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**CURRENT RESPONSIBILITIES:**

- (Non-executive) Chairman, *Risk Lighthouse, Inc.* ([www.risklighthouse.com](http://www.risklighthouse.com))
- CEO/Executive Director, *ERM Institute International, Ltd* ([www.ermii.org](http://www.ermii.org))
- Director of Actuarial Science Program & Robert Batten Chair Professor, *Dept of Risk Mgt and Insurance*, Robinson College of Business, Georgia State University
- Co-head Editor, *ASTIN Bulletin*: the official Journal of the International Actuarial Association (<http://www.casact.org/library/astin/index.htm>)

**EDUCATION:**

Ph.D. (Statistics)	- University of Waterloo,	1993.
M.S. (Statistics)	- University of Saskatchewan,	1991.
M.S. (Mathematics)	- Peking University,	1989.
B.S. (Mathematics)	- Peking University,	1986.

**PROFESSIONAL DESIGNATION:**

Fellow	- The Casualty Actuarial Society,	2001
Associate	- The Society of Actuaries,	1993
Member	- American Academy of Actuaries,	2001

**RECOGNITIONS:**

- The Insurance Industry Advisory Board for DFA Capital Management ([http://www.dfa.com/DFA\\_site/m4f12.html](http://www.dfa.com/DFA_site/m4f12.html))
- Recipient of the Ronald Ferguson Prize in Reinsurance, 2004
- Recipient of the Inaugural Bob Altling von Geusau Memorial Prize by the International Actuarial Association, 2003.
- The 2003 Thomas P. Bowles Symposium Leader, on “Benchmark Capital and Fair Value”, in Atlanta.
- Recipient of the Charles A. Hachemeister Prize by the Casualty Actuarial Society, 2003.
- Recipient of Best Paper Prize at the Casualty Actuarial Society Ratemaking Seminar, 1997.

**PAST ACADEMIC POSITIONS:**

- 2003 - 2004           Special Appointed Visiting Professor  
                                   Guanghua School of Management  
                                   Peking University, Beijing, China

- 1996 (09-11) Visiting Associate Professor of Actuarial Science  
University of Copenhagen, Copenhagen, Denmark
- 1995 (10-11) Visiting Lecturer of Actuarial Science  
Nankai University, Tianjin, China.
- 1994 - 1997 Assistant Professor of Actuarial Science  
University of Waterloo, Waterloo, Ontario, Canada
- 1993 - 1994 Assistant Professor, Co-director of Actuarial Science Program  
Concordia University, Montreal, Canada

#### **PAST INDUSTRY, CONSULTING & PROFESSIONAL EXPERIENCE:**

- Summer 2005, Senior Consultant, Risk Lighthouse, Inc. ([www.risklighthouse.com](http://www.risklighthouse.com))  
Marietta, Georgia
  - Performed Strategic Review of the Reinsurance Program for a U.S. professional liability insurer
  - Developed Operational Risk Capital Models for a Bermudian bank
  - Analyzed the Pricing Impacts on Transactional Growth for an global money transfer company
- 2001-2004 Assistant Vice President & Research Director, SCOR Reinsurance Company, ([www.scor.com](http://www.scor.com)), Itasca, IL
  - Project Leader for Enterprise Risk Management & Capital Allocation. Responsible for building individual models for market risks, credit risks, interest rate risks, property-casualty pricing/reserving risks, life insurance risks, and operational risks. Developed methodologies and analytical tools for risk aggregation and capital allocation. Gathered underwriting inputs regarding local insurance markets in more than twenty countries in Asia, Europe and America. Conducted internal communications/meetings with business units and line managers.
  - Developed a universal pricing formula, now commonly known as the Wang transform, for pricing aggregate stop-loss reinsurance and catastrophe reinsurance.
  - Developed risk benchmarks for all major lines of business; these benchmarks served as a basis for calculating underwriting target loss ratios. Implemented risk-load adjustment by layer. Applied the concept of Brownian motion in finance to reflect increased cost of capital for long-tailed lines of business.
  - Audited the reserving system used by the SCOR Group. Tested various reserving methods.
- 1997-2000 Pricing Actuary  
SCOR Reinsurance Company, Itasca, IL
  - Priced reinsurance treaties in personal lines, commercial lines, workers compensation, fidelity & surety, proportional and excess-of-loss, aggregate stop-loss, and non-traditional covers.

**SERVICES IN ACADEMIC & PROFESSIONAL COMMUNITIES:**

- Council Member of the SOA Risk Management Section (2003-2005)
- Section Editor - Encyclopedia of Actuarial Science (2001)
- Member of the Organizing Committee of the Enterprise Risk Management Symposium in Chicago, April 26-27, 2004.
- Member of the AFIR Committee, International Actuarial Association (since 2005)
- Member of the International Actuarial Association Solvency Working Party (2002-2003)
- Associate Editor - North American Actuarial Journal (2001-2004)
- Founding Editor for the Joint SOA/CAS Risk Management Section Newsletter
- Member of the American Risk and Insurance Association
- Member of the Risk Theory Society (1995)

**SCHOLARLY ARTICLES IN REFEREED JOURNALS:**

1. **Wang, Shaun** "Cat Bond Pricing Using Probability Transforms." The Geneva Papers on Risk and Insurance - Issues and Practice, 2004
2. **Wang, Shaun** "Equilibrium Pricing Transforms: New Results Using Buhlmann's 1980 Economic Model." ASTIN Bulletin: Journal of the International Actuarial Association, 33 (2003 May): 57-73.
3. **Wang, Shaun** "A Universal Framework for Pricing Financial and Insurance Risks." ASTIN Bulletin: Journal of the International Actuarial Association, 32 (2002 November): 213-234.
4. **Wang, Shaun** "A Class of Distortion Operators for Pricing Financial and Insurance Risks." Journal of Risk and Insurance, 67 (2000 March): 15-36.
5. Dhane, Jan, **Wang, Shaun**, Young, Virginia, and Goovaerts, Marc "Comonotonicity and Maximal Stop-Loss Premiums." Bulletin of the Swiss Association of Actuaries, (2000): 99-113.
6. **Wang, Shaun** "Aggregation of Correlated Risk Portfolios: Models and Algorithms." Proceedings of the Casualty Actuarial Society, Vol. LXXXV (1998): 848-939.
7. **Wang, Shaun** "Implementation of PH-transforms in Ratemaking." Proceedings of the Casualty Actuarial Society, Vol. LXXV (1998): 940-979.
8. **Wang, Shaun**, and Brown, Robert "A Frailty Model for Projection of Mortality Improvement." Journal of Actuarial Practice, Vol. 6 (1998): 197-241.
9. Chan, Wai-Sum, and **Wang, Shaun** "The Wilkie Model for Retail Price Inflation Revisited." British Actuarial Journal, Vol. 4 (1998): 637-652.
10. **Wang, Shaun** "An Actuarial Index of the Right-Tail Risk." North American Actuarial Journal, Vol. 2 (1998): 88-101.
11. **Wang, Shaun**, and Dhane, Jan "Comonotonicity, Correlation Order and Premium Principles." Insurance: Mathematics and Economics, 22 (1998): 235-242.
12. **Wang, Shaun**, and Young, Virginia "Ordering of Risks: Expected Utility Theory versus Yaari's Dual Theory of Risk." Insurance: Mathematics and Economics, 22 (1998): 145-161.

13. Young, Virginia, and **Wang, Shaun** "Updating Non-Additive Measures with Fuzzy Information." Fuzzy Sets and Systems, 94 (1998): 355-366.
14. **Wang, Shaun**, Young, Virginia, and Panjer, Harry. "Axiomatic Characterization of Insurance Prices." Insurance: Mathematics and Economics 21 (1997): 173-183.
15. Hesselager, Ole, **Wang, Shaun**, and Willmot, Gordon "Exponential and Scale Mixtures and Equilibrium Distribution." Scandinavian Actuarial Journal (1997): 125-142.
16. **Wang, Shaun**, and Young, Virginia "Risk-Adjusted Credibility Premium Using Distorted Probabilities." Scandinavian Actuarial Journal (1997): 143-165.
17. Gerchak, Yigal, and **Wang, Shaun** "Liquid Asset Allocation Using News Vendor Models with Convex Shortage Costs." Insurance: Mathematics and Economics, 20 (1997): 17-21.
18. **Wang, Shaun** "Premium Calculation by Transforming the Layer Premium Density." ASTIN Bulletin: Journal of the International Actuarial Association, 26 (1996): 71-92.
19. **Wang, Shaun** "Ordering of Risks under PH Transforms." Insurance: Mathematics and Economics, 18 (1996): 109-114.
20. **Wang, Shaun** "Insurance Pricing and Increased Limits Ratemaking by Proportional Hazards Transform." Insurance: Mathematics and Economics, 17(1995): 43-54.
21. **Wang, Shaun** "On Two-Sided Compound Binomial Distributions." Insurance: Mathematics and Economics, 17 (1995): 35-41.
22. Panjer, Harry, and **Wang, Shaun** "Computational Aspects of Sundt's Generalized Class." ASTIN Bulletin: Journal of the International Actuarial Association, 25 (1995): 5-17.
23. **Wang, Shaun**, and Sobrero, Monica "Further Results on Hesselager's Recursive Procedure for Calculation of Some Compound Distributions." ASTIN Bulletin: Journal of the International Actuarial Association, 24 (1994): 161-166.
24. **Wang, Shaun**, and Panjer, Harry "Proportional Convergence and Tail-Cutting Techniques in Evaluating Aggregate Claim Distributions." Insurance: Mathematics and Economics 14 (1994): 129-138.
25. **Wang, Shaun**, and Panjer, Harry "Critical Starting Points for Stable Evaluation of Mixed Poisson Probabilities." Insurance: Mathematics and Economics, 13 (1993), 287-297.
26. Panjer, Harry, and **Wang, Shaun** "On the Stability of Recursive Formulas." ASTIN Bulletin: Journal of the International Actuarial Association, 23 (1993): 227-258.

#### **REFEREED SCHOLARLY ARTICLES NON-JOURNALS:**

27. **Wang, Shaun** "A Set of New Methods and Tools for Enterprise Risk Capital Management and Portfolio Optimization." CAS Risk Capital Management Call Paper Program, Summer 2002: 43-78.
28. **Wang, Shaun** "Pricing of Catastrophe Bonds Market." Chapter 11 in "Alternative Risk Strategies" edited by Morton Lane, 2002, Risk Waterhouse, London.
29. **Wang, Shaun** "A Risk Measure That Goes Beyond Coherence." Proceedings of 2002 AFIR (Actuarial Approach to Financial Risks), March 2002, Cancun, Mexico.
30. **Wang, Shaun** "Ambiguity-Aversion and the Economics of Insurance." Proceedings of the ARIA Risk Theory Society, University of Wisconsin-Madison, April 1996.

31. **Wang, Shaun**, and Panjer, Harry “Further Results on the Stability of Recursive Formulas.” Transactions of the 25th International Congress of Actuaries, 1995, Brussels, Belgium.
32. **Wang, Shaun**, “Risk Loads in Life/Non-Life Insurance: A Unified Approach.” Transactions of the XXIV ASTIN colloquium, 1995, Belgium.
33. Guo, Z.H. and **Wang, S.** (1991). “Dynamics of unilateral systems on a finite-dimension Riemannian manifold.” International Series of Numerical Mathematics, Vol. 101, 215-228, 1991, Birkhauser,Verlag, Basel.

#### **REFEREED PROFESSIONAL/PRACTITIONER PUBLICATIONS:**

34. **Wang, Shaun**, “ERM is the next big thing for quants.” Financial Engineering News, Nov/Dec 2005, <http://www.fenews-digital.com/fenews/200511/?pg=26>
35. **Wang, Shaun**, “Where is ERM Heading?” Editorial for the SOA Risk Management Section Newsletter, March 2004 (to appear)
36. **Wang, Shaun**, and Mango, Donald “Blazing Research Trails at the 2003 Bowles Symposium.” Actuarial Review, August 2003.
37. **Wang, Shaun**, and Mango, Donald “Research Outside the Actuarial Comfort Zone at the 2003 Bowles Symposium.” Actuarial Review, February 2003.
38. **Wang, Shaun** “Capital Allocation Methods.” Capital Allocation: A Necessity for the Insurance Industry, SCOR Tech, 2003.
39. **Wang, Shaun** “Capital Allocation: What About the Future?” Capital Allocation: A Necessity for the Insurance Industry, SCOR Tech, 2003.
40. **Wang, Shaun** "Risk Capital Management and RAROC in the Insurance Industry." French Assurance Arbitrators, 7 (2002): 19-24
41. **Wang, Shaun**, and Coste, Claire-Marie, From Distortion Operator to Risk Load, SCOR Tech, 2002.

#### **INVITED TALKS:**

- 1) Keynote Speech, “ERM: The Future Train”, The Actuarial Profession at the Crossroads, Academy Annual Meeting, Oct. 10-11, 2005 Mayflower Hotel, Washington DC
- 2) Invited Keynote Speaker by a group of Japanese Universities & Organizations (Keio University, Nihon University, JARIP, and the Institute of Actuaries of Japan), October 1-7, 2005
- 3) The Enterprise Risk Management Workshop, the National Academies (Board on Mathematical Sciences and Their Applications), January 14-15, 2004, Washington DC, “Risk Aggregation in ERM”
- 4) The Joint Forum Meeting (Basel Committee on Banking Supervision, International Organization of Securities Commissions, International Association of Insurance Supervisors), November 6, 2003, Federal Bank of New York. Participation is by invitation only. Contributed comments.
- 5) CAS Annual Meeting, Charles A. Hachemeister Prize Paper Presentation, November 2003, New Orleans, A Universal Framework For Pricing Financial And Insurance Risks.”

- 6) University of Wisconsin School of Business, September 2003, Madison, "Latest Trends of Risk Management in Insurance Companies"
- 7) Joint French Finance Association and International IME Congress, June 25, 2003, Lyon, France, Chairman/Moderator for the "Risk Measure Plenary Session"
- 8) Bowles Symposium Keynote Presentation, April 2003, Atlanta, "The Key Issues and Mission."
- 9) Peking University Guanghua School of Management, February 2003, Beijing, "Latest Development in Risk Management for Financial/Insurance Companies"
- 10) SCOR Capital Allocation Seminar, October 2002, Paris, France, "Capital Allocation Methods", and "Capital Allocation: What About the Future?"
- 11) CAS Risk and Capital Management Seminar, July 2002, Toronto, "New Tools for Enterprise Risk Capital & Portfolio Optimization"
- 12) Restin Group Meeting (Reinsurance Section of ASTIN; Participation is by invitation only), May 2002, Naples, Italy, "Insurance Company Capital Allocation"
- 13) The Fields Institute Quantitative Finance Seminar, March 27, 2002, Toronto, "Risk Measurement and Management in Insurance Companies"
- 14) CAS Enterprise Risk Management Seminar, April 2001, San Francisco, "Contingent Payoffs in ERM"
- 15) The French Reinsurance Seminar, March 2000, Paris, France, "From distortion operators to risk loads" (together with Claire-Marie Coste)
- 16) The CAS Ratemaking Seminar, March 1998, Chicago, "Aggregation of Correlated Risk Portfolios"
- 17) The ICSA Applied Statistics Symposium, June 1997, Rutgers University, New Jersey, "Current hot statistical problems in actuarial science"
- 18) University of Copenhagen, October 1996. "Ambiguity Aversion and Economics of Insurance"
- 19) University of Bergen, Norway, October 1996, "Axiomatic characterization of insurance prices"
- 20) Norway ASTIN Subgroup Seminar, Oslo, Norway, October 1996, "Computation of aggregate claim distributions"
- 21) Risk Theory Seminar at Wisconsin-Madison in April 1996, "Ambiguity-aversion and the economics of insurance"
- 22) Casualty Actuarial Society Reinsurance Seminar, New York City, June 1995, "Risk Loads Using Transformed Distributions"
- 23) New York University at Stony Brook, May 1995, "Modeling and Pricing of Insurance Risks"
- 24) Risk Theory Seminar, Oberwolfach, Germany, September 13-20, 1994, "Skewed Gaussian distributions"