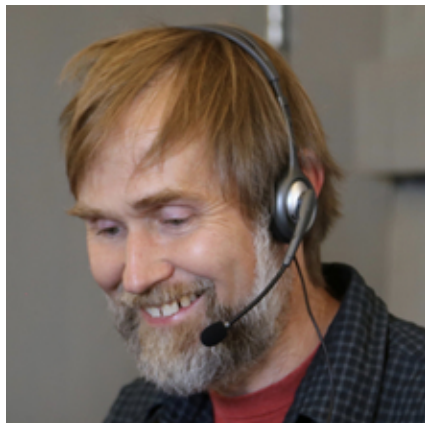


Message from the President



As members of the SSC, you probably know that we have a Board of Directors. But what does the Board actually do? Quite a lot, it turns out! In this column, I'll try to give you some information on the Board, what they do, and a snapshot of recent activities.

Who are your Board?

The **Board consists** of 14 Regional Representatives and an 7-person Executive. All 21 are elected by the general membership of the society. The Board meets three or more times a year (in October and May or June, and via teleconference in the winter).

Others who are not members of the Board are also invited to attend Board meetings:

- Executive Assistant (our only paid employee)
- Appointed officers (currently 7, including Executive Director and Electronic Services Manager)
- Local arrangements chairs and program chairs of the 2017 and 2018 annual meeting
- presidents of the 7 sections and 3 regional associations
- chairs of 32 committees

Not everyone among these invitees attends in person. All are asked to submit reports summarizing the activities of their respective groups and suggesting action that the Board might take.

What does your Board do?

The Board is responsible for governing the Statistical Society of Canada. Board members are accountable for the SSC's performance in relation to its mission and strategic objectives, and for the effective stewardship of financial and human resources. The Board also oversees SSC's compliance with its own governing documents and federal, provincial and municipal laws and regulations. I am

impressed by the thoughtfulness and dedication of our Board as they carry out these important responsibilities.

Our Executive Secretary, Llewellyn Armstrong, is compiling a FAQ for Board members and others attending the Board meeting, describing in greater detail how the Board works. Look for it on our website in the coming months.

So, what happened at the most recent Board meeting?

On October 21 and 22, the Board of Directors met in Montreal. We managed to work on many items in a full agenda. The pdf information package provided to Board members prior to the meeting weighed in at over 200 pages (!), representing the diverse interests and activities of the society.

In no particular order, here are some items that were discussed:

Peter MacDonald, the Electronic Communications Manager, recommended that the ECM position is no longer necessary, due to evolving roles of the Electronic Services Manager, Public Relations Officer and the changing nature of our communications. Peter has served the SSC in this role since 2013, and will continue to be active in improvements made to the curation of historical material on our website.

An Accreditation Task Force, formed after the June Board meeting, is examining possible changes to the organizational structure of the Accreditation Committee and the Accreditation Services Committee. The task force hopes to bring a proposal to the Board in Winter 2018.

The 2018 Budget was approved. Board members actively discussed components of the budget, including the 2018 annual meeting, the 2018 student conference, section budgets, and proposals for specific projects coming from several committees (Accreditation, Accreditation Services, New Investigators, Students and Recent Graduates, Census @ School and Membership)

Guidelines on “implicit bias” were suggested by the Awards Committee and approved by the Board. These guidelines for award nomination and selection strive to increase diversity in award winners and reduce the effect of unconscious, unintentional assumptions on judgements. Although developed with awards in mind, similar principles can be considered when selecting individuals in other contexts, such as election to the Board.

As part of ongoing efforts to improve our financial policies, the Board approved a new policy that large payments require two signatures. The Board received feedback from our auditor in June that this and other issues should be addressed. The Board can expect additional improvements to financial policies, procedures and reporting in 2018.

The Board approved plans to have a job fair at the 2018 Annual Meeting in Montreal. Organized by the membership committee, it will be the first job fair in over a decade.

Other items discussed include approval of the location of the 2019 annual meeting (in Calgary), the final financial statement of the 2017 annual meeting, a contract with a new web development company, the ongoing transition of Liaison to an electronic newsletter, plans for fundraising (investigating an endowment and soliciting project proposals for support with donations), new operating policies and procedures, renewal of the CJS contract, and approval of 2 new P.Stat. and 3 new A.Stat. members.

As you can see, your Board is working hard on the affairs of the society. If you have a chance to talk with your regional representative or other Board member, I encourage you to do so. The Board (including myself) are ultimately responsible to the membership of the society, and welcome your thoughts.



Coming Attractions of The Canadian Journal of Statistics: 2017 Issue 4



In the final issue of 2017, *The Canadian Journal of Statistics* presents eight papers covering topics on time series, nonparametric regression models, two-stage cluster sampling, current status data, and missing observations.

Gaussian mixtures of autoregressive models are useful for explaining the heterogeneous behaviour of time series. One important task is to infer the number of autoregressive regimes and the autoregressive orders. Information-theoretic criteria such as AIC or BIC are commonly used for such inference, and they typically evaluate each regime/autoregressive combination separately in order to choose an optimal model. However, the number of combinations can be too large to make such an approach computationally infeasible. To handle this issue, KHALILI, CHEN and STEPHENS develop a **computationally efficient regularization method for simultaneous autoregressive-order and parameter estimation when the number of autoregressive regimes is predetermined**. They propose a regularized Bayesian information criterion (RBIC) to select the number of regimes.

The second paper concerns the analysis of time series with limited or censored data. Practitioners commonly disregard the censored observations or replace them with some function of the limit of detection. However, this treatment usually results in biased estimates. Motivated by this, SCHUMACHER, LACHOS and DEY propose an **analytically tractable and efficient stochastic approximation of the EM algorithm to obtain the maximum likelihood estimates of the parameters of censored regression models with autoregressive errors**. The authors also develop an R package, “ARCensReg,” for the implementation of their method.

The next two papers deal with incomplete data that have missing observations or are interval-censored. MORIKAWA, KIM and KANO consider a **problem with data that are missing not at random (MNAR)**. Handling MNAR data often requires two types of modelling, one for the outcome and the other for the response propensity; correctly specifying these two models is often difficult. Consequently, the authors propose a semiparametric maximum likelihood method for analyzing MNAR data where a parametric model is used for the response propensity and a nonparametric model is

used for the outcome part. The resulting analysis is more robust than the fully parametric approach.

Focusing on bivariate current status or case I interval-censored failure time data, HU, ZHOU and SUN propose a **sieve maximum likelihood estimation approach under copula models where marginal proportional hazards models are assumed**. The proposed method leaves the underlying copula model completely unspecified and can be easily implemented. The authors establish that the proposed estimators are strongly consistent and have the asymptotic normality property.

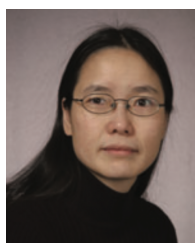
The next two articles consider problems of nonparametric regression. ZAMBOM and KIM develop a new method to **test for heteroscedasticity in a multiple nonparametric regression model**. The test statistic is based on a high-dimensional one-way ANOVA constructed with the absolute value of the residuals, and its asymptotic distribution is derived under the null hypothesis of homoscedasticity and local alternative. The properties of the proposed test statistic are preserved when a correctly specified parametric mean function is used to obtain the residuals.

To analyze multi-curve data, DE SOUZA, HECKMAN and XU examine a **switching nonparametric regression model where each curve is driven by a latent state process**. The state at any particular point determines a smooth function, forcing the individual curve to “switch” from one function to another. They develop an EM algorithm to estimate the model parameters and also obtain standard errors for the parameter estimates of the state process. They focus on three types of hidden states: those that are independent and identically distributed, those that follow a Markov structure, and those that are independent but with distribution depending on some covariates.

In the seventh paper, HOLMQUIST and GUSTAFSSON present a **likelihood-based test for clustering among subpopulation mean directions for circular data**. The test is based on a two-level hierarchical model with von Mises distributed variation on each level. The properties of the tests are investigated and compared to the commonly applied techniques of second-order analysis and pseudo-pooling of directions.

In the final article, KIM, PARK and LEE consider **informative cluster sampling with generalized linear mixed models**. When a sample is obtained from a two-stage cluster sampling scheme with unequal selection probabilities, the sample distribution can differ from that of the population and the sampling design can be informative. The authors propose an estimation approach for the model parameters using the EM

algorithm. To avoid using the intractable sample likelihood function, they use a normal approximation for the sampling distribution of the profile pseudo maximum likelihood estimator for the random effects in the level-one model.



Enjoy the new issue!

Grace Y. Yi

CJS Editor

2018 Awards of the SSC : Call for nominations

Every year, the SSC recognizes excellence in our community by giving numerous awards. To do this, the various award committees must receive nominations from members like you! Consider preparing nominations for deserving candidates now as the deadlines for submitting nominations are approaching.

The deadline for the Gold Medal, Honorary Membership, Distinguished Service Award, Pierre Robillard Award and the SSC Award for Impact of Applied and Collaborative Work is **January 31, 2018** while it is **February 1, 2018** for the CRM-SSC Prize in Statistics.

The Lise Manchester Award is given in alternate years and will be awarded in 2018. The deadline for nominations is **February 15, 2018**, for work published or completed between December 31, 2012 and December 31, 2017.

For the Student Research Presentation Awards, the deadlines are **February 15, 2018**.

SSC members are also encouraged to nominate deserving candidates for the five awards sponsored by the Committee of Presidents of Statistical Societies (COPSS).

Details concerning all of these awards and how to nominate a candidate, can be found in the **September issue of Liaison**. The Board recently approved a **document providing guidelines** to nominators and award committee members for avoiding implicit bias in the selection of award winners.

Please take the time to think about deserving candidates and submit nominations to help us celebrate excellence among our colleagues and students!

Brian Allen

SSC AWARDS COMMITTEE

Brian Allen (Chair), *University of Guelph*

Debbie Dupuis, *HEC-Montréal*

Sylvia Esterby, *University of British Columbia-Okanagan*

Jack Gambino, *Statistique Canada*

Jeffrey Rosenthal, *University of Toronto*

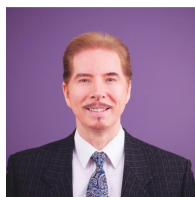
Román Viveros-Aguilera, *McMaster University*

Francis Zwiers, *University of Victoria*

News From Western



Serge Provost received a Best Presentation Award from the World Academy of Science, Engineering and Technology for a paper entitled ‘An Extension of the Generalized Extreme Value Distribution’, which he presented at the 19th International Conference on Computational and Applied Mathematics, held last June in New York City. He joined the Department of Statistical and Actuarial Sciences at the University of Western Ontario while completing his Ph.D. degree in Mathematics and Statistics at McGill University. Professor Provost is an Associate of the Society of Actuaries and a Fellow of the Royal Statistical Society.



Dr. Provost's research has been continuously supported by the Natural Sciences and Engineering Research Council of Canada since the beginning of his professional career. In 2010, he chaired NSERC's Scholarship and Fellowship Selection Committee for the

Mathematical Sciences. He is the author or co-author of three research monographs and some one hundred scholarly articles, and according to ResearchGate, he has consistently achieved top statistics in his department over the past few years. As well,

he has been the recipient of three University Teaching Awards of Excellence. He has supervised twelve doctoral dissertations and forty some Master's projects addressing a wide array of topics of relevance in the fields of Actuarial Science, Financial Modelling, Distribution Theory and Data Analytics.

Probability Section Update

The Probability Section is pleased to announce a workshop and the speakers in its four invited sessions for the 2018 SSC Annual Meeting in Montréal.

WORKSHOP:

Aaron Smith of the University of Ottawa will run a workshop titled *Introduction to Monte Carlo Methods*. To quote from the abstract “This workshop will give an introduction to various Monte Carlo methods, with a bias towards problems and algorithms that might contain some interest for probabilists and mathematical statisticians.” We are very pleased to have Aaron running this workshop.

INVITED SESSIONS AND TENTATIVE SPEAKERS:

- **Limit Order Book Modeling**

Organized by: Anatoliy Swishchuk, University of Calgary

- Bruno Rémillard, HEC Montréal
- Claude Simard, Université du Québec à Montréal
- Anatoliy Swishchuk, University of Calgary

- **Distribution-free testing for discrete distributions**

Organized by: Priscilla Greenwood, University of British Columbia

- Estate Khmaladze, Victoria University of Wellington, NZ
- Hira Koul, Michigan State University

- **Probabilistic Aspects of Reliability Theory and Applications**

Organized by: N. Balakrishnan, McMaster University

- Nozer Singpurwalla, Hong Kong City University, Hong Kong
- Maxim Finkelstein, University of the Free State, South Africa
- Olivier Gaudoin, Institut Polytechnique de Grenoble, France

- **Limit Theorems in Change-Point Analysis**

Organized by: Yuliya Martsinyuk, University of Manitoba

- Miklos Csörgő, Carleton University
- Bruno Rémillard, HEC Montréal
- Greg Rice, University of Waterloo

We are grateful to the organizers of the sessions for continuing to promote the diversity and depth of the Canadian probability community.

Again this year the Probability Section will be sponsoring student competitions for talks and poster presentations at the annual SSC meeting. More details about the 2018 competitions will be announced soon. Please contact Neal Madras at madras@mathstat.yorku.ca for further information.

We look forward to continuing the tradition of a Probability Section dinner on the Monday evening of the SSC meeting. We encourage as many members as possible to join us for this enjoyable evening.

Richard Lockhart
President, Probability Section

New Accreditations of the SSC

It is with great pleasure that the Board of the Statistical Society of Canada (SSC) awarded the P.Stat. or A.Stat. designation to the following individuals.

Two levels of accreditation, the Professional Statistician (P.Stat.) and the Associate Statistician (A.Stat.), are offered by the SSC. The qualification of A.Stat. is intended

to indicate that the holder has completed a course of study equivalent to a major or honours degree in statistics, or in exceptional instances, has otherwise demonstrated an advanced understanding of statistical theory and its application. The qualification of P.Stat. is intended to indicate that the holder has the necessary academic qualifications and a minimum of six years of professional experience in the application of statistics. See also: **How to apply.**

P. Stat. #181

Erik Youngson



Erik currently works as a Biostatistician with the Strategy for Patient Oriented Research (SPOR) Data Platform at Alberta Health Services / University of Alberta. Primary responsibility is working with investigators to answer medical research questions utilizing provincial administrative health databases. Previous positions include Methodologist at the Ottawa Hospital Research Institute (OHRI) and Senior Analyst at Cancer Care Ontario (CCO).

Education:

2006, MMath, Biostatistics University of Waterloo

2005, BSc (Honours), Statistics & Mathematics, University of Winnipeg,

Current Position:

Biostatistician, Health Research Methods and Analytics / SPOR Data Platform, Alberta Health Services / University of Alberta

erik.youngson@ualberta.ca

P.Stat. #182

Fritz Pierre



Fritz currently works as Assistant Director, Analyses and Data Quality at Elections Canada. His primary responsibility is planning and coordinating the design, development and implementation of statistical research and survey methods for studies conducted or commissioned by Elections Canada. He started his career at Statistics Canada, where he worked for more than eight years as a Methodologist statistician. He contributed to the implementation of several surveys, including the Canadian Community Health Survey. Fritz has collaborated with several researchers as a complex survey data analysis consultant. His main area of interest lies in estimating variance in complex survey data models. He holds an MSc in Statistics from the University of Montreal.

Education:

2001, MSc Statistics, University of Montreal,

1997, BSc, Mathematics (Actuarial Science), University of Montreal

Current Position:

Assistant Director – Assistant Chief Methodologist, Elections Canada

fritz.pierre@elections.ca

A.Stat. #125**Janice Tang**

Janice is the Digital Analyst of the planning department at an advertising agency. She has an extensive background in analytics with Majors in Statistics and Analytical Chemistry. During undergrad, she collaborated with researchers at the University of Toronto to experimentally design and manage research projects in a variety of disciplines, including Public Health, Environment and Evolution, and Ecology. Her interest lays in finding new approaches in statistical modeling, big data and machine learning. Currently, she uses her background in research for business analysis, developing research methodologies in the digital space and providing data driven insights for strategic planning.

Education:

2014, B.Sc., Statistics and Chemistry, University of Toronto

Current Position:

Digital Analyst

janice.tang766@gmail.com

www.janice-tang.com

A.Stat. #126**Kathryn Morrison**

Kathryn's training is in biostatistics, epidemiology, and geography. She finished her PhD in February 2017. She currently splits her time between three major roles: as a private statistical consultant, as a post-doctoral researcher at McGill University with Dr. Robert Platt, and as a research analyst at the University of Montreal with Dr. Kate Zinszer. Methodologically, Kathryn is interested in spatio-temporal statistics, Bayesian computation, and modern approaches to data visualization. Substantively, she has worked in environmental health, infectious disease, and pharmaco-epidemiology. She loves the range of applications that being a methodologist has allowed her to dabble in. She is an avid R programmer and believes strongly in the principles of transparency and reproducibility in research and analysis.

Education:

2017, PhD, Epidemiology, McGill University

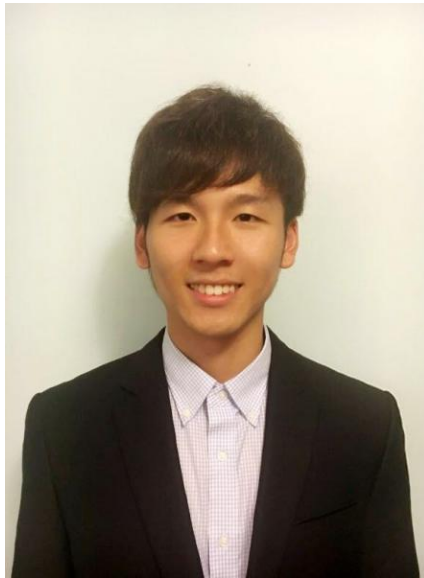
2011, MSc, 2011, Geography, University of Victoria

2009, BSc, Geography (major), statistics (minor), University of Victoria

Current Position:

Post-doctoral researcher, McGill University

morrison.kathrynt@gmail.com

A.Stat. #127**Ruochen Chen**

Ruochen is a recent graduate from the specialist program in Applied Statistics with extensive research and data analysis experience, and also with a strong background in modelling techniques, programming, and algorithms. He also has superb communication skills with the ability to explain technical concepts to a non-technical audience.

Education:

2017, BSc (Honors) , Specialist - Applied Statistics with Focus in Social Psychology, University of Toronto,

samc.uoft@gmail.com

www.linkedin.com/in/ruochen-sam-chen-918851105/

2018 SSC Elections

The Election Committee hereby publishes a list of candidates for positions on the SSC Executive and Board of Directors that will become vacant on July 1, 2018. In addition, candidates for positions on the executives of the Sections and on the Accreditation Program Committees are provided. Biographical sketches for all these candidates will appear later in *Liaison*. Additional nominations must be supported by

at least five individual members in good standing; they must be submitted in writing and received by the Chair of the Election Committee on or before **January 15, 2018**.

MEMBERS OF THE EXECUTIVE COMMITTEE (Three-year Terms)

PRESIDENT-ELECT [President, 2019-20; Past President, 2020-21]

Bruce Smith, Dalhousie University

EXECUTIVE SECRETARY

Llwellyn Armstrong, Ducks Unlimited

REGIONAL REPRESENTATIVES ON THE BOARD OF DIRECTORS (Two-Year Terms)

ATLANTIC PROVINCES (One To Be Elected)

Candemir Cigsar, Memorial University of Newfoundland

Henrik Stryhn, University of Prince Edward Island

QUÉBEC (Two To Be Elected)

Thierry Duchesne, Université Laval

Cody Hyndman, Concordia University

Marc Simard, Institut national de santé publique du Québec (INSPQ)

ONTARIO (Two To Be Elected)

Lorna Deeth, University of Guelph

Michael McIsaac, Queen's University

Xu (Sunny) Wang, Wilfrid Laurier University

MANITOBA - SASKATCHEWAN - NORTHWEST TERRITORIES - NUNAVUT (One To Be Elected)

Katherine Davies, University of Manitoba

Cindy Feng, University of Saskatchewan

ALBERTA - BRITISH COLUMBIA - YUKON (One To Be Elected)

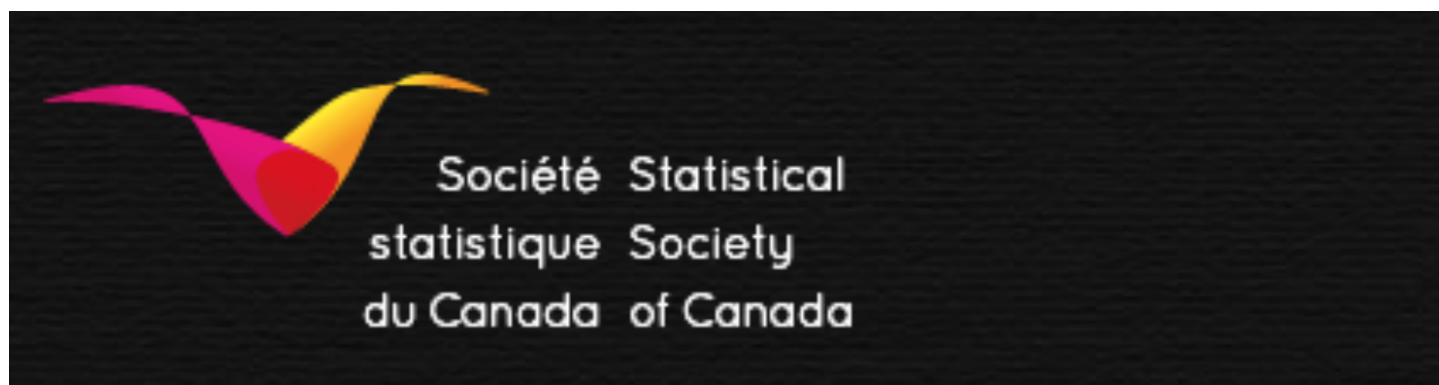
Karen Kopciuk, University of Calgary

Jason Loeppky, University of British Columbia, Okanagan

SECTION EXECUTIVES (Three-year Terms)

ACTUARIAL SCIENCE SECTION EXECUTIVE**PRESIDENT-ELECT** [President, 2018-19; Past President, 2019-20]**David Landriault**, University of Waterloo**TREASURER****Jean-François Bégin**, Simon Fraser University**BIOSTATISTICS SECTION EXECUTIVE****PRESIDENT-ELECT** [President, 2019-20; Past President, 2020-21]**Lei Sun**, University of Toronto**TREASURER / TRÉSORIER****Eleanor Pullenayegum**, Child Health Evaluative Sciences, Toronto**BUSINESS AND INDUSTRIAL STATISTICS SECTION EXECUTIVE****PRESIDENT-ELECT** [President, 2019-20; Past President, 2020-21]**Ryan Browne**, University of Waterloo**PROBABILITY SECTION EXECUTIVE****PRESIDENT-ELECT** [President, 2019-20; Past President, 2020-21]**Jean Vaillancourt**, HEC Montréal**STATISTICAL EDUCATION SECTION EXECUTIVE****PRESIDENT-ELECT** [President, 2019-20; Past President, 2020-21]**Sotorios Damouras**, University of Toronto**SURVEY METHODS SECTION EXECUTIVE****PRESIDENT-ELECT** [President, 2019-20; Past President, 2020-21]**Kim Huynh**, Bank of Canada**TREASURER** (Two-year term; 2018-20)**Christian Nambeau**, Statistics Canada**ACCREDITATION PROGRAM COMMITTEES** (Three-year terms)**ACCREDITATION COMMITTEE** (Four to be elected)**Jeff Bakal**, University of Alberta**Beatrice Baribeau**, Statistics Canada**Ruth Croxford**, Institute of Clinical Evaluative Sciences**Soyean Kim**, Technical Safety BC**Alberto Nettel-Aguirre**, University of Calgary

ACCREDITATION APPEALS COMMITTEE (Two to be elected)**Neil Arnason**, University of Manitoba**Yogendra Chaubey**, Concordia University**Lennon Li**, Public Health Ontario**THE SSC ELECTION COMMITTEE 2017-18****Jack Gambino** (Chair), Statistics Canada**Sylvia Esterby**, UBC Okanagan**Christian Genest**, McGill University**Cyntha Struthers**, University of Waterloo**François Bellavance**, HEC Montréal**Sheldon Lin**, University of Toronto**Neal Madras**, York University**Matthias Schonlau**, University of Waterloo**Jim Stallard**, University of Calgary**Grace Yi**, University of Waterloo

Call for Education and Outreach Proposals

Do you have an idea for advancing the goals of the SSC to promote statistics and probability to students and educators, or to help students and young researchers develop careers in the statistical sciences?

The SSC Board will award between \$500 and \$5000 from donated funds for the best proposals received by January 31, 2018. In your proposal, please provide:

- your idea and a rationale, explaining how it fits with the mission of the SSC
- who will implement the project and how it will be implemented
- a detailed timeline

- who will be responsible for administering and reporting on the project
- a detailed budget with justification.

Send your proposal by January 31, 2018 to Mary Thompson at methomps@uwaterloo.ca.

Mary Thompson
Chair of the SSC Fundraising Committee

McGill Summer School in Health Statistics



Erica E. M. Moodie (Biostatistics), Alexandra M. Schmidt (Biostatistics), and David A. Stephens (Mathematics and Statistics) are organizing a **Summer School in Health Statistics** at McGill University during the week of May 28-June 01, 2018, to be held the week before the SSC meeting in Montreal. This activity is linked to McGill's new **CANSSI Health Statistics training network**

The school will have daily short courses covering a wide variety of topics:

- Analysis of Administrative Health Care Data (**Robert Platt**)
- Introduction to Survival Analysis (**James A. Hanley**)
- Flexible Modeling of Survival Data: Challenges, Methods, and Applications (**Michal Abrahamowicz**)
- An Introduction to Causal Inference and Propensity Score Methods (**Erica Moodie** and **David A. Stephens**)
- An Introduction to Bayesian Inference and MCMC (**David A. Stephens**)
- A tutorial on Alternating Direction Method of Multipliers (ADMM) Algorithms (**Yi Yang**)
- Analysis of Spatially Structured Data (**Alexandra M. Schmidt**)

The courses will be tailored towards senior undergraduates and MSc students who may be interested in learning about the topics taught and research undertaken at the graduate level at McGill University.

New Investigator Presentation Award at SSC 2018



Debuting at the 2018 SSC Annual Meeting is the **New Investigator Presentation Award** for contributed talks given by New Investigators. Entries will be judged on the quality of both the presentation and the underlying research. The award consists of a certificate and a cash prize.

To be eligible for the award the presenter must be within 5 years of beginning their first academic appointment, and within 10 years of completing their PhD program. Presentations based on joint work with a collaborator who does not fit the definition of a New Investigator are eligible, as long as the New Investigator presents the work.

To enter, the New Investigator must:

- Submit the abstract of the contributed talk through the meeting website
- Indicate at the time of submission of the abstract in the space provided on the meeting website that they wish to be considered for the award;

- Email to sscnewinvest@ssc.ca the date they obtained their PhD and the date they began their first academic appointment, so that their eligibility can be confirmed.

Thank you in advance for your interest!

Nathaniel Stevens
Chair, New Investigators Committee

First Announcement of Job Fair at the 2018 SSC Annual Meeting



The SSC with involvement of the ASSQ will host an onsite Job Fair at the 2018 Annual Meeting in Montreal. This first short notice comes to alert job seekers so they can plan attendance.

SSC institutional members and employers of SSC Accredited members will be recognized with reduced participation costs. Participation details for both job seekers and employers will follow in the next *Liaison* newsletter, and be announced over the email list d-ssc.

Judy-Anne Chapman (2018 Job Fair Coordinator, SSC Committee on Membership, jachapma@aol.com),
Bouchra Nasri (ASSQ representative)
Gabrielle Simoneau (Local Arrangements Committee representative)

Advertisement: Post-doctoral fellow in health economic and health services research; BC Centre for Excellence in HIV/AIDS



Location: Vancouver, British Columbia, Canada

Health Economic Research Unit
 BC Centre for Excellence in HIV/AIDS
<http://www.cfenet.ubc.ca/research/heru>

The BC Centre for Excellence in HIV/AIDS is seeking a postdoctoral fellow to join the Health Economic Research Unit (BCCfE, HERU program) on a 2-year term, with potential for extension.

Applicants should have recently acquired a PhD in economics, statistics, mathematics/operations research, health services research or a related quantitative discipline. A successful applicant should possess demonstrated experience in health economic evaluation and/or econometric analysis; strong quantitative skills, including experience and proficiency using SAS, STATA, R or similar software packages; an aptitude for working collaboratively to meet team and organizational goals; and strong potential for research productivity, securing grant funding and developing an independent research agenda within the BCCfE, HERU program. The successful candidate will receive additional training in a wide range of research methods, while contributing substantially to the development and execution of cutting-edge health economic research.

The position entails collaborating with the BCCfE, HERU program lead research scientist, Dr. Bohdan Nosyk, and HERU team members in high-value health economic research projects. Specific tasks include leading or contributing to cost-effectiveness analyses, conducting econometric and statistical analyses of health administrative data, preparing manuscripts; presenting research findings at conferences; developing research proposals; and other related activities.

The Health Economic Research Unit at the BC Centre for Excellence in HIV/AIDS is a multidisciplinary team of health economists, statisticians and public health researchers engaged in an international portfolio of leading-edge health economic and health services research projects focusing primarily in HIV/AIDS, substance use disorders and viral hepatitis. BCCfE, HERU program offers outstanding research opportunities, with access to world-class linked administrative databases; a breadth of methodological skills; and a focus on maximizing health outcomes for marginalized populations. BCCfE, HERU program is integrated within the various units of the BCCfE as well as a number of local and provincial stakeholders and policymakers.

Key projects which the successful applicant may be involved in include:

- **The Localized Economic Modelling project in HIV/AIDS:** Funded by an R01 grant from the National Institutes of Health-National Institute on Drug Abuse, this project aims to develop a novel economic modelling framework to identify optimal combination implementation strategies for six US cities. The project builds upon a validated economic model with an aim to produce rapid, automated

evidence synthesis, integrating findings from emerging public health interventions into real-time disease surveillance systems.

- **Vancouver's Downtown Eastside 2nd Generation Strategy (2GS) Evaluation:** This project represents a comprehensive, multidimensional, and patient-centered evaluation of Vancouver's Downtown Eastside (DTES) health care delivery strategy, which focuses improving access to high-quality integrated care for people with multiple concurrent disorders living in Vancouver's most impoverished neighborhood. The project is currently funded by the Canadian Institutes of Health Research, the Michael Smith Foundation for Health Research and the Vancouver Coastal Health Authority.
- **Seek and Treat for the Optimal Prevention of HIV/AIDS (STOP HIV/AIDS):** Funded primarily by the BC Ministry of Health, STOP HIV/AIDS is a province-wide initiative to expand access to HIV testing, care, and treatment for all BC residents, particularly among vulnerable populations. BCCfE, HERU program leads several projects to evaluate the economic and public health impact of this ongoing initiative, which is supported by a comprehensive province-wide linked administrative database of people living with HIV in British Columbia.

The BC-CfE is a world renowned HIV/AIDS research centre with an integrated set of research concentrations in Laboratory Sciences, Clinical Trials, Population Health and Epidemiology, Urban Health, Gender and Sexual Health, Health Economics and Professional Education Programs. A multidisciplinary team of Health Economists, Epidemiologists, Clinical Researchers, Statisticians, Programmers, and Data Analysts work collaboratively within these research concentrations to improve the health of British Columbians with HIV through the development, ongoing monitoring and dissemination of comprehensive research and treatment programs for HIV and related diseases.

The BCCfE offers competitive salary rates, commensurate with qualifications and experience. Employee benefits include medical, dental, as well as accrued vacation and sick time.

Applicants will be considered on a rolling basis until the position is filled.

Submit CV & a brief cover letter highlighting experience and research interests, including recent published peer reviewed papers, to:

Human Resources Coordinator
BC Centre for Excellence in HIV/AIDS
608-1081 Burrard Street
Vancouver, BC
V6Z 1Y6
E-mail: hr@cfenet.ubc.ca

Advertisement: STATISTICIAN | HERU

***Please note:** Only Canadian Citizens, legal residents or residents with a legal work permit will be considered.*

STATUS: This is a full time position

JOB START DATE: As soon as possible

SALARY: The BCCfE offers competitive salary rates, commensurate with qualifications and experience.

LOCATION: BC Centre for Excellence in HIV/AIDS (BCCfE), St. Paul's Hospital, Vancouver, British Columbia, Canada

JOB: The successful candidate will conduct statistical analyses for the Health Economic Research Unit (HERU) at the BCCfE. BCCfE, HERU program, led by Dr. Bohdan Nosyk, is a multidisciplinary team of statisticians, health economists and public health researchers engaged in an international portfolio of leading-edge health economic and health services research projects focusing primarily in HIV/AIDS, substance use disorders and viral hepatitis. BCCfE, HERU program offers outstanding research opportunities, with access to world-class linked administrative databases; a breadth of methodological skills; and a focus on maximizing health outcomes for marginalized populations. BCCfE, HERU program is integrated within the various units of the BCCfE as well as a number of local and provincial stakeholders and policymakers.

Specific tasks include leading or contributing to statistical analyses of health administrative data; preparing manuscripts; presenting research findings at conferences; supporting the development of research proposals and other related activities.

Key projects which the successful applicant may be involved in include:

- **Vancouver's Downtown Eastside 2nd Generation Strategy (2GS) Evaluation:** This project represents a comprehensive, multidimensional, and patient-centered evaluation of Vancouver's Downtown Eastside (DTES) health care delivery strategy, which focuses improving access to high-quality integrated care for people with multiple concurrent disorders living in Vancouver's most impoverished neighborhood. The project is currently funded by the Canadian Institutes of Health Research, the Michael Smith Foundation for Health Research and the Vancouver Coastal Health Authority.
- **Seek and Treat for the Optimal Prevention of HIV/AIDS (STOP HIV/AIDS):** Funded primarily by the BC Ministry of Health, STOP HIV/AIDS is a province-wide initiative to expand access to HIV testing, care, and treatment for all BC residents, particularly among vulnerable populations. BCCfE, HERU program leads several projects to evaluate the economic and public health impact of this ongoing initiative, which is supported by a comprehensive province-wide linked administrative database of people living with HIV in British Columbia.
- **The Localized Economic Modelling project in HIV/AIDS:** Funded by an R01 grant from the National Institutes of Health-National Institute on Drug Abuse, this project aims to develop a novel economic modelling framework to identify optimal combination implementation strategies for six US cities. The project builds upon a validated economic model with an aim to produce rapid, automated evidence synthesis, integrating findings from emerging public health interventions into real-time disease surveillance systems.

JOB RESPONSIBILITIES:

- General statistical and epidemiological analysis
- Maintaining confidentiality in dealing with all matters
- Demonstrate practical collaborative experience

JOB QUALIFICATIONS:

- Master's degree in biostatistics or statistics

- Understanding of epidemiological methods
- Knowledge of Oracle programming an asset
- Expertise in statistical packages – SAS, S-plus/R
- Expertise in statistical techniques – longitudinal, hierarchical, time-to-event analysis, among others
- Knowledge of epidemiological and health services research methods – methods for inference in experimental and non-experimental settings; methods for analysing health administrative databases
- Ability to work independently and collaboratively to meet team and organizational goals
- Excellent problem solving and communication skills
- Assist researchers in writing grant applications and manuscripts
- Ability to work in Microsoft Office

ORGANIZATION: The BC-CfE currently employs a team of Statisticians, Programmers, Data Managers, Clinical Research Assistants, Health Economists, Data Analysts and Data Entry Clerks who work collaboratively on population-level and cohort-based studies to improve the health of British Columbians with HIV through the development, ongoing monitoring and dissemination of comprehensive research and treatment programs for HIV and related diseases.

BENEFITS: Employee benefits include medical, dental, as well as accrued vacation and sick time

Please include in your letter of submission:

- Curriculum Vitae
- Recent published peer reviewed papers if applicable
- Experience and interests

CONTACT:

Human Resources Coordinator
BC Centre for Excellence in HIV/AIDS
608-1081 Burrard Street
Vancouver, BC
V6Z 1Y6
E-mail: hr@cfenet.ubc.ca

APPLICATION DEADLINE: Applicants will be considered on a rolling basis until the position is filled.
