



Newsletter 2005

Editor's Note: This Newsletter covers events during the last two academic years, roughly Fall 2003 to Summer 2005. Some of the articles below have been written by the staff of SFU News, and others have been drafted by the faculty and staff of the department. Larry Weldon

Contents of this Issue

A Few Words From the Chair	2
New Faculty Members	4
Staff Changes	6
Actuarial Student National Association Magazine	7
Creation of the Faculty of Health Sciences	7
Donations to Endowment Fund	9
Natalia Lysenko wins Dean of Science Gold Medal	9
Laura Cowen wins First Prize in Student Paper Competition	9
Sitter appointed Editor of Technometrics	10
Salmon and Sea Lice – Statistics in Environmental Science	10
MSc Projects and PhD Theses – A Diverse Range of Topics	12
Stats/ActSci Basketball	13
P-Stat Accreditation	13
UBC-SFU Joint Seminar in Statistics	14
Awards 2003-2004	14
Awards 2004-2005	18
Some Stories from Award-Winning Students	20

A Few Words From The Chair



When I began my term as department chair in September of 2004, I figured that it would be a low-key period of consolidation. We had doubled in size in about 5 years of remarkable growth. Surely, I thought, the unprecedented surge was over. I looked forward to a quiet time to help integrate the new faculty members into the department. It would be, it seemed, a pleasant time to encourage the best out of the very bright, energetic young people who had recently joined us. In addition, Steve Thompson was scheduled to arrive to take up the Shrum Chair in Science. Steve could join the other senior members in the department in melding a solid team.

It seemed that office space was not even going to be a serious issue. We had just acquired new floor space to the east, beyond what some of you may recall was once an old fire-escape-like exit to a footpath through the woods. We had enough offices to go around with space left over for a lab for Derek Bingham (our Tier II Canada Research Chair), a shared office for visitors, and even a spare office to loan to Earth Sciences.

I am very pleased to report that my prediction of a low-key time was dead wrong. Thanks to continuing, strong support from the upper administration, we received authorization to hire a third actuary last year. We were very fortunate to recruit Yi Lu who comes with considerable teaching experience from China. Yi also has very timely research interests in modeling risks associated with such events as Atlantic hurricanes.

We were also very fortunate to have hired – jointly with the new Faculty of Health Sciences – Leilei Zeng, a recent Ph. D. graduate from the University of Waterloo whose research interests are focused on biostatistics. Leilei also has consulting experience in optometry research – timely expertise should the Faculty receive approval for its proposal to create an optometry program at the new Surrey Campus.

The university's new Faculty of Health Sciences and Surrey Campus are in fact presenting us with further exciting opportunities for expanding our mandate. Under the extraordinarily capable guidance of our founding chair, Charmaine Dean, we are developing a new M. Sc. concentration in biostatistics that will complement activities in the new Faculty of Health Sciences.

At the Surrey Campus, we are committed to working with the Department of Mathematics and others to develop an innovative program in operations research. This may well involve a move of the existing Management and Systems Science program to the new campus. We are currently advertising for a senior person to coordinate the development of a new contingent to our department at Surrey whose first task will be to

fulfill this commitment. Any readers who found the Burnaby campus too rectangular and blocky, I would encourage to visit the Surrey Campus, scheduled to open next fall. The flowing, airy architecture is stunning.

Speaking of remarkable facilities, many of us are also involved in the new centre for Interdisciplinary Research in the Mathematical and Computational Sciences (IRMACS). This facility promotes interdisciplinary research through providing graduate students, postdoctoral fellows, and visitors with physical workspace, state-of-the-art computational and communications resources, and expert technical support. The opportunity that the centre provides for researchers to interact across traditional academic disciplines is unique.

The IRMACS presentation theatre, with its 3-D projection facilities and other advanced communications facilities is a real showpiece of modern technology. And then there is the physical workspace. Our graduate student numbers have burgeoned along with the faculty complement. K9501, the former classroom converted several years ago to house our graduate students, can no longer accommodate more than a fraction of our current cohort. The IRMACS facility has come to play an essential role, not only in fostering the interdisciplinary research projects that are increasingly common in our department, but in addressing our shortage of physical space.

The most notable change to our teaching activities has been in actuarial science. We were most fortunate in being able to entice Gary Parker back from a very successful foray into the world of actuarial consulting. Gary has overseen the expansion of the faculty complement to 3 actuaries, and together, the group has revitalized the undergraduate program. The program annually attracts 20-30 high-quality students. These students continue to win top awards for their academic performance. The actuarial group is now developing post-baccalaureate opportunities and a full graduate program. Indeed Natalia Lysenko, winner of the 2005 Dean's Convocation Medal, is one of the first two students to take advantage of the new post-graduate opportunities that the group is developing.

Perhaps a few of you reading this will have memories of Simon Fraser University that pre-date mine. I came here 25 years ago, in 1980. At that time, the statistics group had a mix of 3 relatively senior people (Cesareo Villegas, David Eaves and Michael Stephens), and 3 people who had arrived more recently (Larry Weldon, Richard Lockhart, and myself). We met informally under Michael's energetic leadership to plot a future at Simon Fraser University for a discipline that was just starting to emerge on a national level. Cesareo has now passed away, but David still comes up for special occasions, and Michael remains very actively engaged in research and graduate supervision. Michael also continues to enliven the department with his infamous skills as a public speaker.

Even by 1980, we had come to rely on the remarkable talent and dedication of Ms. Sylvia Holmes, then graduate secretary for the Department of Mathematics and Statistics. Sylvia went on to become the founding graduate and chair's secretary in our new department. She retired last fall after 30 years of exemplary service. It was easy to find people willing to pay tribute at her retirement reception to her remarkable contributions to both our department and its predecessor – of course, the speakers' list included the indefatigable Michael Stephens.

We have recently been fortunate to be able to expand our staff complement to two full-time positions, now ably filled by Kelly Jay and Charlene Bradbury.

As for the three recent faculty arrivals in 1980, we're now a minority of the senior people in the department. (To protect the guilty, I won't mention the others' names.) There are also an approximately equal number of very talented and energetic recent arrivals who are in turn poised to carry the department forward for a new generation. Many of them have come with prestigious, externally funded contracts; all of them come very highly recommended. We are very fortunate. Indeed, whenever I meet statisticians from other Canadian universities, someone tells me how envious people are of the strong cohort of new people we have been able to recruit to our department. I am very privileged to have the opportunity to serve as chair of such a remarkable group.

Finally, I would like to thank Larry Weldon for volunteering once again to assemble this newsletter. It is important for us to keep in touch with people who have passed through the department. One of the greatest pleasures for a member of the teaching profession is in return visits from former students. I enjoyed the opportunity to meet with those who came to the alumni reception last fall, and would encourage everyone to feel welcome to stop by sometime for a visit with a favorite teacher.

New Faculty Members

Over the last two academic years, several new faculty members have joined the department. Cary Tsai (Risk Theory, Ruin Theory), Yi Lu (Risk Theory and Applications), Rachel Altman (Correlated Discrete Data and Latent Variable Models), Derek Bingham (Industrial Statistics), Joan Hu (Incomplete Data Analysis, Longitudinal Studies), Gary Parker (Financial Risk Management), Boxin Tang (Design of Experiments, Industrial Statistics), Steve Thompson (Sampling Theory and methods; Environmental Statistics), Leilei Zeng (Longitudinal Data Analysis); New Adjunct Faculty F. He (Forestry - Pacific Forest Center) and N.W. Hengartner (Spatial Statistics - Los Alamos National Lab) and Paramjit Gill (UBC-Okanagan - Sports Statistics).

Pictures that were available for "new" faculty members appear on the next two pages, although it has been over two years since the last newsletter, and several of these members will no longer feel they are "new" to this department!



Rachel Altman



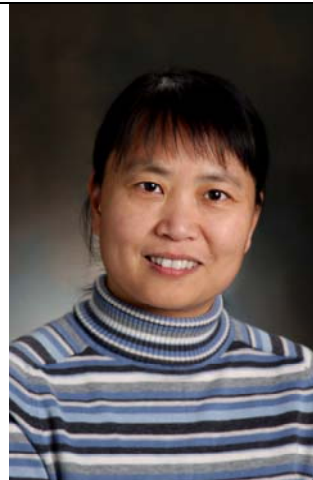
Derek Bingham



Paramjit Gill



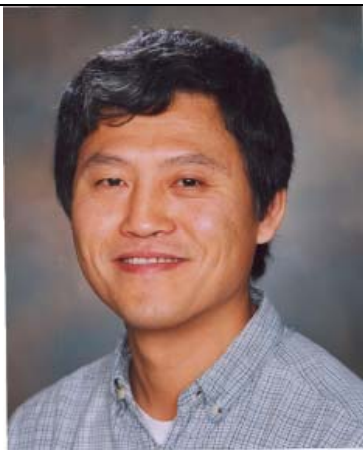
Joan Hu



Yi Lu



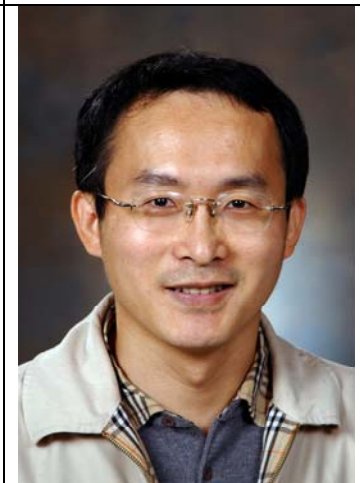
Gary Parker





Boxin Tang



Steve Thompson



Cary Tsai

		
Leilei Zeng		Our Quarters

Staff Changes

From the D.A., Sadika Jungic



As of October of 2004 Sylvia Holmes, the first Graduate and Chair's secretary in the Department of Statistics and Actuarial Science happily retired after 35 years of service to Simon Fraser University. Most of Sylvia's working time was in the old Department of Mathematics and Statistics.

Kelly Jay, who joined our Department in November of 2004, replaced Sylvia as Graduate/Chair's Secretary. Kelly came with some experience in the realm of graduate and chair's secretary's work and is a nice addition to our department. As the Department grew, the part time position of the Receptionist/Secretary was upgraded to a full time position of the Undergraduate Secretary/Receptionist/Secretary and we were able to recruit Charlene Bradbury back to our Department.

At this stage, after facing substantial increase of faculty members and graduate students, the Department is considering hiring one more staff member.

Actuarial Student National Association magazine

A recent edition of the Actuarial Students National Association magazine was mostly produced and written by students within our program or graduates of our program.

The Actuarial Students' National Association (ASNA) was founded in 1989 at Laval University, Quebec. It has now grown to represent over 85% of actuarial students in Canada. Students from Concordia, Laval, Montreal, UQAM, Toronto, Waterloo, Simon Fraser and Western University are members in the ASNA.

The ASNA magazine is one of the most effective means of transmitting information to the student body. It communicates current issues to over 2,200 actuarial students, graduates and professionals across the world. The magazine contains articles submitted by actuaries writing about their specialty or on a current issue related to the profession.

The magazine is bilingual: every article is written both in English and in French. We have an excellent translation committee that takes care of maintaining the bilingualism in every activity and publication. Funds related to the publication of the magazine is gathered by sponsorships.

Past issues have featured articles on various topics: exceptional career path, legal expertise, new exam system and requirements, reinsurance, casualty insurance, changes in the professional organizations... to name a few!

Creation of Faculty of Health Sciences

Congratulations to David Maclean on bringing the new Faculty of Health Sciences online.

"The program will explore collaborative community health research, disease prevention, the complexities of societal investment in health and public policy-making. The faculty will accept its inaugural MSc program's first students in September 2005. Fourteen tenure-track researchers will make up the faculty's initial complement of appointments, beginning in June 2004. Their selection will be based on their expertise in epidemiology, qualitative research methods, public health/community health, bio-statistics and health economics.

More details about the 2003 inauguration at:

http://www.sfu.ca/mediapr/sfu_news/archives_2003/sfunews01080418.htm

The Department of Statistics and Actuarial Sciences in the Faculty of Science has been closely associated with the new Faculty of Health Science. Here are some of the details of our involvement.

Statistics and Actuarial Science are key technologies for research and administrative work in the health sciences. The first Dean of Health Sciences, Dr. David Maclean, had a minor appointment in our department when he first came to SFU, as a consequence of his interest in biostatistics, epidemiology, and health care research.

Charmaine Dean was the initial Associate Dean of the new Faculty - she managed the hiring and the program construction, and hired Richard Lockhart last summer as the Graduate Studies Chair. Carl Schwarz served as the tenure and promotions committee chair last year for Health Sciences.

At the request of Health Sciences, Charmaine arranged to have our graduate students in statistics critique the practicum proposals of the health sciences students. This will be structured in a 'grant committee style' meeting in the spring and is associated with the practicum proposal course which the health sciences students will take next term. We offer this gratis as support to health sciences in its start up phase.

Biostatistics is a strong connection and we are developing a stream in this area. We have a strong natural connection intellectually and scientifically and because of our collaborative work at provincial and national levels in the health, biometric, environmental and sampling arenas - all of which connect to health sciences.

There are many additional links. There will be an Arthritis Research Chair in Statistics - position to be filled. Rick Routledge is connecting with Tim Takaro on the environmental health side. Leilei Zeng will be a joint appointment next year and is currently Charmaine's PDF. Many of our faculty are associate members. Some of us are mentors. Another source of intimate links with health science field is in the Masters and Doctoral programs of our students – see the project and thesis titles later in this newsletter.

Statistics departments worldwide have benefited from the collaboration with researchers in the health science area. Our department has pursued these links off-campus but now can include an increased involvement in health science research through internal connections.

Donations to Endowment Fund

We are very grateful to the following individuals and organizations for donations to our Statistics and Actuarial Science Endowment Fund.

Anonymous (1)
Chan,Jonathan Kai Lun
Fan Seafoods Ltd.
Hare,Kevin
Harrop,Ronald and Olive
Hsu,Irene Hui-Kong
Kwok,Tsun Yin Joseph
Lee,Lai Yin
Shen,Ran
Statistical Society of Canada
Sutherland,Jason Murray
Szeto,Erica Wai-Ka
Szeto,Margaret
Talling,Douglas Norman
Taylor,Carolyn Gail
Tsai,Cary Chi-Liang
Yuen,Henry

The income from the endowment supports awards and scholarships for students in our major and honors programs.

For information on how to contribute to this endowment fund, please contact Sadika Jungic at 604-291-3665 or sjungic@sfu.ca.

Natalia Lysenko wins Dean of Science Gold Medal

For Natalia Lysenko, winner of the dean of science's convocation medal in June 2005, her university career move was a calculated handspring from the sports arena to academia. From Russian gymnast to North American actuarial scientist would be a tough change for ordinary students, but Natalia has excelled in everything she has tried. See the fascinating story from the SFNews article

http://www.sfu.ca/mediapr/sfu_news/archives/sfunews06090505.html

Laura Cowen wins First Prize in Student Paper Competition

Congratulations to Laura Cowen on a First Prize in the Student Paper Oral Competition at the Western North American Region (WNAR) of the International Biometrics Society in Fairbanks, Alaska.

The subject of her talk was how to estimate animal abundance using mark-recapture when tag loss is present. This was based on her recent Ph.D. thesis from the Department of Statistics and Actuarial Science at SFU.

Laura has recently assumed a faculty position in the Mathematics Department at UVic.

Sitter appointed Editor of Technometrics

Randy Sitter has been appointed Editor of Technometrics from three years starting 1 January 2004. Technometrics is a flagship publication of the American Society for Quality Control and the American Statistical Association. Since its inception in 1959, the mission of Technometrics has been to contribute to the development and use of statistical methods in the physical, chemical, and engineering sciences. The Department is pleased to host Technometrics for the next three years. Its mission is closely aligned with our Departmental focus on applied statistics



Salmon and Sea Lice – Statistics in Environmental Science

Ottawa urgently needs to find out whether sea lice-infested fish farms are killing wild salmon in Northern B.C.'s Broughton Archipelago.

That is the view of Simon Fraser University statistics professor Rick Routledge, a researcher studying the issue and a participant in a recent workshop about it in Alert Bay. "The evidence implicating the fish farms remains circumstantial and incomplete," says Routledge, "but it is very compelling."

Routledge and other workshop participants are dismayed that a 2004 federal study of the Broughton Archipelago's salmon fishery will not begin until the end of March. Pink salmon smolts will have already started migrating out of the archipelago's inlets, past fish farms, and into the ocean by then.

SFU's centre for coastal studies (CCS) organized the Alert Bay workshop to get stakeholders discussing new research about rising sea lice populations in fish farms and declining wild salmon runs in the Broughton Archipelago.

(See Sea lice proceedings for The Speaking For the Salmon report on the workshop, prepared by CCS.)

The archipelago's nutrient rich inlets are major producers of B.C.'s salmon runs, particularly pink salmon, the most abundant salmon species.

Studies done by Routledge, a CCS member, Alexandra Morton, an independent biologist, and other researchers over the last few years have shown that sea lice levels on wild salmon near active fish farms are much higher than elsewhere.

Routledge stresses that scientists must nail down the lethal sea lice load for juvenile pink salmon because European evidence suggests that one louse can kill a juvenile pink. "This is no better than an educated guess," explains Routledge. "Our salmon are much smaller than their wild European counterparts and not closely related."

Routledge's most recent work with Morton's team shows that when some Broughton Archipelago farms were emptied of fish in 2003, the lice loads on wild salmon caught in the vicinity declined substantially. Like many conservationists and native groups at the workshop, Routledge questions the provincial government's refusal to make public details on fish farm sea lice loads.

Routledge and other scientists are frustrated because the provincial government is not further researching or enforcing the emptying of fish farms in 2004.

Also, a recent major study by the federal department of fisheries neglected to examine the connection between sea lice, pink salmon and fish farms.

John Fraser, the chair of the Pacific Fisheries Resource Conservation Council, concludes that the federal and provincial governments are dragging their heels on investigating the issue. He says that federal fisheries must resolve conflicting interests. "The inherent conflict is whether the department is going to promote aquaculture or look after the wild fish and the habitat," says Fraser. The council is an independent body, advising the federal government on Pacific salmon conservation.

(This article appeared in SFU Week on 24 Mar 2004. See http://www.sfu.ca/mediapr/sfu_news/archives/sfunews03180402.htm for more detail)

MSc Projects and PhD Theses – A Diverse Range of Topics

Yiqing Li, M.Sc. project, "Predicting the 2004 Presidential Election". Supervisor Tim Swartz

Jeremy Hamm, M.Sc. project, "Estimating the rate of concussions in British Columbia minor hockey using community volunteer collected data". Supervisors Dave Goodman and Carl Schwarz

Nicole Trouton, M.Sc. project, "An investigation into the factors influencing escapement estimation for chinook salmon (*Oncorhynchus tshawytscha*) on the Lower Shuswap River, British Columbia.". Supervisor Carl Schwarz.

Ran (Sandy) Shen, M.Sc. project, "A Constrained Joint-Equation Estimation of at-a-station Hydraulic Geometry". Supervisor Carl Schwarz.

Eric Sayre, M.Sc. project, "An Approach to Analyzing Case-Control Screening Data with an Application to Digital Rectal Exam and Metastatic Prostate Cancer". Supervisor Larry Weldon.

Laura Cowen, Ph.D. thesis, "Mark-recapture and tag-loss." Supervisor Carl Schwarz.

Karey Shumansky, M.Sc. project, "Comparison of Statistical Methods of Haplotype Reconstruction and Logistic Regression for Association Studies" Supervisor John Spinelli

Mercedeh Ghadessi, M.Sc project. "A Comparison of Two Logistic Regression Approaches for Case-Control Data with Missing Haplotypes" Supervisors Brad McNeney and Jinko Graham.

Maria Lorenzi, M.Sc. project. "Analysis of Occupational Cohort Data Using Exposure as a Continuous Time-dependent Variable" Supervisor John Spinelli

Suman Jiwani, M.Sc. project. "Parametric Change point Survival Model with Application to Coronary Artery Bypass Graft Surgery Data" Supervisor Charmaine Dean

Amy Summers, M.Sc. project. "Hockey Pools for Profit: A Simulation Based Player Selection Strategy". Supervisor Tim Swartz.

Stats/ActSci Basketball

Unlike most teams in the SFU Men's Intramural Basketball League, the Stats/Actsci team practices inclusion. We have professors on our team, graduate students, undergraduates, old and young players, players of varying ethnicities and both genders have been represented. The only loose requirement is that you need to be a statistician/actuary or a friend of a statistician/actuary.

We have been fielding a team every term for at least five years, and have gone under such colourful team names as "The Statisticians", "The Matrix", "The P-values", "The Bayes Factors" and even "Sir David Cox".

Despite the inclusivity and the comical names, the Department has managed to put forward competitive teams. In the Fall 2005 semester, we made it to the league championship game for the second time. However, sweet victory and the promise of a champions t-shirt eluded us once again. As some of us are getting a little long in the tooth and some of the "stars" are near graduation, the time to win is now.

You may recognize some of the following players who have well represented our Department: Mark Wolters, Jason Nielsen, Carl Schwarz, Randy Sitter, Wilson Lu, Tim Swartz, Sean Zheng, Simon Bonner, Darcy Pickard, Farouk Nathoo, Tony Zhang and Matt Pratola. (Submitted by Tim Swartz)

P-Stat Accreditation

As indicated below, the Statistical Society of Canada is establishing a program for accreditation of professional statisticians who practice in Canada.

We are pleased to announce that the Department of Statistics and Actuarial Science at SFU has two of the initial cohort of accredited Statisticians: Rick Routledge P.Stat. and Carl Schwarz P.Stat.

For further information, please visit the interim web site:
http://www.ssc.ca/main/about/accreditation_e.html

UBC-SFU Joint Seminar in Statistics

This year, Rachel Altman(SFU) and Jason Loeppky (UBC) launched a new seminar series, entitled UBC/SFU Joint Seminars in Statistics. The goal of this series is to help in creating a cohesive community of statisticians in the GVRD, and, in particular, to increase the interaction among faculty and students at UBC and SFU. The seminars are at a level accessible to graduate students, and are held at convenient, central locations in Vancouver. By bringing statisticians together -- both from the two departments and the local medical research centres -- it is hoped that the wealth of available resources within the community will be highlighted and made more accessible.

Here is a list of the speakers and topics that have provided a promising start to this new series.

Jan 27, 2005

1. Professor [Jim Zidek](#), UBC
Physical vs Statistical Modelling: Towards Reconciliation
2. Professor [Charmaine Dean](#), SFU
Problems in the Analysis of Spatial Longitudinal Data

Oct. 6, 2005

1. Professor Tim Swartz, SFU
Two Problems in Bayesian Computation: Importance Sampling and Classification
2. Professor [Paul Gustafson](#), UBC
On Bayes and Being Realistic

Awards: There are two sets of awards in this newsletter, one from each academic year 2003-4 and 2004-5. See the following pages.

**Department of Statistics and Actuarial Science Awards
(2003-4)**

Graduate Awards

**NSERC Post-graduate Scholarship
2004/05**

PGS Masters
Suman Jiwani

PGS Doctoral
Eric Sayre

2003/04

PGSA
Amy Summers

PGSB
Crystal Linkletter
Wendall Challenger
Linnea Duke

Special Graduate Entrance Scholarship

Crystal Linkletter (03-2)
Amy Summers (03-3)

PIMS Postdoctoral Fellowship

2004/05
Wen Lu

NSERC Postdoctoral Fellowship

2004/05
Jason Loepky

**PhD Graduate Fellowships
04-1**

Laurie Ainsworth
Jason Loepky
Jason Nielsen

**MSc Graduate Fellowships
03-3**

Jeremy Hamm
Eric Sayre

04-2

Chunfang Lin

**President's Ph.D. Stipend
03-3**

Laurie Ainsworth

04-2

Jason Loepky
Wen Lu
Laura Cowen

**C.D. Nelson Scholarship
03-1**

Crystal Linkletter

Faculty Awards

Associate Director of IHRE

Charmaine Dean

Professional Accreditation for Statistics

Carl Schwarz and Rick Routledge

**Appointment as the New Editor for
Technometrics**

Randy Sitter

Architect of new Faculty of Health Sciences

David MacLean

Michael Smith Scholar Award

Jinko Graham

CRM-SSC Prize

Charmaine Dean

**Silver Anniversary of receiving NSERC
Research Grants**

Rick Routledge

Norman Reilly

Michael Stephens

Undergraduate Awards

Undergraduate Open Scholarships during 03-2, 03-3, 04-1

Andrew Balo (03-2, 03-3,03-3)
Tyler Gray (03-2, 03-3,04-1)
John Kowalik (03-3,04-1)
Lai Yin Lee (03-3,04-1)
Dawei Li (03-2)
Julia Lin (03-2,03-3)
Natalia Lysenko (03-3,04-1)
Yeuk Mak (04-1)
Eunjoo Park (03-3)
Xiao Lu Wang (03-2,03-3,04-1)
James Kwang Wong (03-2)
Clement Wu (03-2,04-1)
Kuan-Chiur Wu (03-2,03-3,04-1)
Shih-Wa Ying (03-2,03-3,03-3)
Zhe Zhang (03-2,03-3,04-1)

SFU Alumni Scholarship

Dong Chen (03-2)
Xiao Lu Wang (03-2)
Clement Wu (03-2)
Ruowei Zhou (04-1)

Dr. Abe Unau Memorial Co-op Prize

Chun Kwan (03-2)

R. Bruce Coles Memorial Scholarship

Xiao Lu Wang (03-3,04-1)

Watson Wyatt & Company Scholarship in Actuarial Science

Natalia Lysenko (04-1)

Management and Systems Science Graduation Award

Peter Lok Pan Mak

Management and Systems Science Prize

Maximilian Burke (3rd year award)
Kseniya Stepanova (4th year award)

Statistics and Actuarial Science Endowment Award for excellent achievement in the Majors and Honors program

Dong Chen
Yanna Hu
Xiao Lu Wang
Clement Wu

SSC Endowment Award

Rouwei Zhou

High Academic Performance in Statistics/Actuarial Science/MSSC Courses (03-2, 03-3, 04-1)

Evguenia Jane Rozina, **Acma 490** (03-2)
Jared Van Snellenberg, **Stat 101C**(03-2)
Heena Hee-Eun Kim **Stat 101** (03-2)
Karen Ka Hang Wong, **Stat 201** (03-2)
Wai Un, **Stat 270** (03-2)
George X. Zhu, **Stat 330** (03-2)
Tyler Gray, **Stat 410** (03-2)
Ryan Quee, **MSSC 480** (03-2)
Zhe Zhang, **Acma 310** (03-3)
Lin He, **Acma 425** (03-3)
Sandra Gillespie, **Stat 101 C** (03-3)
Kimmy K.L. Chan, **Stat 203** (03-3)
Albert Su, **Stat 270** (03-3)
Ming Wai Emily Tsang, **Stat 302** (03-3)
Kuan-Chiun Wu, **Stat 350** (03-3)
John Bentley, **Stat 400** (03-3)
Aaron Springfield, **Stat 430** (03-3)
Jessica Ou Dang, **Stat 450** (03-3)
Kai Fai Poon, **Stat 490** (03-3)
Vincent Q.V. Nguyen, **MSSC 480** (03-3)
Edwin Yiu, **MSSC 481** (03-3)
John Kowalik, **Acma 320,445**(04-1)
Saravie Brewer, **Stat 100** (04-1)
Selina McBride, **Stat 101 C** (04-1)
Robert Wallis, **Stat 201** (04-1)
Fei Jiang, **Stat 270 D1** (04-1)
Duomo Zhang, **Stat 270 D2** (04-1)
Ruowei Zhou, **Stat 330** (04-1)
James Wong, **Stat 380** (04-1)
Xiao Lu Wang, **Stat 402** (04-1)
Sean D. Weston, **Stat 403** (04-1)
Natalia Lysenko, **Stat 410** (04-1)
Aslam Jamal, **MSSC 480** (04-1)
Xiaoming Shi, **MSSC 481** (04-1)

Department of Statistics & Actuarial Science Awards (2004-5)

Graduate Awards

CGS-M NSERC Scholarship:

Natalia Lysenko
Ruowei Zhou

CGS-D NSERC Scholarship:

Simon Bonner

SFU Special Graduate Entrance Scholarship:

Ruowei Zhou

C.D. Nelson Memorial Graduate Scholarship 2005-2006:

Natalia Lysenko

GEOIDE Gold Student Scholarship:

Farouk Nathoo

Faculty Awards

2004 CRM-SSC Prize in Statistics:

Randy Sitter

Pierre Robillard Award for best Ph.D. thesis:

Rachel Mackay Altman

Michael Smith Foundation for Health Research Award:

Jinko Graham

Undergraduate Awards

Undergraduate Open Scholarships

Andrew Balo 1044

Ou Dang 1044

Yanna Hu 1047

Chan-Sheng Hung 1044,1047

Aaron Kinakin 1044,1047

John Kowalik 1044,1047,1051

Victoria Laan 1047,1051

Rong Li 1044,1047,1051

Monica Lu 1047, 1051

Natalia Lysenko 1044,1047,1051

Yui Pui Mak 1044,1047,1051

Eunjoo Park 1044,1047,1051

(Rina) Meng Wang 1044,1047,1051

Xiaolu Wang 1044

Clement Wu 1047

(Kyle) Kuan-Chiun Wu 1044,1047,1051

Shih-Wa Ying 1044

Zhe Zhang 1044,1047

SFU Alumni Scholarship

Feng Li 1047,1051

Rong Li 1047

Yew-Wei Lim 1044, 1051

Xiaolu Wang 1044

Faculty of Science Alumni Scholarship

Rong Li 1044

Dean of Science Award

(Kyle) Kuan-Chiun Wu 1047

Statistics & Actuarial Science Endowment Award for excellent achievement in the Majors & Honors program:

Feng Li

Yew-Wei Lim

Xiaolu Wang

SSC Endowment Award

(Kyle) Kuan-Chiun Wu

R. Bruce Coles Memorial Scholarship

Yanna Hu 1047

Rong Li 1051

Pacific Blue Cross Scholarship:

John Kowalik

Watson Wyatt Scholarship:

Ruowei Zhou

John Culver Woody Scholarship:

Natalia Lysenko

Some Stories from Award-Winning Students

The Department has 7 major awards:

- The Watson Wyatt Scholarship for students with high standing in Actuarial Science established by the Watson Wyatt Company.
- The Pacific Blue Cross Scholarship for students with high standing in Actuarial Science established by Pacific Blue Cross.
- The Statistical Society of Canada (SSC) award
- The Statistics and Actuarial Science Endowment Awards (four awards) funded by earnings on our departmental endowment fund.

Some of these award winners have provided some background to their success. See the following stories.

Watson Wyatt Scholarship

Ruowei Zhou

This scholarship is awarded annually to a student in an approved Actuarial Science program who has completed ACMA320. It is granted on the basis of academic performance.

Ruowei Zhou writes:

My first degree and PhD degree are in computer science. After graduation, I spent several years doing image processing and pattern recognition related R&D works in Singapore. In 2003, when my family immigrated to Canada, I found that it was the time for me to replan my future and rethink my career. After some researches, Actuarial Science seemed a good choice for me. It involves a lot of mathematics and statistics. It also plays an important role in people's everyday life: insurance, pension, finance, and other areas.

In fall 2003, I was accepted into Actuarial Major by SFU. The study proves to be very challenging and fascinating. In fall 2004, I got a co-op job in D.A. Townley, a Vancouver based pension administration company. During the eight-month co-op work term, I have been given great opportunities to do various projects in pension field: investment performance analysis, pension plan actuarial valuation, pension plan amendments and consolidation, and pension calculations. This experience further convinced me that I've chosen the right career path for myself.

I am expecting to graduate in the fall of 2005. After that, I will enter the Statistics and Actuarial Science graduate program of SFU. My goal is to be an expert in Actuarial field. I am confident that I will excel in my studies and future works.

Pacific Blue Cross Scholarship

John Kowalik

One Pacific Blue Cross Scholarship in Actuarial Science will be made available in any semester, based on academic merit, to a 3rd or 4th year student with a declared major in Actuarial Science.

John Kowalik writes:

I came to Canada 12 years ago with my family in search of a better future, so I have always placed school as my first priority. Receiving a scholarship like the Pacific Blue Cross Scholarship is an incredibly rewarding and motivating experience for me.

I first heard about actuarial science from my grade 12 math teacher. I have always had a passion for mathematics so I immediately looked into it and became very interested in the field. I began my studies at Simon Fraser University in 2002 with a slight feeling of intimidation and fear. I knew that the actuarial science program is very competitive and I was afraid that I could drop from being one of the top students in my grad class to a relatively average student at SFU. However, the increasing difficulty of classes only heightened my interest in the material and caused my grades to consistently improve. I am currently at the top of the actuarial science program in SFU with an upper division GPA of 4.30. It will certainly be difficult to bring this up any further.

Last Fall semester I worked as a TA for the Statistics and Actuarial Science Department and I previously volunteered as a Calculus TA for the Mathematics Department. Aside from my studies, I also enjoy playing and recording music with my band, and competing in expert/pro bike trials competitions. I believe that such a well-rounded lifestyle of diverse activities is what allows me to maintain a great attitude.

This scholarship is the first major symbol of achievement to me, as well as a great financial support. It has made me realize that my hard work is paying off, and that I am nearing the transition from school to work and perhaps graduate studies.

Thank you very much for your support!

Statistical Society of Canada

(Kyle) Kuan-Chiun Wu

The Statistical Society of Canada Award will be presented to an undergraduate student who is a declared major/honors in Statistics and/or Actuarial Science. The criteria for selection for the award are academic merit and a commitment to the mission of the SSC. The SSC is a national organization representing statisticians from across Canada. Its mission is to encourage the development and use of statistics and probability.

To achieve this, the Statistical Society of Canada:

- helps to develop a public awareness of the value of statistical thinking and the importance of statistics and statisticians in Canadian society;
- works to ensure that decisions affecting Canadian society are based on appropriate data and valid statistical interpretation;
- promotes the highest possible standards for statistical education and practice in Canada;
- promotes the development of statistical methodology;
- promotes a sense of community among all statisticians in Canada;
- provides a forum for the exchange of ideas between theoreticians and practitioners of statistics.

This award was generously endowed by the Statistical Society of Canada using proceeds of the net revenue from the SSC Annual Meeting held at Simon Fraser University in 2001.

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Kyle Wu writes:

When I was three years old, my family moved from Taiwan to South Africa, where I spent most of my life. Honestly, the move didn't seem to impact my life much – I was much too busy eating, sleeping, playing, learning to speak properly, and not worrying about picking a good career path to notice the changes. However, when I moved to Vancouver four-and-a-half years ago, I did a very

good job (overly good, some would say) of noticing all the changes to my life. These changes ranged from the fact that I'd be going to a completely different school, to the fact that my immediate family would become spread over three continents, to the fact that cars drive on the right side (or the wrong side, depending on how you look at it) of the road. Fortunately, I didn't have to change my goal to become an actuary.

I first heard about actuarial science from a cousin of mine (one that I particularly look up to) when I was 14. Even before I decided to do any research on the profession, I knew that my current career path would be the one that I'd be taking once I'd gotten high school out of the way, and here I am. As an actuary, not only would I satisfy my desire to have a slightly less-than-conventional job, but, having always been fascinated by mathematics, I'd be able to do it the love *and* for the money.

As with many students at my stage of the actuarial program, I hope to finish my preliminary actuarial exams before I graduate. This shouldn't be too hard to accomplish because, although I am close to graduation in terms of credit-hours, I began an eight-month co-op work term at Pacific Blue Cross in January, which means that I won't be able to finish my course requirements for graduation until the end of the year, at least.

I haven't really made any plans past graduation yet. I suppose I'll try to find work in the actuarial field and try to earn a full actuarial designation as soon as possible, but there are still decisions to be made about whether or not I'll stay in Vancouver, what "flavour" of actuary I'd like to become, and so on.

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Statistics and Actuarial Science Endowment Awards

These awards are presented to students in the major/honor program with high academic standing.

Feng Li

Three years ago, when I arrived at Vancouver International Airport as a new immigrant from China, I was considering a new career instead of software engineer for which I have been working for nearly 10 years. I thought I should choose a career that must be exciting, challenging, and the most important thing is

such that I can take advantage of all my knowledge and skills I got from my past education and career.

I'm very good at mathematic, have professional computer skills, and extremely curious about finance and investment subject. I searched school and program on the Internet and then found Actuarial Science Program at SFU was just exactly what I was looking for. However, ACMA program is a very hot program at SFU. Fortunately, I was accepted into the program as a second-degree student after two semesters hard studying at SFU.

During the first semester after I was admitted into the program, I was so fascinated by what I was studying in ACMA320 and ACMA315. It was the first time in my life I did realize that the price for an insurance contract was calculated by some scientific and strict assumption. So I can't wait to study other ACMA courses.

Since I arrived Canada, I'm very proud of two accomplishments I have achieved till today. One is I got my first baby, my little son Alex; the other is the program I'm studying. Whenever I talked about my program, I always attracted some envious eyes from other students. So I know I just did a right choice. I will continue to work hard toward completing the program and then look for a job as an actuary or further my study in actuarial or statistics field.

Yew-Wei Lim

I was originally a computing science major but made the switch to Statistics when I realize that is what I am passionate about. I did complete the Certificate in Computing Studies before making the switch, and this credential will complement very well with a Statistics degree and a certificate in actuarial science.

While working as a computer programmer fulltime, I started enrolling in SFU computing science courses in the evening. Through the years, I have tried philosophy, computing science, mathematics, statistics and actuarial mathematics courses – and I can say that Statistics is what I enjoy doing most, and actuarial science comes as a close second. It is a major decision for me to quit my fulltime job to be a fulltime student. I am hoping that will speed up my mid-career change from computing to the field of statistics.

My transition to Statistics is not exactly smooth. My father in Singapore fell seriously ill late last year and I had to make frequent trips to Singapore to visit and handle studies at the same time. My father passed away in March this year, and it felt as if the world has collapsed. I was surprised at how caring the SFU

community is when instructors wrote to console me and to send their sympathy. It was then when I realize I am very fortunate to be a part of SFU.

Ten years ago, when I took my first actuarial science course at SFU, I was very keen on being an actuary and even wrote to the Canadian Institute of Actuaries for advice. I was disheartened then by the length of time it takes to attain fellowship with SOA. Although I have a promising career in computer science, my aspirations is in the field of Statistics and Actuarial Science. It takes me ten years to realize that and I don't wish to wait another ten years to regret not giving my best to pursue my ambition.

I should graduate in another 5 semesters. My dream is to pursue a Masters degree in Statistics after this and then teach. I think I will make a good Statistics or mathematics instructor. I hope to make learning Statistics fun and interesting.

Xiao Lu Wang

More than three years ago, I came to Vancouver from Dalian, a small, but very beautiful city located on the northeast coast of China. My high school courses in China were focused on mathematics, physics, and chemistry. My favorite subject of the three is mathematics. Right before graduation, I was thinking over my career path. I heard about actuarial science from a friend of my parents. After some research about it, I decided to come to Canada to pursue my university study, instead of going to University in China.

I started in SFU in January 2002. At that time, actuarial science is still a very small program in our school, and most students are still wondering what is actuarial science. But as we all see now, three years later, the program has grown dramatically in both size and quality. At the same time, more and more people are getting to realize what an actuary is.

During my three year study in SFU, most of the courses I took were actuarial mathematics, statistics and finance. By the study, not only did I master the professional knowledge, but I also got to learn the way the whole financial market behaves. I enjoy my university study, especially finding out the financial world in depth using the tool of mathematics. I have finished SOA exam 1 to 4, and currently I am preparing for Course 6 in May, 2005.

I did my first co-op term at Pacific Blue Cross. Currently, I am doing my next eight month co-op term at Mercer Human Resource Consulting, Toronto. I feel the co-op working experience is very valuable for students before they start their career. From various experience in firms with different style, I have a better

understanding of myself. I got to know what I need to improve now as a new graduate, and an international student working in a consulting firm, with English as the second language. Now I have a clear picture of how it is like to work as an actuary, and I found my interest in it. Also, I mastered the basic skills to work as an actuary. I expect to go back to school for my last academic semester in fall this year, and then start my professional job.

I was 19 years old when I came to Canada with all the dreams, and now I am 22 years old. I feel myself very fortunate to find out what I want to become by my university study. Of course, I will face a lot of difficulties in my future work. However, I believe that as long as I have a strong heart to face and overcome them, my dream will finally be realized.