Curriculum Vitæ

Sahir Rai Bhatnagar

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1 Identification

Name: Sahir Rai Bhatnagar

Designations: Associate of the Society of Actuaries (ASA)
Address: Lady Davis Institute for Medical Research

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Citizenship: Canadian

Languages: English, French, Hindi

2 Education

2013–present | Ph.D. (Biostatistics)

McGill University, Montreal QC, Canada

Passed Theoretical Comprehensive Exam, May 2014) Passed Applied Comprehensive Exam, May 2015) McGill Graduate Excellence Award \$18,000

2012–2013 | Master of Science (Biostatistics)

Queen's University, Kingston ON, Canada

MSc project title: Absolute risk estimation in a case cohort study of prostate cancer

MSc Queen's Graduate Studies Award \$20,000

(GPA 3.94/4.3)

2005–2008 | Bachelor of Science (Actuarial Mathematics)

Concordia University, Montreal QC, Canada

3 Professional Examinations

2011 | Associate of the Society of Actuaries (ASA)

4 Experience

2014	Teaching Assistant, McGill University Inferential Statistics (EPIB 607)
2012-2013	Teaching Assistant, Queen's University Tutorial leader in calculus (MATH 121) Term and exam marker for numerical methods and actuarial mathematics
2012–2013	Research Assistant, McGill University Working with Dr. Andrea Benedetti in the Respiratory Epidemiology and Clinical Research Unit at McGill, where our research is focused on methods for correlated data, as well as developing an R package for the clustering of DNA fingerprint data
2008–2012	Actuarial Analyst, Aon Hewitt Preparation and verification of annual reports, financial reports, annual statements, valuation reports, budget projections, and pension costs for clients balance sheets. Re- sponsible for translation of pension plan status to clients

5 Publications

- 1. Wang Y, Murphy O, Turgeon M, Wang ZY, <u>Bhatnagar SR</u>, Schulz J, and Moodie EEM (2015) The perils of Quasi-likelihood Information Criteria. <u>Accepted in Stat.</u>
- 2. Sun J., <u>Bhatnagar SR</u>, Oualkacha K, Ciampi A, Greenwood CMT (2015) Joint analysis of multiple blood pressure phenotypes in GAW19 data by using a multivariate rare-variant association test. Accepted in *BMC Proceedings*.
- 3. Bhatnagar SR, Greenwood CMT, Labbe A (2015) Assessing transmission ratio distortion in extended families: a comparison of analysis methods. Accepted in *BMC Proceedings*.
- 4. Bhatnagar SR, Atherton J, Benedetti A (2014). Comparing alternating logistic regressions to other approaches to modelling correlated binary data. *Journal of Statistical Computation and Simulation*. doi:10.1080/00949655.2014.916707

6 Presentations

6.1 Invited conference/workshop presentations

2015/07/29	Bhatnagar SR: Atelier sur le logiciel en R: Un introduction à la programmation en R. GERAD: Groupe d'études et de recherche en analyse, Université de Montréal. Sponsored by HEC Montréal.
2015/05/28	Bhatnagar SR: Reproducible Research: An introduction to knitr. Department of Epidemiology, Biostatistics and Occupational Health, McGill University. Sponsored by the CRM Statistics Laboratory and the Montreal Biostatistics Seminar Series.
2015/04/19	Bhatnagar SR*, Houde A, Voisin G, Bouchard L, Blanchette M, Greenwood CMT: DNA methylation and Expression to predict childhood obesity. 4th Annual Canadian Human and Statistical Genetics Meeting, Vancouver, Canada.
2013/05/13	Bhatnagar SR: Introduction to LATEX. Queen's University, Department of Mathematics and Statistics.

 $[\]boldsymbol{*}$ indicates the person that gave the presentation

6.2 Poster Presentations

2015/04/19	Bhatnagar SR*, Houde A, Voisin G, Bouchard L, Blanchette M, Greenwood CMT: Integrating DNA Methylation and Gene Expression data in Placenta Tissue to Predict Childhood Obesity. 4th Annual Canadian Human and Statistical Genetics Meeting, Vancouver, Canada. \$1,000 Award for Best Poster
2014/08/24	Bhatnagar SR*, Greenwood CMT, Labbe A: Transmission Ratio Distorition in Extended Families. Genetic Analysis Workshop 19, Vienna, Austria.
2014/08/25	Sun J, Bhatnagar SR*, Oualkacha K, Ciampi A, Greenwood CMT: Joint analysis of multiple blood pressure phenotypes in GAW19 data by using a multivariate rare-variant association test. Genetic Analysis Workshop 19, Vienna, Austria.
2014/05/26	Bhatnagar SR*, McGregor K*, Turgeon M*: Effect of economy on TV time use. 42nd Annual Meeting of the Statistical Society of Canada, Toronto, Ontario.

6.3 Seminar Presentations

2015/08/12	Bhatnagar SR: Introduction to knitr and R Markdown. Montréal UseR Group, Notman House, Montréal.
2015/03/12	Bhatnagar SR: Imputing the Epigenome. Lady Davis Institute, Montreal Jewish General Hospital.
2015/03/05	Bhatnagar SR: Making sense of Methylation & Expression data in Cordblood and Placenta Tissues. Lady Davis Institute, Montreal Jewish General Hospital.
2014/04/07	Bhatnagar SR: Estimation and Accuracy after Model Selection by Bradley Efron. Department of Mathematics and Statistics, McGill University.
2014/01/23	Bhatnagar SR: Reproducible Research and Biostatistics. Biostatistics Reading Group, McGill University.
2014/08/07	Bhatnagar SR*, Greenwood CMT, Labbe A: Transmission Ratio Distortion in Extended Families. Lady Davis Institute, Montreal Jewish General Hospital.
2013/08/30	Bhatnagar SR: Absolute Risk Estimation in a Case Cohort Study of Prostate Cancer. Department of Mathematics and Statistics, Queen's University.
2013/03/06	Bhatnagar SR: Colorectal Cancer Screening in Visible Minorities in Canada. Department of Public Health Sciences, Queen's University.
2012/11/27	Bhatnagar SR: Computational Methods for the Case-Cohort Design. Department of Public Health Sciences, Queen's University.

7 Technical Skills

R SAS L⁴TEX Microsoft Office suite Unix/Linux operating system, Bash Shell Script GitHub, Jekyll

8 Volunteer Experience

2010--Present

Math Teacher, Aditya Youth Trust Fund

Teaching mathematics to a group of elementary and high school students who are financially under resourced. Motivate and inspire students to place a high value on education while promoting wholesome social involvement, and to encourage them to achieve their maximum potential

2011 - 2013

MAB - Mackay Rehabilitation Center

Working with elderly patients diagnosed with Retinitis Pigmentosa. Accompaniment to perform everyday tasks that would be difficult to do independently such as grocery shopping, banking transactions, and outdoor activities