARCH EXPERIENCE	Research Assistant Lady Davis Institute for Medical Research, Jewish General Hospital, Montréal, QC Supervisor: Celia M.T. Greenwood, Ph.D Research Assistant Department of Mathematics and Statistics, McGill University Supervisor: Jayce R. Getz, Ph.D	2013-2016 2011-2012
REFEREED JOURNAL PUBLICATIONS	1. Turgeon, M. , Oualkacha, K., Ciampi, A., Miftah, H., Dehghan, G., Zanke, B.W., Benedet, A.L., Rosa-Neto, P., Greenwood, C.M.T., Labbe, A., for the Alzheimer’s Disease Neuroimaging Initiative. “Principal component of explained variance: an efficient and optimal data dimension reduction framework for association studies”. To appear in <i>Statistical Methods in Medical Research</i> . doi:10.1177/0962280216660128	

2. Wang, Y., Murphy, O., **Turgeon, M.**, Wang, Z.Y., Bhatnagar, S.R., Schulz, J., and Moodie, E.E.M. “The perils of quasi-likelihood information criteria”, *Stat*, 4: 2015. doi:10.1002/sta4.95
3. Ahmad, O.S., Morris, J.A., Mujammami, M., Forgetta, V., Leong, A., Li, R., **Turgeon, M.**, Greenwood, C.M.T., Thanassoulis, G., Meigs, J.B., Sladek, R., and Richards, J.B. “A Mendelian randomization study of the effect of type-2 diabetes on coronary heart disease” *Nature Communications*, 6: 2015. doi:10.1038/ncomms8060

SUBMITTED
JOURNAL
PUBLICATIONS

1. **Turgeon, M.**, Grinek, S., Labbe, A., Greenwood, C.M.T. “An Empirical Estimate For Assessing Significance When Testing For Association Between Two Large Multivariate Datasets”. Submitted to *Annals of Applied Statistics*.

PAPERS IN
PREPARATION

1. **Turgeon, M.**, Foley, J.W., Labbe, A., Greenwood, C.M.T. “umi-dedup: A parametric clustering algorithm for the deduplication of tagged DNA sequencing reads”.
2. Grinek, S. and **Turgeon, M.** “Doubly singular Beta ensembles with applications to multivariate analysis”.
3. Bhatnagar, S., **Turgeon, M.** (co-primary author), Hanley, J., Saarela, O. “**casebase**: An Alternative Framework For Survival Analysis”.
4. **Turgeon, M.**, Bhatnagar, S.R., Saarela, O. “A novel approach to competing risk analysis using case-base sampling”.
5. **Turgeon, M.**. “Multi-precision linear algebra for computing largest root distributions using the **rootWishart** package”.

SCHOLARSHIPS
AND AWARDS

- Student Awards — McGill University
- SSC 2017 Student Research Presentation Award June 2017
 - Gerald Clavet Fellowship (declined) 2016-2017
 - Dr. Jim Hanley Research Day Award May 2016
 - FQRNT Doctoral Scholarship (\$20,000 per year) 2014-2016
 - McGill Graduate Excellence Award (\$10,000) 2013-2014
 - FQRNT Masters Scholarship (\$15,000 per year) 2011-2013
 - Thomlinson Masters’ Fellowship (\$5,500) 2011-2012
- Student Awards — University of Ottawa
- Linis Scholarship (\$1,000) 2011
 - NSERC Undergraduate Summer Research Award (\$4,500 - declined) 2010
 - Dean of Science’s Honour List 2008-2011
 - Admission Scholarship (\$2,500 per year, renewed twice) 2008-2011
 - Bourse de la Francophonie (\$2,500) 2008-2009
- Travel Awards
- Faculty of Medicine Graduate Mobility Award Nov 2017
 - Research stay at Stanford University
 - Ontario Baden-Württemberg Summer Research fellowship (\$3,500) 2010
 - Research stay at Universität Freiburg

PRESENTATIONS

- Invited presentations
- Maternal Adversity, Vulnerability, and Neurodevelopment (MAVAN) Methodology group, Montréal, QC Mar 2016
 - Montreal Genomics Meeting, Montréal, QC Dec 2015

Contributed presentations

- Statistical Society of Canada Annual Meeting, Montréal QC June 2018
 - Statistical Society of Canada Annual Meeting, Winnipeg MB June 2017
 - 5th Annual Canadian Statistics Student Conference, Winnipeg MB June 2017
 - Statistical Society of Canada Annual Meeting, St. Catherines, ON May 2016
 - EBOH Annual Research Day, Montréal, QC April 2016
 - 4th Annual Human and Statistical Genetics Meeting, Vancouver, BC Apr 2015
 - Biostatistics Reading Group, Montréal, QC Oct 2015
- Feb 2015, Mar 2014

Poster presentations

- EBOH 50th anniversary conference, Montréal, QC Apr 2015
- 4th Annual Human and Statistical Genetics Meeting, Vancouver, BC Apr 2015
- Statistical Society of Canada Annual Meeting, Toronto, ON May 2014

TEACHING
EXPERIENCE

Teaching Assistant

MATH323 - *Probability* Winter 2016

Department of Mathematics and Statistics,
University McGill

MATH240 - *Discrete Structures* Fall 2012, 2013

Department of Mathematics and Statistics,
University McGill

MATH134 - *Enriched Linear Algebra* Fall 2012

Department of Mathematics and Statistics,
University McGill

MATH141 - *Calculus II* Winter 2012, 2013

Department of Mathematics and Statistics,
University McGill

Grader

EPIB621 - *Data Analysis in the Health Sciences* Winter 2015

Department of Epidemiology, Biostatistics, and Occupational Health,
University McGill

MATH236 - *Algebra II* Winter 2013

Department of Mathematics and Statistics,
University McGill

MAT1541 - *Introduction à l'algèbre linéaire* Winter 2011

Department of Mathematics and Statistics,
University of Ottawa

Tutor

Mathematics and Statistics Help Center Fall 2010

Department of Mathematics and Statistics,
University of Ottawa

REVIEWING
EXPERIENCE

Journals

- International Journal of Epidemiology

Conferences

- Regina Qu'Appelle Health Region Annual Research Day
- Canadian Society for Epidemiology and Biostatistics Annual Meeting

OTHER ACADEMIC
ACTIVITIES

6th Annual Canadian Statistics Student Conference June 2018

Organisation Committee

- Co-chair of the Scientific Program Committee

- Statistical Society of Canada - Case study competition May 2016
 Department of Epidemiology, Biostatistics and Occupational Health
 McGill University
- Senior mentor to participating teams
 - Assist the competitors with the challenges involved in the competition
- Epidemiology, Biostatistics and Occupational Health Student Society Sep 2014-2016
 McGill University
- Representative for Biostatistics students
 - Represent the student's perspective on various departmental committees:
 - Programs committee
 - Biostatistics Programs Committee
 - Co-organize a departmental Methods Discussion Group
- Biostatistics Reading Group Sep 2014-Apr 2016
 McGill University
- Co-organizer
 - Invite faculty members and post-doctoral fellows to present their work
- Review Committee for the Department of Pathology Mar 2013
 McGill University
- Representative for the Post-Graduate Students' Society
 - Evaluate the academic, teaching, and clinical activities of the department
 - Present report and recommendations to the McGill Senate

SOFTWARE

R packages:

- `pcev`, implementing *Principal Component of Explained Variance*.
- `casebase`, implementing case-base sampling for survival analysis.
- `covequal`, implementing a test of equality of covariance matrices valid for high-dimensional data.
- `multiKernel`, implementing multivariate prediction using kernel-machine regression.
- `rootWishart`, implementing exact computations of largest root distributions in single and double Wishart settings.
- `funtooNorm`, providing functions for normalization of Illumina Infinium Human Methylation 450 BeadChip (Illumina 450K) data when samples are collected from multiple tissues or cell types.

Python modules:

- `umi-bayes`, providing tools for the analysis of tagged DNA sequencing reads and implementing the parametric clustering-based deduplication algorithm.

REFERENCES

- Celia M.T. Greenwood
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 McGill University
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