Message from the president



Société Statistical statistique Society du Canada of Canada

As indicated in recent emails, the 2020 SSC Annual Meeting has been cancelled due to the Covid-19 epidemic.

All registration fees for the SSC conference and the allied CSSC conference are being <u>refunded in full</u>. The CSSC 2020 has transitioned to an <u>online conference</u> hosted through Zoom and registration for the event is now free.

As you can imagine, there are a number of costs being borne by the Society associated with the cancelled meeting. If you wish to donate a portion of your registration fee to the Society, to help defray these costs, there is a button to accommodate that on the form.

The tentative plan is to move as many of the invited sessions/talks as possible from the 2020 program to the 2021 meeting in St. John's. To date we have confirmation that the 2019 Gold Medal address by Bruno Rémillard, the 2019 Impact Award address by Belkacem Abdous, and the 2020 CRM-SSC Prize address will be presented at the 2021 meeting, together with addresses by the winners of the 2020 Gold Medal, the 2020 Impact Award winner, and the 2021 CRM-SSC Prize.

The only talks from the 2020 program that will be presented this June, in virtual format, are the presidential invited address, the Pierre Robillard Award address, and possibly the *Canadian Journal of Statistics* Award address. Details to follow.

The <u>Biostatistics</u>, Business and Industrial Statistics, <u>Data Science and Analytics</u>, <u>Probability</u>, and <u>Survey Methods</u> Sections will be running virtual <u>workshops</u> this year, details will be announced shortly. The Case Studies Competition will be held <u>online</u>.

We are currently working on the logistics and timing for conducting a virtual annual general meeting.

On behalf of all members of the SSC, I would like to express my sincere thanks to the 2020 local organizing committee, co-chaired by Shirley Mills and Yiqiang Zhao of Carleton University, the 2020 program committee and particularly the program chair J. C. Loredo-Osti of Memorial University of Newfoundland, our SSC office staff, Michelle Benoit and Marie-Pierre Nantel, our electronic services manager, Angelo Canty, and the many translators, section organizers and a host of others, who have worked so hard to put together what would have been a spectacular conference in Ottawa.

I look forward to seeing you all in person at the 2021 meeting in St. John's.

CSSC 2020 transition to online conference



Société Statistical statistique Society du Canada of Canada

Given the actual COVID-19 pandemic, it is with great regret that we announce the <u>cancellation</u> of the in-person 2020 Canadian Statistics Student Conference to be held May 30, 2020 at Carleton University, Ottawa.

However, this year's CSSC will now be offered as a free online webinar! Register now! A link to access the online conference will be sent only to registrants closer to the conference day.

Date: Saturday, May 30, 2020

Time: 11:00 a.m.-5:00 p.m. EDT/8:00 a.m.-2:00 p.m. PDT

Location: Online (via Zoom webinar)

Please join us at this annual conference, organized entirely by students, for students! Some of the features planned for this year include the following:

- A keynote speech by **Dr. David Haziza** (Université de Montréal and Statistics Canada).
- A career session with panelists from academia, government, and industry including
 - **Dr. Mireille Schnitzer**, Professor (Université de Montréal),
 - Kathryn Mills, Manager—Advanced Analytics/AI (Canada Revenue Agency),
 - Reuben Pereira, Manager—Data Science (The Home Depot).
- A scientific workshop on "Efficient literature reviews using Python" by Blair Bilodeau, PhD candidate (Statistical Sciences, University of Toronto).
- Student oral/poster presentation sessions.

Further details, including program updates, links, etc., will be announced at a later date and updates posted frequently on the CSSC website.

For any other questions, please feel free to email us at ssc.student.conference@gmail.com.

Take care, be safe, and hoping to see you there (virtually)!

The CSSC 2020 Organizing Committee

2020 SSC elections



Société Statistical statistique Society du Canada of Canada

2020 SSC elections

In compliance with the SSC By-Laws, the election committee is publishing a list of candidates for positions on the executive and board of directors that will become vacant on July 1, 2020. In addition, candidates for positions on the executives of the sections are provided. The biographical sketches for all candidates follow. Elections will start in late April 2020.

MEMBERS OF THE EXECUTIVE COMMITTEE

(Three-year terms)

PRESIDENT-ELECT

(President, 2021-22; Past President, 2022-23)

Grace Yi, Western University

Grace Y. Yi is a professor of the University of Western Ontario where she currently holds a Tier I Canada Research Chair in Data Science. Grace's research interests focus on developing methodology to address challenges concerning measurement error, causal inference, imaging data, missing data, high dimensional data, survival data, and longitudinal data.

Grace received her PhD in Statistics from the University of Toronto in 2000 and then joined the University of Waterloo as a postdoctoral fellow (2000–2001), assistant professor (2001–2004), associate professor (2004–2010), professor (2010–2019), and university research chair (2011–2018). She is a fellow of the American Statistical Association and an elected member of the International Statistical Institute. Grace received the Centre de Recherches Mathématiques and the Statistical Society of Canada (CRM-SSC) Prize in 2010 and the University Faculty Award (2004–2009) granted by the Natural Sciences and Engineering Research Council of Canada. Her work with Xianming Tan and Runze Li won *The Canadian Journal of Statistics* Award in 2016.

Grace has served the professions in various capacities. She was the editor in chief of *The Canadian Journal of Statistics* (2016–2018) as well as the president of the Biostatistics Section of the Statistical Society of Canada in 2016, and the founder of the first chapter (Canada Chapter, established in 2012) of International Chinese Statistical Association.

TREASURER

Patrick Brown, University of Toronto

Patrick Brown is a scientist in the Centre for Global Health Research at St. Michael's Hospital, and associate professor in the Department of Statistical Sciences at the University of Toronto. His research focuses on models and inference methodologies for spatio-temporal data, motivated by problems in the study of global mortality causes and trends. Current research includes methods for quantifying the relationship between daily air quality measurements and mortality, geostatistical spatio-temporal models for aggregated and censored case counts, Bayesian computation for survival models, and statistical computing on graphics processors. He has developed and maintains several R packages for modelling and visualizing spatial data.

As a member of the SSC since 2006, Patrick has served as treasurer to the Biostatistics Section (2009–2025), Biostatistics president (past-serving-elect 2017–2020), and local co-organizer for the 2014 SSC.

MEETINGS COORDINATOR

Nadia Ghazzali, University of Quebec at Trois-Rivières

Nadia Ghazzali is full professor of statistics at the Department of Mathematics and Computer Science, Université du Québec à Trois-Rivières (UQTR). Nadia received a Bachelor in Mathematics, a Master in Mathematics and Engineering, and a Doctorate in Statistics, at the Université de Rennes I, France. She arrived in Canada in 1992 as a postdoctoral researcher in the Department of Mathematics and Statistics at McGill University. From 1993 to 2012, she was a professor of statistics at Université Laval. From 2012 to 2015, she was Rector at UQTR. Her research interests include supervised clustering, unsupervised clustering, neural networks, and data science with applications in astrophysics, biostatistics, pattern recognition, and digital and medical imaging. Nadia was involved in the SSC as regional representative of Quebec on the board of directors and as chair of the committee on women in statistics. Finally, Nadia was holder of the NSERC-Industrial Alliance for Women in Science and Engineering in Quebec, member of the Hassan II Academy of Science and Technology of Morocco, member of the Expert Panel on Women in University Research Council of Canadian Academies and currently member of the national et international juries of L'Oréal-UNESCO for Women in Science.

REGIONAL REPRESENTATIVES ON THE BOARD OF DIRECTORS

(Two-year terms)

ATLANTIC PROVINCES

(One to be elected)

Michael McIsaac, UPEI

Dr. Michael McIsaac received his BSc in Honours Mathematics from UPEI (2007), and his MMath (2008) and PhD (2013) in Statistics from the University of Waterloo.

After working as a faculty member and program director for the MSc Biostatistics program at Queen's University in Kingston from 2013–2018, Michael McIsaac returned to his alma mater, the University of Prince Edward Island, and is an associate professor in UPEI's newly-formed School of Mathematical and Computational Sciences.

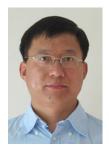
Michael's main research interests relate to efficient two-phase study designs, statistical methods for the analysis of incomplete data, and in the development and application of statistical methods for health studies. Michael is also interested in statistical education and pedagogy, and earned a Certificate in University Teaching from Waterloo's Centre for Teaching Excellence.

Dr. McIsaac is completing a term on the SSC board of directors as an Ontario regional representative (2018–2020) and, given his recent move back to Prince Edward Island, is now standing for election as a regional representative from the Atlantic provinces. Michael also served as a member (2014–2017) and chair (2016–2017) of the SSC's new investigators committee, and has served as a member of ENAR's Council for Emerging and New Statisticians (2014–2017) and as a member of CENS' steering committee (2015–2017).



Guohua Yan, University of New Brunswick

Guohua Yan is an associate professor in the Department of Mathematics and Statistics at the University of New Brunswick. He received his PhD in 2008 from the University of British Columbia and joined the University of New Brunswick since then. His current research focuses on random effects models, Bayesian analysis and mixture models.



Asokan Varyath, Memorial University of Newfoundland

Asokan Mulayath Variyath is an associate professor of statistics in the Department of Mathematics and Statistics at the Memorial University. During 1991–2001, he worked as a faculty member at SQC & OR Division of Indian Statistical Institute. He obtained his PhD in Statistics from University of Waterloo in 2006 and then moved to Texas A & M University as postdoc. In 2008, he joined Memorial University as assistant professor of statistics. His main research interests are industrial statistics, design of experiments, survival analysis and longitudinal studies. He has become involved in the development of the new first year statistics course at Memorial and also undertook a project "Improving the Students' Learning Process through the Use of Statistical Applets." He

has served SSC as a member of students travel grant committee, president of SSC Education Section 2018–19, and co-chair of the local organizing committee of SSC Annual Meeting 2021.



QUEBEC (Two to be elected) Cody Hyndman, Concordia University

Cody Hyndman is an associate professor in the Department of Mathematics and Statistics at Concordia University. After completing his PhD in Statistics at the University of Waterloo in 2005, he was a postdoctoral fellow at the University of Calgary from 2005 to 2006, joined Concordia as an assistant professor in 2006, and was appointed chair of the Department of Mathematics and Statistics in July 2017. His research focuses mainly on stochastic methods in finance, forward-backward stochastic differential equations, and stochastic filtering. He has served the SSC as a Quebec representative (2018–2020) on the board of directors, a member of the fundraising committee since 2018, and organized invited paper sessions at the SSC meetings in 2012 and 2016. He was a guest editor of the March 2020 special issue of *The Canadian Journal of Statistics* on "Stochastic Models, Statistics, and Finance" and contributed to establishing the CANSSI Quebec regional node at Concordia.



Karim Oualkacha, University of Quebec at Montréal

Karim Oualkacha is an associate professor in the Department of Mathematics at Université du Québec à Montréal (UQAM). He received BSc in Mathematics and MSc in Statistics and Operational Research from the University of Caddi Ayyad (Marrakesh), and MSc and PhD in Statistics from Laval University. His research interests are in the statistical challenges of sparse high-dimensional data and dependence modelling with applications in the area of statistical genetics. Karim has been involved with the SSC since 2012. Among others, he has served as a member of the student travel grants committee from 2012 to 2015, and he is the institutional representative of UQAM within the SSC since 2016.



Paramita Chaudhuri, McGill University

Paramita Saha Chaudhuri is an assistant professor of biostatistics at the McGill University. She received her MStat from Indian Statistical Institute and her PhD from University of Washington, Seattle. Her research interest spans methods for observational studies and in particular development and assessment of prediction models, longitudinal and time-to-event studies and privacy-preserving statistical modelling. She has been involved with SSC since 2015, most recently as a member of the Student Travel Award committee (2019–2021). More information about her recent research are available on her webpage: http://sites.google.com/site/paramitasaharesearch/



Denis Talbot, Laval University

Denis Talbot is an associate professor in the Department of Social and Preventive Medicine at Laval University. He completed his training in statistics at Laval University (BSc, MSc), Université du Québec à Montréal (PhD) and University of Washington (postdoc). He was editor in chief for the journal of the Association des statisticiennes et statisticiens du Québec between 2012 and 2017, and member of the bilingualism committee of the SSC from 2016 to 2018. His research interests concern causal inference, particularly model selection, treatment regimes, mediation analysis, machine learning and the challenges related to analyzing electronic health records data.



ONTARIO (Two to be elected) Edward Chen, Statistics Canada

Edward J. Chen, P.Stat., has been employed at Statistics Canada since 1986. Currently, he is a chief of Methodology and devotes his passion and energy to the most successful Census of Population in the Canadian history. Edward leads a team in improving the address register and ensuring the coverage of the Census. Previously, he was a chief of Methodology and devoted over 25 years to the excellence of Statistics Canada's household survey program including the Canadian Labour Force Survey.

Edward is very active in the statistical and local communities. He served two terms as SSC treasurer from 2005 to 2009 when he started putting the SSC finance in good order. He was elected as a SSC board member from 2009 to 2011. He served again as SSC treasurer for two more terms from 2014 until 2019. Edward is also elected as a member of the SSC accreditation appeals committee and served as in many capacities for the SSC including the associate editor for the *Liaison* newsletter for 12 years and SSC committees including the SSC fundraising committee. Previously, Edward was treasurer of the Statistical Society of Ottawa from 1999 to 2003 and treasurers of other local organizations.



Zeny Feng, University of Guelph

Zeny Feng is a professor of statistics, graduate coordinator at the Department of Mathematics and Statistics, and a core member in the graduate program in bioinformatics, University of Guelph. She obtained her MSc and PhD in Biostatistics from the University of Waterloo. She had her postdoctoral research training in the Department of Biostatistics, Yale School of Public Health. Her research has focused on the statistical and bioinformatic methodology development for studies of genetics, genomics, and metagenomics. She is also interested in modelling the spread of infectious diseases. She had served on the research committee (2017–2020) and committee member of NSERC Discovery Grant evaluation group of Mathematics and Statistics. She is now serving the speaker selection committee for the joint Fields Institute and CANSSI Distinguished Lecture Series in Statistics (2019–2022).



Melanie Poulin-Costello, Roche

Melanie Poulin-Costello is director of biostatistics for Hoffman La Roche in product development. Melanie oversees a team of 35 biostatisticians working on clinical trials from first in human to phase 3, including regulatory filing and some post marketing. She also oversees the statistical aspects of drug development for ALK+ lung cancer and skin and rare disease cancers at Roche. In addition, Melanie is passionate about alternative clinical trial designs as evidenced by her involvement in the Placebo/Standard of care data sharing initiative within TransCelerate. Prior to Roche Melanie worked at Amgen and at Bayer as a statistical scientist in clinical trials extending her experience to include health technology assessments while at Amgen. She has an MSc in statistics from the University of Victoria and BMath from University of Waterloo. Melanie is also currently an adjunct professor in biostatistics at the Dalla Lana School of Public Health at University of Toronto. Melanie is also an active member of PSI. Much of her spare time is spent in the arts with painting and photography. She is an avid cyclist, loves wilderness hiking and most recently obtained her scuba certification in Belize.



Michael Wallace, University of Waterloo

Michael Wallace is an assistant professor in the Department of Statistics and Actuarial Science at the University of Waterloo. Originally from the UK, he moved to Canada in 2013 to take up a postdoctoral fellowship at McGill, prior to his current appointment. A biostatistician, Michael's research centres around causal inference with a particular focus on precision medicine and missing or mis-measured data. Michael hopes to contribute to the SSC board through two important areas of experience. First, as a keen proponent of communicating the importance of statistics and statistical thinking, he has served on the editorial board for *Significance* magazine for eight years. Second, motivated by his experiences living and working with a physical disability, Michael is a strong advocate for representation of the rights and needs of marginalized groups, especially within professional organizations. Within academia, he has contributed to this cause as a member of the University of Waterloo's equity committee, and he hopes to increase awareness and accommodation of these issues within the SSC.



Olli Saarela, University of Toronto

Olli Saarela is an associate professor in the biostatistics division of the Dalla Lana School of Public Health (DLSPH), University of Toronto. He completed his Master and PhD in Statistics at University of Helsinki, Finland, while also gaining many years of experience working as a biostatistician in cardiovascular disease research projects at the National Institute for Health and Welfare of Finland during his studies. Following a postdoctoral fellowship and a brief spell as a faculty member at McGill University, he joined the DLSPH in 2014. His research is in the field of causal inference methodology, with applications for example to health services research and clinical trials. A member of the SSC since 2011, Olli is also a member of the executive committee of the Southern Ontario Regional Association of the SSC, and has been for several years involved in organizing their annual workshop/DLPSH Biostatistics research day; he is keen to serve the Ontario statistical community as a regional representative to the SSC.



MANITOBA-SASKATCHEWAN-NORTHWEST TERRITORIES-NUNAVUT

(One to be elected)

Mohammad Jafari Jozani, University of Manitoba

Mohammad is an associate professor of statistics and an adjunct member of the Biomedical Engineering (BME) program at the University of Manitoba. He is an associate director of CANSSI for Manitoba/Saskatchewan/NWT/Nunavut Region. He is also serving the Manitoba Statistical and Health Sciences (MB-SAHS) collaborating center of CANSSI and has been a member of the Student Research Presentation Award committee of SSC since 2019.

His research program consists of data centric approaches for developing fundamental theories, new methodologies and computational tools to solve problems of relevance in a variety of application domains. Currently, at his Complex Analytics Research Lab (CARL), he is working on statistical learning problems that have high dimensional aspects and involve big data. His research team is one of the main contributors to the area of statistical learning with complex sampling designs using order statistics and rank information. He has applied his research in heath condition monitoring, breast cancer studies, osteoporosis diagnosis, environmental risks, and recently in the calibration problems to design surgical simulators for training purposes in order to make surgeries safer.



Yang Zhao, University of Regina

Yang Zhao is an associate professor in the Department of Mathematics and Statistics at the University of Regina, where she joined as an assistant professor in 2005. She completed a MSc in Statistics from Victoria University in 2000 and PhD in Statistics from the University of Waterloo in 2005. Her research focuses mainly on inference for regression models with missing data. She has served on the organizing committee of the annual meeting of the Prairie Network of Research in the Mathematical Science (PNRMS) in 2011 and young investigators committee during 2010–2013, has organized invited paper sessions at ICSA-Canada Chapter 2015 Symposium. Yang is currently serving CANSSI health sciences committee at Saskatchewan Health Science Collaborating Centre.



ALBERTA-BRITISH COLUMBIA-YUKON (One to be elected)
Linglong Kong, University of Alberta

Dr. Linglong Kong is an associate professor at the Department of Mathematical and Statistical Sciences of the University of Alberta. He is a Canadian Research Chair in Statistical Learning (Tier II, 2020–2025). He has published about 40 peer-reviewed manuscripts including top journals AOS, JASA and JRSSB, and top conferences ICML, ICDM, AAAI and IJCAI. Currently, Linglong is serving as associate editors of *Journal of the American Statistical Association, International Journal of Imaging Systems and Technology, The Canadian Journal of Statistics*, and the ASA Statistical Imaging Session program chair. His research interests include statistical machine learning, high-dimensional data analysis, neuroimaging data analysis, robust statistics and quantile regression.



Ehsan Karim, University of British Columbia

Dr. M. Ehsan Karim is an assistant professor at the School of Population and Public Health, University of British Columbia (UBC); a scientist and biostatistician at the Centre for Health Evaluation and Outcome Sciences (CHÉOS), St. Paul's Hospital; and an associate member at the Department of Statistics, UBC. He obtained his PhD in Statistics from UBC, completed his postgraduate training in the Department of Epidemiology, Biostatistics, and Occupational Health at McGill, and was also a trainee at the Canadian Network for Observational Drug Effect Studies (CNODES). His current program of research focuses on developing causal inference methodologies and applications of data science approaches in the large healthcare data context in answering real-world questions, supported by the Michael Smith Foundation for Health Research Scholar Award, grants from NSERC and BC SUPPORT Unit. He has previously served as a judge in the annual SSC meeting poster session in 2016 and 2019, an organizer of a case study in 2019, and is currently serving as a member of the SSC Award for Case Studies in Data Analysis committee since 2018 (three-year term), and a judge for the poster session in the Canadian Statistical Student Conference (CSSC) this year.



SECTION EXECUTIVES

ACTUARIAL SCIENCE SECTION EXECUTIVE

(Three-year terms; 2020–23)

PRESIDENT-ELECT

(President, 2021–22; Past President, 2022–23) **Andrei Badescu**, University of Toronto



BIOSTATISTICS SECTION EXECUTIVE

(Three-year terms; 2020–23)

PRESIDENT-ELECT

(President, 2021-22; Past President, 2022-23)

Rob Deardon, University of Calgary

Rob Deardon is an associate professor of biostatistics with a joint position in the Faculty of Veterinary Medicine and Department of Mathematics & Statistics at the University of Calgary. Much of his recent work has been in the area of infectious disease modelling, but he is also interested in Bayesian & computational statistics, experimental design, disease surveillance methods, spatio-temporal modelling, statistical learning and statistical modelling in general. He currently has a research group of around 10 postdocs and research students. He is also currently coordinator of the Interdisciplinary Biostatistics Graduate Program at the University of Calgary, and this past year has been serving as chair of the statistics stream of the NSERC Discovery Grant Math & Stats Evaluation Group. Previous to his post at the University of Calgary, he spent eight years as faculty in the Department of Mathematics and Statistics at the University of Guelph, and held postdoctoral positions at the Universities of Cambridge and Warwick. His PhD, in the area of agricultural experimental design, was obtained from the University of Reading in 2001.



BUSINESS AND INDUSTRIAL STATISTICS SECTION EXECUTIVE

(Three-year terms; 2020–23)

PRESIDENT-ELECT

(President, 2021-22; Past President, 2022-23)

Jean-François Plante, HEC Montréal

Jean-François Plante is an associate professor at HEC Montréal. He has been involved in the SSC continuously since 2009. He is currently the managing editor of *The Canadian Journal of Statistics* and a Quebec representative on the board of the SSC. From 2013 to 2016 he served as public relations officer, being de facto a member of the executive committee and of the board. Jean-François received his training from Laval University (BSc, MSc), the University of British Columbia (PhD) and the University of Toronto (postdoc). He also spent a sabbatical at the University of Waterloo. His current research interests focus on statistical methods for distributed (big) data and applications of statistical learning.



DATA SCIENCE AND ANALYTICS SECTION EXECUTIVE

(Three-year terms; 2020–23, with the exception of President—two-year terms, 2020–22)

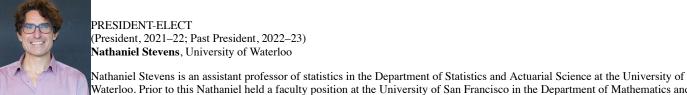
PRESIDENT

(Past President, 2021–22)

Nathan Taback, University of Toronto

Nathan is currently an associate professor, teaching stream, in the Department of Statistical Sciences (cross-appointed in Computer Science) at the University of Toronto. He is the director of Data Science Programs in Statistical Sciences which includes an undergraduate Data Science program, and the Master of Science in Applied Computing—Data Science concentration. During the past several years he has been involved in developing data science curriculum, courses, and internship opportunities at the undergraduate and graduate levels. In 2016 he started ASA DataFest@UofT—an undergraduate data science contest, and has developed other experiential learning opportunities for students. His research interests include data science and statistics education, statistical communication, and biostatistics.

Before joining the University of Toronto as a full-time faculty, Nathan worked as a biostatistician and statistical consultant. After graduating he worked as biostatistician at GSK then as a faculty research scientist at the Center for Biostatistics in AIDS Research (CBAR) at the Harvard School of Public Health, and a senior statistician in the AIDS Clinical Trials Group (ACTG). During his time at GSK and CBAR he was involved in the design and analysis of clinical trials. As a statistical consultant, he continued to work on clinical trials as well as projects in disparate fields, such as measuring patterns of sexual violence and violence against humanitarian aid workers, and journalists in armed conflict; identifying institutional variation in adherence to cancer treatment guidelines with researchers at the Dana Farber Cancer Institute; and testifying as an expert witness in statistics.



Waterloo. Prior to this Nathaniel held a faculty position at the University of San Francisco in the Department of Mathematics and Statistics where he served as program director for the undergraduate data science program. Having overseen 30+ data science internships at 20+ companies, Nathaniel is interested in using statistics to solve practical problems, and he has a passion for inspiring and training students to

internships at 20+ companies, Nathaniel is interested in using statistics to solve practical problems, and he has a passion for inspiring and training students to do the same. His research interests lie at the intersection of data science and industrial statistics; his publications span topics including experimental design and A/B testing, social network modelling and monitoring, survival and reliability analysis, measurement system analysis, and the development of estimation-based alternatives to traditional hypothesis testing.



SECRETARY **Alberto Nettel-Aguirre**, University of Calgary

TREASURER **Shirley Mills**, Carleton University

Shirley Mills is currently the inaugural interim treasurer of the Data Science and Analytics Section. She is a professor of mathematics & statistics at Carleton University (1983–) and executive director of the Statistical Society of Canada (2011–). Trained as a mathematical statistician and a graduate of the University of Alberta (PhD 1983) and University of Manitoba (BSc (Dbl.Hon.)1969, MSc 1970, Sec. Ed. Cert. 1971), she has been a professor since 1971 and has held positions in universities in Manitoba, Alberta, and Ontario. Her specialty evolved into applied statistics and data science and she has supervised over 100 graduate students. She founded and was director of the Statistical Consulting Centre at Carleton (1987–1994). In recognition of her SSC involvement over four decades, including as SSC executive secretary for two terms, she received the SSC 2015 Distinguished Service Award. She also received the 2019 Honoured Alumni of the Year from the University of Manitoba Department of Statistics and the 2018 Faculty of Science Impact Award from Carleton University, for outstanding contributions in research, teaching, and service. She served as president of the Statistical Society of Ottawa, two terms as treasurer of CAUT & the CAUT Defence Fund, as president of the Carleton University Academic Association, over 10 years on the pension committee of Carleton University, as the Faculty of Science rep to the Carleton University Senate, as the Senate rep to the Carleton University Board of Governors, and as president of her Community Association in Ottawa.



PROBABILITY SECTION EXECUTIVE

(Three-year terms; 2020–23)

PRESIDENT-ELECT (President, 2021–22; Past President, 2022–23) **Éric Marchand**, University of Sherbrooke

Éric Marchand has been a full professor in the Department of Mathematics of the Université de Sherbrooke since 2004. Prior to that, he was at the University of New Brunswick and completed his PhD work at the Université de Montréal in 1990. He served as department chair from 2004 to 2010 and as director of the Statistics Laboratory of the CRM from 2015–2019. Among other responsibilities, he served on the NSERC selection committee for mathematics and statistics and he was a member of the Board of Governors at the Université de Sherbrooke. Over the years, Éric has been active within the SSC such as being a regional representative on the board, a member of the CJS Award, the Lise Manchester Award and bilingualism committees, as president and member of the Pierre Robillard Award and research committees. He is currently serving on the awards committee.

Continuously funded by NSERC for almost 30 years, his research interests include Bayesian statistics, multivariate analysis, and statistical inference in general, as well discrete probability models.

TREASURER

Gennady Shaikhet, Carleton University

Gennady Shaikhet is an associate professor in the School of Mathematics and Statistics, at Carleton University. He received his MSc and PhD in Statistics from the Technion—Israel Institute of Technology in 2007. He then spent three years in Pittsburgh, US, at the Department of Mathematics at Carnegie Mellon University, and joined Carleton in July 2010. Gennady's areas of interest are probability theory, stochastic processes and applications: approximations and control of large scale service networks, financial engineering, and operations management. Gennady has been a treasurer for the Probability Section of the SSC since July 2017.



STATISTICAL EDUCATION SECTION EXECUTIVE

(Three-year terms; 2020–23)

PRESIDENT-ELECT

(President, 2021–22; Past President, 2022–23) **Bruce Dunham**, University of British Columbia

Prof. Bruce Dunham is a professor of teaching in the Department of Statistics at the University of British Columbia. Prior to arriving at UBC in 2005 he held positions at the universities of Nottingham and Derby in England, his native country. Prof. Dunham studied at the University of London for a PhD in Probability Theory. After several years pursuing a traditional research-oriented academic career, he decided his interests resided in education and pedagogy. He has taught over 30 different courses in the areas of mathematics and statistics and has developed a great enthusiasm for the adoption of active learning and evidence-based teaching methods. He is a past president of the Statistical Society of Canada's Education Section and has also served on the education committee.



SURVEY METHODS SECTION EXECUTIVE

(Three-year terms; 2020-23)

PRESIDENT-ELECT

(President, 2021–22; Past President, 2022–23) **Jean-François Beaumont**, Statistics Canada

Jean-François is currently chief of the Statistical Research and Innovation Section at Statistics Canada. He studied at Laval University from 1989 to 1996 where he obtained a Baccalaureate in Actuarial Science, a Certificate in Computer Science and a Master in Statistics. He has been working at Statistics Canada ever since. Small area estimation, statistical data integration, robust estimation and bootstrap variance estimation for finite populations are his current research topics of interest. Jean-François also served as the secretary of the Survey Methods Section of the Statistical Society of Canada from 2005 to 2007 and chaired the scientific committee of Statistics Canada's 2014 International Methodology Symposium.



<u>Update on the SSC 2020 Case Studies in Data Analysis Competition</u>



Société Statistical statistique Society du Canada of Canada

The Case Studies in Data Analysis Poster Competition will be held online on **June 1,2020**. The case studies are intended to provide enthusiastic teams of graduate and senior undergraduate students with the opportunity to apply their knowledge to the analysis of big datasets. Each participating team will choose to analyze one of the two datasets described below. Each team is strongly encouraged to identify a faculty member to support the members as they develop their analytic approach and final presentation. Team members will work together to present a poster summarizing their methods and analysis results.

Case Study 1: Predicting hourly electricity demand in Ontario

Teams that select this case study will use the aggregated provincial-level hourly demand data for all sectors and annual demand data for each sector from the Canada Energy Regulator (CER) and the hourly air temperature and weather data from ETH Zurich and Imperial College London to develop statistical models to predict hourly electricity demand in the residential sector in Ontario.

Case Study 2: Predicting podcast popularity in iTunes

Teams that select this case study will use podcasts from iTunes to develop statistical models to extract features from the provided podcasts and predict the number of reviews for the podcasts based on the extracted features.

Awards

Two awards will be presented for the top two teams in each of the two case studies. The value of the award from SSC for each case study in the 2020 competition is \$750, with the expectation that this award is shared equally among the members of each winning team. CER will grant one of the two awards to the team working on the Case Study 1. The committee reserves the right to decline to make an award for each case study if the number of entries is insufficient.

All participating students will receive a certificate of participation.

Important Dates

May 24, 2020: Case Study 2 prediction result submission

Teams interested in participating in the Case Study 2 must submit their prediction result (an Excel file with two columns: podcast ID, the number of predicted reviews. Please do not round the results into integer numbers) for each of the podcast in the unlabeled dataset by this date to Dr. Kathryn Morrison (kathryn@precision-analytics.ca). Please name the file as CaseStudyNumber TeamLeaderFullName UniversityName.xlsx. This prediction result will take 30% of your final poster judging score.

May 24, 2020: Abstract and group photo submission

Teams interested in participating in the competition must submit the following information by this date by emailing the chair of the case studies in data analysis committee, Dr. Pingzhao Hu (Pingzhao.hu@umanitoba.ca).

- 1. Teams interested in participating in the competition must register it. The registration information should include: Names and emails of team leader, team members, and faculty mentor(s), university name, case study number, presentation title. We require that the number of team members (either undergraduate students or graduate students) in a team should be not be more than four.
- 2. An abstract (maximum 500 words) with sections of (i) Introduction, (ii) Objective, (iii) Methods, (iv) Results and (v) Conclusions. The abstract template can be downloaded **here**.
- 3. A PDF version of your poster.

Poster preparation

Each poster is recommended to contain the following information:

- Title of poster
- Names of team members and university affiliation(s)
- Objectives
- Methods
- Results/Main findings (use figures, tables, and text)
- Conclusions (including strengths and limitations of your analysis)

You should acknowledge your team's faculty mentor (if you have one) on your poster. The role of your faculty mentor is to provide advice and suggestions about your analysis, not to do the analysis for you.

The maximum size for your poster is 4 feet high by 3.5 feet wide.

Consider the elements of good poster design as you prepare for the competition. Some useful resources are:

- https://guides.nyu.edu/posters
- https://www.sciencedirect.com/science/article/pii/S2049080116301303

June 1, 2020: Poster presentation judging (Students are NOT required to present)

The committee of the award for case studies in data analysis will consider such attributes as result accuracy, innovation of the analysis methods, technical clarity, and cohesiveness of the analysis, interpretation and presentation of results in choosing winning teams.

Each poster will be evaluated based on the pre-defined criteria (see the Poster Judging Form here by a team with 3–4 judges. The judging team members will make a consensus of the ranking of all participating teams for each of the two case studies respectively.

Acknowledgements

Many thanks to members of the case studies in data analysis committee for 2020 for their contributions: Dr. Kathryn Morrison, Precision Analytics Inc., and McGill University; Chel Hee Lee, Critical Care Medicine, Alberta Health Services & University of Calgary; Dr. Ehsan Karim, School of Population and Public Health, University of British Columbia; Dr. José Ribas Fernandes, Dr. Ryan Hum, Mr. Mantaj Hundal, Mr. Lukas Hansen, Mr. Michael Nadew, Mr. Matthew Hansen, Canada Energy Regulator.

More details can be found at: https://ssc.ca/en/meetings/annual/2020-annual-meeting/case-studies

Dr. Pingzhao Hu

Chair of the Case Studies in Data Analysis Committee

<u>Accreditation approvals (December 2019)</u>



Société Statistical statistique Society du Canada of Canada

The following individuals have been approved in December 2019:

For A. Stat .:

Matthew Pietrosanu

I am currently a PhD student in statistics at the University of Alberta with research interests in robust methods for high-dimensional data, Bayesian hierarchical models, and neurogenetic data analysis. My doctoral work so far focuses on incorporating highly correlated modes of neuroimaging and genetic data into statistical models to identify genes and brain regions associated with neurodegenerative diseases and in identifying genetic and neurological differences between population subgroups.

While my academic background lies purely in applied mathematics and statistics, I am passionately interested in interdisciplinary work and collaborations, especially in health sciences. Outside of my own research, I have major commitments to statistical research consulting through my work as a private consultant and member of my department's graduate student-run consulting group. Out of a personal interest in scientific writing and communicating the value of statistics across all disciplines, I have enjoyed collaborations with researchers from diverse backgrounds. I have significant work experience as a data analyst working with healthcare survey data, financial records, and 3D imaging data in applied fields.

Sarah Roy-Molgat



I am a bilingual student, recently graduated from the University of Ottawa, Faculty of Science. My time as an undergraduate student was spent specializing in the fields of statistics, mathematics, economics, and physics. I will begin a professional Master of Actuarial Science at the University of Waterloo in the fall of 2019. My objective is to become a certified actuary in the UK, the US, and Canada, with intention for my profession to take me across the globe. My interests include economics of conflicts, finance, probability and statistics, game theory and behavioural economics.

I have worked as a science mentor for the past four years; leading study groups for first year physics courses at the University of Ottawa. I have also taken part in a summer research internship in Lyon, France on behavioural and cognitive science. I have held the position of customer service specialist at the Ottawa-based financial planning firm RocheBanyan Inc. and as of recently, actuarial assistant for its parent company, Welton Parent Inc.

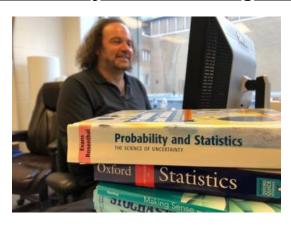
For P. Stat.:

Feng Ye



I joined the Kidney Health Research Group at the University of Alberta in 2010 where I have worked closely with the nephrologists and other health scientists. My role is to obtain and review literature to determine appropriate statistical techniques, design and implement statistical procedure, and input to manuscripts, reports, and presentations. My expertise includes prediction risk modelling, survival analysis, and cost effectiveness evaluation.

Interview with statistics professor Jeffrey Rosenthal: The key statistic that determines your chances of getting coronavirus



By CityNews

Due to myriad variables it's not possible to predict your exact odds of contracting the novel coronavirus, but according to one renowned mathematician, there's one statistic we should be closely tracking to gauge the probability of becoming infected.

It's called the basic reproduction number (RO) and University of Toronto statistics professor, **Jeff Rosenthal**, says keeping that number low (below 1) is the key to eradicating the illness.

The World Health Organization estimates the RO for coronavirus to be between 1.4 and 2.5.

That means every person who contracts the virus could potentially spread it to up to 2.5 more people—making the prospect of containment highly unlikely.

Some studies put the number even higher.

"This reproduction number, if it's more than 1, it keeps on getting bigger and bigger, but if it's less than 1, it gets smaller and smaller and dies out, so that's what the whole battle is about," Rosenthal said from his U of T office on Monday.

"You get this kind of exponential growth where in new generations of the disease you are multiplying by some reproduction number, and that's why diseases have the potential to spread really quickly."

And while individuals may feel helpless in the face of an invisible virus that seems to be spreading across the world at an alarming rate, Rosenthal stressed that when it comes to lowering the reproduction number, a little goes a long way.

"Things as simple as if everybody washes their hands more, people don't touch their faces, they seem like simple things but if they make it a little less likely that you're going be infecting the next person, that could cut this reproduction number down that little bit, and every little bit could make a big difference in the long run for how the virus spreads."

Increased cases in Ontario

Due to the relatively low number of cases in Ontario (18 at publish time) Rosenthal says the odds of contracting the virus in the province remain quite low.

But that could change as more and more cases surface and attempts to track the virus begin to overwhelm health care workers.

"In Ontario so far there's quite a small number of (infected) people ... so what it means is they can try to track every one of them and keep every one of them isolated and 'who else did you talk to?' and we better isolate them or at least we better test them ... you can try to control it," Rosenthal said.

"But as the numbers go up, as they are starting to, it gets less and less likely that you'll be able to contain it and once there's enough people that have it, you can't track everybody and figure out who talked to who ... and as long as that reproduction number stays high, it's going to just spread and it's really hard to control at that point."

"It could start to get to the point where it's just running through the population and that could be a point where a significant portion of the population is going to get it."

High mortality rate

Rosenthal says the novel coronavirus has a significantly higher mortality rate than the flu, which kills thousands of Canadians a year.

"About 1 person in 50 who gets the novel coronavirus is actually going to die from it, which is quite high compared to say the common flu," he said. "(The flu) is still only about 1 in 1,000 people who get the ordinary flu who are going to die from it.

"But if it's about 1 in 50 for novel coronavirus—that's a fairly high fraction so it's going to cause a lot of destruction."

Rosenthal has made a career out of studying probabilities, and while he believes there's still a chance Canada can contain the spread of coronavirus, he still sees cause for concern.

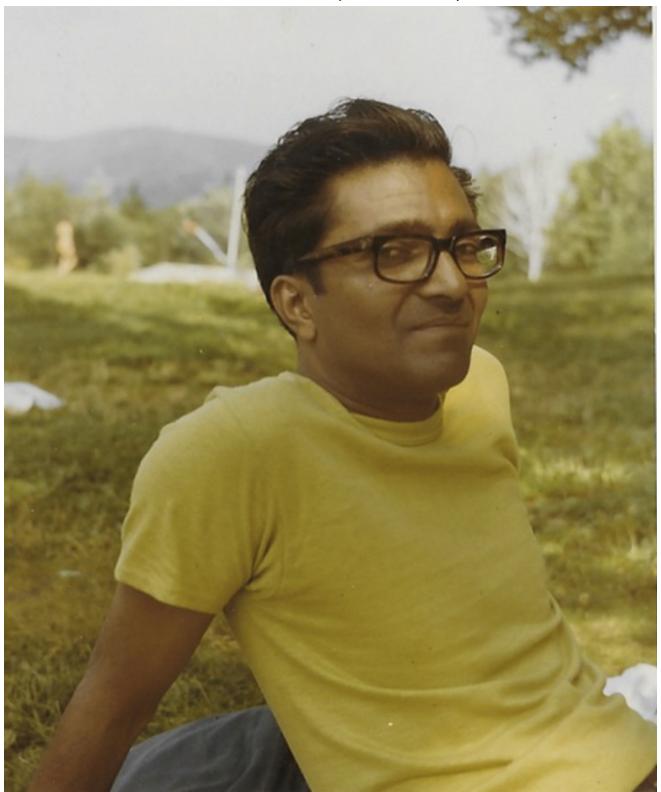
"We are seeing in Canada—they are doing a pretty good job—but it's starting to seep in."

"I would say there's still some chance in Canada that it will be contained ... but it doesn't seem that likely," he added.

"It seems more likely at this point that it's going to get out and spread and then a significant fraction of the population would probably get it."

Click here to watch the full interview with CityNews.

<u> Obituary: Venamamalai Seshadri (1928-2020)</u>



Venamamalai Seshadri, Professor Emeritus of Statistics at McGill University, died peacefully at his daughter's home on March 8, 2020, in Sunnyvale, California. He was 91 years old.

Sesh, as he was informally called, was born on April 25, 1928, in Kizhanatham, India. After studying mathematics at Loyola College in Madras (MA, 1950), he taught in Sri Lanka (1950-54) and Myanmar (1954-57) before moving to the United States to pursue doctoral studies in mathematical statistics at Oklahoma State University (PhD, 1961). His thesis, titled "Estimation in the Balanced Incomplete Block Design," was written under the supervision of the eminent statistician **Franklin Graybill**. After graduation, Sesh taught at Southern Methodist University in Dallas, Texas, until 1962. He then moved his family to Montréal, where he began his career at McGill University. He was tenured in 1964 and became a Full Professor in 1970. He retired in 1997.

Sesh's research specialization was distribution theory. His name is permanently associated with the inverse Gaussian distribution, the long and fruitful study of which he began in 1981. His masterly exposition of the topic, titled "The Inverse Gaussian Distribution: A Case Study in Exponential Families," was published in 1992 by Oxford University Press. He complemented it in 1999 with a second monograph titled "The Inverse Gaussian Distribution: Statistical Theory and Applications," which appeared in the Springer Lecture Notes Series. Together, these two books are still the go-to references on the subject.

However, Sesh's research contributions covered a much wider spectrum. In the early sixties, he started his research career by working on estimation problems. He proposed ways of combining independent estimators of a parameter that could be considered as cousins of Stein's shrinkage estimator. He also wrote papers on topics in probability dealing, among others, with stable laws and tail probabilities. There is also a torrent of ideas and techniques in his work on multivariate analysis where he introduced a new method for constructing multivariate distributions on the unit simplex, and used continued fractions and random walks on certain semi-groups. Moreover, he used multivariate Laplace transforms to study the link between laws with quadratic variance functions and their conjugate counterparts. This latter work is in fact related to that which he did on natural exponential families of distributions, and the inverse Gaussian family.

While at McGill, Sesh authored over 50 research articles, many of which appeared in journals of the highest caliber such as *The Annals of Statistics*, the *Journal of the American Statistical Association*, and *Biometrics*. He was also a frequent contributor to *The Canadian Journal of Statistics*. In many of these papers, he was the sole author while in others he collaborated with world-class probabilists and statisticians such as **Miklós Csörgö** (Carleton), **Michael Stephens** (Simon Fraser), **Gérard Letac** (Toulouse), and **Ole Barndorff-Nielsen** (U. of Aarhus). He also supervised 9 MSc and 2 PhD students, several of whom proceeded to academic positions, including **Morty Yalovsky** and **Christina Wolfson** (McGill), **Paul Cabilio** (Acadia), **Brenda MacGibbon** (UQAM), **Jonathan Shuster** (U. of Florida), **Sana El-Khoraibie** (U. of Cairo), and **Alain Vandal** (U. of Auckland).

Within the Mathematics and Statistics Department at McGill, Sesh was known as an incurable traveler. His reputation and enthusiastic talks, delivered in English and French, earned him invitations from around the world and fed his wanderlust. In his retirement, he spent many years teaching at prestigious universities all over the world as Professor Emeritus, enjoying bridge games with his friends and spending time with his dear departed wife, **Champa Seshadri**.

Sesh is survived by his sister Leelavathi Seshadri, his children (Srinivasan Seshadri and Usha Seshadri), and various in-laws (Ikuko Fukuta Seshadri, Lakshmi Seshadri, Michael Kreaden, and Marie-Christine Guiot). He is mourned by his seven grandchildren: Olivia Seshadri, Annapurna Kreaden, Siddartha Kreaden, Masashi and Satoko Sato, and Masatoshi and Alex Sato. We are all the poorer for his departure but the discipline of statistics is richer for his exceptional research contributions.

by C. Genest and D.B. Wolfson, McGill University, Montréal

News from Western University



On July 1, 2019, the Department of Statistical and Actuarial Sciences welcomed two new faculty members, namely, **Grace Yi**, Tier I CRC in Computational Neuroscience, and **Cristián Bravo Román**, Tier II CRC in Banking and Insurance Analytics. As well, **Kristina Sendova**was elected chair of the department last summer. We would also like to let it be known that **A. Ian McLeod** and **Mary Millard** officially retired as of June 30, 2019.

And congratulations to **David R. Bellhouse** for becoming an honorary fellow of the Institute and Faculty of Actuaries of the UK! To quote him "I feel very honoured to receive this fellowship. I see it as the capstone of my career as a historian of statistics, probability, and actuarial science."

Serge B. Provost

(Originally submitted in the fall of 2019)

Grace Yi



David R. Bellhouse



Cristián Bravo Román



Mary Millard



A. Ian McLeod



Kristina Sendova

A warm welcome to four new colleagues





Statistical Sciences UNIVERSITY OF TORONTO

In the midst of a pandemic and the uncharted territory it has brought us to, we are delighted to announce some wonderful news as well. While we are still engaged in a very competitive hiring campaign, we can already report the addition of four talented colleagues to our department. We look forward to working with our brilliant new faculty members and warmly welcome them to our team. Additional hiring news will be reported in the next issue of *Liaison*.

Rohan Alexander



Rohan Alexander will be joining the University of Toronto's Department of Statistical Sciences and the Faculty of Information in July 2020 as an assistant professor. He looks forward to contributing to both areas and strengthening the ties between statistics and the iSchool. Rohan's research interests include questions in social sciences, such as: Are our politicians actually representing us? Do elections matter? How can we make political polling better? Rohan earned his PhD in Economics from the Australian National University. His work has been published in the *Journal of Economic History*.

Samantha-Jo Caetano



Samantha-Jo Caetano will be joining the University of Toronto's Department of Statistical Sciences as an assistant professor, teaching stream, in July 2020. Samantha is currently in the process of completing her PhD at McMaster University, with her PhD research focusing on measuring concordance of time-to-event models. Over the last 4 years Samantha has lectured and coordinated multiple large first- and second-year statistics courses at both the University of Toronto (Mississauga) and McMaster University. Samantha is passionate about statistical outreach and improving student mental health. She has hosted multiple statistical workshops, partnered with WISE (Women in Science & Engineering), for high school, undergraduate, and graduate students. Her most recent workshop focused on the usage of relative risk to assess the point source of epidemiological outbreaks.

Read more here about a recent workshop she held to introduce students to the role of statistics in tracking outbreaks and epidemics.

Jessica (Jesse) Gronsbell

Jesse Gronsbell will be joining the University of Toronto's Department of Statistical Sciences in July 2020 as an assistant professor. She works in biostatistics, with a focus on the development of statistical methods for electronic health records and mobile health data. Jesse earned her PhD in Biostatistics from Harvard University, where she was supported by a Ruth L. Kirschstein Predoctoral Individual National Research Service Award from the National Institutes of Health. Her work has been recognized with a Young Researchers Award from the International Society of Nonparametric Statistics and a Gertrude Cox Scholarship honourable mention from the American Statistical Association.



<u>Jun Young Park</u>



Jun Young Park will be joining the University of Toronto's Department of Statistical Sciences and the Department of Psychology as an assistant professor in July 2020. Jun's research interests include modelling correlated data and applying resampling for statistical inference. He has worked on developing statistical methods for a wide range of biomedical science including neuroimaging (MRI/fMRI), behaviour genetics, and cancer genomics; he is passionate about further expanding his area of research. As an applied statistician, he expects to contribute to science through collaborations with faculty, students, and researchers. He is currently in the process of completing his PhD in Biostatistics at the University of Minnesota.

By Radu Craiu

Making a start on transforming data science education in secondary schools

IDSSP

International Data Science in Schools Project

The International Data Science in Schools Project (IDSSP, www.idssp.org) is a cross-disciplinary project involving an international team of computer scientists and statisticians from the leading professional organizations for both disciplines. Its purpose is to promote and support the teaching of Introductory Data Science, particularly in the final years of schooling, by developing

- a framework for introducing data science including topics, learning outcomes, and sample lesson plans;
- · excellent modular teaching and learning resources and associated assessment rubrics;
- a moderated portal for ongoing sharing of materials and experience;
- professional development services for teachers and teacher trainers.

The project comprises two phases:

Phase 1. Develop a curriculum framework as the basis for development of resources to support teaching students a pre-calculus course on Introductory Data Science; and a corresponding framework to teach teachers how to teach students Introductory Data Science.

Phase 2. Develop the resources to support courses based on the curriculum frameworks, and devise and implement a course aimed at prospective teachers of data science.

The online report, <u>Curriculum Frameworks for Introductory Data Science</u>, sets out the frameworks developed under Phase 1.

The impetus for this project was a high-profile workshop, <u>STEMS2016</u>, held in response to the critical shortage of data scientists entering the workforce. It was initiated by the Statistical Society of Australia and involved academia, government, and industry. It was soon realized that this was a growing international problem that merited an international and cross-disciplinary response.

Several leading statistical and computer science societies, including the SSC, and other interested organizations were approached to provide in-principle support and suggest personnel. An international <u>curriculum team</u>, comprising computer scientists and statisticians expert in the teaching of aspects of data

science, was recruited in 2017, as was a larger, more broadly based advisory group. SSC members Wesley Burr and Alison Gibbs are on the curriculum team.

It is envisaged the frameworks developed to date will be used not just in schools, but also as a valuable source of information for data science courses in community colleges and universities and for private study.

The supporting societies are now pondering how to build on this work. The most ambitious option is to seek the funding to support a major international project to complete Phase 2.

For further information, please send email to idssp.info@gmail.com, or visit www.idssp.org.



Wesley Burr



Alison Gibbs

Health Canada - We are looking for statisticians/bio-statisticians!



Government of Canada Gouvernement du Canada

Reference number: SHC20J-022272-000008

Selection process number: 20-NHW-SPECIALIZED-NCR-EC05EC06-000001

Health Canada - Public Health Agency of Canada Ottawa (Ontario) EC-05 - Statisticien/Bio-Statisticien, EC-06 - Statistician/Bio-Statistician Full Time position - Permanent 86,018 dollars to 112,790 dollars

Closing date: 31 August 2020 - 23:59, Pacific Time

Who can apply: Persons residing in Canada and Canadian citizens residing abroad.

Apply online

Important messages

Health Canada and the Public Health Agency of Canada are looking to staff at least nine (9) positions within the National Capital Region, with various language requirements. Some positions may have the option of telework.

The intent of this inventory is to have a pool of interested candidates and/or qualified candidates to draw from when vacancies arise and for current and future needs within Health Canada and the Public Health Agency of Canada.

The breadth and depth will be considered throughout each phase of the assessment process.

Duties

What will you be doing?

Your evaluations will be used to influence policy decisions, which contribute to the protection of the health of Canadians. Examples of evaluations are:

- Soundness of clinical trials for new drug approval;
- Levels of contaminant in food or the environment;
- Analysis of the intake of sodium in the Canadian population;
- Administrative data sources for coverage and appropriateness as a sampling frame;
- Supporting modelling and forecasting analysis; and
- Methodological support for complex analysis such as multi-level modelling.

These evaluations will be used to provide information for regulatory action or programs aimed at the protection and improvement of the health of the Canadian people.

You will be seen as an expert and will contribute to the body of knowledge

You will be recommending and using new and existing methodological approaches, data sources for studies, areas for analysis and research.

Are you interested in finding more about this opportunity, or maybe you know someone who could fulfill this role, share and/or click on the apply online!!

Work environment

Who are we?

Health Canada is the federal department responsible for helping Canadians maintain and improve their health. Our goal is for Canada to be among the countries with the healthiest people in the world. For more information, please visit: https://www.canada.ca/en/health-canada.html

The Public Health Agency of Canada is part of the Health Portfolio of the Government of Canada, committed to help protect the health and safety of all Canadians. Its activities focus on preventing chronic diseases, like cancer and heart disease, preventing injuries and responding to public health emergencies and infectious disease outbreaks. For more information, please visit: https://www.canada.ca/en/public-health.html

The positions are located in Ottawa, Ontario in the National Capital Region. The City has various recreational pathways for walking and bicycling, in addition to the Rideau Canal, a UNESCO World Heritage Site. Ottawa hosts multiples annual and seasonal activities and festivals. The national museums and the National Arts Centre are also great attractions. The City houses a culinary community that's earning wide acclaim, as well as, unique boutiques and shopping districts. For more information, please visit: ottawatourism.ca

Positions to be filled: 9

Information you must provide

Your resume.

A covering letter in 1,500 words (maximum) "Please provide a cover letter that explains how you meet the essential/required education and experience."

In order to be considered, your application must clearly explain how you meet the following (essential qualifications)

---You are interested in making a difference through excellence in the application of statistics to data, send us your resume by clicking "apply online". Along with your resume, provide us with a few paragraphs that explain how you meet the education and experience required to join our organization. You need to tell us how, when and where you obtained the education and experience. If you do not tell us, we cannot guess (and we will not ask) and you may be eliminated from further consideration.---

The breadth and depth of experience will be considered during screening, assessment and/or selection of candidates.

EDUCATION:

Master's degree or PhD from a recognized post-secondary institution with acceptable specialization in Statistics.

Degree equivalency

EXPERIENCE

Experience in the application of statistical methods to the design or analysis of clinical trials, experiments or surveys.

Experience in preparing, presenting and translating statistical advice, results of analysis and recommendations to diverse audiences, including senior management.

The following will be applied / assessed at a later date (essential for the job)

Various language requirements

There are English-only positions and bilingual positions (intermediate and advanced levels -- for more information, please visit: https://www.canada.ca/en/public-service-commission/services/second-langu...)

Information on language requirements

COMPETENCIES

- Uphold integrity and respect (including respectful of diversity)
- · Collaborate with partners and stakeholders

ABILITIES

- Ability to apply or critically assess statistical analyses
- Abilities to recommend methodological approaches to improve the design, conduct, analyses, and interpretation of statistical analyses
- · Ability to summarise and present key scientific findings in plain language and to various audiences
- · Ability to communicate effectively in writing and orally
- Attention to details
- Judgment
- · Work independently

The following may be applied / assessed at a later date (may be needed for the job)

---The following are asset qualifications, "the good to have", but not necessarily essential for the job. A hiring manager may decide to apply these criteria at any time during the process, as deemed required. As such, provide us with a few paragraphs that explain how you meet the education and experience. You need to tell us how, when and where you obtained the education and experience. If you do not tell us, we cannot guess (and we will not ask) and you may be eliminated from further consideration.---

EDUCATION:

PhD from a recognized post-secondary institution with acceptable specialization in Biostatistics or Statistics.

Master's degree with thesis from a recognized post-secondary institution with acceptable specialization in Statistics.

Degree equivalency

EXPERIENCE:

Experience working in the field of biology or health sciences.

Experience managing projects.

Experience with quantitative or qualitative risk assessment.

Experience in having at least one published scientific paper in a peer reviewed journal or conference as an author.

KNOWLEDGE:

Knowledge of internal review/regulatory processes.

Knowledge of national survey methodology.

Conditions of employment

Reliability Status security clearance - Various level from Reliability to Secret

Other information

The Public Service of Canada is committed to building a skilled and diverse workforce that reflects the Canadians we serve. We promote employment equity and encourage you to indicate if you belong to one of the designated groups when you apply.

Information on employment equity

We are committed to providing an inclusive and barrier-free work environment, starting with the hiring process. If you need to be accommodated during any phase of the evaluation process, please use the Contact information below to request specialized accommodation. All information received in relation to accommodation will be kept confidential. https://www.canada.ca/en/public-service-commission/services/assessment-a...

Preference

Preference will be given to veterans and to Canadian citizens, in that order, with the exception of a job located in Nunavut, where Nunavut Inuit will be appointed first.

Information on the preference to veterans

We thank all those who apply. Only those selected for further consideration will be contacted.

Contact information

Specialized Recruitment Team

hc.specializedrecruitment-recrutementspecialise.sc@canada.ca

Apply online

CANSSI news



Canadian Statistical Sciences Institute Institut canadien des sciences statistiques

Data • Discoveries • Decisions Données • Découvertes • Décisions

CANSSI director, Donald Estep, on a mission to learn about Canadian statistics and inferential data science

As a newcomer to Canada and Canadian universities, Don decided to undertake a travel campaign to visit universities across Canada. The goal is to develop an understanding of the environment in which Canadian statisticians and data scientists conduct research and training and the pressures on their home departments and institutions that affect that environment. Don also engages the CANSSI community to discuss what CANSSI is doing well, where it can do well, and how it should evolve in the future.

During his visits, he has met with students, faculty, and administration. Don says, "The Canadian statistical and inferential data science community is under very significant stress right now—a victim of its own success. But everywhere I go, people have been unfailingly warm, friendly, and engaging. I have come to understand that CANSSI is special because it reflects the qualities of the community it supports."

Don will continue his travel campaign, intermingled with preparation of the proposal for the NSERC Institute competition.

CANSSI Graduate Student Exchange Scholarships

We are excited to announce the new <u>CANSSI Graduate Student Exchange Scholarships</u> program, which supports graduate students who wish to undertake an extended visit to a CANSSI member university. The program is designed to foster acquisition of new knowledge and skill sets, exposure to new areas of research and application, co-discovery of new statistics, and co-supervision of thesis research. These competitive scholarships are available to master's and PhD students who are currently enrolled in a degree program at a <u>CANSSI member university</u>. Details can be found <u>on our website</u>.

Update on the Collaborative Research Team program and call for letters of intent

The <u>Collaborative Research Team (CRT) program</u> is the flagship activity of CANSSI. The mandate of the CRT program is to foster research and training interactions that span disciplines and institutions in order to tackle fundamental statistics and inferential data science research that has impact in science, engineering, health, and society. Wildly successful since its introduction, the CRT program emphasizes the cocreation of knowledge, the leveraging of Canada's statistical and data science expertise, and the synergy achieved by embedding partnership into projects at their inception. CRT projects are awarded approximately \$180,000 over a three-year period to support HQP, research interactions of the CRT team, and communication and dissemination of research results.

We have made a significant change to the application process to reduce the up-front investment of time in the competition.

The annual CRT competition has two parts: Submission of a Letter of Intent (LOI) followed, upon invitation, by submission of full proposals. We have shifted the ingredients of the LOI and the full proposal so that the LOI focuses on the proposed research and the training of HQP, leaving details of project finance and management to the full proposal.

<u>Learn more about these changes online</u> or contact us at <u>info@canssi.ca</u> with any questions.

We're pleased to announce two new CRTs starting in 2020.

Laura Cowen (University of Victoria), Simon Bonner (Western University) and Saman Muthukumarama (University of Manitoba) will lead a project called Addressing Spatial and Computational Issues in Integrated Analysis of Modern Ecological Data.

David Haziza (Université de Montréal) and Changbao Wu (University of Waterloo) will lead a project called *Modern Techniques for Survey Sampling and Complex Data*.

Congratulations to both teams!

CANSSI Annual General Meeting—Save the date

This year's AGM will take place at Carleton University on **Saturday, May 30**. Each member institute is invited to send a representative to learn what's new at CANSSI and to vote on any motions including the appointment of new board members.

Upcoming deadlines:

- SAMSI Undergrad Workshop Applications for the May 18-22 Workshop—March 26, 2020
 Call for CRT LOIs—April 30, 2020
- Graduate Student Exchange Scholarships April 30, 2020
 Call for Workshop Proposals June 15, 2020

CANSSI mailing list

Have you been missing out on our emails? Never sure when there's a deadline? Write to info@canssi.ca to subscribe to our mailing list.