

# Curriculum Vitae

## Biographical Information:

### Personal:

**Name:** X. Sheldon Lin

**University Address:** Department of Statistics  
University of Toronto  
Toronto, Ontario M5S 3G3  
Telephone No.: (416) 946-5969  
Email: sheldon@utstat.utoronto.ca

### Degrees:

B.Sc.	1980	Xiamen University
M.Sc.	1985	Fuzhou University
M.Math.	1993	University of Waterloo
Ph.D.	1990	University of Alberta

## Employment

### Appointments

2002-present	Professor, Statistics, and Full Member of Graduate Faculty, University of Toronto
2007-2009	Associate Chair (Graduate), Statistics, University of Toronto
2001-2002	Associate Professor, Statistics, University of Toronto
1997-2000	Associate Professor, Statistics and Actuarial Science, University of Iowa
1997-present	Adjunct Professor, Statistics and Actuarial Science, University of Waterloo
1993-1997	Assistant Professor, Statistics, University of Toronto
1991-1992	Research Associate, Applied Mathematics, University of Waterloo
1990-1991	Postdoctoral Fellow, Mathematics, University of Alberta

### Visiting Appointments

4.2008	Distinguished Visiting Professor, Mathematics and Actuarial Science American University in Cairo
2006-2007	Visiting Professor, Applied Mathematics Hong Kong Polytechnic University
7.2006	Invited Professor, Institut de Science Financiere et d'Assurance (ISFA)

2004

Universite Claude Bernard Lyon I  
Visiting Professor, Mathematics, University of Michigan

### **Honours:**

2004 Co-winner, Annual Prize for the best paper published in *North American Actuarial Journal* in 2003, Society of Actuaries.

1998 Co-winner, Annual Prize for the best paper published in *North American Actuarial Journal* in 1997, Society of Actuaries.

1994 Dean's Excellence Award, University of Toronto.

1992 University of Waterloo Graduate Scholarship.

1989-1990 University of Alberta Dissertation Fellowship.

### **Professional Affiliations and Activities**

Co-Editor, *North American Actuarial Journal*, 2008-present.

Associate Editor

*Insurance: Mathematics and Economics*, 2000-present.

*North American Actuarial Journal*, 2002-2008.

*Management Science*, 1998-2001.

Referee for

*Insurance: Mathematics and Economics*

*North American Actuarial Journal*

*Scandinavian Actuarial Journal*

*ASTIN Bulletin*

*Annals of Actuarial Science*

*Journal of Actuarial Practice*

*Journal of Risk and Insurance*

*Mathematical Finance*

*Finance and Stochastics*

*Quantitative Finance*

*Journal of Computational Finance*

*Journal of Banking and Finance*

*Management Science*

*Journal of Applied Probability*

*Methodology and Computing in Applied Probability*

*Operations Research Letters*

*Mathematics of Operations Research*

*Journal of Computational and Applied Mathematics*

*Communications in Statistics*

*Probability and Statistics Letters*

*Journal of Applied Statistics*

*Stochastic Models*

*Applied Stochastic Models in Business and Industry*  
*Systems and Control Letters*  
*Mathematical and Computer Modeling*  
*Journal of Applied Mathematics and Decision Sciences*  
*Journal of Applied Mathematics and Stochastic Analysis*  
*Journal of Systems Science and Complexity*  
*Applied Mathematics-A Journal of Chinese Universities*  
*Zentralblatt MATH*  
*IMA Journal of Mathematics Applied in Medicine and Biology*  
*International Journal of Production Economics*  
*Journal of Industrial and Management Optimization*  
*Frontiers of Mathematics in China*

Associate, Society of Actuaries, 1993–present.

Member, Education and Research Section Council, Society of Actuaries, 2009–2012.

Member, Waterloo Research institute in Insurance, Securities and Quantitative finance (WatRISQ), 2009–present.

Chair, Halmstad Prize Committee, Actuarial Foundation, 2010–present.

Member, Halmstad Prize Committee, Actuarial Foundation, 2004–06, 2008.

Member, Scientific Committee

Sixteenth International Congress on Insurance: Mathematics and Economics, Hong Kong, June 2012.

International Conference on Actuarial Science and Related Fields, Haikou, China, March 2011.

Fourteenth International Congress on Insurance: Mathematics and Economics, Toronto, June 2010.

International Conference on Insurance and Actuarial Science, Chongqing, China, June 2010.

International Conference on Actuarial and Financial Risks, Shanghai, China, January 2010.

Thirteenth International Congress on Insurance: Mathematics and Economics, Istanbul, Turkey, May 2009.

Stochastic Modelling Symposium, Canadian Institute of Actuaries/Society of Actuaries, Montreal, December 2008.

Twelfth International Congress on Insurance: Mathematics and Economics, Dalian, China, July 2008.

Tenth International Congress on Insurance: Mathematics and Economics, Leuven, Belgium, July 2006.

Stochastic Modelling Symposium, Canadian Institute of Actuaries/Society of Actuaries, Toronto, April 2006.

Ninth International Congress on Insurance: Mathematics and Economics, Quebec City, July 2005.

Stochastic Modelling Symposium, Canadian Institute of Actuaries, Toronto, September 2003.

International Conference in Applied Statistics, Actuarial Science and Financial Mathematics, Hong Kong, December 2002.

Eleventh International AFIR Colloquium, Toronto, September 2001.

Member, Mathematics and Statistics Evaluation Group 1508 (Formerly GSC 14), Natural Sciences and Engineering Research Council of Canada (NSERC), 2008–2011.

Reviewer for grant proposals

National Science Foundation (NSF), USA, 2010

Natural Sciences and Engineering Research Council of Canada (NSERC), 2002–2008

Research Grants Council of Hong Kong, 2002–2010

Swiss National Science Foundation (SNF), 2008

Mathematics of Information Technology and Complex Systems Network of Centres of Excellence (MITACS-NCE), 2007

SHARCNET, 2007

Research Council of Katholieke Universiteit Leuven, Belgium, 2005

Canada Foundation for Innovation (CFI), 2004

Referee for promotion to Full Professor

Department of Applied Mathematics, Hong Kong Polytechnic University, 2010

Faculty of Science, University of Western Ontario, 2008

Faculty of Business Administration, Chinese University of Hong Kong, 2008

Faculty of Arts and Sciences, Roosevelt University, 2007

Department of Mathematics, Hong Kong University of Science and Technology, 2005

Department of Mathematics, University of Michigan, 2002

Referee for promotion to Associate Professor

Department of Statistics and Actuarial Science, Simon Fraser University, 2010

Department of Statistics and Actuarial Science, Simon Fraser University, 2009

Faculty of Science, University of Western Ontario, 2009

Department of Statistics, McMaster University, 2009

Department of Mathematics and Statistics, University of Montreal, 2008

Department of Statistics, Chinese University of Hong Kong, 2008

Department of Mathematics, University of Michigan, 2006

External Examiner, Actuarial and Financial Mathematics Program, Institute of Mathematical Sciences, University of Malaya, Malaysia, 2009–2013.

External Assessor, University of Malaya, Malaysia, 2011–2014

Member, Institute for Quantitative Finance and Insurance (IQFI), University of Waterloo, 2004–2009.

Member, Preliminary Education Standing Committee, Society of Actuaries, 2005–2009.

External Reviewer, Undergraduate Programs, Faculty of Mathematics, University of Waterloo, 2009.

External Advisor, Department of Applied Mathematics, Hong Kong Polytechnic University, 2006–2007.

Member, Organizing Committee

Fourteenth International Congress on Insurance: Mathematics and Economics, Toronto, June 2010.

Data Analysis and Statistical Foundations III, Conference in Honour of Professor D.A.S. Fraser, Toronto, April 2010

Festkolloquium in Honour of Professor Phelim Boyle, Waterloo, June 2006.

Senior Researcher, Project ‘Development Schemes for Korean Life Insurance Industry in the Age of Low Interest Rates,’ Korean Risk Management Society, 2005.

Member, Professional Examination Committee, Society of Actuaries, 2004.

External Reviewer and Consultant, Actuarial Science Program, University of Jordan, 2004.

Academic Consultant, Casualty Actuarial Society Exam 8, 2001, 2002.

External Reviewer, Research Paper Committee, Society of Actuaries, 1998, 1999.

Member, Society of Actuaries Project Oversight Group on Robust Methods in Actuarial Science, 1998.

Member, Society of Actuaries Project Oversight Group on Cost of Mismatch in Stochastic Interest Rate Models, 1998.

Member, Society of Actuaries Project Oversight Group on Tight Approximation of Basic Characteristics of Classical and Non-Classical Surplus Processes, 1998.

Member, Society of Actuaries Project Oversight Group on Ruin Probabilities in Collective Risk Theory, 1997.

## **Academic History:**

### **Research Endeavours:**

Actuarial Science, Mathematical Finance, and Applied Probability

### **Research Awards:**

2010-2011	145,000	MITACS. Project on Finsurance (one of 7 core investigators)
2010-2011	15,000	MITACS. ACCELERATE Ontario Internship (Yuxiang Chong)
2006-2007	11,000	Committee on Knowledge Extension Research, Society of Actuaries. Research Grant(with Xiaoming Liu)

2005-2012	147,000	NSERC. Discovery Grant-Individual
2002-2003	11,050	Committee on Knowledge Extension Research, Society of Actuaries. Research Grant(with Ken Seng Tan)
2001-2005	72,000	NSERC. Discovery Grant-Individual
1999-2000	10,750	Committee on Knowledge Extension Research, Society of Actuaries. Research Grant(with Ken Seng Tan)
1998-1998	6,600	Old Gold Fellowship, University of Iowa
1998-1999	19,000	Finance Research Committee, Society of Actuaries
1997-1998	14,000	NSERC. Research Grant
1997-1998	10,000	Actuarial Education and Research Fund, Research Grant(with Gordon Willmot)
1995-1996	12,000	Actuarial Education and Research Fund, Research Grant(with Phelim Boyle)
1994-1997	30,000	NSERC. Research Grant
1994-1994	2,500	Society of Actuaries. Education Grant
1993-1994	6,000	Connaught Fund, University of Toronto. Start-Up Grant

## Scholarly & Professional Work:

### Refereed Publications:

1. Lee, S.C.K. and Lin, X.S. (2011). "Modeling dependent risks with multivariate Erlang mixtures," *ASTIN Bulletin*, under revision.
2. Chi, Y. and Lin, X.S. (2011). "On the threshold dividend strategy for a generalized jump-diffusion risk model," *Insurance: Mathematics and Economics*, 48, 326-337.
3. Willmot, G.E. and Lin, X.S. (2011). "Risk modelling with the mixed Erlang distribution," *Applied Stochastic Models in Business and Industry*, 27, 2-22.
4. Lee, S.C.K. and Lin, X.S. (2010). "Modeling and evaluating insurance losses via mixtures of Erlang distributions," *North American Actuarial Journal*, 14(1), 107-130.
5. Chi, Y., Jaimungal, S. and Lin, X.S. (2010). "An insurance risk model with stochastic volatility," *Insurance: Mathematics and Economics*, 46(1), 52-66.
6. Lin, X.S., Tan, K.S. and Yang, H.L. (2009). "Pricing annuity guarantees under a regime-switching model," *North American Actuarial Journal*, 13, 316-338.
7. Lin, X.S. and Wang, T. (2009). "Pricing perpetual American catastrophe put options: a penalty function approach," *Insurance: Mathematics and Economics*, 44, 287-295.
8. Lin, X.S. and Sendova, K. (2008). "The compound Poisson risk model with multiple thresholds," *Insurance: Mathematics and Economics*, 42, 617-627.

9. Lin, X.S. and Liu, X. (2007). "Markov aging process and phase-type law of mortality," *North American Actuarial Journal*, 11(4), 92-109.
10. Gerber, H.U., Lin, X.S. and Yang, H. (2006). "A note on the dividends-penalty identity and the optimal dividend barrier," *ASTIN Bulletin*, 36, 489-503.
11. Gaillardetz, P. and Lin, X.S. (2006). "Valuation of equity-linked insurance and annuity products with binomial models," *North American Actuarial Journal*, 10(4), 117-144.
12. Lin, X.S. and Pavlova, K. (2006). "The compound Poisson risk model with a threshold dividend strategy," *Insurance: Mathematics and Economics*, 38, 57-80.
13. Lin, X.S., Willmot, G.E. and Drekcic, S. (2003). "The classical risk model with a constant dividend barrier: analysis of the Gerber-Shiu discounted penalty function," *Insurance: Mathematics and Economics*, 33, 551-566.
14. Lin, X.S. and Tan, K.S. (2003). "Valuation of equity-indexed annuities under stochastic interest rates," *North American Actuarial Journal*, 7(3), 72-91.
15. Willmot, G.E., Cai, J. and Lin, X.S. (2001). "Lundberg inequalities for renewal equations," *Advance in Applied Probability*, 33, 674-689.
16. Lin, X.S. and Willmot, G.E. (2000). "The moments of the time of ruin, the surplus before ruin, and the deficit at ruin," *Insurance: Mathematics and Economics*, 27, 19-44.
17. Lin, X.S. (1999). "Valuation of options on the maximum/minimum of multiple assets, discrete lookback options and equity-indexed annuities," *Finance*, 20, 95-114.
18. Lin, X.S. and Willmot, G.E. (1999) "Analysis of a defective renewal equation arising in ruin theory," *Insurance: Mathematics and Economics*, 25, 63-84.
19. Willmot, G.E. and Lin, X.S. (1998). "Exact and approximate results for the distribution of surplus before and after ruin," *Insurance: Mathematics and Economics*, 23, 91-110.
20. Lin, X.S. (1998). "Double barrier hitting time distributions with applications to exotic options," *Insurance: Mathematics and Economics*, 23, 45-58.
21. Boyle, P. and Lin, X.S. (1997). "Bounds on contingent claims based on several assets," *Journal of Financial Economics*, 46, 383-400.
22. Boyle, P. and Lin, X. (1997). "Optimal portfolio selection with transaction costs," *North American Actuarial Journal*, 1(2), 27-39.
23. Boyle, P. and Lin, X. (1997). "Valuation of options on several risky assets when there are transactions costs," *Advances in Futures and Options Research*, 9, 111-127.

24. Willmot, G.E. and Lin, X. (1997). "Upper bounds for the tail of the compound negative binomial distribution," *Scandinavian Actuarial Journal*, 97:2, 138-148.
25. Willmot, G.E. and Lin, X. (1997). "Simplified bounds on the tails of compound distributions," *Journal of Applied Probability*, 34, 127-133.
26. Willmot, G.E. and Lin, X. (1996). "Bounds on the tails of convolutions of compound distributions," *Insurance: Mathematics and Economics*, 18, 29-33.
27. Lin, X. (1996). "Tail of compound distributions and excess time," *Journal of Applied Probability*, 33, 184-195.
28. Willmot, G.E. and Lin, X. (1994). "Lundberg bounds on the tails of compound distributions," *Journal of Applied Probability*, 31, 743-756.
29. Lin, X. and Liu, X. (1994). "Qualitative study of an HIV transmission model among IV drug users," *Applied Mathematics and Computation*, 60, 215-236.
30. Lin, X., Hethcote, H.W. and van den Driessche, P. (1993). "An epidemiological model for HIV/AIDS with proportional recruitment," *Mathematical Biosciences*, 118, 181-195.
31. Lin, X. and So, J. (1993). "Global stability of the endemic equilibrium and uniform persistence of epidemic models with subpopulations," *Journal of the Australian Mathematical Society, Serial B*, 34, 282-295.
32. Lin, X. (1992). "On the global stability of a delay epidemic model," *Journal of the Australian Mathematical Society, Serial B*, 34, 26-34.
33. Lin, X. and van den Driessche, P. (1992). "A threshold result for an epidemiological model," *Journal of Mathematical Biology*, 30, 647-654.
34. Lin, X., So, J. and Wu, J. (1992). "Center manifolds for partial differential equations with delays," *Proceedings of the Royal Society of Edinburgh*, 122A, 237-254.
35. Antonelli, P., Bradbury, R., Kazarinoff, N., Lin, X. and Reichet, R. (1992). "Large scale starfish waves and reefal connectance," *Ecological Modeling*, 61, 187-194.
36. Antonelli, P., Bradbury, R. and Lin, X. (1992). "On Hutchinson's competition equations and their homogenization: a high-order principle of competitive exclusion," *Ecological Modeling*, 60, 309-320.
37. Antonelli, P., Bradbury, R. and Lin, X. (1991). "A high-order predator-prey interaction with applications to observed starfish waves and cycles," *Ecological Modeling*, 58, 23-332.
38. Lin, X. (1991). "On the uniqueness of endemic equilibria of an HIV/AIDS transmission model for a heterogeneous population," *Journal of Mathematical Biology*, 29, 779-790.

39. Lin, X. (1991). "Qualitative analysis of an HIV transmission model," *Mathematical Biosciences*, 104, 111-134.
40. Lin, X. and So, J. (1990). "Some results on an SIRS epidemic model with subpopulations," *Mathematical and Computer Modeling*, 14, 659-661.
41. Antonelli, P. and Lin, X. (1990). "Mathematical analysis of a coral-starfish model," *Mathematical and Computer Modeling*, 13, 35-44.
42. Lin, X. (1989). "Time-varying vector fields on a compact Riemannian manifold II," *Chinese Annals of Differential Equations*, 5, 63-73.
43. Lin, X. (1988). "Time-varying vector fields on a compact Riemannian manifold I," *Chinese Annals of Mathematics*, 9B, 95-106.
44. Lin, X. (1985). "Stability and instability of nonautonomous systems," *Journal of Fuzhou University*, No. 3, 16-22.
45. Lin, X. (1984). "Perturbed linear systems and generalized exponential dichotomies," *Journal of Fuzhou University*, No. 1, 35-41.

#### **Books and Chapters in Books:**

1. Lin, X.S. (2010). "Cramér-Lundberg Estimates," in *Encyclopedia of Quantitative Finance*, Cont, R. (Ed.), Wiley and Sons, 404-407.
2. Lin, X.S. and Willmot, G.E. (2008). "Collective Risk Models," *Encyclopedia of Quantitative Risk Analysis and Assessment*, Volume I, Wiley and Sons, 255-258.
3. Lin, X.S. and Willmot, G.E. (2008). "Ruin Theory," *Encyclopedia of Quantitative Risk Analysis and Assessment*, Volume IV, Wiley and Sons, 1591-1598.
4. Lin, X.S. (2006). *Introductory Stochastic Analysis for Finance and Insurance*, John Wiley and Sons, New York.
5. Lin, X.S. (2005). "Valuation of interest rate guarantees using option pricing techniques," *Development Schemes for Korean Life Insurance Industry in the Age of Low Interest Rates*, Volume I, Part III, 422-436, Korean Risk Management Society.
6. Lin, X.S. (2004). "Compound Distributions," *Encyclopedia of Actuarial Science*, Volume I, 314-317, Wiley and Sons.
7. Lin, X.S. (2004). "Integrated Tail Distributions," *Encyclopedia of Actuarial Science*, Volume II, 909-911, Wiley and Sons.
8. Lin, X.S. (2004). "Lundberg Approximations, Generalized," *Encyclopedia of Actuarial Science*, Volume II, 1047-1050, Wiley and Sons.
9. Lin, X.S. (2004). "Ruin Theory," *Encyclopedia of Actuarial Science*, Volume III, 1530-1535, Wiley and Sons.

10. Willmot, G.E. and Lin, X.S. (2001). *Lundberg Approximations for Compound Distributions with Insurance Applications*, Lecture Notes in Statistics 156, Springer-Verlag, New York.

### Non-Refereed Publications

1. Lin, X.S. and Liu, X. (2005). Discussion of Ng and Yang's "Lundberg-type bounds for the joint distribution of surplus immediately before ruin and at ruin under the Sparre-Andersen model," *North American Actuarial Journal*, 9(2), 102-107.
2. Lin, X.S. (2004). Review of *Interest Rate Model: an Introduction*, *North American Actuarial Journal*, 8(3), 154-155.
3. Lin, X.S. (2004). Review of *Generalized Poisson Models and Their Applications in Insurance and Finance*, *Journal of American Statistical Association*, 99, p563.
4. Lin, X.S. (2003). Discussion of Yebin Cheng and Qihe Tang's "Moments of the surplus before ruin and the deficit at ruin in Erlang(2) risk processes," *North American Actuarial Journal*, 7(3), 122-124.
5. Lin, X.S. (2003). Discussion of Hans Gerber and Elias Shiu's "Geometric Brownian motion models for assets and liabilities: from pension funding to optimal dividends," *North American Actuarial Journal*, 7(3), 51-53.
6. Lin, X.S. and Tan, K.S. (2001). "Valuation of equity-indexed annuities under stochastic interest rates," *The 11th International AFIR Colloquium Proceedings*, 2, 473-492, Canadian Institute of Actuaries, Ottawa.
7. Lin, X.S. (2001). Discussion of "Analysis of incremental return of Canadian mutual funds' by J.F. Carriere and C.F. Hill," *North American Actuarial Journal*, 5, 39-40.
8. Lin, X.S. (2000). Review of *Stochastic Processes for Insurance and Finance*, *British Actuarial Journal*, 6, Part IV, 876-877.
9. Lin, X.S. (2000). "Valuation of equity-indexed annuities," *Proceedings of Thirty-fourth Annual Actuarial Research Conference*, Vol 1, 619-622.
10. Lin, X.S. (1999). "Laplace transform and barrier hitting time distributions," *Proceedings of Thirty-third Annual Actuarial Research Conference*, Vol 1, 165-178.
11. Lin, X.S. (1999). Review of *Loss Distributions: From Data to Decisions*, *North American Actuarial Journal*, 3, 150-151.
12. Lin, X.S. (1998). Discussion of Gerber and Shiu's "Pricing perpetual options for jump processes," *North American Actuarial Journal*, 2, 108-109.
13. Lin, X.S. and Willmot, G.E. (1998). "A solution of defective renewal equations with applications to ruin theory," *Proceedings of Thirty-second Annual Actuarial Research Conference*, 365-374.

14. Boyle, P. and Lin, X.S. (1997). "Bounds on multiple contingent claims," *Proceedings of Thirty-first Annual Actuarial Research Conference*, 223-224.
15. Lin, X.S. and Willmot, G.E. (1996). "Nonexponential bounds on the tails of compound distributions," *Proceedings of Thirtieth Annual Actuarial Research Conference*, 501-508.
16. Panjer, H. and Lin, X.S. (1993). Discussion of Plumley's "An actuarial analysis of the AIDS epidemic as it affects heterosexuals", *Transactions of the Society of Actuaries*, XLIV, 417-421.

### **Invited Talks: Conferences/Workshops**

International Conference on Actuarial Science and Related Fields, Haikou, China, March 2011.

Session 27, Society of Actuaries 2010 Annual Meeting & Exhibit, New York City, October 2010.

International Conference on Insurance and Actuarial Science, Chongqing, China, June 2010.

International Conference on Actuarial and Financial Risks, Shanghai, January 2010.

Stochastic Modelling Symposium, Canadian Institute of Actuaries, Montreal, December 2008.

IFID/MITACS Conference on Financial Engineering for Actuarial Mathematics, Fields Institute, Toronto, November 2008.

Keynote Speaker, Second International Workshop on Gerber-Shiu Functions, Radon Institute of Computational and Applied Mathematics, Austrian Academy of Sciences, Linz, Austria, August 2008.

Workshop in Honor of Hans U. Gerber, Tsinghua University, Beijing, July 2008.

Half-Day Seminar, Actuarial Society of Hong Kong, Hong Kong, May 2007.

First International Workshop on Gerber-Shiu Functions, Montreal, August 2006.

Ruin Theory Session, International Federation of Operational Research Societies (IFORS) Triennial Conference, Honolulu, Hawaii, July 2005.

Workshop on Embedded Options in Insurance Products, University of Hong Kong, February 2005.

Plenary Speaker, Seventh International Congress on Insurance: Mathematics and Economics, Lyon, June 2003.

Conference on Risk Management in Insurance: Tools from Risk Theory, Queuing and Finance, Waterloo, June 2003.

CORS (Canadian Operations Research Society) National Conference, Toronto, June 2002.

Spring Meeting, Society of Actuaries, Hawaii, June 1998.

Computational Finance Workshop, Toronto, May 1996.

Meeting on Risk Theory, Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach, Germany, September 1994.

Oktoberfest Finance Conference, Waterloo, Canada, October 1993.

## **Invited Talks: Universities/Companies**

Department of Statistics and Actuarial Science, Simon Fraser University, April 2011.  
Lecture Series on Insurance Loss Modelling, Xiamen University, Xiamen, China, March 2011.  
WatRISQ, University of Waterloo, November 2010.  
Nanqiang Lecture, Xiamen University, Xiamen, China, July 2010.  
China Institute for Actuarial Science, Central University of Finance and Economics, China, June 2010.  
School of Mathematics, Georgia Institute of Technology, November 2009.  
Korean Actuarial Association, Seoul, South Korea, July 2009  
Department of Mathematics and Statistics, McMaster University, March 2009.  
Department of Mathematics and Actuarial Science, American University in Cairo, April 2008.  
Department of Mathematics, University of Hong Kong, May 2007.  
Faculty of Mathematical and Information Sciences, Guangzhou University, March 2007.  
Institut de Science Financière et d'Assurances, Université Claude Bernard Lyon I, France, July 2006.  
Department of Mathematics and Statistics, York University, October 2005.  
Risk Management Department, Royal Bank of Canada, March 2005.  
Department of Mathematics, University of Jordan, October 2004.  
Department of Mathematics, University of Michigan, November 2004.  
Department of Mathematics, University of Michigan, September 2004.  
Twenty-Third Joint Actuarial Seminars, ISFA Lyon and ISA-HEC Lausanne, Lausanne, January 2003.  
Department of Statistics, East China Normal University, December 2003.  
Department of Statistics and Actuarial Science, University of Waterloo, February 2003.  
Department of Finance, National University of Taiwan, December 2002.  
Department of Financial Mathematics, Peking University, May 2002.  
Statistics Department, East China Normal University, April 2002.  
School of Information, People's University of China, April 2001.  
School of Finance, Shanghai University of Finance and Economics, May 2000.  
Department of Actuarial Science, Risk Management and Insurance, School of Business, University of Wisconsin at Madison, April 1999.  
Department of Statistics and Actuarial Science, University of Waterloo, December 1998.  
College of Business Administration, University of Northern Iowa, November 1998.  
Department of Statistics, University of Missouri at Columbia, March 1998.  
Ten Lectures in Mathematical Finance, Institute of Advanced Economic Studies, Wuhan University, June 1997.  
Department of Statistics, University of Hong Kong, May 1997.

### **Contributions to Conferences:**

13th International Congress on Insurance: Mathematics and Economics, Istanbul, Turkey, May, 2009.  
4th Brazilian Conference on Statistical Modelling in Insurance and Finance Maresias, Brazil, April, 2009.  
12th International Congress on Insurance: Mathematics and Economics, Dalian, China, July, 2008.  
41st Annual Actuarial Research Conference, Montreal, August, 2006.  
10th International Congress on Insurance: Mathematics and Economics, Leuven, Belgium, July, 2006.  
40th Annual Actuarial Research Conference, Mexico City, Mexico, August, 2005.  
37th Annual Actuarial Research Conference, Waterloo, Ontario, 2002.  
11th Annual International AFIR Colloquium, Toronto, September, 2001.  
36th Annual Actuarial Research Conference, Columbus, Ohio, 2001.  
33rd Annual Actuarial Research Conference, Atlanta, Georgia, August, 1998.  
32nd Annual Actuarial Research Conference, Calgary, Alberta, August, 1997.  
31st Annual Actuarial Research Conference, Muncie, Indiana, August, 1996.  
Actuarial Research Workshop, Statistical Society of Canada Annual Meeting, Waterloo, Canada, June, 1996.  
30th Annual Actuarial Research Conference, College Park, Pennsylvania, August, 1995.  
28th Annual Actuarial Research Conference, Madison, Wisconsin, August, 1993.

### **Students:**

#### **PhD Students:**

Ongoing: Panpan Wu, Yuxiang Chong (with Sebastian Jaimungal), Gong Lan (with Andrei Badescu)  
Tao Wang, April 2008; Xiaoming Liu, December 2007; Patrice Gaillardetz, April 2006; Serena Tiong, May 2000 (with Elias Shiu).

#### **Postdoctoral Fellows:**

Alexandru Vali Asimit (2008), Chi Chiu Chu (2005-2006), Kristina Pavlova (2004-2005)

#### **PhD Committee:**

Eddie Ng (Electronic and Computer Engineering, 2010), Angelo Valov (Statistics, 2009), Chao Yang (Statistics, 2008), Samuel Hikspoors (Statistics, 2008), Wei Liu (Economics, 2007), Xiaofang Ma (Computer Science, 2007), Mylene Bedard (Statistics, 2006)

#### **External Examiner for:**

Seung Hwan Chin (PhD, Melbourne, 2010), Ping Chen (PhD, HKU, 2009), Taehan Bae (PhD, Western Ontario, 2008), Kwan Kwok Man (MPhil, HKU, 2007), David Landriault

(PhD, Laval, 2005), Chi Chiu Chu (PhD, HKUST, 2005), Andrew Ng (MPhil, HKU, 2004), Kwok Wai Yu (MPhil, HK PolyU, 2004)

## List of Courses (in preceding 5 years):

### Undergraduate Courses:

2010-2011	ACT 348F	Intermediate Life Contingencies
2009-2010	ACT 466S	Credibility Theory and Simulation
2008-2010	ACT 452S	Loss Models II
2006-2010	ACT 451F	Loss Models
2007-2008	ACT 247S	Introductory Life Contingencies
2005-2007	ACT 348F	Intermediate Life Contingencies
2005-2006	ACT 451F	Risk Theory
2005-2006	ACT 460F	Survival and Loss Models
2002-2003	ACT 348F	Intermediate Life Contingencies
2000-2003	ACT 247S	Introductory Life Contingencies
2001-2004	ACT 460F	Survival and Loss Models
2001-2004	ACT 451F	Risk Theory
2000-2002	ACT 349S	Topics in Actuarial Science: Corporate Finance
2000-2003	ACT 466S	Credibility Theory and Simulation
1994-1997	ACT 247S	Introductory Life Contingencies
1995-1997	ACT 451F	Risk Theory
1993-1997	ACT 467F	Graduation and Demography
1993-1996	ACT 240F	Fundamentals of Business Mathematics
1993-1995	ACT 330S	Operations Research

### University of Iowa:

1998-2001	22S:175	Risk Theory
1997-2000	22S:176	Credibility Theory and Loss Distributions
1997-1999	22S:182	Life Contingencies I
1997-1998	22S:182	Life Contingencies II

### Graduate Courses

2006-2007	STA 2501F	Mathematical Risk Theory
2003-2004	STA 2503F	
	MMF 1941F	Stochastic Analysis for Finance
	STA 4247S	Research in Mathematical Finance and Actuarial Science
1995-1997	STA 2503F	Applied Probability for Mathematical Finance

### University of Michigan:

2004-2005	MATH542/IOE552	Financial Engineering I
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University of Iowa:

2000-2001 22S:185 Investments  
1999-2000 22S:293 Stochastic Differential Equations in Finance  
1998-1999 22S:172 Financial Modeling and Stochastic Calculus

## **Administrative Positions:**

### **University of Toronto:**

2009-2010 Graduate, PTR  
2008-2009 Graduate, Executive  
2007-2008 Graduate, NSERC PGSD Selection Committee (University)  
2006-2007 Graduate  
2005-2006 Graduate, Hiring  
2003-2004 Dean's representative on Math Hiring, UT Discovery Day, Fields Institute  
Graduate Study Information Fair, Planning, Graduate, Promotion, Development  
2002-2003 Graduate, Development, Promotion, Publicity and Liaison, Undergraduate  
2001-2002 Graduate, Chair Search, Hiring(Actsci), Development  
1996-1997 Advisory, Master Program in Mathematical Finance  
1995-1997 Industrial Liaison, Actuarial Science Program  
1996-1997 Graduate  
1995-1997 Publicity and Liaison 1993-1995 Undergraduate

### **University of Iowa:**

1999-2000 Executive  
1999-2000 Undergraduate Advising  
1998-2000 MS Exam-Actuarial  
1998-1999 Graduate Advising  
1997-1998 Student Awards