2020 SSC Awards: Call for Nominations

Nominations for the 2020 SSC awards must be received by these dates:

- Gold Medal—January 31, 2020
- Honorary Member—January 31, 2020
- Distinguished Service—January 31, 2020
- Impact in Applied and Collaborative Work—January 31, 2020
- Pierre Robillard—January 31, 2020
- CRM-SSC—February 1, 2020
- Lise Manchester—February 15, 2020

Nominations for the 2020 COPSS awards must be received by these dates:

- Fisher Award and Lectureship—December 15, 2019
- Presidents' Award—December 15, 2019
- Elizabeth L. Scott Award and Lectureship—December 15, 2019

When making a nomination, please consider the SSC's guidelines on implicit bias (pdf).

SSC GOLD MEDAL

The **Gold Medal** of the SSC is awarded to a person who has made outstanding contributions to statistics, or to probability, either to mathematical developments or in applied work. The Gold Medal is intended to honour current leaders in their fields and is normally expected to be awarded to someone still active in research. The recipient should be Canadian or a permanent resident of Canada, and must have made high quality research contributions to the statistical sciences in Canada. A recipient of the Gold Medal must be a member of the SSC. A nomination consists of a recent curriculum vitae, at least four letters of support, and a suggested citation to accompany the award. A nomination is effective for three successive competitions and may be updated annually. Previous winners can be viewed here.

SSC HONORARY MEMBERSHIP

Honorary Membership in the SSC is intended to honour a probabilist or a statistician or, in special circumstances, another individual who has made exceptional contributions to the development of the discipline. Nominations are open to people whose work was done primarily in Canada or who had a major impact in this country. Membership in the SSC is not a prerequisite. A nomination consists of a recent curriculum vitae, at least three letters of support, and a suggested citation to accompany the award. Previous winners can be viewed here.

SSC DISTINGUISHED SERVICE AWARD

The **Distinguished Service Award** is intended to honour a person who has contributed substantially and over a period of several years to the operation or welfare of the SSC. A nomination consists of a recent curriculum vitae, at least two letters of support, and a suggested citation to accompany the award. Previous winners can be viewed here.

Nominations for the three SSC awards—the Gold Medal, Honorary Membership, and the Distinguished Service Award—must be received on or before **January 31, 2020** by the chair of the SSC awards committee, Hugh Chipman. The submission process is not complete until the chair has confirmed receipt of the nomination.

Chair of the SSC Awards Committee
Hugh Chipman
Hugh.Chipman@gmail.com

AWARD FOR IMPACT IN APPLIED AND COLLABORATIVE WORK

The **SSC Award for Impact in Applied and Collaborative Work** is given to a Canadian or to someone residing in Canada, who is a member of the SSC and who has made outstanding contributions in applied and collaborative work, the importance of which derives primarily from its relatively recent impact on a subject area outside of the statistical sciences, on an area of application or on an organization.

The essential idea is that the award is for the impact of the work (not for its degree of technical sophistication, for example). The work should demonstrate the importance of the statistical sciences to other areas of endeavour and should include an intellectual contribution to statistical science motivated by the area of application. Areas in which a substantial contribution would qualify include: formulation of new statistical questions and ideas uniquely appropriate to the subject matter discipline or the organization; development and application of conceptually new approaches appropriate to the subject matter or the organization; new implementation of the best combination of techniques to solve important and difficult research problems in the applied discipline; development of statistical methods that answer a question in another field that could not have been answered adequately before; application of creative statistical thinking with demonstration of clear understanding of the science/industry of the area of endeavour; establishment of the relative merits of alternative analytic approaches leading to guidelines useful to applied scientists in choosing among them. This list is intended to be examples of contributions and is not necessarily exhaustive.

The nomination package should consist of a letter of nomination and at least three letters of support, a curriculum vitae, a "layperson" description of the work and its impact expressed in terms that would be suitable for publicity purposes, and a citation suitable for public announcement of the award. The nomination package should also include at least two letters from non-statisticians representing the field or organization that has felt the impact of the work. The letters must address how the contributions have had a recent impact. Letters of recommendation from those not directly involved in the research are particularly encouraged. The onus is on the nominator(s) to explain the work and to provide evidence of its impact in support of the nomination.

Previous award winners can be viewed here.

Nominations must be received on or before **January 31, 2020** by the chair of the committee, Carl Schwarz. Electronic submission with PDF files is preferred. The submission process is not complete until the chair has confirmed receipt of the nomination.

Carl Schwarz
Statistics and Actuarial Science
Simon Fraser University
cschwarz.stat.sfu.ca@gmail.com

PIERRE ROBILLARD AWARD

The aim of the **Pierre Robillard Award** is to recognize the best PhD thesis defended at a Canadian university in a given year and written in the fields covered by _The Canadian Journal of Statistics_. The award consists of a certificate, a monetary prize, and a one-year membership in the SSC. The winner will be invited to give a talk based on the thesis at the 2020 Annual Meeting of the Society; assistance with expenses to attend the meeting may be provided. The winner will also be invited to submit a paper to _The Canadian Journal of Statistics_.

Submitted theses will be evaluated by a committee whose members are appointed by the president of the SSC; their decision will be final. Judging will take into account the originality of the ideas and techniques, the possible applications and their treatment, and the potential impact on the statistical sciences. In any given year, no more than one winner will be selected; however, the committee may arrive at the conclusion that none of the submitted theses merits the award.

If accepted, the paper will be identified as being based on the thesis which won the 2019 Pierre Robillard Award; the names of the university and the thesis supervisor will be clearly indicated. The thesis supervisor could be co-author of the paper. The Pierre Robillard Award committee chair must receive the thesis and a nominating letter from the thesis supervisor by **January 31, 2020.**

It is imperative that the supervisors address the three criteria below in their letters:
1. The originality of the ideas and techniques, as well as a description of the exact contribution of the student when the thesis is based on co-authored articles.
2. Possible applications and their treatment.
3. Potential impact on the statistical sciences.
In so doing, the supervisor may include excerpts of letters from external examiners. Complete letters from external examiners or referees will not be accepted. Official confirmation that the thesis has been defended in 2019 must also be provided. Electronic submission is strongly encouraged.

Submission Instructions
For electronic submission, the thesis should be in PDF format. The thesis and covering letter can be emailed to the committee chair. The subject header of the electronic message should be "SSC Robillard Award Submission—StudentName" and the corresponding files should be named StudentName-thesis.pdf and StudentName-cover-letter.pdf, where "StudentName" is replaced with the name of the student being nominated. Alternately, the covering letter can give a website from which an electronic copy of the thesis can be downloaded. If the thesis has to be submitted in another electronic format or on paper, the Pierre Robillard Award committee chair must be contacted before submission. Entries should include email addresses and phone numbers of both the supervisor and the student.

Previous award winners can be viewed here

Send thesis submissions for the Pierre Robillard Award to the chair of the Pierre Robillard Award committee, Juli Atherton. The submission process is not complete until the chair has confirmed receipt of the nomination.

Juli Atherton
Département de mathématiques, UQAM
atherton.juli@uqam.ca

CRM-SSC AWARD

The Centre de recherches mathématiques (CRM) and the Statistical Society of Canada (SSC) solicit nominations for the **CRM-SSC Prize**, which is awarded in recognition of a statistical scientist's professional accomplishments in research during the first 15 years after earning a doctorate.

The award, which includes a $3,000 cash prize, is bestowed at most once a year upon a Canadian citizen or permanent resident of Canada whose research was carried out primarily in Canada. Previous award winners can be viewed here.

In 2020 eligibility will be limited to candidates who received their PhD (or equivalent degree) in the year 2005 or subsequently. The CRM-SSC Prize committee may exceptionally consider candidates who have received their degree prior but very near to the year 2005, if it can be demonstrated that special circumstances, such as parental leaves or other leaves of absence from work, delayed professional achievements. Current membership in the SSC is not a prerequisite. The nominations will be examined by an advisory committee consisting of five members, three of whom are appointed by the SSC and two by the CRM. The committee is chaired by one of the two CRM representatives.

Nominations should be addressed to the director of the Centre de recherches mathématiques, and sent via e-mail to nomination@crm.umontreal.ca by February 1, 2020. The nomination should be accompanied by at least three and no more than four letters of support, an up-to-date curriculum vitae, including a list of publications, and a suggested citation to accompany the award. As files are not carried over from one year to the next, nominations must be renewed each year.

Please submit nomination files by email to the attention of the director of the CRM at nomination@crm.umontreal.ca. The submission process is not complete until the chair has confirmed receipt of the nomination.

LISE MANCHESTER AWARD

This award commemorates the late Dr. Lise Manchester's abiding interest in making use of statistical methods to provide insights into matters of relevance to society at large. The **Lise Manchester Award** recognizes excellence in state-of-the-art statistical work which considers problems of public interest and which is potentially useful for formation of Canadian public policy.

Any relevant statistical contribution occurring during the previous five years can be nominated for the award in a given year. Nominations from governmental and non-governmental organizations are encouraged. Each nomination must be supported by a member of the SSC. The winner or winners will receive a personal certificate; they will also share $1,000 in cash prize.

Previous award winners can be viewed here.

Nominations must be received on or before February 15, 2020 by the chair of the Lise Manchester Award committee, James Hanley. The submission process is not complete until the chair has confirmed receipt of the nomination.

James Hanley
Dept. of Epidemiology, Biostatistics & Occupational Health
McGill University
james.hanley@mcgill.ca

COPSS AWARDS

The **Committee of Presidents of Statistical Societies (COPSS)** sponsors a number of awards which are presented at the Joint Statistical Meetings. These awards are: the **Presidents' Award** ("to a young member of the statistical community in recognition of outstanding contributions to the profession of statistics"), the **R. A. Fisher Lectureship** ("to honour the contributions of Sir Ronald Aylmer Fisher and the work of a present-day statistician"), the **Elizabeth L. Scott Award** ("to recognize an individual who exemplifies the contributions of Elizabeth L. Scott's lifelong efforts to further the careers of women in academia"), the **Florence N. David Award** ("to recognize a female statistician who exemplifies the contributions of Florence Nightingale David"), and the **George W. Snedecor Award** ("to honour an individual who was instrumental in the development of statistical theory in biometry"). Note that the David and Snedecor Awards are given only in odd-numbered years, whereas the Scott Award is given only in even-numbered years. Also note that, for the COPSS Presidents' Award, "eligible candidates either (i) will be under 41 throughout the award calendar year, **or** (ii) will be under age 46 throughout the award calendar year **and** will have received a terminal statistically-related degree no more than 12 years prior to that year."

Members of the SSC are encouraged to nominate worthy candidates for these COPSS awards. The deadline for nominations for the Fisher Award and Lectureship, Elizabeth L. Scott Award and Lectureship and the Presidents' Award is **December 15, 2019**.

For information concerning the nomination process and a list of previous winners, see here. For further information or assistance, contact **Hugh Chipman,** Hugh.Chipman@gmail.com.

Speed Identified as the Best Predictor of Car Crashes

Speeding is the riskiest kind of aggressive driving, according to a unique analysis of data from on-board devices in vehicles.

Researchers at the University of Waterloo examined data from 28 million trips for possible links between four bad driving behaviours—speeding, hard braking, hard acceleration, and hard cornering—and the likelihood of crashes.

Their analysis revealed speeding is a strong predictor of crashes, while statistically significant links for the other kinds of aggressive driving couldn't be established.

"For insurance companies using this telematics data to assess who is a good risk and who isn't, our suggestion based on the data is to look at speed, at people driving too fast," said **Stefan Steiner**, a statistics professor in Waterloo's Faculty of Mathematics.

Data for the study came from insurance companies in Ontario and Texas with clients who had on-board diagnostic devices installed in their vehicles.

In the first study of its kind, researchers initially analyzed the data to identify 28 crashes based on indicators such as rapid deceleration.

Each vehicle in those crashes was then matched with 20 control vehicles that had not been in crashes, but were similar in terms of other characteristics, including geographic location and driving distance.

When the crash cases were compared to the control cases using a sophisticated penalty system for the four kinds of bad driving, speeding emerged as the key difference between them.

"Some of the results are no surprise, but prior to this we had a whole industry based on intuition," said **Allaa (Ella) Hilal**, an adjunct professor of electrical and computer engineering. "Now it is formulated—we know aggressive driving has an impact."

Steiner cautioned that the study was limited by several unknowns, such as different drivers using the same vehicle, and more research is needed to verify the results.

But he said the analysis of telematics data could eventually revolutionize the insurance industry by enabling fairer, personalized premiums based on actual driving behaviour, not age, gender, or location.

Hilal believes the data could also make roads safer by giving drivers both tangible evidence and financial incentives to change.

"Having this information exposed and understood allows people to wrap their minds around their true risks and improve their driving behaviours," she said. "We are super pumped about its potential."

Manda Winlaw, a former mathematics postdoctoral fellow, and statistics professor **Jock MacKay** also collaborated on the study, "Using telematics data to find risky driver behaviour," which appears in the journal *Accident Analysis and Prevention*.

MEDIA CONTACT | Matthew Grant
226-929-7627 | @uwaterloonews | uwaterloo.ca/news

Attention broadcasters: Waterloo has facilities to provide broadcast quality audio and video feeds with a double-ender studio. Please contact us for more information

Dr. Michelle Miranda Joins the Statistics Group at the University of Victoria

The Department of Mathematics and Statistics at the University of Victoria welcomes Dr. **Michelle Miranda** to the Statistics group. Dr. Miranda received her doctorate from the University of North Carolina at Chapel Hill under the supervision of Drs. J. Ibrahim and H. Zhu. Her thesis was entitled "Bayesian Analysis of Ultra-high Dimensional Neuroimaging Data." She held two postdoctoral fellowships, one at the Research, Innovation and Dissemination Center for Neuromathematics at the University of Sao Paulo, and the other at the University of Texas MD Anderson Cancer Center. Her research interests include functional data analysis, low-rank techniques, Bayesian methods for variable selection and spatial models for neuroimaging data.

The Department of Statistics and Actuarial Science Welcomes Assistant Professor Aukosh Jagannath

The Department of Statistics and Actuarial Science is pleased to welcome Assistant Professor Aukosh Jagannath as of July 1, 2019.

Aukosh Jagannath holds a PhD in Mathematics from the Courant Institute at New York University in 2016. Since then he has been an NSF Mathematical Sciences Postdoctoral fellow at the University of Toronto and Harvard University as well as a Benjamin Pierce fellow at Harvard University. His research interests are in probability and analysis and their applications to statistical physics, combinatorial optimization, the mathematics of data science, and high-dimensional statistics. Jagannath will help develop a stronger theoretical foundation for data science and expand our links with other departments and faculties at Waterloo.

The Department of Statistics and Actuarial Science Welcomes Assistant Professor Fangda Liu

The Department of Statistics and Actuarial Science is pleased to welcome Assistant Professor **Fangda Liu** as of June 1, 2019.

Fangda Liu holds a PhD in Actuarial Science from the University of Waterloo in 2015. She was then an assistant professor at the Central University of Finance and Economics for three years, and joins us from an assistant professor position in the College of Business at Georgia State University. Her research interests include reinsurance/insurance, risk measures, risk sharing and market equilibria. Her work provides a good balance of theory and applications and she will strengthen the actuarial science group within our department.
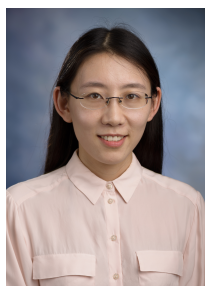
McGill Professor Celia Greenwood: President of the International Genetic Epidemiology Society

Dr. Celia Greenwood, president of the International Genetic Epidemiology Society, highlights the upcoming 28th Annual Meeting of the Society
October 12–14, 2019

Hilton of Americas Hotel
Houston, Texas

The annual meeting of the International Genetic Epidemiology Society (IGES) welcomes attendees with interests in statistical methodology and epidemiologic studies in the field of human genetics and genomics. Invited speakers at the 2019 meeting in Houston, TX, include **Genevera Allen**(Rice University and Baylor College of Medicine), whose research interests are in high dimensional inference and machine learning, **Toby Johnson**(GlaxoSmithKline) who works on causal inference and methods for validation of drug targets, **Kari North** (UNC Department of Epidemiology) with multidisciplinary research in cardiovascular disease, and **Hongyu Zhao** (Yale University), who develops statistical approaches answering a wide range of questions in human genetics and molecular biology.

The meeting usually welcomes 250–400 attendees, with plenary oral and poster sessions as well as mentoring activities for trainees and young investigators. Houston is a welcoming city with many museums and a walkable downtown core.

For further information, see https://iges.memberclicks.net/iges-2019 or email iges@geneticepi.org

David Bellhouse Has Been Made Honorary Fellow of the Institute and Faculty of Actuaries of the United Kingdom

Based on his book *Leases for Lives: The Emergence of Actuarial Science in Eighteenth Century England*, as well as his biography of Abraham De Moivre and other contributions, **David Bellhouse** has been named honorary fellow of the Institute and Faculty of Actuaries of the United Kingdom.

Honorary fellow nominees should be individuals who "have achieved distinction in related fields or given significant service to the actuarial profession," can add value to the profession, have a direct connection with the profession, and have an ongoing relationship with the profession.

The full notice of the award is at

https://www.actuaries.org.uk/news-and-insights/news/honorary-fellowships-sir-steve-webb-and-dr-david-bellhouse

Congratulations to Mario Ghossoub and Mirabelle Huynh, for Earning Their Designation of Fellow of the Society of Actuaries

The Department of Statistics and Actuarial Science would like to highlight the recent achievements of two of its department members, **Mario Ghossoub** and **Mirabelle Huynh**, for earning their designation of Fellow of the Society of Actuaries.

Congratulations to the two of them for this extraordinary achievement!

Phelim Boyle Named Fellow of the Royal Society of Canada

The Department of Statistics and Actuarial Science would like to congratulate **Phelim Boyle**, along with two other Faculty of Mathematics researchers, on being named a fellow of the Royal Society of Canada (RSC). They are among the seven University of Waterloo researchers to receive this honour and among 93 new fellows elected by their peers for outstanding scholarly, scientific, and artistic achievement across Canada.

Phelim Boyle is a professor emeritus at Waterloo and a professor of business and economics at Wilfrid Laurier University. He is an actuary whose seminal research in finance and insurance has won international recognition. He uses mathematical models to solve problems at the interface of these fields. Boyle has made pioneering contributions to quantitative finance, and his ideas have transformed how actuaries handle financial risk. His research has influenced financial practice by providing sophisticated tools for financial institutions to better manage their risks.

Michael Arthur Stephens: 1927–2019

Michael Arthur Stephens was born April 26, 1927; he died April 10, 2019 at the age of 91. Along his journey, he had real impact in the areas of directional data and goodness-of-fit, played an important role in the development of the Statistical Society of Canada and was responsible for the existence of a vibrant group in the Department of Statistics at Simon Fraser University. Just as importantly, Michael educated and entertained generations of young statisticians; he mentored, supported, cajoled, and told stories to many, many people.

Michael was born and raised in Bristol, England. His parents were divorced when Michael was quite young; his mother disappeared from his life. He then lived for some time with his grandmother and grandfather (a bookie), his father having moved to Southampton for work before being killed in the Blitz in 1941.

Michael's road to statistics was far from direct. At the age of 11 he won a scholarship to Queen Elizabeth Hospital, a Bristol boarding school dating from 1590. There he eventually became "head boy" and enjoyed a successful rugby career to go with his successful academic career. The result was a scholarship to Bristol University where he obtained an Honours Physics degree in 1948. That year, he went to Harvard as the first holder of the Frank Knox Scholarship, completing his AM in Physics there in 1949. His first career switch came at this point; for the next 10 years Michael taught mathematics. He started in the US at Tufts College (in Massachusetts), then left for London when the Korean War came along. There he taught engineering students at Woolwich and Battersea Polytechnics (now the Universities of Greenwich and East London, respectively) before returning to the US to teach at Case Institute of Technology (now Case Western Reserve University, in Ohio). Only in 1959, at age 32, did Michael switch to statistics, starting his PhD at the University of Toronto under the supervision of **Geoffrey Watson**.

There were memorable events and important milestones, the source of many stories, between the end of his time at Harvard and his arrival at Toronto. Having decided to return to England he booked passage on the RMS Queen Mary. On that trip he met George Plimpton, an American journalist and actor. He lost at squash to Plimpton (whose later fame was based on very short stints playing professional sports badly to write about the experience) after they cajoled a steward into letting them play in the squash court reserved for first-class passengers. In London, he shared an office with **Henryk Zygalski** who was one of the Poles whose work enabled the successful cracking of the ENIGMA code at Bletchley Park; Michael's memories will appear shortly in *The Enigma Bulletin*. And in 1956, at Case, Michael first learned FORTRAN, a subject which will recur below since he continued writing and running FORTRAN code until he died.

Michael's time at the University of Toronto was formative and the source of many more stories. As an older student doing a PhD he was a don in residence and helped many students succeed at U of T. He used to speak with pride of having earned $100 (Canadian) while a PhD student by producing code for a chemist who needed to evaluate some complex-valued functions. Beyond stories, of course, Michael was getting on with the business of becoming a researcher. It was at this time that Geoff Watson introduced Michael to directional data (for his PhD thesis), and it was Geoff's introduction of the goodness-of-fit statistic, (U^2 (U2), for data on the circle, that led Michael to the whole area of goodness-of-fit. These two topics occupied most of Michael's career.

In 1962 Michael graduated and married his wife, Evelyne. The year was a very good one in many other ways for Michael since he published his first three papers, all in *Biometrika*. He stayed briefly at Toronto to teach but in 1963 found a tenure-track job at McGill University. I think it's fair to say that Michael was ambitious. He was appointed professor at Nottingham University (in the UK) in 1970 but left there only two years later for McMaster University in Hamilton. In 1976, he moved to Simon Fraser where he spent the rest of his career.

By this time, Michael's career was flourishing. When he went to Nottingham he had 16 papers in *Biometrika*, three in the *Annals*, two in *JRSS-B* and one in *JASA*—a remarkable start. This initial burst of writing was in directional data: exact distribution theory, large-sample theory for directional tests in 1, 2, and many-sample problems, goodness-of-fit tests on the circle, higher dimensional directional data, and much more. The work on U^2 U2 then grew to encompass many goodness-of-fit papers. Six years later, arriving at SFU, he was already a fellow of the ASA, a fellow of the IMS, and an elected member of the ISI.

At Simon Fraser Michael moved quickly, hiring three statisticians (**Larry Weldon**, me, and **Rick Routledge**) over the next five years quickly growing our group from two to six. In some ways, this success was too much; political forces (and money) meant our next hire, **Tim Swartz**, took another seven years. The late 80s and early 90s brought us to 10 by the time he became professor emeritus in 1992, having reached the age of 65. Michael preferred to refer to this by describing himself as FLORA: Forcibly Laid Off at Retirement Age.

Retirement made little difference to his research, however; he was still writing papers right up till his cancer diagnosis and helping to edit even after that. Most of Michael's research after coming to SFU was in goodness-of-fit. He was the leading proponent of three quadratic Empirical Distribution Function tests—Cramér–von Mises, Anderson–Darling, and Watson's test. These tests of the hypothesis that a sample has some distribution, have themselves distributions which depend on whether or

not any parameters are estimated, on the family of distributions in question, and in general on the specific parameter value. The distributions are those of a sum of weighted chi-square variates and the weights are found by solving a (Fredholm) integral equation. Michael loved the related special function theory; he and I spent many hours solving the equivalent boundary value ODE problems. Indeed, Michael got my own research career started in the early 80s by bringing me in on one of these problems concerning the von Mises distribution on the circle.

Michael was very proud of the 1986 book, *Goodness-of-fit Techniques,* which he co-edited with **Ralph D'Agostino**; through this book he had his greatest impact on science. He, himself, wrote four chapters in that book; he also co-wrote the introduction with D'Agostino. The book focuses sharply on practice, not theory; Michael was fond of asking, "what would the practical man want?" If you read his chapters in the book, or his papers, you will see that Michael wrote smoothly and flowingly but I should tell you that the process was far from effortless—a useful lesson for many academics. Michael edited his work very aggressively. For much of the time before he retired that meant literally cutting and pasting as he took a draft, cut it into pieces, taped those pieces into new places and inserted scrawls that only Sylvia Holmes, who typed for him, could read. This focus on the writing derived from a dedication to marrying theory with practice and ensuring that readers could duplicate the analyses he suggested without any intervening confusion.

Michael leaves behind thousands of FORTRAN programs; I wish I could tell you they were carefully documented. We often laughed at the orphaned pieces of code that would be left behind as he edited the code—still in the file but in such a way they could never be executed. Here is another lesson—don't do that. (Of course, few readers will ever have seen a bare "goto" statement; those tended to be the way Michael moved past the intervening, now orphaned, code.)

The bulk of Michael's work was done in the age of statistical tables and his computing skill led him to working on several such for **Egon Pearson** that appeared in *Biometrika Tables*. Indeed, Michael collaborated over some years with Pearson on a variety of topics. Pearson's request for smaller tables, for instance, led Michael to produce "modified" goodness-of-fit statistics; a sample size dependent location scale shift of the original statistic for which the convergence of the null distribution to its large-sample limit was very fast. Pearson also introduced Michael to the use of Pearson curves, the four-parameter family introduced by Pearson's father, Karl, that includes so many of the famous distributions of statistics. Michael used his original code (which really just interpolated in a table) for many years and was always happy when he could compute the first four moments of a statistic so that he could fit another Pearson curve.

Writing for a Canadian audience, I must say something about Michael's influence here. For the SSC I think it's fair to say Michael's major service came through his term as president in 1983–84. He looked on the creation of the SSC Gold Medal during his presidency as his most important contribution that year. The medal was later awarded to Michael himself in 1989. I should also note that the Society made him an honorary member after his retirement. These, however, are the formal aspects of Michael's role in the Society. I know many readers will instead think immediately of his contribution as a frequent after-dinner speaker. He was very popular in this role, delivering "off-the-cuff" remarks he had practised for hours in front of a mirror. He would often poke fun at colleagues (and sometimes, I confess, those remarks had a bit of bite) but always he spoke with good humour and good intentions.

Michael's story telling mastery was honed over long years. Michael worked with many people over his career. Along the way he built many friendships. Michael listened to those friends—listened and remembered. He empathized, and then when you met him again, he would follow up, ask after your family, remember anything which might previously have been troubling you. In the months leading up to his death, I had the privilege of reading emails from many people whose lives he touched; those emails were very moving to me.

Michael also had stories of the theatre in which he took a deep, life-long interest. He had stories of his rugby career at school in Bristol, of the other boys at his school and where they ended up in life, and of his political interests (in the UK Liberal party of the day). He told stories of people he met at Harvard, at Case Western, in France, of Evelyne and her family's war experiences in France, and of his in-laws. He told stories of his teaching experiences in the United States and of his colleagues everywhere he went. He told vivid stories with great detail on these and many, many more topics.

Michael was predeceased by Evelyne. He is survived by their daughter, Madeleine, who is now herself married with four sons of whom Michael was very proud indeed. He also leaves behind an enormous number of friends, students, and colleagues who owe him a great debt. I am one such; in my case the debt is huge. While I will miss Michael's stories, I miss Michael even more.

- By **Richard Lockhart**

Further reading

Michael's CV is available online at: http://people.stat.sfu.ca/~lockhart/MAS/CV_MAStephens.pdf.

A conversation with Michael which provides more detail on his early life can be found here: http://people.stat.sfu.ca/~lockhart/MAS/MASConversation2007.pdf.

More detail on his professional life is in an interview of Michael by John Spinelli and me in *Journal of Statistical Theory and Practice*, vol. 3, pp. 751–762, 2009.

Marc Moore (1942–2019)

Marc Moore, formerly professor at Montréal Polytechnic School, passed away on July 26, 2019 in Montréal. He was 77 years old. We lost with him a pioneer of statistics in French Canada.

Marc was born on May 12, 1942 in Chicoutimi (Quebec). He grew up in St-Hyacinthe, where his father was director of the School of Textiles for a long time. After studying mathematics (BSc, 1964) and statistics (MSc, 1966) at the University of Montréal, he worked for a few months at Surveyer, Nenniger and Chênevert (later, SNC-Lavalin) before opting for a career in education. He was a lecturer at the Royal Military College St-Jean from 1965 to 1969 and concurrently at the University of Montréal in 1968–69, where he then undertook doctoral studies under the supervision of Constance van Eeden.

Upon graduation in July 1971, Marc was appointed to an assistant professorship at Montréal Polytechnic School. He was promoted to the rank of associate professor in 1973 and became a full professor in 1980. He chaired the Department of Applied Mathematics twice (1981–84, 1991–94) and, under difficult circumstances, oversaw its merger with the Department of Industrial Engineering. He was the 1985 recipient of the Principal's Award of Excellence and retired at the end of 2002.

Marc was a relentless worker with a keen sense of organization. He was known as a kind, modest, and generous man. A visionary and a builder, he was among the first French-Canadian statisticians to acquire a solid reputation in research. A pioneer of spatial statistics, he published nearly 30 research papers, mostly as sole author, in international journals such as *The Annals of Statistics* or the *Journal of Applied Probability*, but also in *The Canadian Journal of Statistics*. In particular, he is credited with an elegant result on the completeness of Bayesian procedures in shape reconstruction, as well as significant advances in iceberg movement modeling and morphometric analysis of spatial data.

Student training was of paramount importance to Marc. He was a gifted teacher whose students appreciated his structured thinking, relevance, and respect. He taught probability theory and statistics to several generations of engineers. With **Yves Lepage** and **Roch Roy**, he coauthored the textbook *Introduction à la théorie des probabilités* published by the Presses de l'Université du Québec in 1975.

After playing a key role in setting up graduate programs in mathematics at Polytechnic, Marc supervised four PhD students. The first one, **Sylvain Archambault**, received the Pierre Robillard Award from the SSC for the best thesis completed in 1990. **Luc Adjengue** (1991) and **Noureddine Raïs**(1992) are professors at Polytechnic and at Sidi Mohamed Ben Abdellah University in Fez, respectively. As for **Soumaya Moussa** (1994), she is a statistician at the Canadian Mortgage and Housing Corporation.

Marc's expertise was in great demand. He was a member of Statistics Canada's advisory committee on methodology from 1985 to 1988. He also served four terms, and was chair twice, on grant selection committees for the Natural Sciences and Engineering Research Council of Canada (1981–84, 1994–95, 1996–99) and Quebec's Fonds pour la formation de chercheurs et l'aide à la recherche (1989–92). He also sat on Quebec's pedagogical coordinating committee for college mathematics programs (1984–86).

Marc's involvement in the community was exemplary. He served on numerous committees within the SSC, including the Pierre Robillard Award committee on three occasions. He was president of the Society in 1995–96 and responsible for the scientific program not of one, but of two SSC annual meetings (Quebec, 1987; Wolfville, 1993). From 1990 to 1995, he was also a member (and chair in 1992–93) of the COPSS Presidents' Award committee.

In 1997–98, Marc organized a thematic semester at the Centre de recherches mathématiques de Montréal, together with **Jerry Lawless**, **Nancy Reid**, and **Yannis Yatracos**. The proceedings of the workshop on spatial statistics which he edited were published by Springer in 2001. In May 2002, he also organized, with **Sorana Froda** and **Christian Léger**, a symposium for the 75th anniversary of his PhD supervisor, **Constance van Eeden**. This led to a Festschrift published as *IMS Lecture Notes* in 2003.

Finally, one would be remiss not to mention the outstanding services that Marc rendered to *The Canadian Journal of Statistics* as a member of the editorial board (1981–85), as first associate editor (1985–88), and finally as editor-in-chief (1989–91). It was under his guidance that the journal became one of the first in statistics to implement double-blind refereeing. It took Marc a lot of determination to implement this policy, unpopular in some quarters, but consonant with his keen sense of justice.

Among Marc's honours, he was co-opted a member of the International Statistical Institute in 1986 and received the SSC Distinguished Service Award in 1994. He became an honorary member of the SSC in 2003.

Marc retired at the age of 60 to concentrate on his passion for cabinet-making. His talent was inherited from his paternal grandfather, who was a cabinetmaker for the Quebec Legislature. Self-taught in this trade, Marc started by building his own cottage at Cameron Lake in the Laurentians. From 2003 to 2013, he lived in St-Sauveur, where he manufactured small furniture and craft items, turned parts, as well as traditional cabinets. His wife and he were sailing and hiking enthusiasts, and were emeritus members of the Quebec Walking Federation. Marc lived through difficult times when Parkinson's disease forced him to abandon all his activities.

Marc is survived by his wife, **Monique Pineault**, a nurse, whom he married in 1966, as well as their two sons, François and Benoît, their spouses, Anne and Chantal, and four grandchildren. Marc was particularly proud of his sons' achievements, and with good reason: François is director, 1finity Product Line Management at Fujitsu Network Communications in Texas; Benoît has just been appointed a judge of the Quebec Court of Appeal.

Marc will remain for us a model of professional and personal commitment. We will miss him very much.

- **Christian Genest,** McGill University

photo by **Peter MacDonald**

Job Announcement: Assistant Professors in Statistics, Biostatistics or Data Science

The Department of Statistics and Actuarial Science in the Faculty of Mathematics at the University of Waterloo is in an exciting period of expansion and invites applications for six positions at the rank of Assistant Professor, or as circumstances warrant, Associate or Full Professor may be considered. Interested candidates from any area of statistics, biostatistics or data science are encouraged to apply. The expected start date for these positions is July 1, 2020 though the actual start date is flexible.

Requirements include a PhD in Statistics, Biostatistics, or related areas, demonstrated research potential, excellent communication skills, and a strong commitment to teaching at the graduate and undergraduate levels. The candidate will be expected to develop and lead an active, internationally recognized research program and cooperate with graduate students and professors on a variety of research problems. The candidate is also expected to teach courses at the undergraduate and graduate levels along with some curriculum development, as well as engage in various administrative services to the department.

The University of Waterloo is one of Canada's leading universities with 40,000 full and part-time students in undergraduate and graduate programs. The Department of Statistics and Actuarial Science is one of the top academic units for the statistical and actuarial sciences in the world and is home to over 50 research active full-time faculty and close to 200 graduate students in programs including statistics, biostatistics, data science, quantitative finance and actuarial science. The department offers a vibrant research environment for a wide range of areas including statistical theory, applied probability, analysis of longitudinal and event history data, methods for incomplete data, statistical learning, data science, computational statistics, finance and risk management, survey methods, industrial statistics, and interdisciplinary collaborative work. The department benefits from close relationships with many research groups on campus including the Survey Research Centre, the Business and Industrial Statistics Research Group, the Computational Statistics Research Group, the Waterloo Research Institute in Insurance, Securities and Quantitative Finance, the School of Public Health and Health Systems, the Interdisciplinary Centre on Climate Change, and the Centre for Theoretical Neuroscience.

Interested individuals should apply using MathJobs (www.mathjobs.org/jobs). Applications should include a cover letter, a curriculum vitae, research and teaching statements, teaching evaluation summaries (if available), and up to three reprints/preprints. In addition, applicants should arrange to have at least three reference letters submitted on their behalf. Completed applications will be reviewed on an ongoing basis. The application deadline is November 20, 2019. The salary offered will be commensurate with qualifications and experience. The salary range for these positions is $110,000 to $150,000. Negotiations beyond this salary range will be considered for exceptionally qualified candidates.

If you have any questions regarding the position, the application process, assessment process, eligibility, or a request for accommodation during the hiring process, please contact:

Stefan Steiner, Chair
Department of Statistics and Actuarial Science
University of Waterloo
200 University Avenue West
Waterloo ON N2L 3G1, CANADA
sas-chair@uwaterloo.ca

The University of Waterloo regards diversity as an integral part of academic excellence and is committed to employment equity and accessibility for all employees. As such, we encourage applications from women, Indigenous (First Nations, Métis and Inuit) peoples, persons with disabilities, members of diverse gender identities, and others who may contribute to the further diversification of ideas. At Waterloo, you will have the opportunity to work across disciplines and collaborate with an international community of scholars and a diverse student body, situated in a rapidly growing community that has been termed a "hub of innovation." All qualified candidates are encouraged to apply; however, Canadians and permanent residents will receive priority in the recruitment process.

Three reasons to apply: https://uwaterloo.ca/fauw/why.

Statistics 2021 Canada: 6th Canadian Conference in Applied Statistics

STATISTICS 2021 CANADA
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STATISTICS 2021 CANADA: 6th Canadian Conference in Applied Statistics

Department of Mathematics & Statistics and Department of Supply Chain & Business Technology Management of Concordia University will be hosting the conference, **Statistics 2021 Canada: 6th Canadian Conference in Applied Statistics** during Thursday, July 15 to Sunday, July 18, 2021.

In keeping with the long tradition of previous decennial conferences (starting in 1971), this convention is dedicated to all areas of statistical sciences. In addition to the traditional theoretical/applied areas, interdisciplinary research would be encouraged and promoted, including the following major theme areas: Applied Statistics, Big Data, Bioinformatics, Biostatistics, Computational Statistics, Data Mining, Data Science, Demography, Econometrics, and Health Statistics.

The venue of the conference:

1455 de Maisonneuve Blvd West

Concordia University, Montreal, QC H3G 1M8

Contact: Yogen Chaubey

Email: stat2021@concordia.ca

Web link: http://www.concordia.ca/artsci/events/statistics-2021.html