PATRICK LEE BROCKETT
December 2013

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CURRENT POSITIONS AT THE UNIVERSITY OF TEXAS AT AUSTIN

Director, Risk Management and Insurance Program
Gus S. Wortham Memorial Chair in Risk Management and Insurance
Director, Center for Risk Management and Insurance
Professor with joint appointments in the Departments of Information, Risk and Operations Management; Finance; and Mathematics
Global Research Fellow at the IC^2 Institute, University of Texas at Austin
Affiliated Faculty Member, Division of Statistics + Scientific Computation

OTHER POSITIONS

Member of Board of Directors, Texas Property and Casualty Guaranty Association

EDUCATION

B.A. 1970, (Mathematics) California State University at Long Beach, California
M.A. 1975, (Mathematics) University of California at Irvine, California
Ph.D. 1975, (Mathematics) University of California at Irvine, California

EXTERNAL PROFESSIONAL HONORS AND AWARDS

In 2013 a Social Science Research Network paper entitled "The Most Prolific Contributing Authors to the Leading Risk Management and Insurance Journals: 1984-2013" by Jean Heck identified the prolific contributors to the elite three journals in Risk Management and Insurance. In terms of the number of appearances I was ranked #9 in the world over the last 30 years and when the impact factor of the journal was taken into account, I ranked #2 in the world over the 30 year history. Also analyzed was the past ten years of contribution. In this I ranked # 2 in the world overall, and once the impact factor of the journal was taken into account, I rose to #1 in the world.

In 2013 I was appointed as member of National Academy of Sciences' National Research Council Committee to investigate costs and benefits of reforms to the National Flood Insurance Program (2013-2014)

In 2011 I was awarded the American Risk and Insurance Association's Excellence in Teaching Award, August, 2011 at annual meeting in San Diego, California

I was appointed in 2011 as a member of National Academy of Sciences' panel to investigate risks in the levee systems in America and the National Flood Insurance Program (2011-2012)

In 2009 the article "Brockett, Patrick L., Richard Derrig, and Xiaohua Xia. "Using Kohonen's Self Organizing Feature Map to Uncover Automobile Bodily Injury Claim Fraud," *The Journal of Risk and Insurance,* June 1998. Vol. 65, No. 2, 245-274 was listed as tied with one other article in insurance actuarial science and finance for the 8th most cited *Journal of Risk and Insurance* article (December 2009 issue *Journal of Risk and Insurance,* Table 8 p. 497).

Listed as the Top Ten Most Published Researcher in the World in the 75 year history of *The Journal of Risk and Insurance* (the premier academic journal in risk management and insurance in the world) in terms of the number of pages published. See Mary A. Weiss and Joseph Qiu (2008) "*The Journal of Risk and Insurance:* A 75-Year Historical Perspective," *The Journal of Risk and Insurance*, 2008, Vol. 75, No. 2, 253-274.

Ranked as the 12th most impactful scholar (non-tied ranking) among 1,376 management science (MS)/production and operations management (POM) professors in 225 American business schools in the USA according to the H-index of scholarly productivity and impact. The H-index is a citation based methodology for determining the impact of a scholar which does not place undue emphasis on the "one hit" authors, or people who churn out numerous papers which are never cited by others, as might a simple web of science citation count. The H-index quantifies both the actual scientific productivity and the apparent scientific impact of a scientist. The index is based on the set of the scientist's most cited papers and the number of citations that they have received in other people's publications. The index was suggested by the physicist Jorge E. Hirsch as a tool for determining theoretical physicists' relative quality, was published in the *Proceeding of the National Academy of Sciences*, and is sometimes called the Hirsch index or Hirsch number. The MS/POM scholarly impact study research, which took almost a year to complete, was conducted at DePaul University by Bin Jiang and I was informed of the results via email in 2008.

Casualty Actuarial Society's ARIA Research Prize 2008 given to "the author(s) of that paper published by the American Risk and Insurance Association (ARIA) which provides the most valuable contribution to casualty actuarial science" by the Casualty Actuarial Society. For the paper by Patrick L. Brockett, and Linda L. Golden entitled "Biological and Psychobehavioral Correlates of Risk Taking, Credit Scores, and Automobile Insurance Losses: Toward an Explication of Why Credit Scoring Works," *The Journal of Risk and Insurance*, 74(1), March 2007. 23-63.

Elected Fellow of the Institute for Risk Management (2008)

American Risk and Insurance Association Outstanding Achievement Award, August 2006, for furthering the science of risk management through the promotion of education, research and communication during my nine year tenure as editor of *The Journal of Risk and Insurance* from 1998-2006.

Member of the Board of Directors, Board on Mathematical Sciences and their Applications, National Research Council, The National Academies of Science of the United States, 2005-2008.

Elected Member of the International Statistical Institute 2006. This is a very prestigious election of only a select few statisticians worldwide.

RMIR Perspectives Award for 2006 for the most outstanding perspectives article published in the *Risk Management and Insurance Review* during 2005, given by the American Risk and Insurance Association August 2006 for the paper by Patrick L. Brockett, Mulong Wang, and Chuanhou Yang (2005) "Weather Derivatives and Weather Risk Management," *Risk Management and Insurance Review* 8(1) 127-140.

Robert C. Witt Research Award 2005 for the most outstanding feature article published in *The Journal of Risk and Insurance* during 2004, given by the American Risk and Insurance Association August 2005 for the paper, by Patrick L. Brockett, John Semple, Ray Chang, John J. Rousseau, and Chuanhou Yang (2004) "A Comparison of HMO Efficiencies as a Function of Provider Autonomy," *The Journal of Risk and Insurance* 71, 1 (March), 1-13.

Robert I. Mehr Award 2004 given by the American Risk and Insurance Association August 2004 "for that journal article making a ten year lasting contribution to risk management" and having "withstood the test of time". Received for: Brockett, Patrick L., William W. Cooper, Linda L. Golden, and Utai Pitaktong (1994), "A Neural Network Method for Obtaining an Early Warning of Insurer Insolvency," *The Journal of Risk and Insurance*, September, 402-424

Casualty Actuarial Society's ARIA Research Prize 2003 given to "the author(s) of that paper published by the American Risk and Insurance Association (ARIA) which provides the most valuable contribution to casualty actuarial science" by the Casualty Actuarial Society. For the paper by Patrick L. Brockett, Richard A., Derrig, Linda L. Golden, Arnold Levine and Mark I. Alpert entitled "Fraud Classification Using Principal Component Analysis of RIDITs," *The Journal of Risk and Insurance,* 2002 69(3), 341-372.

Casualty Actuarial Society's ARIA Research Prize 2001 given to "the author(s) of that paper published by the American Risk and Insurance Association (ARIA) which provides the most valuable contribution to casualty actuarial science" by the Casualty Actuarial Society. For the paper Brockett, Patrick L., Hung-Gay Fung, Gene C. Lai, Richard D. MacMinn, and Robert C. Witt. December 2000. "Great (and not so Great) Expectations: An Endogenous Economic Explication of Insurance Cycles and Liability Crises," *The Journal of Risk and Insurance*, Vol. 67, No. 4. (Dec., 2000), pp. 617-652

International Brian Hey Prize (Second Place) 2000 Competition held by the Institute of Actuaries in England and the Scottish Faculty of Actuaries, Second Prize. October, 2000. For the paper Brockett, Patrick L., Hung-Gay Fung, Gene C. Lai, Richard D. MacMinn, and Robert C. Witt. December 2000. "Great (and not so Great) Expectations: An Endogenous Economic Explication of Insurance Cycles and Liability Crises," *The Journal of Risk and Insurance*, Vol. 67, No. 4. (Dec., 2000), pp. 617-652

David Rist Prize 1999 (Finalist) Competition is for the most outstanding paper on military operations research, by the Military Operations Society, 1999, for the paper Brockett, Patrick L., B. Golany, J. J. Rousseau, D.A. Thomas, and L. Zhou. 1997. "Forecasting and Allocation of US Army Recruiting Resources," *Military Operations Research*, Vol. 3 No. 3, pp. 13-29.

Holder of the Thomas Boles Chair in Actuarial Science, Georgia State University, Atlanta, Georgia, 1998

Society of Actuaries Annual Prize, 1996 winner of Annual Prize for the Best Paper of the Year for 1996 from the Society of Actuaries for the article Brockett, Patrick L., S. Cox, B. Golany, F. Phillips, and Yun Song. 1996. "Actuarial Uses of Grouped Data: An Information Theoretic Approach to Incorporating Secondary Data," *Transactions, of the Society of Actuaries*, Vol. 17, 75-99.

Franz Edelman Competition (Semi-finalist) for the most outstanding application of management science techniques in practice, Institute for Operations Research and the Management Sciences (INFORMS), 1995 for our work on US Army recruiting subsequently summarized in the paper Brockett, Patrick L., B. Golany, J. J. Rousseau, D.A. Thomas, and L. Zhou. 1997. "Forecasting and Allocation of US Army Recruiting Resources," *Military Operations Research,* Vol. 3 No. 3, pp. 13-29.

Winner of the "Best Paper Award" for 1994 from the International Insurance Society, June 19-23, 1994 Madrid, Spain for the paper Brockett, Patrick L., G. C. Lai, S. W. Pottier, and R. C. Witt. June 19-23, 1994. "Ambiguity, Risk Charges, and Insurance Pricing," *Proceeding of the International Insurance Society*, Madrid, Spain, pp. 298-311.

The Halmsted Prize for the Most Outstanding English Language Publication in Actuarial Science in the World (1993)," presented by The Society of Actuaries for my article "Information Theoretic Approach to Actuarial Science: A Unification and Extension of Relevant Theory and Applications," *Transactions of the Society of Actuaries*, Vol. 43, 73-135.

American Statistical Association Award for "Most Outstanding Statistical Application Article Published in any Journal, in any Field, and in any Language During 1990 or 1991," presented by the American Statistical Association (1992) for my article "Information Theoretic Approach to Actuarial Science: A Unification and Extension of Relevant Theory and Applications," *Transactions of the Society of Actuaries*, Vol. 43, 73-135.

American Risk and Insurance Association's Award for "Outstanding Feature Article"
Published during 1986 in *The Journal of Risk and Insurance*" presented by the American Risk and Insurance Association for the article Brockett, Patrick L., S. H. Cox, Jr., and R.C. Witt. June 1986. "Insurance Versus Self-Insurance: A Risk Management Perspective," *The Journal of Risk and Insurance*, Vol. 53, 242-257.

American Risk and Insurance Association's Award for "Outstanding Communication"
Published During 1983 in *The Journal of Risk and Insurance*" presented by the American Risk and Insurance Association for the article Brockett, Patrick L. December 1983. "On the Misuse of the Central Limit Theorem in Some Risk Calculations," *The Journal of Risk and Insurance*, Vol. 50, No. 4, 727-731.

ELECTED PROFESSIONAL SOCIETY FELLOWSHIPS AND HONORS

The Institute of Risk Management (Elected Fellow)
International Statistical Institute (Elected Member)
The American Association for the Advancement of Science (Elected Fellow)
The Institute of Mathematical Statistics (Elected Fellow)
The American Statistical Association (Elected Fellow)
The Royal Statistical Society Fellow
(also elected Chartered Statistician by RSS)
The Operations Research Society of America (now INFORMS) (elected Full Member)

OTHER PROFESSIONAL SOCIETY MEMBERSHIPS

Academy of Marketing Science
American Risk and Insurance Association (Past President)
Asia Pacific Risk and Insurance Association
Casualty Actuarial Society (Academic Corresponding Member)
Global Association of Risk Professionals
Institute for Operations Research and Management Sciences (INFORMS)
International Actuarial Association (Individual Life Member)
Risk and Insurance Management Society (RIMS)
Southern Risk and Insurance Association
Western Risk and Insurance Association

CURRENT EDITORIAL POSITIONS

2007- Associate Editor, *The Journal of Risk and Insurance*

2000 - Member of Distinguished Honorary Editorial Board, *North American Actuarial Journal.* This position is for a selected few who not only serve on the Editorial Board, but also have been chosen to give advice on strategy and directions to the Editor.

2008-2010 Editorial Board Member, *Journal of International Business and Entrepreneurship*

PREVIOUS EDITORIAL POSITIONS

1984-2008 Associate Editor, *Insurance: Mathematics and Economics*, one of the very top journals in actuarial science and insurance mathematics published in Europe

1998-2007 Editor, *The Journal of Risk and Insurance*, the flagship journal of the American Risk and Insurance Association and the most prestigious academic journal in risk management and insurance in the world

2000-2004 Member of the Editorial Board, *Applied Stochastic Models in Business and Industry* (formerly *Applied Stochastic Models and Data Analysis*)

1999 Special Guest Editor of the *North American Actuarial Journal* Special Issue (January) on Genetic Testing and its Impact on the Insurance Industry

1997 Co-Editor (with W.W. Cooper, A. Berger, and J. Pastor) Special Issue of the *European Journal of Operations Research* on new methodologies and directions in the evaluation of financial institutions.

1995- 2000 Associate Editor, *North American Actuarial Journal*, the flagship journal of the Society of Actuaries and the most prestigious academic journal in actuarial science in North America

1995-1998 Associate Editor for Book Reviews, *North American Actuarial Journal*

1991-1993 Associate Editor, *Naval Research Logistics*

1979-1980 Associate Editor, Book Review Section, *Journal of the American Statistical Association*

UNIVERSITY PROFESSIONAL HONORS AND AWARDS RECEIVED

Global Research Fellow IC^2 Institute, University of Texas

Fellow of the Humanities Research Institute at the University of Texas (2011)

Deans Fellow: McCombs School of Business (Spring 2010)

Deans Fellow: McCombs School of Business (Spring 2005)

Dean's Fellow 1998, University of Texas at Austin College and Graduate School of Business

Outstanding Graduate Teacher Award (University-wide competition), by The University of Texas at Austin Graduate School, 1995.

Award for Research Excellence, presented by The University of Texas CBA Foundation Advisory Council (1992)

Faculty Research Assignment, University of Texas Graduate School (Spring 1991)

Award for Outstanding Research Contributions, presented by The University of Texas CBA Foundation Advisory Council (1988)

Award for Research Excellence, presented by The University of Texas CBA Foundation Advisory Council (1984)

OTHER UNIVERSITY PROFESSIONAL AWARD NOMINATIONS

Management Science and Information Systems Department Nominee for College-wide Award for Outstanding Research Contributions (2006)

Management Science and Information Systems Department Nominee for University-wide Outstanding Graduate Teacher Award (1993)

Finance Department Nominee for College-wide Award for Research Excellence, (1991)

Nominated for Outstanding Professor Award, The Graduate Business Council (1987)

Nominated for Friar Society Teaching Award (1987)

Finance Department Nominee for University-wide Outstanding Graduate Teacher Award, (1989, 1992, and 1993)

Nominated for Outstanding Researcher Award, Golden Key National Honor Society (1987)

Nominated for Outstanding Teacher Award, Golden Key National Honor Society (1985)

OFFICES IN PROFESSIONAL ORGANIZATIONS AND PROFESSIONAL SERVICE

2000-2013 Member of Board of Directors, Texas Property and Liability Insurance Guaranty Association (Appointed as a Public Member by the Texas State Commissioner of Insurance)

2010-2013 Member of the Theory of Risk Committee of the Casualty Actuarial Society,

Chair, ARIA Actuarial Research Award Committee, American Risk and Insurance Association. Raise funds for award

Co-Organizer 6th Longevity Risk and Capital Market Solutions Conference, Sydney, Australia, September, 2010

Member of the Committee to determine the Robert I. Meir Award for the most outstanding article published in *The Journal of Risk and Insurance* ten years previously which has "withstood the test of time", given by the American Risk and Insurance Association

2009 Member of the Theory of Risk Committee of the Casualty Actuarial Society, 2009

	Chair, Ad hoc committee on ARIA Actuarial Research Award, American Risk and Insurance Association
	Co-Organizer 5th Longevity Risk and Capital Market Solutions Conference, New York, New York September, 2009
	Member of the Committee to determine the Robert I. Meir Award for the most outstanding article published in *The Journal of Risk and Insurance* ten years previously which has "withstood the test of time", given by the American Risk and Insurance Association
2008	Member of the Theory of Risk Committee of the Casualty Actuarial Society, 2008
	Member of the Wright –Kulp Book Award Committee to determine the most outstanding contribution to the risk management literature, sponsored by the American Risk and Insurance Association
	Completed (with Professor Richard MacMinn) the raising of funds for the American Risk and Insurance Association (ARIA) to establish an endowment for a research award titled "The Robert C. Witt Award" for the most outstanding feature article published each year in the *Journal of Risk and Insurance*. This Award is given by ARIA in honor of former UT risk management and insurance professor Robert C. Witt.
	Member of the Committee to determine the Robert I. Meir Award for the most outstanding article published in *The Journal of Risk and Insurance* ten years previously which has "withstood the test of time", given by the American Risk and Insurance Association
2004-2007	Member of the Board of Directors, Board on Mathematical Sciences and their Applications, National Research Council, The National Academies of the United States
2007	Member of the Committee to determine the Robert I. Meir Award for the most outstanding article published in *The Journal of Risk and Insurance* ten years previously which has "withstood the test of time", given by the American Risk and Insurance Association
1998-2006	Co-Chair (with Richard MacMinn) of the Meir Award for the most outstanding article published in *The Journal of Risk and Insurance* ten years previously which has "withstood the test of time", given by the American Risk and Insurance Association
2002-2003	Immediate Past President, American Risk and Insurance Association.
1999- 2003	Executive Committee Member for the Board of Directors, American Risk and Insurance Association.
2001-2002	President, American Risk and Insurance Association.
2002-2003	Chair, Officer Nomination Committee, American Risk and Insurance Association.

2000-2001	Chair, Finance Committee, American Risk and Insurance Association
2000-2001	Chair, Strategic Planning Committee, American Risk and Insurance Association
2000-2001	President-Elect, American Risk and Insurance Association
1999- 2000	Member of the Society of Actuaries Task Force on Education and Qualifications 20005
2000-2006	Liaison, Society of Actuaries with the American Association for the Advancement of Science
2000	Organizer of International Annual Convention, American Risk and Insurance Association (2000)
1999 –2000	Vice President, American Risk and Insurance Association
1996-2001	Member of Board of Directors, American Risk and Insurance Association
1998-2006	Co-Chair (with Richard MacMinn) of the Meir Award for the most outstanding article published in *The Journal of Risk and Insurance* ten years previously which has "withstood the test of time", given by the American Risk and Insurance Association
2002-2003	Co-Chair (with Richard MacMinn) of the Robert C. Witt Award for the most outstanding article published in *The Journal of Risk and Insurance* during the previous year, by the American Risk and Insurance Association
1998	Organizer, Bowles Symposium on Genetic Technology and its Impact on Insurance Underwriting, Georgia State University, March 1998
1991	Member of the Committee to determine Kulp-Wright book awards given by the American Risk and Insurance Association
1990	Member of the Committee to Determine Stickler Teaching Innovation Award given by the American Risk and Insurance Association
1987-1988	Member of the Nominating Committee for the American Risk and Insurance Association
1985, 90, 92, 2008, 2009	Member of the Committee to Determine Awards for the *Journal of Risk and Insurance*, American Risk and Insurance Association.
1986-1988	Supervisor and organizer of the Society of Actuaries examinations for the Austin, Texas examination center
1985-1989	Member of the National Science Foundation Measurement Methods and Data Improvement Advisory Panel
1985	Member of the Program Coordinating Committee for the Annual Meeting of the American Risk and Insurance Association
1985-95	Member of the Society of Actuaries Committee on Relations With Statistical Societies

1984	Co-organizer (with S.H. Cox), Twentieth Annual Actuarial Research Conference, sponsored by the Society of Actuaries
1979	President, Austin Chapter of the American Statistical Association
1978	Vice President, Austin Chapter of the American Statistical Association

PUBLICATIONS

Books

Brockett, Patrick L., and A. Levine. 1984. *Statistics, Probability and Their Applications,* W. B. Saunders Publishing Co., (Reprinted in Japan, by HRW International, 1986).

Baranoff, Etti G, Patrick Brockett and Yehuda Kahane, *Risk Management for the Enterprise and Individuals,* Flatworld Knowledge Publisher, Spring 2009. http://www.flatworldknowledge.com/

Monographs

Aird, Paul, Patrick Brockett, and Robert C. Witt. 1993. *An Analysis of Pricing and Availability Problems in the Texas Automobile Insurance Market,* National Association of Independent Insurers.

Brockett, Patrick L. and Patricia Arnold 2004 "Deregulation, Pricing and Availability Issues in the Texas Homeowners Insurance Market" (Fall) 2004 monograph, *Texas Public Policy Foundation*

National Research Council. *Levees and the National Flood Insurance Program: Improving Policies and Practices*. Washington, DC: The National Academies Press, 2013 (part of National Research Council committee that wrote the monograph)

Articles on Risk Management and Insurance

Bertrand, W., Patrick L. Brockett, and A. Levine. 1979. "A Methodology for Determining High Risk Components in Urban Environments," *International Journal of Epidemiology*, Vol. 8, No. 2, 161-166.

Brockett, Patrick L., and R. C. Witt. December 1982. "The Underwriting Risk and Return Paradox Revisited," *The Journal of Risk and Insurance*, Vol. 49, No. 4, 621-627.

Arnold, B.C., and Patrick L. Brockett. 1983. "Identifiability for Dependent Multiple Decrement/Competing Risk Models," *Scandinavian Actuarial Journal*, 117-172.

Arnold, B.C., and Patrick L. Brockett. 1983. "When Does the βth Percentile Residual Life Function Uniquely Determine the Distribution?", *Operations Research*, Vol. 31, 391-396.

Brockett, Patrick L., and S. H. Cox, Jr. 1983. "Adjusting Lifetables to Incorporate Pertinent Personal Profile Information," Actuarial Research Clearing House.

Brockett, Patrick L. December 1983. "On the Misuse of the Central Limit Theorem in Some Risk Calculations," *The Journal of Risk and Insurance*, Vol. 50, No. 4, 727-731. (This article won an award from The American Risk and Insurance Association for Outstanding Communication published in this journal in 1983).

Brockett, Patrick L. 1983. "Risk Equivalent Return on Shareholders' Equity and Utility Assessment--a Comment on the paper by A. Longley-Cook," *Transactions of the Society of Actuaries*, Vol. 35, 341-348. (This article was a finalist for the Halmsted Prize given by the Society of Actuaries for the best English language publication of the year in the world in Actuarial Science).

Brockett, Patrick L., and S. H. Cox, Jr. 1984. "Optimal Ruin Calculation Using Partial Stochastic Information," *Transactions of the Society of Actuaries*, Vol. 36, 49-62.

Brockett, Patrick L. 1984. "General Bivariate Makeham Laws," *Scandinavian Actuarial Journal*, 150-156.

Brockett, Patrick L., S. H. Cox, Jr. 1984. "Statistical Adjustment of Mortality Tables to Reflect Known Information," *Transactions of the Society of Actuaries*, Vol. 36, 63-75.

Brockett, Patrick L., S. H. Cox, Jr., and R. C. Witt. December 1984. "Self Insurance and the Probability of Financial Regret," *The Journal of Risk and Insurance*, Vol. 51, 720-729.

Arnold, B.C., Patrick L. Brockett, W. Torres, and A. L. Wright. 1984. "On the Inconsistency of Bayesian non-Parametric Estimators in Competing Risk/Multiple Decrement Models," *Insurance: Mathematics and Economics*, Vol. 3, 49-55.

Brockett, Patrick L. 1985. "Using a Standard Distribution and Client Data to Obtain a Client Loss Distribution," *Conference of Actuaries in Public Practice*, Vol. 34, 503-511.

Brockett, Patrick L. and S. H. Cox, Jr. 1985. "Insurance Calculations Using Incomplete Information," *Scandinavian Actuarial Journal*, 94-108.

Brockett, Patrick L., S. H. Cox, Jr., and R. C. Witt. June 1986. "Insurance Versus Self-Insurance: A Risk Management Perspective," *The Journal of Risk and Insurance*, Vol. 53, 242-257. (This article won an award from The American Risk and Insurance Association for outstanding Feature Article published in this journal in 1986.)

Brockett, Patrick L., and J. Zhang. 1986. "Information Theoretic Mortality Table Graduation," *Scandinavian Actuarial Journal*, 131-140.

Brockett, Patrick L., and N. Sipra. 1987. "Linearity and Gaussianity of Interest Rate Data: an Empirical Time Series Test," *Actuarial Science*, (Festschrift Volume in honor of V. M. Joshi), 173-183.

Aird, Paul, Patrick L. Brockett, and Linda L. Golden. 1990. "How Public Policy Can Define the Marketplace: The Case of Pollution Liability Insurance in the 1980's," *Journal of Public Policy and Marketing*, Vol. 9, 211-226.

Brockett, Patrick L., and Robert C. Witt. 1990. "Linear and Nonlinear Stochastic Process Models in the Financial Theory of Insurance Companies," *Proceedings of the Business and Economic Statistics Section of the American Statistical Association*, 25-31.

Aird, Paul, Patrick L. Brockett, and Robert C. Witt. 1990. "An Economic Overview of the Excess and Surplus Lines Insurance," *Journal of Insurance Regulation*, Vol. 9, No. 2, 234-258.

Aird, Paul, Patrick L. Brockett, and Robert C. Witt. March 1991. "An Overview of the Reinsurance and the Reinsurance Markets," *Journal of Insurance Regulation*, Vol. 9, No. 3, 432-454.

Brockett, Patrick L., and R. C. Witt. March 1991. "Relevant Distributions for Insurance Prices in an Arbitrage Free Equilibrium," *The Journal of Risk and Insurance*, Vol. 58, 13-29.

Brockett, Patrick L. 1991. "Information Theoretic Approach to Actuarial Science: A Unification and Extension of Relevant Theory and Applications," *Transactions of the Society of Actuaries*, Vol. 43, 73-135. (This paper won the Award for the Most Outstanding Statistical Application Article published in any journal during 1991. The award is presented by The American Statistical Association at their 1992 annual meeting. It also won the Halmsted Award from the Society of Actuaries for the most outstanding English language publication in actuarial science.)

Brockett, Patrick L., and Samuel H. Cox. 1991. "Discussion of Reitano's 'Statistical Analysis of Banded Data'," *Transactions of the Society of Actuaries*, Vol. 43.

Brockett, Patrick L., Marc Goovaerts and Greg Taylor. 1991. "The Schmitter Problem," *ASTIN Bulletin*, Vol. 21, No. 1, 129-132.

Brockett, Patrick L., Z. Huang, H. Li, and D. Thomas. 1991. "Information Theoretic Graduation of Multivariate Data" *Scandinavian Actuarial Journal*, Vol. 2, 144-153.

Aird, Paul, Patrick L. Brockett, and Robert C. Witt. April 1992. "The Competition for Markets," *Risk Management*, Vol. 39, No. 4, 49-53.

Brockett, Patrick L., and Robert C. Witt. October 1993. "Turmoil in the Texas Auto Insurance Market," *Texas Business Review*.

Brockett, Patrick L., William W. Cooper, Linda L. Golden, and Utai Pitaktong. September 1994. "A Neural Network Method For Obtaining An Early Warning of Insurer Insolvency," *The Journal of Risk and Insurance*, Vol. 61, No. 3, 402-424. This paper won the Robert I. Mehr Award for 2004 given by the American Risk and Insurance Association "for that journal article making a ten year lasting contribution to risk management" and having "withstood the test of time".

Brockett, Patrick L., G. C. Lai, S. W. Pottier, and R. C. Witt. June 19-23, 1994. "Ambiguity, Risk Charges, and Insurance Pricing," *Proceeding of the International Insurance Society*, Madrid, Spain, pp. 298-311. (This paper won the "Best Paper Award" from the International Insurance Society for 1994 where it was presented).

Brockett, Patrick L., and E. S. Tankersley. January/February 1995. "The Genetics Revolution: Insurer Needs versus Society's Ethics," *Contingencies*, Vol. 7, No. 1, 13-16.

Brockett, Patrick L., and Richard MacMinn. April 1995. "Corporate Spin-offs as a Value Enhancing Technique when Faced With Legal Liabilities," *Insurance: Mathematics and Economics*, Vol. 16, No. 1, 63-68.

Brockett, Patrick L., and Yun Song. 1995. "Obtaining a Life Table for Spinal Cord Injury Patients Using Information Theory," *Journal of Actuarial Practice*, Vol. 3, No. 1, 77-91.

Brockett, Patrick L., and Xiaohua Xia. 1996. "Operations Research in Insurance: a Review," *Transactions of the Society of Actuaries*, Vol. 47, 1-74.

Brockett, Patrick L., S. Cox, B. Golany, F. Phillips, and Yun Song. 1996. "Actuarial Uses of Grouped Data: An Information Theoretic Approach to Incorporating Secondary Data," *Transactions, of the Society of Actuaries*, Vol. 17, 75-99. (This article won the Annual Prize given by the Society of Actuaries for the best publication of the year in the *Transactions, of the Society of Actuaries*).

Brockett, Patrick L., B. Golany, N. Sipra, R. C. Witt, and X. Xia. 1996."Statistical Tests of Stochastic Process Models Used in the Financial Theory of Insurance Companies," *Insurance: Mathematics and Economics*, Vol. 18, 73-79.

Brockett, Patrick, and C. McClellan. February 1996. "Tort Reform and Mandated Insurance Rate Rollbacks," *Texas Business Review*.

Brockett, Patrick L., and Stacy Youngsdale. September 1996. "The Techniques for Management of Property Risk used by Universities," *URMIA, The University Risk Management and Insurance Association Journal*, Vol. 3, No. 1, 51-65.

Brockett, Patrick L., S. H. Cox, and J. Smith. 1996. "Bounds on the Price of Catastrophe Insurance Options on Futures Contracts," published in *Securitization of Insurance Risks,"* Society of Actuaries Monograph Series, Schaumburg, Ill.

Brockett, Patrick L., Linda L. Golden, and Xiaohua Xia. 1997. "Using Computer Intensive Technologies to Aid Insurance Regulators: Early Detection of Insolvency and Fraud," *Impact : How IC^2 Research Affects Public Policy and Business Markets*. Edited by W.W. Cooper, D. Gibson, F.Y. Phillips, S. Thore and A. Whinston, Quorum Books, Westport , Connecticut, pp. 111-130.

Brockett, Patrick L., and E. Susan Tankersley. 1997. "The Genetics Revolution, Economics, Ethics and Insurance," *Journal of Business Ethics*, Vol. 16, pp. 1661-1676.

Brockett, Patrick L., W. W. Cooper, Linda L. Golden, and X. Xia. 1997. "A Case Study in Applying Neural Networks to Predicting Insolvency for Property and Casualty Insurers," *Journal of the Operational Research Society*, Vol. 48, 1153-1162.

Brockett, Patrick L. 1998. "Technological Change and Its Impact on Risk Creation and Management," Chapter 18 in *International Risk and Insurance: Environments and Management*. Edited by Harold D. Skipper, Jr., Richard D. Irwin, Inc., Press, pp. 443-466

Brockett, Patrick L., Richard Derrig, and Xiaohua Xia. June 1998. "Using Kohonen's Self Organizing Feature Map to Uncover Automobile Bodily Injury Claim Fraud," *The Journal of Risk and Insurance*, Vol. 65, No. 2, 245-274. (In 2009 this article was listed as tied with one other article in insurance actuarial science and finance journals for the 8th most cited article. Cf., *Journal of Risk and Insurance* December 2009 issue Table 8 p. 497).

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Golden, Linda L. and Patrick L. Brockett, 2013 "Detecting Fraud in Accounting and Marketing" *Journal of Accounting and Marketing*, Vol 2(3), 1-2, doi: 10.4172/2168-9601.1000e122

Book Reviews

Brockett, Patrick L. *2003*. *Modern Actuarial Risk Theory (Modern ART)* by Rob Kass, Marc Goovaerts, Jan Dhaene, and Michel Denuit, Kluwer Academic Publishers2001; ISBN: 0792376366; Reviewed in *The Journal of Risk and Insurance* 2003 Vol. 70(2) p.361.

Brockett, Patrick L., and Linda L. Golden. June 2001. *Law of the Internet* by George B. Delta and Jeffrey H. Matsuura, Aspen Law & Business Publishers 1999, Reviewed in *The Journal of Risk and Insurance* Vol. 68, No. 2, pp.372-374.

Brockett, Patrick L., March 2001. *Law of Insurance Contract Disputes, Second Edition* by Jeffrey W. Stempel, Aspen Publishers 2000, Reviewed in *The Journal of Risk and Insurance* Vol. 68, No. 1, pp.209-212.

Brockett, Patrick L. April 1997. *Mathematical Models in Finance*, Edited by S. D. Howison, F. P. Kelly and P, Chapman and Hall Publishing Company 1995, ISBN 0 412 63070 2, Reviewed in *North American Actuarial Journal*. Vol. 1, No. 1, p.110

Brockett, Patrick L., and Henry Wurts. April 1997. *Against the Gods: The Remarkable Story of Risk*, by Peter L. Bernstein John Wiley and Sons, Inc. Publishing Company,

New York 1996, ISBN 0 471-12104-5, Reviewed in *North American Actuarial Journal*. Vol. 1, No. 2, pp. 105-107.

Brockett, Patrick L. 1997. *Rupp's Insurance and Risk Management Glossary*, by Richard V. Rupp, NILS Publishing Company, Chatsworth, California 1996, ISBN 0-89246-446-1, Reviewed in *North American Actuarial Journal*, Vol. 1, No. 2, p.107.

Brockett, Patrick L. March 1994. *Insurance Risk Models* Harry H. Panjer.and Gordon E. WIllmot, Society of Actuaries Publishers, Chicago, Ill. (1992), Reviewed in *The Journal of Risk and Insurance*, Vol. 61, No. 1, 156-157.

Brockett, Patrick L. June 1993. *Progress in Decision, Utility and Risk Theory,* Attilla Chikán, ed., Kluwer Academic Publishers, Dortrecht/Boston/London (1991), Reviewed in *The Journal of Risk and Insurance*, Vol. 60, No. 11, 333-334.

Brockett, Patrick L., and Linda L. Golden. February 1991. *Multivariate Analysis of Variance and Repeated Measures: A Practical Approach For Behavioral Scientists,* by D. J. Hand and C. C. Taylor, Chapman and Hall (with Linda L. Golden) Reviewed in *Journal of Marketing Research*, Vol. 28, 114-115.

Brockett, Patrick L., and Linda L. Golden. February 1991. *Psychological Foundations of Economic Behavior*, by Paul Albanese (Ed.), Praeger Publishers, Reviewed in *Journal of Marketing Research*, Vol. 28, 115-116.

Brockett, Patrick L., and M. J. Hinich. 1989. *Stochastic Processes in Underwater Acoustics,* by C.R. Baker, Springer-Verlag, Lecture Notes in Control and Information Sciences #85, Reviewed in *Journal of the Acoustical Society of America*.

Brockett, Patrick L., and Antoine Laurence. 1989. *Managerial Decision Analysis,* by Danny Samson, Irwin Press, Reviewed in *The Journal of Risk and Insurance*, Vol. 57, p. 581.

Brockett, Patrick L. May 1988. *Model Selection,* by H. Linhart and W. Zucchini, John Wiley and Sons, Reviewed in *Journal of Marketing Research*, Vol. 25, 214-215.

Brockett, Patrick L., and S. H. Cox Jr. 1984. *Stochastic Methods in Economics and Finance,* by A. Malliaris and W. Brock, Reviewed in *Journal of the American Statistical Association*, Vol. 80, 236-237.

Brockett, Patrick L. 1983. *Comparative Statistical Inference (2nd edition),* by Vic Barnett, Reviewed in *Journal of the American Statistical Association*, Vol. 78, No. 382, 503.

Brockett, Patrick L. 1982. *Techniques in Operations Research Vol. 2, Models, Search and Randomization,* by B. Conolly, Reviewed in *Journal of the American Statistical Association*, Vol. 77, 688.

Brockett, Patrick L. 1982. *Mathematical Programming for Operations Researchers and Computer Scientists,* by A. Holtman, Reviewed in *Journal of the American Statistical Association*, Vol. 77, 688.

Brockett, Patrick L. 1981. *Information Theory as Applied to Chemical Analysis,* by Eckschlager and Stepanek, John Wiley Interscience (1979), Reviewed in *Journal of the American Statistical Association*, Vol. 76, 209.

Brockett, Patrick L. 1980. *The H-Function with Applications in Statistics and Other Disciplines,* by A. M. Mathai and R. K. Saxena, Halsted Press, Reviewed in *Journal of the American Statistical Association*, Vol. 75, 241- 242.

Brockett, Patrick L. 1980. *The Asymptotic Theory of Extreme Order Statistics,* by Janos Galambos, John Wiley Interscience (1978), Reviewed in *Journal of the American Statistical Association*, Vol. 75, 473-474.

Brockett, Patrick L. 1978. *Decomposition of Superpositions of Density Functions and Discrete Distributions*, by Pal Medgyessy, Halsted Press, Reviewed in *Journal of the American Statistical Association*, Vol. 73, 895-896.

Brockett, Patrick L. 1978. *Characterizations of the Normal Probability Law,* by A. M. Mathai and G. Pederzole, Halsted Press, Reviewed in *Journal of the American Statistical Association*, Vol. 73, 896.

Brockett, Patrick L. 1978. *Two Essays on Entropy,* by Rudolf Carnap, University of California Press, Reviewed in *Journal of the American Statistical Association*, Vol. 73, 896.

GRANTS AND CONTRACTS RECEIVED

2013	Securities and Exchange Commission, 16 hours of lectures on insurance and capital markets
	Received AARP grant to study Medicare Fraud
2009-2013	Insurance Council of Texas, $4,500 each year for faculty research support in risk management
2004-5	Graduate Student Research Support for Legislatively Mandated Credit Scoring and Insurance Study Texas Department of Insurance, about $60,000
	Faculty Research Support for Legislatively Mandated Credit Scoring and Insurance Study, given by Texas Department of Insurance, about $40,000
	Psychological and biological correlates of risk taking, given by Actuarial Education and Research Foundation (AERF). (with Linda L. Golden co-PI), $22,500
	Research on Detection of Insurance Fraud in Insurance in Spain, given by the Spanish Government, about 15,000 Euros.
2002-3	Statistical Analysis of Credit Scoring and Insurance Losses, given by the Texas State Lt Governors Office, about $55,000 plus equipment (with Bruce Kellison),
1997-1998	Genetic Testing and Insurance." Granting Organization: Actuarial Education and Research Fund (AERF), Society of Actuaries

1994-1995 “Revalidation and Upgrade of the Enhanced FAARS-SHARE Model.” Granting Organization: U.S. Army Research Office

“Alternative Technical Methods for Predicting Insolvency of Life and Health Companies” (with James Jarrett), from the Texas Department of Insurance

“A Validation of the Texas Early Warning System” (with James Jarrett), from the Texas Department of Insurance

1991 "Reserve Forecasting and Allocation of Army Recruiting Resources Study -- Sequential Hierarchical Allocation of Resource Elements (FAARS-SHARE) Systems.” Granting Organization: U.S. Army Research Office

1999-1993 “Development of a Vector Extremal Model for the Navy's Awaiting Instruction Problem,” (with Gang Yu). Granting Organization: Office of Naval Research

1993-1994 “An Analysis of Pricing and Availability Problems in the Texas Auto Insurance Market” (with Bob Witt). Granting Organization: National Association of Independent Insurers

Research Grant from The Actuarial Education and Research Fund of The Society of Actuaries for “Operations Research in Insurance”

1990-1991 “An Analysis Focused Taxonomy of Risk, Uncertainty, Ambiguity and Incomplete Information in Modeling and Decision Making in Insurance Operations.” Granting Organization: College of Business Administration Summer Research Award

University Research Institute-Small Research Grant ($500)
University Research Institute - Faculty Research Assignment (One semester off with pay for Spring 1991)

"Statistical Models for Early Warning Systems of Insurance Company Insolvencies," (with W.W. Cooper). Granting Organization: Texas State Auditor's Office

1989-1990 CBA Faculty Academic Development and Research Committee - Summer research award

University Research Institute-Small Research Grant ($500)

“Information Theoretic Unification of Solutions of Problems in Actuarial Science: Research and Study Note.” Granting Organization: Actuarial Education and Research Fund (AERF), Society of Actuaries

1988-1989 CBA Faculty Academic Development and Research Committee - Summer research award

1987-1988 “Chebychev Systems of Functions as a Unifying Technique for some problems in Finance, Economics, and Insurance.” College of Business Administration Summer Research Award

1986-1987 “Information Theoretic Analysis of Discrete Data.” Granting Organization: College of Business Administration Summer Research Award

1986-1987 “Computation of Information Theoretic Statistics.” Granting Organization: University Research Institute

1986-1987 “Computation of Information Theoretic Statistics.” Granting Organization: IBM Project Quest (joint with L. L. Golden and R.A. Peterson)

1984-1987 “Non Gaussian Ocean Surveillance” (with the Applied Research Laboratories, The University of Texas at Austin). Sponsor: Office of Naval Research

1980-1984 “Characterization of Non-Gaussian Stochastic Processes in Underwater Acoustics and Development of Signal Processing Algorithms.” (Joint effort with C. Baker, University of North Carolina, and the Applied Research Laboratories, The University of Texas at Austin). Sponsor: Office of Naval Research

1978-1980 “Statistical Tools for Determining Fitness to Fly.” Contracting Organization: U.S. Air Force (Brooks Air Force School of Aerospace Medicine, San Antonio, Texas). Co-Principal Investigator: G. Shea

1978 “Statistical Analysis of Stochastic Processes with Independent Increments.” Granting Organization: National Science Foundation

1976 “Admissible Transformations of Measures on Locally Compact Groups.” Granting Organization: Tulane University Committee on Faculty Research

INVITED ADDRESSES, LECTURES, AND PAPERS PRESENTED

1974 "An Index for Convergence of Sums of Independent Random Variables," November 1974 meeting of the American Mathematical Society at the University of Southern California

1975 "A Methodology for Inverting Mixing Distributions," April 1975, University of Wisconsin-Parkside Mathematics Department

"Estimating Mixing Distribution Functions via Moments," Tulane University Mathematics Department, New Orleans, April 1975

1976 "Limit Distributions of Sums Under Mixing of the Scale Parameter," Invited talk at March 1976 meeting of the Institute of Mathematical Statistics held at Texas A & M University

"Admissible Transformations of Measures," January 1976 meeting of the American Mathematical Society in San Antonio, Texas

"Support of Infinitely Divisible Measures on Hilbert Space," special session on probability and statistics, November 1976, meeting of American Mathematical Statistics in Albuquerque, New Mexico

1977 "Design and Mathematical Analysis of Questionnaires," Colloquium Lecture, Department of General Business, December 1977, The University of Texas at Austin

1978 "Approximating Moment Sequences to Obtain Consistent Estimates of Distribution Functions," January 1978 Annual Meeting of American Mathematical Society in Atlanta, Georgia.

Chairman, session on Probability Theory and Stochastic Processes, January 5, 1978 Annual Meeting of American Mathematical Society, Atlanta, Georgia

"A Methodology for the Analysis of Categorical Questionnaires," January 1978 lecture, Brooks Air Force Base, Biomedical Computation Division, San Antonio, Texas

"A Characterization of Information Divergence with an Application to Questionnaire Information," American Mathematical Society Meeting, April 1978, San Francisco, California

"A Mathematical Analysis of Questionnaires," Austin Chapter of the American Statistical Association, May 1978

“Zeros of the Densities of Infinitely Divisible Probability Measures,” Colloquium, Mathematics Department, Tulane University, October 1978

“Information Theory and Statistics,” Mathematics Department Colloquium, Tulane University, October 1978

1979 "Recognition of Trends in Health Monitoring Systems with Low Reliability Data," Austin Chapter, American Statistical Association, January 1979 meeting

"Discriminant Analysis with Categorical Information," invited talk, April 30, 1979 meeting, Operations Research Society of America, New Orleans

"Non-parametric Tests for Trends," Department of Mathematics Colloquium Lecture, Tulane University, May 1979

"Information Theoretic Discrete Variable Selection," June 1979 meeting of the Institute of Mathematical Statistics, Los Angeles

"Minimum Discrimination Information Estimation via Unconstrained dual Convex Programming," September 1979, Fifth Congress of the National Academy of Engineering of Mexico (National Academy of Sciences of Mexico), Morelia, Mexico

"Monitoring Adverse Reactions to Drugs by Non-parametric Statistical Methods," October 1979, Colloquium, University of Louisville, Louisiville, Kentucky

1980 "Discrimination Without Training Samples, with Applications to World Health Organization Data," February 1980, Department of Statistics Colloquium, University of California, Riverside

"High-Low Discriminant Analysis of Categorical Data Using RIDITS," invited presentation for session on discriminant analysis, Biometric Society Meeting, March 1980, Charleston, South Carolina

"Statistical Techniques for Determining Fitness to Fly," March 1980, Brooks Air Force School of Aerospace Medicine, San Antonio, Texas

"Statistical Model for Survival Incorporating Time Dependent Covariates," Austin Chapter, American Statistical Association, May 1980

"Unimodality of High Convolutions," Department of Mathematics Colloquium, October 1980, University of California, Riverside

"Using Time Dependent Covariates to Assess Survival Probabilities with an Application to Heart Disease," December 1980, Colloquium, University of California, Irvine, Community & Environmental Medicine, and Southern Occupational Health Center

1981 "Analysis of Categorical Questionnaires with an Application to Marketing Research," Seminar in the Finance Workshop, January 1981, Graduate School of Management, University of California, Irvine

"A Periodic Check Up Statistical Model for Heart Disease in Air Force Fliers," February 1981 Colloquium, California State University at Long Beach

"Periodic Check Up Survival Analysis Model," April 1981 Colloquium, Department of Statistics, University of California, Riverside

1982 "Self Insurance and Regret," April 1982, Risk Theory Seminar (Sponsored by the American Risk and Insurance Association), Columbus, Ohio

"Identifiability of Competing Risk Models," June 1982, Institute of Mathematical Statistics, San Diego, California

1983 "Self Insurance and Disutility," Southwestern Risk and Insurance Association, January 1983, Newport Beach, California

"Likelihood Detection for Infinitely Divisible Processes," February 1983, Department of Mathematics Colloquium, Tulane University

"Non-Parametric Density Estimation," June-July 1983, Non Gaussian Signal Processing Conference (sponsored by the Office of Naval Research)

"Optimal Choice Among Risky Assets for a Class of Utilities Containing All Common Utility Functions," Operations Research Society of America, November 1983 Special Session on Quantitative Methods in Financial Decision Analysis

"On Market Efficiency and the Lognormal Distribution of Returns," Operations Research Society of America, November 1983 Special Session on Quantitative Methods in Financial Decision Analysis

Organizer and chairman of Special Session on Quantitative Methods in Financial Decision Analysis, Operations Research Society of America, November 1983

1984 "Bispectral Analysis of Underwater Acoustical Data," Non-Gaussian Signal Processing Conference, Princeton, N. J., March 1984, sponsored by the Office of Naval Research

"Constructing a Unimodal Prior Distribution," National Academy of Engineering of Mexico, Cuidad Obregon, Sonora, Mexico, September 1984

"A Method for Constructing a Unimodal Prior Density," Actuarial Research Conference, Society of Actuaries, Berkeley, California, October 1984

1985 "An Empirical Statistical Test of the Linear and Gaussian Time Series Models for Interest Rate Series," May 1985 Symposia on Statistics and Festschrift for Joshi, London Ontario, Canada

"Information Theoretic Methods for Insurance Calculations," August 1985, American Risk And Insurance Association annual meeting, Vancouver, British Columbia, Canada

1986 "Financial Consideration of Risk--Pluses and Minuses," Operations Research Society of America, November 1986, Special Session on Quantitative Methods in Financial Decision Analysis

1987 "Comparison of Risk Characteristics of Individual Decision Makers," (invited) International Risk Theory Symposium, Mathematics Institute, Oberwolfach, Germany

"The Contributions of A. Charnes to Statistical Thought," (with L. Seiford), Symposium Honoring A. Charnes on his Seventieth Birthday, Austin Texas.

1989 "A New Method for Identifying Asymmetric Relationships Among Variables: Information Theory Applied to Affect, Location Convenience and Patronage Frequency," (with Linda L. Golden and Mary R. Zimmer), Winter Educator's Conference of the American Marketing Association, February 1989, St. Petersburg, Florida

1990 "Linear and Nonlinear Time Series Models in the Financial Theory of Insurance Companies," (co-authored with Robert C. Witt), Invited lecturer at the American Statistical Association Annual Meeting, Anaheim, California. This session was jointly sponsored by the Business and Economic Statistics section of the ASA and by the Society of Actuaries

"Stochastic Process Models for Ventured Capital Decisions," (with Samuel Cox, and James Gerberman), Business and Economic Statistic section of the American Statistical Association annual meeting, Anaheim, California

"Risk, Return, Skewness and Preference," (with Yehuda Kahane), August 1990, The American Risk and Insurance Association Annual Meeting in Orlando, Florida

Discussant of the paper "Fuzzy Trends in Automobile Insurance," by J. David Cummins and Richard Derrig, at the American Risk and Insurance Association Annual Meeting in Orlando, Florida

1991 "Fun With Moment Problems--The Schmitter Problem," (invited) International Risk Theory Symposium, Mathematics Institute, Oberwolfach, Germany

"A Reexamination of the Relationship Between Moment Preferences And Utility," April 1991, the Risk Theory Seminar of the American Risk and Insurance Association, Penn State University

"Event Frequency Modeling: A Unification of the Mixed And Compound Poisson Distributions With Application To Purchase Frequency Events," (with Linda Golden and Harry Panjer), invited presentation, July 1991, ORSA/TIMS/SOBRAPO Joint International Conference, Rio de Janeiro, Brazil

"A Chance Constrained Programming Approach To Pension Plan Management," (with Abraham Charnes and Li Sun), August 1991, American Risk and Insurance Association Annual Meeting

1992 "Venture Capital Financing," Instituto Technologico De Monterey, April 10-11, 1992, Mexico City, Mexico

1993 "Superfund Reforms and the Impact on the Insurance Industry," July 1993, National Conference of Insurance Legislators (invited), Washington D.C.

"The Genetics Revolution, Economics, Ethics, and Insurance," (with E. Susan Tankersley) August 1993, American Risk and Insurance Association Annual Meeting, San Francisco California

"Using Neural Networks to Detect Early Warnings of Insurance Company Insolvencies," (with Linda L. Golden, Utai Pitaktong, and W.W. Cooper), August 1993, American Risk and Insurance Association Annual Meeting, San Francisco, California

"Environmental Liability: The Role of Insurance," American Public Power Association (invited), October 1993, Austin, Texas

Selected member of an eight-person international group of medical informatics specialists to go to Hungary (Budapest and Szeged) and Russia (Moscow and St. Petersburg) and meet with academic and scientific colleagues, and members of the Academy of Sciences in these countries

Chairman of session on Issues in Business Education, Fourth Symposium on Cross-Cultural Consumer and Business Studies, December 1993, Kahuku, Hawaii.

1994 "New Approach to Event Study Methodology with an Application to Proposition 103," August 1994, American Risk and Insurance Association Meeting

"Stochastic Process Models for Financial Time Series in Insurance," Meeting on Risk Theory, September 18-14, 1994, Mathematics Research Institute, Oberwolfach, Germany

"Information Theoretic Applications to Actuarial Science," Meeting on Risk Theory, September 18-14, 1994, Mathematics Research Institute, Oberwolfach, Germany

"Ambiguity, Risk Charges, and Insurance Pricing," (with G. C. Lai, S. W. Pottier, and R. C. Witt) the International Insurance Society, June 19-23, 1994 Madrid, Spain . This won the "Best Paper Award" at the conference.

1995 "Claims Made versus Occurrence: Debunking Some Myths and Developing Some Finance Pricing Models," January 1995, Western Risk and Insurance Meeting, Las Vegas, Nevada

"Kohonen Feature Maps for Detecting Bodily Injury Fraud Claims in Automobile Insurance," January 1995, Massachusetts Automobile Insurance Bureau, Boston, Massachusetts

"Risk Management for Software Development Companies," American Defense Preparedness Association Test & Evaluation Symposium XI, January 31, 1995, held at the IC^2 Institute, Austin, Texas

"Rank Statistical Methods for Detecting Efficiency Differences in Intertemporal DEA Analysis," Computational Economics Society Meeting, May 1995 Austin, Texas

"Information Asymmetries and Insurance Futures Options," The Bowles Symposium on the Securitization of Insurance Risks, May 24-26, 1995 Georgia State University, Atlanta, Georgia

"Pattern Recognition Methodology: A New Approach for Identifying Fraudulent Claims in Government Programs," the National State Auditors Association Annual Conference, June 8-10, Phoenix, Arizona.

"Information Asymmetries and Insurance Futures Options, American Risk and Insurance Association Annual Meeting, August 1995, Seattle, Washington.

"Kohonen Feature Maps for Detecting Bodily Injury Fraud Claims in Automobile Insurance," American Risk and Insurance Association Annual Meeting, August 1995, Seattle, Washington.

1996 "An Application of Rank Statistics to DEA and OECD Country Productivity" (with Linda L. Golden and Shan Li) Presented to the Northeast Decision Sciences Institute annual meeting, St. Croix, V.I., April 1996.

"The Use and Impact of Information Technology and the Internet on Risk Management and Insurance," Presented to the Austin Chapter of the CPCU, 1996

"The Effect of Provider Autonomy and the Efficiency of HMOs," (with John Rousseau and J. Semple) August, 1996, American Risk and Insurance Association Annual Meeting, Philadelphia, Penn

Houston Marine Insurance Seminar, attended and received $10,000 in scholarships for students in Risk Management and Insurance, Houston, Texas September, 1996

"Provider Autonomy and the Efficiency of HMOs," 1996, Health Care Management Seminar, University of Texas at Austin

"Risk Management and Business Risk", October 1996, Videotaped Interview for a PBS film documentary to be aired in 1997

Society of Actuaries Annual Meeting, attended and received Annual Prize for most outstanding publication in the *Transactions of the Society of Actuaries* for the year 1996, Orlando, Florida, November 1996

"Issues in the Deregulation of Commercial Lines of Insurance," presented to NCOIL (National Conference of Insurance Legislators) Annual Meeting in Austin, Texas, November 18, 1996.

1997 "An Evaluation of the Efficiency of Different Marketing Distribution Systems in the Insurance Industry" (With Linda Golden, John Rousseau and Yuying Wang), Western Risk and Insurance Association Annual Meeting, Santa Barbara, California, January 1997.

2000 "Fraud Classification Using Principal Component Analysis of RIDITs" August, 2000, American Risk and Insurance Association Annual Meeting, Boston, Mass. August, 2000

"Current Issues and Research Topics in Risk Management," Actuaries Club of the Southwest, November 2000

2001 "Fraud Classification Using Principal Component Analysis of RIDITs" July, international Insurance Mathematics and Economics conference, invited Plenary Keynote address, Penn State University, State University Penn.

"DEA Evaluation of Efficiency of Marketing Distribution Systems in the U.S. Property-Liability Insurance Industry: A Financial Intermediary Approach" Western Risk and Insurance Association annual Meeting, January, 2001, Santa Barbara, Calif.

"Modeling and Predicting Automobile Insurance Fraud" Western Risk and Insurance Association Annual Meeting, January, 2001, Santa Barbara, Calif.

"An Analysis of the Efficiency of Joint Service Advertising Versus Service Specific Advertising for Recruiting Success" (with William W. Cooper, Linda L. Golden, and Michael Kwinn) Military Operations Research Conference, West Point, June, 2001

"The History and Future of Risk Research" Invited Presidential Address, American Risk and Insurance Association Annual Meeting, Indianapolis, IN. August, 2001

2002 "Mediation as a Cost Containment Mechanism in Insurance: Public Perceptions and Insurer Benefits," (with Linda Golden) presented to the Western Risk and Insurance Association Annual Meeting, January.

"Assessing Fraud with Unsupervised Learning," (with Richard Derrig, Linda L. Golden, Arnold Levine), presented to the Conference on "Insurance Claim Fraud: Developing the Models and Mining the Data," sponsored by the Insurance Fraud Bureau of Massachusetts and the Coalition Against Insurance Fraud and the Insurance Research Council, Newport, Rhode Island, November, invited.

"Genetic Testing and Insurance" (with Richard MacMinn), Center for Risk and Insurance of the University of Nottingham Conference, London, England, April (Invited)

"Efficiency and Title Insurance" (with W.W.Cooper and U.Pitaktong) presented to the Western Risk and Insurance Association Annual Meeting, January.

"Technology and Risk Management" Session Chair at the Western Risk and Insurance Association Annual Meeting, January.

"The Role of Howard Tucker in Graduate Education" at Festschrift for Howard Tucker's 80th birthday Celebration, Irvine, California, October

2003 "Risky Business: Targeting The Chronically Uninformed in Risk Communication Campaigns," (with Anderson, Ronald and Linda L. Golden), Western Decision Sciences Institute Annual Conference, Kauai, Hawaii, April 15-19, 2003, (refereed) in the "Consumer Behavior and Marketing Mix" tract

"Genetic Testing and Adverse Selection" (with Richard MacMinn) Western Risk and Insurance Association annual Meeting, January, 2003, Maui, Hawaii.

"Genetic Testing and Adverse Selection" (with Richard MacMinn and J.A. Raeburn) presented at the Southern Risk and Insurance Association Meetings in Clearwater, 2003,

"Genetic Testing and Adverse Selection" (with Richard MacMinn and J.A. Raeburn) presented at the Asia-Pacific Risk and Insurance Association Meetings in Bangkok, 2003.

"Economic Aspects of Genetic Testing" (with Richard MacMinn) presented at the European Group of Insurance Economist meeting, Zurich, Switzerland September 2003

"Ethics, Genetic Testing and Insurance Underwriting" Invited Plenary talk, American Risk and Insurance Association Annual Meeting, August, 2003. Denver, Colorado.

"Credit Scoring and Insurance Underwriting" Testimony before the Texas Senate, February, 2003

"Credit Scoring and Insurance" Automobile Agents of Texas annual meeting, Keynote speech, San Antonio, TX

2004 "Heavy Tailed Distributions' Use in Enterprise Risk Management," at conference on Enterprise Risk Management, National Academy of Sciences, January 2004, Washington DC (Sponsored by the Conference Board on Mathematical Science and their Applications)

National Academy of Sciences Moderator of Session on "Heavy Tailed Distributions" at conference on Enterprise Risk Management, National Academy of Sciences, January 2004, Washington DC

"Up coming issues in insurance," Annual Policy Orientation Symposium for the Texas Legislators, sponsored by the Texas Public Policy Research Foundation Austin, Texas, January 2004

"Fraud Classification Using Principal Component Analysis of RIDITs," Casualty Actuarial Society Annual Conference, May, 2004 (invited to present our ARIA Award winning paper), Colorado Springs, Colorado.

"Chance Constrained Programming Approach to Pension Plan Management Using Heavy Tailed Distributions," The Second Erich L. Lehmann Symposium on Statistics, May 19-22, 2004, Rice University, Houston, Texas

"Detecting Insurance Fraud using Principal Component Analysis of RIDITS," Presented to the Austin Chapter of the American Statistical Association, Austin Texas 2004

2005 "Legislative Issues in insurance Regulation" 4th Annual Policy Orientation for the Texas Legislature, sponsored by the Texas Public Policy Research Foundation, Austin, TX, January 2005

"Information Theoretic Approach to Statistical Theory and Probabilistic Understanding" Austin Chapter, American Statistical Association, February 24, 2005

"Education and Research Directions in Actuarial Science in the United States" University of Valencia, Spain, March 2005

"Information Theoretic Approach to Statistical Reasoning with Applications to Actuarial Science" University of Barcelona, Spain, April 2005

"Overview of Trends in the US Insurance Market on Insurance Research" Tsinghua University, China, May 23, 2005

"The Relevance of Information Theory for Risk Analysis" A Unifying Philosophical Approach to Thought and Risk", Tsinghua University, China, May 23, 2005

"Introduction to and Overview of Data Envelopment Analysis" Tsinghua University, May 24, 2005

"Using DEA to Assess the Efficiency of the Insurance Market" Tsinghua University, May 24, 2005

"Detecting Consumer Fraud using PRIDIT Analysis" Fudan University, China, May 23, 2005

"Biological and Psychological Influences on Risk Taking" (with Linda L. Golden and Sandra Dunn), presented to the World Risk and Insurance Economics Conference held in Salt Lake City, August 2005. Papers are competitively reviewed.

Chaired session and served as Discussant on paper on securitization of longevity risk at World Risk and Insurance Economics Conference held in Salt Lake City, August 2005.

2006- "The After-Effect of Deregulation of Insurance in Texas" Texas Public Policy Research Foundation Austin, Texas, January 2006 (Conference to prepare Texas Legislators on Issues in Texas)

"Weather Derivatives and Risk Management," in special invited session on Financial Engineering at the International Workshop on Applied Probability (IWAP), University of Connecticut, Storrs, Connecticut, May 15-22,2006

Chaired Invited Session at the 2006 Enterprise Risk Management Symposium and 8th Bowles Symposium, sponsored by the Society of Actuaries and the American Risk and Insurance Association, Chicago, Illinois, April 23-25, 2006

2007 "Biological and Psychobehavioral Correlates of Risk Taking, Credit Scores, and Automobile Insurance Losses: Toward an Explication of Why Credit Scoring Works," in a special invited session at the Casualty Actuarial Society's Predictive Modeling Seminar, Las Vegas, Nevada, October 10-12, 2007

"A Psychological and Biological Explanation of Why Credit Scoring Works," Faculty Research Presentation to McCombs students, November 6, 2007 (joint with Linda L Golden).

"Active Fraud Detection"(with Jing Ai, and Linda L. Golden), presented at the INFORMS Meeting, Seattle, WA, November, 2007.

2008 "Quantifying Enterprise Risk Management using Chance Constrained Programming" (with Jing Ai, Linda Golden and William Cooper) Keynote address at the International Actuarial Conference honoring Harry Panjer's retirement, University of Waterloo, Waterloo Ontario, Canada April 11-13, 2008

"Biological and Psychobehavioral Correlates of Risk Taking and Credit Scores, Why Credit Scoring Works" (with Linda Golden) IMPACT 2008, conference by Fair Isaac, April 27-30, 2008 San Francisco, California

"Quantifying Enterprise Risk Management Using Chance Constrained Programming" (with Jing Ai, Linda Golden and William Cooper) Seminar presentation at the University of North Carolina, Charlotte, Charlotte, North Carolina June 9, 2008.

"Addressing Credit and Basis Risk Arising From Hedging Weather-related Risk with Weather Derivatives" (with Linda Golden, Charles Yang and Hong Zou) ASTIN 2008 Symposium of the International Actuarial Institute, Manchester, England July 12-16, 2008.

"Enterprise Risk Management", Invited academic conference on Enterprise Risk Management sponsored by the American Risk and Insurance Association and the Griffiths Foundation for Insurance Education, at Ohio State University, August 21-23, 2008

"Weather Derivatives for Mitigating Weather Related Risks" (with Linda Golden, Charles Yang and Hong Zou) invited lecture at the 5th Conference in Actuarial Science and Finance, University of the Aegean, Samos, Greece September 1-6, 2008.

"Sociopsychological and Biological Influences on Risk Taking: A Consumer Finance Perspective" (with Linda L. Golden) invited seminar presentation at the University of New Mexico School of Business, Albuquerque, New Mexico, November 7, 2008.

"The Financial Crisis," Guest Lecturer in the Korean Energy Power Company (KEPCO) executive marketing management course for IC^2 (Fall, 2008).

2009 "Biological and Psychobehavioral Correlates of Risk-taking," (with Linda L. Golden) *Casualty Actuarial Society (CAS) Best Journal Article ARIA Prize Winner* Presentation at the CAS Annual Meeting, New Orleans, Louisiana, February, 2009.

"The Origins and Implications of the Financial Crisis" invited seminar, University of Granada, Granada, Spain, April, 2009

"On the Development of a Fraud Rate Estimation Method," (with Jing Ai, Linda L. Golden and Montserrat Guillen) Asia-Pacific Risk and Insurance Association (APRIA) 2009 Annual Meeting, July, 2009.

"Optimization Approach to Risk Management," (with Jing Ai, Jing, Linda L. Golden, and William W. Cooper), presented at the Asia-Pacific Risk and Insurance Association (APRIA) Annual Meeting, Beijing, China, July, 2009.

"An Investigation of Fraud Rate Estimation: Model Applications to the USA and Spain" (with Jing Ai, Linda L. Golden, and Montserrat Guillen), presented at the Asia-Pacific Risk and Insurance Association (APRIA) Annual Meeting, Beijing, China, July, 2009.

"Trials, Tribulations and Trust: Addressing Issues in Internet Surveys," (with Linda L. Golden), presented at the Academy of Marketing Science World Congress, Oslo, Norway, July, 2009.

"On the Development of a Fraud Rate Estimation Method," (with Jing Ai, Linda L. Golden, and Montserrat Guillen), presented at the American Risk and Insurance (ARIA) Annual Conference, Providence, Rhode Island, August, 2009.

Chaired Research Session, at the American Risk and Insurance (ARIA) Annual Conference, Providence, Rhode Island, August, 2009

"Modeling Risk in Catastrophe Mortality Risk Bonds," Discussion at the 5th Longevity Risk and Capital Market Solutions Conference, New York, New York September, 2009

"An Optimization Approach to Risk Management," (with Jing Ai, Linda L. Golden, and William W. Cooper), presented at the Financial Management Association (FMA) Annual Conference, Reno, Nevada October 2009.

"Internet Survey Research: Triumphs, Trials, and Tribulations -An Application to Swine Flu." With Linda L. Golden, Faculty Research Presentation, November 12, 2009. This was the highest attended faculty research presentation ever according to a note we received afterwards.

2010 "Credit and Basis Risk Management Arising From Hedging Weather Related Risks Using Weather Derivatives," (with Linda L. Golden and Charles Yang), Department of Finance, University of Hawaii, Manoa, February 5, 2010

"Health Belief Model Implications for Motivating H1N1 Prevention Behaviors" (with Linda L. Golden and Danae Manika) Health Literacy: Communicating with Underserved Populations Research Conference, sponsored by Center for Health Promotion Research, University of Texas, Austin, Texas March 3, 2010

"Identifying and Detecting Consumer Fraud" (with Linda L. Golden), Invited presentation, University of Granada, Granada, Spain, March, 2010

"Consumer Risk Taking and Perceptions of Risk", Invited presentation, University of Granada, Granada, Spain, March, 2010

"The Global Financial Crisis: Origins, Perspectives, and Potential Future Course", Invited presentation, University of Granada, Granada, Spain, March, 2010

"Insurance Company Insolvency and Guaranty Funds: History and Trends" Invited presentation at the National Conference of Insurance Guarantee Funds, San Francisco, California April 27,28, 2010

"Internet-Based Survey Research: Methodological Issues" Discussant for the session, Academy of Marketing Science, Portland, Oregon, May 29, 2010

"A Strategic Allocation of Capital Approach to Enterprise Risk Management" (With Linda Golden and Jing Ai) 6th Conference in Actuarial Science and Finance, University of the Aegean, Samos, Greece June 1-6, 2010

"Longevity/Mortality Risk Modeling and Securities Pricing" (with Yinglu Deng and Richard MacMinn), 2010 China International Conference in Insurance and Risk Management, Xining, China, July 18-22, 2010

"Enterprise Risk Management Through Strategic Allocation of Capital" (With Jing Ai, Linda L. Golden, and William W. Cooper) World Risk and Insurance Economics Congress (WRIEC) 2010 Singapore Meeting, July 27 2010.

"An Efficiency-based Methodology for Setting Promulgated Insurance Rates" (with Jing Ai, Linda L. Golden, Utai Pitaktong and Charles Yang) World Risk and Insurance Economics Congress (WRIEC) 2010 Singapore Meeting, July 25, 2010.

"Longevity/Mortality Risk Modeling and Securities Pricing" (with Yinglu Deng and Richard MacMinn) 6th International Longevity Risk and Capital Markets Solutions Conference, Sydney, Australia September 2010

"Dynamic Asset-Liability Management with Longevity Risk and Derivatives" (with Yinglu Deng and Richard MacMinn) 6th International Longevity Risk and Capital Markets Solutions Conference, Sydney, Australia September 2010

"Using DEA to Assist the Regulator in Setting Promulgated Insurance Rates" (with Jing Ai, Linda L. Golden, Utai Pitaktong and Charles Yang) INFORMS Annual Meeting, Austin, Texas November 10, 2010

2011 "Developing Effective Public Prevention Messages: The Case of the H1N1 Flu" (with DanaeManika, and Linda Golden), presented at the Symposium for Innovation in Health Care Delivery Systems: Improving Systems for Improving Health and Health Behaviors, McCombs School, University of Texas at Austin, April.

"Implications from the Health Belief Model for Disease Prevention Behaviors in Australia" (with DanaeManika, and Linda Golden), Academy of Market Science World Marketing Congress, Reims, France July 20-23, 2011.

"Developments in Mobile Commerce: Economic Opportunities, Risk Analysis and Risk Management" (with Linda Golden, Danae Manika and Anji Song), 6th Annual International Symposium on Economic Theory, Policy and Applications, 25-28 July 2011, Athens, Greece

"The Cross-cultural Impact of Prior Knowledge and Information Receptivity: It Is Not How Much You Know but How Much You Think You Know!" (with Linda Golden, and Danae Manika), 6th Annual International Symposium on Economic Theory, Policy and Applications, 25-28 July 2011, Athens, Greece

"An Overview of Capital Market Solutions to Longevity Risk Problems with an Application to J.P. Morgan's q-forward Derivative" (with Yinglu Deng and Richard MacMinn). American Risk and Insurance Association Annual Meeting August 7-10, 2011 San Diego, California

"Usage of Credit Scores in Insurance Classification and Pricing" (with Jing Ai, Linda L. Golden, and Bruce Kellison, American Risk and Insurance Association Annual Meeting August 7-10, 2011 San Diego, California

Invited Discussant of "Bond Insurers: Avoiding Capital Pro-cyclicality" by Xiangjing Wei, Shaun Wang, and Eric Ulm, Georgia State University, American Risk and Insurance Association Annual Meeting August 7-10, 2011 San Diego, California

"Is the U.S. Life Insurance Industry in Danger of Systemic Risk by Using Hedging Derivatives?" (with Tom Sager, Bo Shi, and Etti Baranoff, American Risk and Insurance Association Annual Meeting August 7-10, 2011 San Diego, California

"Longevity Risk and Capital Markets" Invited Presentation at the University of Hawaii, Department of Finance, August-September, 2011

"Pricing Life Settlements" (with Yinglu Deng and Richard MacMinn), 7th Annual Longevity Risk and Capital Markets Symposium, Frankfurt, Germany, September 7-9, 2011.

Invited discussion of the paper "Rethinking Age-Period-Cohort Mortality Trend Models" by Daniel H. Alai and Michael Sherris, presented at the 7th Annual Longevity Risk and Capital Markets Symposium, Frankfurt, Germany, September 7-9, 2011.

"Behavioral Aspects of Credit Scoring" (with Jing Ai, Linda L. Golden, and Bruce Kellison), INFORMS Annual Meeting, Charlotte, North Carolina, November, 2011

2012 "Use of Credit Scores in Insurance Classification and Pricing," (with Jing Ai, Linda L. Golden, and Bruce Kellison), Western Risk and Insurance Association (WRIA) annual meeting, Kona, Hawaii, January 2012

"Developments in Mobile Commerce: Economic Opportunities, Risk Analysis and Risk Management" (with Linda Golden and Anji Song), University of Granada, Granada, Spain, March, 2012

"Health care developments in m-commerce and associated issues for risk management," (with Linda Golden, Ilya Dayter, and Danae Manika), presented at the McCombs School of Business Health Care Research Symposium at The University of Texas at Austin, Austin, TX, April, 2012.

"Risk: Public and Private" Humanities Research Institute Fellows Program lecture, University of Texas at Austin, April 26, 2012

"The Cross-cultural Impact of Prior Knowledge and Information Receptivity: It Is Not How Much You Know but How Much You Think You Know!" (with

Linda Golden and Danae Manika), presented at *6th Annual International Symposium on Economic Theory, Policy and Applications, Athens, Greece*

"How to Set Rates if You Must: An Efficiency-based Methodology for Setting Promulgated Insurance Rates" (with Jing Ai, Linda Golden, and Utai Pitaktong) 7th Conference in Actuarial Science and Finance, University of the Aegean, Samos, Greece May 28-June 3, 2012

"Modeling and Pricing Life Settlements" (with Shuo-li Chuang, Yinglu Deng and Richard D. MacMinn), 16th International Congress on Insurance, Mathematics and Economics, Hong Kong, China, June 28-30, 2012

"Modeling Mortality: History, Models and Uses" A three hour special invited presentation at the Tsinghua University Workshop on Insurance Research, Qingdao, China July 16, 2012

"Capital Market Solutions to the Individual Consequences of Longevity Risk: Life Settlements" invited presentation, China International Conference on Insurance and Risk Management, July 18-21, 2012

"Predicting Individuals' Insured Losses: Psychology, Responsibility, and Quantitative Correlates, (with Jing Ai, Linda L. Golden, and Bruce Kellison), Asia Pacific Risk and Insurance Association annual meeting, Seoul, Korea, July 2012

"Modeling and Forecasting Mortality Rates" (with Daniel Mitchell, Rafael Mendoza-Arriaga and Kumar Muthuraman) 47th Actuarial Research Conference, University of Manitoba, Winnipeg, Manitoba, Canada August 3, 2012

"Modeling and Pricing Longevity Derivatives with Stochastic Mortality Using Esscher Transform" (with Shuo-Li Chuang) 8th Annual Longevity Risk and Capital Markets Solutions Symposium, Waterloo, Canada, September 7-9, 2012.

2013 "The Securitization of Longevity Risk and Its Implications for Retirement Security" (with Richard MacMinn, Jennifer Wang, Yijia Lin, and Ruilin Tian) 2013 Pension Research Council Symposium: Recreating Sustainable Retirement: Resilience, Solvency, and Tail Risk, April 25-26, 2013

"A New Approach to Pension Risk Management" (with Jing Ai and Allen Jacobson), 9th Annual Longevity Risk and Capital Markets Solutions Symposium, Beijing, China, September 6-9, 2013.

Ph.D. STUDENTS SUPERVISED

Name	Dissertation Title	Year
Sipra, Naim	*Essays on Financial Models: Portfolio Performance Measures, Capital Market Equilibrium with Redundant Assets, and Intertemporal Fisher Hypothesis*	1986
Sun, Li	*On Some Problems of Chance*	1990

(Co-Chair, A. Charnes)	*Constrained Programming*	
Chang, Yang Chun (Co-Chair, A. Charnes)	*Chance Constrained Programming and Chebychev Systems with Applications*	1990
Dalle Molle, John William (Co-Chair, M. Hinich)	*Higher Order Spectral Analysis and the Trispectrum*	1992
Pitaktong, Utai (Co-Chair, J. Mote)	*Data Envelopment Analysis and Applications*	1993
Chen, Hwei Mei	*A Dynamic Model for Event Study Methodology: An Examination of the Reaction to California's Proposition 103*	1993
Zhang, Changning	*Stochastic Programming and Optimal Salesforce Compensation Schemes*	1994
Li, Shan	*A New Approach to Sensitivity Analysis of the DEA Models and Their Applications to Ranking and Productivity Growth*	1995
Xia, Xiaohua	*The use of Artificial Intelligence Methods in Insurance Modeling*	1996
Song, Yun	*Information Theoretic Approaches to Actuarial Science*	1996
Swan, Scott (Co-Chair, M. Katabe)	*Essays on Robust Design: An Elaboration of the Typology, An Examination of Situational Performance Implications and a Conceptual Extension*	1997
Jang, Jaeho	*Comparative Analysis of Statistical Methods And Neural Networks for Predicting Life Insurers' Insolvency*	1997
Wang, Yuying	*Efficiency in the Property and Liability Insurance Industry*	1997
Magee, David	*Neural Network Method for Actuarial Claim Reserving*	1998
Zhou, Li	*The Navy's Awaiting Instruction Problem*	1998

Kang, Yu (Frank)	*Risk, Ambiguity and Insurance*	1998
Kwinn, Michael (Co-Chair, W.W. Cooper)	*Efficiency of Joint versus Service Specific Advertising for Armed Service Recruiting*	2000
Wang, Mulong (Co-Chair, R. MacMinn)	*Financial Derivatives in Corporate Risk Management*	*2001*
Deng, Honghui (Co-Chair, W.W. Cooper)	*Congestion and Efficiency in the Chinese Economy*	*2003*
Yang, Chuanhou (Charles)	*The Use of Weather Derivatives in Corporate Risk Management*	*2003*
Ai, Jing (Co-Chair, L. L. Golden)	*Supervised and Unsupervised PRIDIT for Active Insurance Fraud Detection*	*2008*
Deng, Yinglu (Co-Chair, R.D. MacMinn)	*Longevity Risk Modeling, Securities Pricing and Other Related Issues*	*2011*
Chuang, Shuo-Li	*Stochastic Mortality Modeling and the Pricing of Mortality/Longevity Linked Derivatives*	*2013*

PARTIAL LISTING OF MEMBERSHIP ON PH.D. STUDENT COMMITTEES(up to 1995)

Name	**Dissertation Title**	**Year**
Diem, Janet	*Estimation in a Non-Stationary Markov Chain*	1976
Haaland, Perry	*A New Approach to Pattern Detection*	1977
Kung, Mabel	*Computational Procedures for Obtaining Least Absolute Value Estimates*	1980
Nathan, Edward C.	*An Examination of Auditor Decision Making Behavior in the Preparation of Audit Time Estimates*	1981
Harris, Michael	*Applications of Montmorillonite as an Excipient in Solid Dosage Forms*	1981

Halverson, Don Ray	*Discrete Time Detection of Signals in Dependent Non-Gaussian Noise*	1981
Kress, Moshe	*On Some Problems in Chance-Constrained and Intertemporal Network Planning*	1981
Rousseau, John	*Game Theoretic Methods in Analysis and Resolution of Cooperation and Conflict in Economics*	1981
Starks, Laura Ann	*The Investment Trust Relationship: An Agency Theoretic Approach*	1981
Cackowski, Ted	*Optimal Capital Structure: The Risk of Bankruptcy and Regulated Industry*	1982
Duffuaa, Salih	*On Some Economic Distribution and Network Problems*	1982
Nelson, Abraham	*Goal Arc Methods in EEO Planning and Control*	1982
Yao, Harry	*On Some Chance Constrained Models for Finance and Management*	1982
Haksever, Cengiz	*Effective Solution of Non-Convex Multi-Objective Ratio Goals Problems*	1983
Al-Yafi, Adnan Abdulbadie	*Management of Some Large-Scale Logistical Problems of the Hajj*	1983
Lovegren, Victoria	*Informatics, Analysis, and Solution of a Class of Constrained Integer Network Problems*	1984
Zhang, Jianzhong	*Trust Region Methods for Nonlinear Optimization and Nonlinear Approximation Problems*	1984
Urrutia, Jorge	*Theoretical Derivation and Empirical Tests of Two Financial Models of Pricing*	1984
Lamm, Joan Marie	*The Theoretical and Empirical Aspects of Determining Underwriting Profit Margins*	1983
Misra, Lalatendu	*Two Aspects of the Theory of Delegated*	1985

	Portfolio Management	
Moridaira, Soichiro	*Two Essays on Economic and Financial Theories of Insurance: Optimal Futures for Insurance* Kuo,	1985
Cheng-Kun	*The Risk of Ruin in Futures Market Trading*	1986
Musumeci, James Joseph	*Impact of Real Return and Inflation Risks on Bond Maturity Decisions*	1987
Rodriguez, Ricardo J.	*Essays on Asymmetric Information and Financial Market Theory*	1986
Lee, Jeong Wan	*The Weekend Effect and the Nonlinear Model -- A Bilinear Approach*	1986
Ancel, Esther	*Estimations of the Statistical Parameters of Stock Returns Implied on Option Prices*	1986
Shin, Hong-Chul	*Optimal Hiring Decisions for Entry-Level Auditors in Public Accounting Firms*	1985
Song, Tiantai	*On Some Problems of Large Scale Network Algorithms*	1985
Golany, Boaz	*On Chance-Constrained, Competitive and Cooperative Evaluational Methods and Some Problems of Dynamic Management*	1985
Eechambadi, Narasimhan	*Efficiency Analysis of Market Response and the Marketing Mix: Extending Data Envelopment Analysis to a Competitive Environment*	1985
Moore, Leslie	*Ordering the Points in Factorial Experiments to Protect Against Early Termination*	1985
Sueyoshi, Toshiyuki	*Goal Programming and Distribution Free Statistical Estimation*	1985
Al-Faraj, Taqi N.	*Mathematical Models For Planning the Production, Refining and Marketing of Crude Oil and Refining Petroleum Products*	1986
Al-Zayer, Jamal A.	*On Some Mathematical Planning Models for the*	1986

	Management of the Oil, Gas, and Petrochemical Industry in Saudi Arabia	
Childs, Barbara J.	*The Cost of Debt and Its Effect on Prices of Multi-Family Housing*	1986
Chergui, Boumedienne	*On Optimization Methods for Gas Liquefaction Production in Algeria and for a Firewater Safety System for the Holy Area Of Mina, in Saudia Arabia*	1986
Dieck-Assad, Martin J.	*On Some Methods, Informatics and Applications of Data Envelopment Analysis*	1986
Gomez, Jose Alberto	*On Some Problems of Dynamic Distributional Planning for Petroleum Distillates in Mexico*	1986
Hanizavareh, Seyedabbas	*On Some Problems of Interval Linear Programming*	1986
Paick, Kwang	*An MDI Approach to Statistical Pattern Recognition and Related Applications*	1986
Divine, John Douglas	*Efficiency Analysis and Management of Not for Profit and Governmentally Regulated Organizations*	1986
Friar, Shirley A.	*Decision Making Under Risk: An Experimental Study within a Business Context*	1986
Lie, Chin-Jen	*The Financial Decisions of a Stock Life Insurance Company: Three Essays*	1987
Azad, Abbas	*An Application of Chance-Constrained Theory to Dynamic Bank Balance Sheet Management*	1988
Hogan, Arthur McClure	*Organizational Form and Asset Substitution*	1988
Wolfe, Michael David	*Constrained Network Modeling in the Management of Optimal Manpower Scheduling and Modifications Design*	1988
Park, Manyong	*Incremental Information Contained in SFAS No. 33 Disclosures: A Closer Examination*	1988

Parker, Mary	*Multiparameter Estimation in Normal Distributions: The Slightly Unequal Variance Case*	1988
Rebello, Michael Joseph	*Managerial Compensation: A Human Capital Perspective*	1989
Zhang, Dagan	*Optimization of Pursuit and Reliability on Discrete Graphs*	1989
Farsi, Daryoush Darabi	*On Some Problems of Cyclical Scheduling in Integer Programming*	1990
Thomas, David Alan	*Data Envelopment Analysis Methods in the Management of Personnel Recruitment under Competition in the Context of U.S. Army Recruiting*	1990
Semple, John	*On a Class of Dual Methods for Quadratic Programming*	1990
Huang, Zhimin	*Vector Extremal Principles for Extensions of Game Theory and Data Envelopment Analysis*	1991
Schellhorn, Carolin D.	*The Role of Subordinated Debt in Regulating Financial Institution Riskiness*	1991
Kwon, Ku-Hyuk	*Chance Constrained Programming and Other Approaches to Risk in Strategic Management*	1991
Collins, James	*Strategic Risk: An Ordinal Approach*	1991
Gong, Linguo	*Sensitivity and Stability Analysis of Problems in Constrained Programming*	1991
Cannon, Susanne	*Financial Intermediation and Ownership Structure: Savings and Loan Associations Under Alternate Regimes*	1991
Hong, Soon Koo	*A Financial Theory of the Insurer's Capital Structure*	1992
Koo, Bon-Sung	*Solvency Surveillance in the Property/ Casualty Insurance Industry: A Financial Analysis and Statistical Evaluation*	1992

Gerberman, James	*On Some Problems of Market Planning Evaluation and Analysis in the Presence of Competitive and Stochastic Effects*	1992
Li, Hongyu	*On Some Contributions to Productivity Analysis of Firms in an Industry Overtime*	1992
Li, Susan	*Optimal Decision Making in Restricted Markets*	1992
Park, Kyunguk	*A Signaling Model with the Investment Decision; A Hidden Knowledge Approach Markets*	1993
Baranoff, Etti	*Financial Analysis of the Life and Health Insurance Industry: A Disaggregated and Clustered Approach*	1993
Pottier, Steven	*Financial Economics of the Insurance Firm*	1994
Akkihal, Shivanand Irappa	*Analysis and Identification of Faults in Distributed Hypothesis Testing Systems*	1995
Jia, Jiamin	*Measures of Risk and Risk-Value Theory*	1995
Chatterjee, Abhijit		

MASTER'S STUDENTS SUPERVISED

Mark Leone	[Mathematics/Statistics]
Candi Wolfe	[Mathematics/Statistics]
John Dalle Molle	[Mathematics]
Antoine Lawrence	[Economics]
Kenny Kan	[Accounting/Risk Management]
Mark Jones	[Mathematics/Actuarial Science]
Chris Neely	[Mathematics/Statistics]
Moses Kim	Mathematics/Actuarial Science]

Sandra Neto	[Mathematics/Statistics]
Xinan Li	[Mathematics/Statistics]
Junsheng Ma	[Mathematics/Statistics]

UNIVERSITY AND COLLEGE SERVICE

Interview candidates for Assistant Professor positions in Engineering, attend their talks, and write recommendation letters, 1977-1979, 1983, 1987

Chair--CBA Ad-Hoc Committee on the Mathematics requirement, 1982

Member--Center for Statistical Studies Advisory Board, (U.T. campus-wide coordinating committee), 1983-1992

Faculty Ad-Hoc Committee to Investigate Formation of a Department of Quantitative Methods, College of Business, The University of Texas at Austin, 1984

Admissions and Registration Committee of the General Faculty, The University of Texas at Austin, (1984-1986)

Member--CBA Faculty Academic Development and Research Committee, (1985-1986)

Member--Ad-Hoc Committee to Formulate Discussion Material On Statistics in the Business School for the CBA Faculty Retreat, 1985

Recruitment of High School Football Players: Help Athletic Department by showing recruits around the Business School and answering questions, 1985

Member--Presidential Committee for the Evaluation of the Dean, 1992

Member--MBA Revision Task Committee, 1992

Member--Planning Committee for Evaluating and Developing an Employee Assistance Program for The University of Texas at Austin, 1992

Member--Advisory Committee for UT Employee Assistance Program, 1992

Faculty Senate and University Council, 1992, 1993

CBA College Retreat Member 1992

University Police Department Advisory Committee, 1993

Member--University Research Institute Grant Evaluation Committee, 1993, 1994, 1995

Member--University Committee to Evaluate Small Research Grants, 1995

Member--University Faculty Welfare Committee, 1996-98

Member, University Faculty Welfare Committee 2002 – 2007

Member Faculty Council 2004-6

Member, Rules Committee of the Faculty Council 2004

Member—Dean's Advisory Committee 2005-2008

Member—Dean's Endowed Professorship Selection Committee 2007- 2008

DEPARTMENTAL SERVICE

Budget Council Representative for Associate & Assistant Professors of Finance, 1982-86

Executive Committee Member, Department of Finance, 1986-1995

Actuarial Science Program Director, 1986-September 1989

Actuarial Science Advisor, Undergraduate and MBA, 1981-September 1989

Risk Management and Insurance Advisor, Undergraduate and MBA, 1989-1992

Member--Ad-Hoc Committee to Formulate Policy on Evaluating Full Professors, 1984

Member--Ph.D. Review Committee, 1984.

Chairman--Committee to Implement An Executive Committee for the Finance Department

Member--Ph.D. Admissions Committee, 1985-1988

Actuaries Club of the Southwest Scholarship Committee

Member--Wortham Chair Scholarship Committee

Actuarial Science Program Review Committee Finance Department

Finance Department Teaching and Research Awards Committee (acting chair 1984; chair 1985, co-chair 1986, member 1987 and 1992, chair 1993, member 1994))

Committee to Nominate Finance Department Internal Chair Candidates, 1985

Department Undergraduate Curriculum Committee (member 1985 and 1987, chair 1986)

Departmental Representative to University Human Subjects Committee

Director, Risk Management and Insurance Program, 1995-

Chairman, Risk Management and Insurance Scholarships

Member MSIS Department Budget Committee, 1995-2004

Chair, Risk Management Faculty Search Committee 1999-2001

Several Ad hoc Department Review Committees (Promotion reviews, Dean's Fellow Recommendation Committee, Post tenure reviews, etc.) 2000-2009

MAJOR AREAS OF INTEREST

Risk Management and Insurance
Managing Financial risk
Actuarial Science
Decision Analysis
Management Science/Operations Management and Research
Statistical Analysis and Applications in Business
Information Theory
Probability Theory and Applications in Business
Stochastic Processes and Nonlinear Time Series
Mathematical Finance

COURSES TAUGHT:

Managing Environmental Risk
Managing International Risk
Managing Employee Risks and Benefits
Managing Corporate Risk
Managing Property and Liability Risk
Mathematical Risk Theory
Risk Analysis and Management
Mathematical Theory of Risk
Introduction to Risk Management and Insurance
Economic and Financial Aspects of Risk Management and Insurance
Life and Health Insurance
Pension Theory

Property and Casualty Insurance
Actuarial Science: Theory of Interest
Actuarial Science: Single and Multiple Decrement Life Contingency Theory and Applications
Stochastic Calculus in Finance and Business
Questionnaire Analysis
Mathematical Statistics (Graduate and Undergraduate)
Mathematical Probability (Graduate and Undergraduate)
Games, Gods and Gambling (History of the People and Ideas Responsible for the Development of Probability and Statistics)
Information Theory
Biostatistics
Numerical Analysis
Differential Equations
Calculus
Linear Algebra
Risk - The Final Frontier: A History of Risk Through the Ages

PROFESSIONAL ACADEMIC BACKGROUND

1999 -	Director, Center for Risk Management and Insurance, University of Texas at Austin
1995-	Director of the Risk Management and Insurance Program, University of Texas at Austin
1995-	Gus S. Wortham Memorial Chairholder in Risk Management and Insurance, University of Texas at Austin
1992-2000	Janey Slaughter Briscoe Fellow, IC^2 Institute, The University of Texas at Austin
1998 -1999	Director, Center for Management of Operations and Logistics, University of Texas at Austin
1998	Holder of the Thomas Bowles Chair in Actuarial Science, Georgia State University, Atlanta Georgia
1996-1998	Senior Associate Director, Center for Management of Operations and Logistics, University of Texas at Austin
1992-1996	Director of the Center for Cybernetic Studies, The University of Texas
1989-1995	Joseph H. Blades Professor of Risk Management and Insurance, The University of Texas at Austin

1987-1989	Paul V. Montgomery Centennial Professor of Actuarial Science, The University of Texas at Austin
1986-1992	Senior Research Fellow, IC^2 Institute, The University of Texas at Austin
1986-1989	Director, Actuarial Science Program, Department of Finance, The University of Texas at Austin
1986-1989	Professor of Finance and Actuarial Science, Department of Finance, The University of Texas at Austin
1984-1986	Richard Seaver Centennial Research Fellow, IC^2 Institute, The University of Texas at Austin
1984-1986	Paul V. Montgomery Centennial Fellow in Actuarial Science, The University of Texas at Austin
1982-1986	Associate Professor of Finance and Actuarial Science, Department of Finance, The University of Texas at Austin
1981-1982	Assistant Professor of Finance and Actuarial Science, Department of Finance, The University of Texas at Austin
1981-2002	Research Scientist, Applied Research Laboratories, The University of Texas at Austin
1981 Winter Quarter	Instructor of Biostatistics, Department of Community and Environmental Medicine, The Medical School, University of California, Irvine Extensions
1980-1981	Visitor, Department of Statistics, University of California at Riverside, Riverside, California
1977-1980	Assistant Professor, Departments of Mathematics and General Business, The University of Texas at Austin
1975-1977	Assistant Professor, Department of Mathematics, Tulane University, New Orleans, Louisiana
1970-1973	National Science Foundation Traineeship, Department of Mathematics, University of California at Irvine, Irvine, California