

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/programs/awards.html>

The Department has 6 major awards:

- The April Allen Memorial Undergraduate Scholarship for students with high standing in Actuarial Science established by T.A. Townley & Associates to honor the spirit of April Allen.
- 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.
- R. Bruce Coles Memorial Scholarship in Actuarial Science.
- The Statistical Society of Canada (SSC) award.
- The Statistics and Actuarial Science Endowment Awards (three awards) funded by earnings on our departmental endowment fund.

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April Allen Memorial Undergraduate Scholarship

Yingying Chen – Tommy Yip

This scholarship is awarded annually to students within their first year of being admitted into one of the Actuarial Sciences programs who demonstrate excellence in academic performance and exhibit potential for success in the actuarial science field. Preference is given to students who have personally been affected by cancer and/or have demonstrated leadership and/or service to an organization involved in cancer research and care. It was established by D.A. Townley & Associates to honor the spirit of April Allen.

Yingying Chen writes:

This is my second term studying at SFU. Fortunately, I was accepted into the Actuarial Science Program and I greatly anticipate being a member of this team. Cancer has affected my life personally, as I watched my grandfather, now deceased, whose never-give-up spirit encourages me forever.

My grandfather fought off cancer bravely for almost four years. During this time, he faced his problem with optimism no matter how bad it was. I remember the first time he had to have an operation to surgically remove cancerous tissue, he was already 80 years old. It was very

dangerous for him to have such a major surgery. Everyone in my family was worried about him, however, my grandfather comforted us and even made jokes to us. After the surgery, he was very weak and was not allowed to eat and drink for three days. Despite everything, he still maintained a good mood and encouraged us to have confidence in him. His positive attitude to difficulties gave me the strength to not fear hard situations. From this I developed a positive attitude towards difficulties and solving problems, instead of dwelling on how unlucky I might be.

Not only did my grandfather's positive attitude affect me, but his never-give-up spirit also impressed me. After being told his cancer came back again, he accepted a second surgery without any hesitation, even though he knew the success rate was only 50%. During that time, I was frustrated by the fact that I could not study actuarial science abroad. He sensed my disappointment, and on the night before he had the operation, he drew me close to his bed. He encouraged me not to give up my dream if it was really where my passion was. He said, "You are young and still have a lot of time to pursue your dream. Go and get it. Never give it up so easily..." Even now, I still bring the scene back to my memory. His words will always be encouraging to me.

Although my grandfather showed a good mood publicly, I still could feel his pain and suffering. It affected me emotionally. Because he was already in his eighties when first diagnosed as having cancer, his body couldn't handle the side effects of the treatments. Most of the time he couldn't fall asleep at night, the pain was so bad. I saw his suffering and felt useless to help. I was afraid, frustrated and depressed, as was my family. We tried many treatments, got many doctors' opinions. We did a lot of research, but his cancer still worsened day by day. As he grew weaker, we all wanted to accompany him as much as we could because we knew he didn't have much time left. During the last couple of months of his life, my mom went to the hospital to care for him several times a day. The treatments were painful not only for my grandfather but also for my family. We had to hide our fear from him. I still remember when my grandfather started a new cycle of the treatment, all of us had to pretend to be confident. However, in our hearts, we were so anxious, wondering if he would be gone at any time during the treatment.

The cost of the treatments were very expensive. It could cost a family's whole life's savings. I remember during that time, my mom always calculated income and planned expenses carefully, eliminating all unnecessary costs. Now looking back, I can see that not only my grandfather, but also my family, went through the cancer. Because of the impact of my grandfather's death, I became aware of the real meaning of being an actuary and the importance of insurance to people. Cancer is a long-term disease, and many patients are not cured easily. Thus, as soon as a person is diagnosed with cancer, the life of his or her whole family will be changed.

They also need to look for money to afford expensive treatments. During these times, a good life insurance plan can offer them security and confidence by providing needed financial support. Thus, to me, being an actuary means helping people cope with their troubles instead of having their problems crush them.

I still have a long way to go to becoming an actuary but with my grandfather's encouragement, I will hold on till I achieve this goal. I hope in the future, I will be able to apply the knowledge Dr. Parker and Dr. Tsai passed on to me and become an effective actuary.

Tommy Yip writes:

My name is Tommy Yip and I am honoured to be a recipient of the April Allen Memorial Scholarship. I am starting my third year at Simon Fraser University and I have completed my first year of actuarial science courses. It has been my goal to enter SFU's prestigious Actuarial Science Program since I was in grade nine after I first heard about the possibilities of a career as an actuary. With the ambition of one day becoming an actuary, I strengthened my mathematical background all throughout high school, while in the mean time researched more into this profession.

As I browse through the internet in search of more information about actuarial science, I realized that not only do actuaries enjoy math, but the majority of them possess solid communication skills. With the desire to enrich my social skills, I have been establishing programs for youth with disabilities and work with social workers in my community since grade ten. Through volunteering, I have become more comfortable in working with others, and the interaction experiences I acquired have aided me with school and my interpersonal relationships. In my community involvement activities, I usually tend to focus in helping high school teenagers in developing their leadership skills and their various assets. Recently, I wrote a proposal and founded a community project called *Citizens of Change*; it is a ten week program involving around thirteen youth from my local high schools. My project is funded by the Millennium Excellence Grant Program and is jointly supported by Cedar Cottage Neighbourhood House, a non-profit organization. In the program, I was in the position to facilitate and to lead the youth into planning activities which could help or enrich the community. The group decided to investigate the pervasive issue of homelessness and for this cause, the group did a bottle drive and collected about 1200 cans and bottles to raise money for the food bank; they also spent a day going to the food bank to help out with distributing the food. As well, social workers were invited to speak and to provide a better understanding to the group of the issue in our immediate city. Some, in hope to raise more awareness, later went on to a march for homelessness. Working with others is a huge part of me.

I would describe the Actuarial Science program at SFU as a tribe. In a small program with around 20 to 25 students admitted each year, it fosters an environment in which everyone would quickly become familiar with each other. In such an environment, a variety of groups are formed. There are those who learn best in a group, and there are also those who learn better on their own but enjoy meeting up to discuss. I believe I am of the former. What I found most enjoyable when working with others are the teamwork and team spirit that arise in overcoming challenges. I find it exciting to discuss and dissect with others the course material, the exam questions the professor may give, and sometimes even life in general. I feel that this is incredible because I have never been exposed to such a concentrated group of people who are all so immensely capable. Not to mention that we all share a sense of humour for statistical jokes.

I sincerely appreciate the wealth of intelligence that envelops me in this program. I think it is truly wonderful how the actuarial science program is set up and organized because the atmosphere formed from this group of academic 'outliers' is not of competitiveness, instead, it is closer to the form of brotherhood—the feeling of belonging. Though everyone came from a different background, they respect each other; furthermore, each individual views another as equal—there exists a form of trust. I think it is because we realize the similarity in each of ourselves—the passion for learning. I must acknowledge that the capability and the approachability of the staffs in the program play an important role in fostering such a respectable environment.

Finally, it has been a great pleasure to receive the opportunity to share my thoughts. Thank you.

Watson Wyatt Scholarship

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.

Xiaokang Sheng writes:

I am a senior Actuarial Science student at Simon Fraser University. This will be my second degree. I received a Math degree at Nankai University in China. The first time I heard the word “actuary” was during a Financial Market class in Nankai. Prof. Zhang introduced this new concept to us and gave us information about how to become an actuary. After that class I was very interested in this field and talked to Prof. Zhang in person. He gave me more details about taking professional exams and suggested that I continue my study abroad.

After collecting more information about actuarial science I found that being an actuary is a fantastic job that totally matched my interests and expectations. Being an actuary can give me various choices in my future career as actuaries can not only determine the price and reserves of insurance products by exercising their knowledge of mathematics, statistics, finance and analysis, but actuarial skills are transferable to any industry or job that requires financial or risk modeling and management. This profession has consistently been rated as one of the top five jobs in the United States.

During my two years of study at Simon Fraser University, I took almost all the actuarial science courses and some useful business and statistics courses. I passed three SOA exams and plan to write more in the future. I have been admitted to the Actuarial Science Masters program at the University of Waterloo. I am very excited about doing research in this fascinating area.

I appreciate the generosity and support from Watson Wyatt and all valuable help and advice that I have received from the professors and advisor in Statistics and Actuarial Science Department at SFU.

Pacific Blue Cross Scholarship

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

Phillip Jang writes:

I am currently in my third year at Simon Fraser University majoring in Actuarial Science with a minor in Mathematics. The minor in math is for enriching my learning experience, and use down the line for graduate school if I should ever need to go. I have so far completed the first two exams from the Society of Actuaries (P and FM) in 2008, and plan to take exam MLC this May.

I came across the actuarial career late in high school when my counselor introduced me to the subject. Thinking the career was a good fit for my skills, I decided to go to Simon Fraser University to give it a try. The deeper I went into the Actuarial Science program, the more I was intrigued to become an actuary. I would like to thank the people of Pacific Blue Cross for their generous sponsorship of my education. I am able to better progress with my education without worrying about my current financial situation.

The year 2008 was a profoundly challenging and colourful experience which began with Gary Parker's infamous ACMA 320 in the spring, which alone required well over 100 hours of study to minimally grasp concepts; and ended with my representation of the Statistics and Actuarial Science department on the Putnam Mathematics Competition (A 12-question 6-hour undergraduate math exam with a usual median score of 0 or 1 points out of 120) in December. I managed to solve two questions on the exam, scoring 20 points and placing 619 out of 3627. In between the two terms, I took courses to finish my VEE requirements, and using my knowledge of interest theory from exam FM material, I tutored students in my finance class. Compared to my perfect 4.33 for courses taken in 2007, my CGPA as of fall 2008 rests at a modest 4.22 as a result of the difficulty of the year.

I have spent this term doing a COOP placement at Westcoast Actuaries Inc., which is a consulting company specializing in Individual Pension Plans, a type of defined benefit plan. It is very interesting to see the applications and implementations of what I studied and to get a glimpse at the role of the actuary. Seeing pension plans live, rather than through a book has made me better appreciate what I have studied.

I would like to thank my friends, my family, and the people of Simon Fraser University for all of their support, and my professors for sharing their knowledge and fascinating experiences. It is an honour to be considered for the Pacific Blue Cross Scholarship, and I give my fullest gratitude to my sponsors at Pacific Blue Cross. I look forward to all the challenges that lie ahead, and I am ready to continue giving it my all. Bring it on!

R. Bruce Coles Memorial Scholarship

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.

Christine Lee writes:

Whenever I mentioned that my two older sisters also studied in Actuarial Science in SFU, almost everyone would think that mathematics was my family's genetic strength. However, my interest in the actuarial science field was dramatically enhanced when I took my first fundamental Actuarial Science course, ACMA 210. After a solid start from ACMA 210, what followed was the most challenging course I have ever taken, ACMA 320. Frankly, I was panicked during the first midterm, but I knew it could happen from the moment I decided to be an actuary. I must commit to this field and face the challenges. At the end, it turned out to be an impressing and promising result.

Education has always been an important aspect of my life. With my keen enthusiasm in this field, I have passed the SOA Exam P, FM, MLC and MFE. My pursuit for educational excellence has also helped me achieve the high grade in various actuarial and statistics classes.

Although education plays a significant role in my life, I considered practical experiences to be just as important. In the past two years, I have been working as a co-op student at four prominent Actuarial companies in Toronto. My employment experience includes working at Mercer and Towers Perrin, where I worked in the Health and Benefits department and Retirement department, respectively. I also worked in the Affinity Markets Valuation team at Manulife Financial and the Actuarial Consulting Group at Sun Life Financial. Finally, I was employed as a statistics workshop teaching assistant and marker in summer 2007. During the fall 2008, I worked as a teaching assistant and marker for ACMA 210. Although it was a busy semester, because I was taking five core courses at the same time, I enjoyed helping and assisting students who faced the same challenges as I did two years ago.

The main goal throughout my educational endeavours is to keep learning to learn well. Upon the completion of my Actuarial Science undergraduate degree, I would like to pursue a Masters degree in this area. It is my pleasure to be selected as a recipient of the R. Bruce Coles Memorial Scholarship. This award gives me a strength to face future challenges. I am confident that my actuarial knowledge, extensive job experience, strong academic background and commitment to this career will lead me to a successful future as an actuary.

(Tracey) Ying Yuan writes:

I first heard about Actuarial Science from a friend majoring in Statistics. She described Actuarial Science as the most challenging major in SFU which triggered my curiosity. So I took ACMA 210, the introductory course for Actuarial Science, and enjoyed the course. To be honest, actuarial science isn't easy for me. I have to study harder than ever, but the sense of accomplishment is worth the hard work.

Currently I'm working at UBC iCapture Centre with the Canadian Obstructive Lung Disease Research as a research assistant. I use my background in statistics to analyze research questionnaire and spirometry data to determine the prevalence of chronic obstructive pulmonary disease in Canada.

I have passed SOA exams P, FM, MFE during the last year and took MLE in May, 2009. I plan to work in the insurance industry and pursue a career as an actuary after my graduation. In my last year of my undergraduate study, I look forward to applying my knowledge and skills to the real world after graduation.

Statistical Society of Canada

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.

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.

Jing Cai writes:

Thank you for selecting me as the recipient of the Department of Statistics and Actuarial Science Award. I am very happy and honored to receive this award.

Ever since I was a child, I have always been fascinated by numbers. After I graduated with my first degree (which was not related to math at all) and worked for a couple of years, I realized I am more interested in working with data. Data always amazes me with its possibility to reveal so

much information. After my immigration to Canada I was finally able to step into the world of statistics. I took all the statistics courses and advanced math courses offered at Langara College and obtained impressive grades. Because of this, I received the Ernest E. Livesey Memorial Mathematics Scholarship in 2007. Further, the knowledge I gained enhanced my decision in working in the field of statistics.

I transferred to SFU in 2007 to work on my big dream. Although not sure what exactly Actuarial Science was, I took STAT 330, 350 and ACMA 210. These courses opened my eyes. I never thought about applying what I had learned to real life cases could be so much fun. How much money I can borrow now for buying a house? How did ICBC calculate my insurance? I helped my parents to understand 'study' reports in newspapers could be misleading without revealing their assumptions. I helped my friends understand what the role of insurance in an investment is. I found it extremely fascinating to use my knowledge to help people around me.

I am taking STAT 402, 410 and ACMA 320, 315 this semester to gain deeper understanding in both Statistics and Actuarial Science. Starting from summer this year, I am planning to apply to be a TA or become a tutor. I would like to help more people understand data and enjoy using data to improve their work or life.

**Department of Statistics & Actuarial Science Awards
2009**

Undergraduate Awards

Undergraduate Open Scholarships:

Yanxun Bao 1084, 1087, 1091
Phillip Jang 1084, 1087, 1091
Emmanuel Krebs 1091
Jiayang Li 1091
Ruobing Li 1084, 1087, 1091
Kuan Lu 1091
Yang Lu 1087, 1091
Yunbo Lu 1084, 1087, 1091
Tim Luo 1084, 1087, 1091
Amy McConnell 1084, 1087, 1091
Yejun Song 1084
Yifan Xu 1087, 1091
SiCong Yan 1084
Roger Yang 1087
(Tracey)Ying Yuan 1084, 1087
(Joyce) Yi Zhang 1084, 1087
Yuchen Zhang 1087, 1091
Wei Zhao 1091

**Alumni Scholarship & Bursary Endowment
Fund:**

Yuanxun Bao 1087, 1091
Jing Cai 1087 1091
Tim Luo 1087, 1091
(Vicky) Jiaying Weng 1084
Roger Yang 1087
Yuchen Zhang 1087, 1091

**Governor General Silver Medal in Actuarial
Science:**

(Joyce) Yi Zhang

**Beverley Raymond Scholarship in
Biological Science or Environmental
Studies:**

Amy McConnell

**Faculty of Business Administration Alumni
Bursaries:**

Roger Yang

Joe & Mary Merchant Scholarship

Yuanxun Bao

**Ken & Su Jang Scholarship for Women in
Science:**

(Joyce) Yi Zhang

**April Allen Memorial Undergraduate
Scholarship:**

Yingying Chen
Tommy Yip

R. Bruce Coles Memorial Scholarship:

Christine Lee
(Tracey) Ying Yuan

Pacific Blue Cross Scholarship:

Phillip Jang

SSC Endowment Award:

Jing Cai

**Watson Wyatt Scholarship in Actuarial
Science:**

Xiaokang Sheng



Graduate Awards

Faculty of Science Teaching Assistant Award:

Ryan Lekivetz

Michael Smith Foundation for Health Research Trainee Award:

Kelly Burkett

Eric Sayre

Jean Shin

Pacific Century Graduate Scholarship:

Barbara Sanders

C.D. Nelson Memorial Graduate Scholarship:

Barbara Sanders

President's PH.D. Research Stipend:

Lihui Zhao

Kelly Burkett

Wendell Challenger

Carolyn Huston

Elizabeth Juarez

Cindy Feng

Special Graduate Entrance Scholarship:

Jervyn Ang

Caroll Co

Barbara Sanders

NSERC PGS M Scholarship:

Jillian Falkenberg

NSERC PGS D Scholarship:

Jean Shin

NSERC CGS M Scholarship:

Jervyn Ang

Ryan Lekivetz

Barbara Sanders

MSc Graduate Fellowship:

Jingyu Chen 1084

Joslin Goh 1084, 1091

Lingzhi Jiang 1084

Qifeng Jiang 1091

Zhong (Joan) Wan 1084

Vivien Wong 1084, 1091

Donghong Wu 1084

Ting (Iris) Zhang 1084

PhD Graduate Fellowship:

Lihui Zhao

Winner of Student Presentation Competition at the International Statistical Ecology Conference 2008:

Wendell Challenger

Best Student Presentation at the Statistical Society of Canada Meeting 2008:

Simon Bonner

Best Student Presentation at the Statistical Society of Canada Meeting 2009:

Wendell Challenger

Carolyn Huston

Faculty Awards

Elected Fellow of the American Statistical Association:

Tom Loughin

Elected Fellow of the Institute of Mathematical Statistics:

Boxin Tang

Named AusCan Scholar for 2009 by the Statistical Society of Canada:

Jiguo Cao

