

Statistics and Actuarial Science Simon Fraser University

Newsletter (abbreviated version)

The full 45+ page newsletter for 2008/2009 is available on our web site at
<http://www.stat.sfu.ca/about/newsletters>.



A human histogram of some of the Departmental family taken in late 2009.
Can you spot some of the “outliers”?

Welcome to the abbreviated edition of the Department of Statistics and Actuarial Science Newsletter. Our Department continues to be among the leading departments for Statistics and Actuarial Science in Canada. We hope this newsletter helps you maintain connections with the faculty and staff and fellow students from your student days at SFU.

Future Data Points

45th Actuarial Research Conference at SFU in July 2010

SFU is proud to host the 45th Actuarial Research Conference on July 26-28, 2010. The ARC is the most important conference in North America for academics and graduate students. It is open to all areas of actuarial practice and promotes education, research and interaction with industry. The year 2010 also marks the 20th anniversary of our actuarial program. More details available at: <http://www.stat.sfu.ca/events/arc>

American Stat Association Meets in Vancouver in August 2010.

The largest meeting of statisticians in the world is coming to Vancouver on **July 31 - August 5, 2010** at the Vancouver Convention Centre in downtown Vancouver. Full details are available at <http://www.amstat.org/meetings/jsm/2010/index.cfm>. We hope to see many of our department's alumni and friends at the convention. Be sure to come up to visit the Department on Burnaby mountain during your visit.

New Departmental Website Launched:

The Department has recently launched a new website (<http://www.stat.sfu.ca/>) that features several of our alumni in the rotating pictures slide show. Check it out!

Department now on Facebook.

The Department has recently launched a Facebook site to help keep in touch with Departmental Alumni and Friends. Visit us at: <http://www.facebook.com/pages/Burnaby-BC/SFU-Department-of-Statistics-and-Actuarial-Science/104222189609838>

Structural Relationships

Some Words from the Chair



Greetings to members, alumni and friends of our Department. I feel very lucky to be in our Department which continues to be one of the highly ranked Departments across Canada. Our success is due to our high quality faculty and staff and to the hard work and achievements of our alumni and students.

This newsletter is a chance for us to showcase our accomplishments. Several faculty members have been elected fellows of the American Statistical Association, the Institute of Mathematical Statistics, and the American Academy for the Advancement of Science or have received national awards from societies. Our graduate students have won best paper competitions at the SSC and other meetings. And we continue to attract high quality students with many NSERC and other scholarships.

Our alumni family is increasing - there are now over 600 alumni from our Department. We would also like to hear about the accomplishments of our alumni - just drop us a line or join us on Facebook (yes, we've joined the 19th century).

I hope to see many of our alumni at two upcoming events in Vancouver. First, in late July, the Department is hosting the 45th Actuarial Research Conference (<http://www.stat.sfu.ca/events/arc>), the most important conference in North America for academics and graduate students in Actuarial Science. It promotes education, research and interaction with industry. The year 2010 also marks the 20th anniversary of our actuarial program. Planning is underway for a celebration to coincide with the ARC.

Then in early August, the annual Joint Statistical Meeting (<http://www.amstat.org/meetings/jsm.cfm>) is being held in downtown Vancouver. This meeting is organized by the American Statistical Association and sponsored as well by the Institute of Mathematical Statistics, the Eastern and Western North American Regions of the International Biometrics Society and by the Statistical Society of Canada. This is the premier meeting for statisticians; I expect more than 5000 in attendance. There are many invited sessions where renowned statisticians talk about the use of statistics in exciting areas of research and public policy.

Finally I want to let you know that 2011 is the tenth anniversary of the founding of this department and we are looking forward to celebrating!

Other news from members of the Department is found in the full newsletter at <http://www.stat.sfu.ca/about/newsletters>

Revamping of our graduate program



The Graduate Studies committee of our Department (chaired by Derek Bingham) has recently tabled a set of proposals to modify our graduate program in our Department. The proposed program will include a more consistent set of courses offered each year along with a Biostatistics stream. Details on both proposals are available at http://www.stat.sfu.ca/~cschwarz/Graduate_program_proposal.pdf.

Comments and suggestions from our alumni and friends of the Department are welcome. Please send them to dbingham@stat.sfu.ca.

Departmental Seminars 2008/2009

The Departmental Seminar series continues to bring interesting speakers on a wide variety of topics. A full listing is available at: <http://www.stat.sfu.ca/research/seminars>. If you are interested in getting announcements about upcoming seminars, please contact the Department to be added to the *stat-sem* email list.

Recent News clipping about our Department.

A full list of news clippings is found on the Department's website at <http://www.stat.sfu.ca/news/>

2010-03-21 CURLERS SECOND IN CLUB TOURNAMENT



The department curling team struggled through 3/4 of the season, but when the pressure was on they started a terrific run nearly won them a club championship at the Cloverdale Curling Club. After winning only 2 games out of their first 16, the team -- lead Dave Campbell, second Marie Loughin, third Derek Bingham, and skip Tom Loughin, with Gary Parker as spare -- reeled off a streak of 6 straight wins including two wins in the year-end tournament that landed them in the finals. No one in the club was more stunned by this unexpected run at glory than the team itself, who credited their new-found success to the recruitment of Quatchi as their mascot. Despite being brought back down to earth in the finals by a team that could actually curl, the team closed out the season with an enthusiasm and vigour rarely seen among statisticians, and they look forward to the start of curling again next September.

PHOTOS: 1. Team MVP, Quatchi, shows off after another fine shot. 2. Tom slides out of the hack as Tara Campbell (L) and Derek Bingham (R) wait to sweep HARD!

2009-11-02 Dean elected fellow of American Association for the Advancement of Science



The American Association for the Advancement of Science named Charmaine Dean as a new fellow. The award was conferred in February 2010.

2009-09-01 Strizhkova awarded CD Nelson Graduate Scholarship.

Congratulations to Olga Strizhkova on her award of the CD Nelson Graduate scholarship for the 2009-2010 academic year.

2009-06-02 Routledge receives SSC Impact Award



The Statistical Society of Canada (SSC) announced in summer 2009 that the recipient of the SSC Award for Impact of Applied and Collaborative Work is Professor Rick Routledge of Simon Fraser University. This award recognizes outstanding contributions by SSC members in collaborative research and applications to a specific field outside of statistics. The citation for the award read: “To Rick Routledge, in recognition of his research on stochastic modeling, sampling and inference techniques for population ecology, for his research on the ecology of fish populations and for the major impact his work on Pacific salmon has had on aquatic science and public policy.” The formal announcement is at http://www.ssc.ca/main/about/awards/awards2009_e.html#impact

Additions to the Departmental Family

Latest Alumni

Congratulations to our latest graduate and undergraduate alumni joining the Departments “family” in 2008 and 2009.



New M.Sc and Ph.D. Alumni.

A list of our newest M.Sc. and Ph.D. alumni and copies of all the theses are available at: <http://www.stat.sfu.ca/people/alumni>. This type of interdisciplinary work is a hallmark of our program in Applied Statistics at Simon Fraser University.

New Undergraduate Alumni

A list of our newest undergraduate alumni is found at <http://www.stat.sfu.ca/people/alumni/undergradalum>

2008 and 2009 Statistics and Actuarial Science Awards

The Department of Statistics and Actuarial Science is pleased to honor its students, staff, and faculty every year during our Annual Awards Reception. A full copy of all of the award winners is available on our web site at <http://www.stat.sfu.ca/people/awards/>

Outliers

For Today's Graduate, Just One Word: Statistics – NY Times, 2009-08-06.

In case you missed it, the New York Times had an interesting article on the growth in positions for Statisticians.

“The rising stature of statisticians,, is a byproduct of the recent explosion of digital data. ... The new breed of statisticians tackle that problem. They use powerful computers and sophisticated mathematical models to hunt for meaningful patterns and insights in vast troves of data. The applications are as diverse as improving Internet search and online advertising, culling gene sequencing information for cancer research and analyzing sensor and location data to optimize the handling of food shipments.” You can read the entire article at:

<http://www.nytimes.com/2009/08/06/technology/06stats.html#>

“The job statistician will become the "sexiest" around.”

February 27th issue of Economist has a special 14 page section on the "The Data Deluge and how to handle it." This is very nice review of why statisticians are necessary to deal with the current deluge of data. "Data, data everywhere ... and a new kind of professional has emerged, the data scientist, who combines the skills of software programmer, statistician, and storyteller/artist to extract the nuggets of gold hidden under mountains of data. Hal Varian, Google's chief economist, predicts that the job statistician will become the "sexiest" around. Data, he explains, are widely available; what is scarce is the ability of extract wisdom from them."

χ^2 test used to detect election fraud.

The Washington Post described how the familiar χ^2 -test for proportions was used to provide evidence of election fraud in the 2009 Iranian elections (<http://www.washingtonpost.com/wp-dyn/content/article/2009/06/20/AR2009062000004.html>). It is very difficult for people to generate truly random digits. The authors looked at the distribution of the final digit in the reported number of votes cast in that election and found an excess of 7's and a deficit of 5's ($p = .04$). They also looked at the frequency of the second and last digits and found evidence of non-randomness. “The probability that a fair election would produce both too few non-adjacent digits and the suspicious deviations in last-digit frequencies described earlier is less than .005.”

Comments and Suggestions are always welcome. Please feel free to send us an email with queries or questions. Editors: Carl Schwarz (cschwarz@stat.sfu.ca) and Cary Tsai (cltsai@stat.sfu.ca)