George Morgan

gmorgan@vt.edu Work: (540) 231-7380

Overview of Relevant Accomplishments

- Created program in banking risks and acquired \$2mm funding for experiential learning in credit
- Presented research at various national and international professional conferences
- Established, implemented, and advise \$5 million fixed income fund managed by 25-30 students
- ♦ Managed \$1.5m/yr. R&D unit with staff of 8 serving two dozen professionals
- NSF-funded as Co-Principal Investigator on project for interdisciplinary research and teaching
- ♦ Directed \$200,000 of industry-sponsored, technology-related research in 2001, 1997, and 1996 Create & manage R&D teams; Interact with top execs of startups and Fortune 500s; Advise on strategy

Focus Areas

Teaching: Financial Institutions, Fixed Income Securities, International Finance,

Business Finance for Technology-Focused Enterprises

Research: Regulation of Financial Institutions and Markets, Futures Markets

Academic/Research Positions

SunTrust Professor of Banking	Virginia Tech	Jul. 1995 - Present
Professor, Finance	Virginia Tech	Aug.1989 - Aug. 1995
Associate Professor, Finance	Virginia Tech	Sept.1984 - Aug. 1989
Assistant Professor, Finance	University of Texas at Austin	Aug. 1979 - Aug. 1984
Financial Economist	Comptroller of the Currency, U.S. Department of Treasury	Jan. 1978 - Aug. 1979

Education

Ph.D.	Finance	University of North Carolina	December 1977
M.S.	Math. Statistics	University of North Carolina	May 1975
B.S.	Mathematics	Georgetown University	May 1973

Administrative Positions *Virginia Tech*

Coordinator	oordinator RMB Option w/ Credit Corps	
Co-Advisor	BASIS	Aug. 2004 – Present
	\$5mm fixed income student-managed fund	Sole advisor: 2014-Present
Executive Director	Center for Wireless Telecommunications (CWT)	July 2001 – June 2004
Director	Space And Wireless Business Center (SAWBUC)	Jan. 1991 - Jun. 2001
	Prior to 4/94 designated as "Assoc. Dir. for	
	Business Research," CWT	
Department Head	Department of Finance, Insurance and	Jan. 1995 - Jun. 1996
-Interim/Acting	Business Law	/Aug. 1999 - Jan. 2000
Director	Department of Finance Ph.D. Program	Jul. 1985 - Mar. 1989

Courses Taught

Bank Management, undergraduate Fixed Income Securities, undergraduate & MBA International Finance, MBA Financial Intermediaries, MBA and Ph.D. Theory of Finance, Ph.D.

Commercializing Network Technologies, MBA

Business of Communications Technologies, MBA Seminar

Finance of Broadband Wireless, MBA

Recent Curriculum Development

Revamped Risk Management and Banking option to make more attractive to employers and students FIN 3254 – Credit Analysis. Constructed course and pushed through university governance, assisted in hiring instructor to start Spring 2019

FIN 4225-26 Credit Corps. Capstone experiential learning for students lending \$2mm to corporations - pending

Journal Articles

"The Resurgence of Push to Talk Technologies," *IEEE Communications Magazine*, vol. 44, no. 1, pp. 48-55, January 2006, co-authored with Luiz DaSilva, et al.

"Bank Foreign Exchange and Interest Rate Risk Management: Simultaneous versus Separate Hedging Strategies," *Journal of Financial Intermediation*, co-authored with Kyung-Chun Mun, Vol. 12, No. 3, July 2003, pp. 277-97.

"Risk Premia on Foreign Exchange: A Direct Approach," *Journal of Multinational Finance*, co-authored with Kyung-Chun Mun, Vol. 13, No. 3, July 2003, pp. 231-50.

"Cross Hedging Foreign Exchange Rate Risks: The Case of Depository Financial Institutions in Emerging Asian Countries," *Journal of Pacific Basin Finance*, co-authored with Kyung-Chun Mun. 1997.

"Estimating the Minimum Risk Maturity Gap: Some Evidence from the Savings and Loan Industry," *Managerial Finance*, co-authored with James McNulty, Craig Ruff, and Stephen Smith, Vol. 23, No. 1, 1997, pp. 57-71.

"The Monitoring Rationale for Dividends and the Interaction of Capital Structure and Dividend Decisions," *Journal of Banking and Finance*, co-authored with Gregory Noronha and Dilip Shome, Vol. 20, No. 1, March 1996, pp. 439-454.

"Regulatory Changes and Federal Mutual Thrift Behavior: Evidence from the 1980's," *Journal of Money, Credit, and Banking*, co-authored with Sylvia Hudgins, Vol. 25, No. 4, November 1993, pp. 828-853.

"Risk Aversion in the Approximate and in the Exact Forms," *The Engineering Economist*, Vol. 37, No. 2, Winter 1992, pp. 137-144.

"Eroding Market Imperfections, Reintermediation, and Disintermediation," *Journal of Financial Research*, co-authored with John Easterwood, Vol. 14, No. 4, Winter 1991, pp. 345-358.

"Toward the Development of a Theory of Corporate Financial Planning," *Advances in Working Capital Management*, co-authored with John Martin, Vol. 2, 1991, pp. 27-48.

"Industrial Policy and the Case of High Definition Television," *Challenge: The Magazine of Economic Affairs*, co-authored with Karen Morgan and Alan Parker, September-October, 1990, pp. 55-57.

"Default Risk in Futures Markets: The Broker-Customer Relationship," *The Journal of Finance*, co-authored with James Jordan, Vol. 45, No. 3, July 1990, pp. 909-934.

"Forward and Spot Market Equilibrium for Storable Commodities," *Quarterly Review of Economics and Business*, co-authored with Richard MacMinn and Stephen Smith, Autumn, 1990, Vol. 30, No. 3, pp. 42-61.

"Financing HDTV," *Satellite Communications*, co-authored with Karen Morgan, Vol. 13, No. 12, November 1989, pp. 41-46.

"Some Notes on Risk Management Via Forward Contracting," *Southern Economic Journal*, co-authored with Stephen Smith, July 1989, Vol. 56, No. 1, pp. 240-252.

"Financial Planning When the Firm's Demand for Funds is Nonstationary and Stochastic," *Management Science*, co-authored with John Martin, Vol. 34, No. 9, September, 1988, pp. 1054-1066.

"Optimal Futures Positions for Large Banking Firms," *The Journal of Finance*, co-authored with Dilip Shome and Stephen Smith, March 1988, Vol. 43, No. 1, pp. 175-196.

"Maturity Intermediation and the Intertemporal Lending Policies of Financial Intermediaries," *The Journal of Finance*, co-authored with Stephen Smith, September 1987, Vol. 42, No. 4, pp. 1023-1034.

"The Role of Capital Adequacy Regulation in the Hedging Decisions of Financial Intermediaries," *Journal of Financial Research*, co-authored with Stephen Smith, Spring 1987, Vol. X, No. 1, pp. 33-47.

"Basis Risk, Partial Take-Down, and Hedging by Financial Intermediaries," *Journal of Banking and Finance*, co-authored with Stephen Smith, December 1986, Vol. 10, pp. 467-490.

"A Rationale for Planning: Implications from the Economic Theory of the Firm," *Managerial and Decision Economics*, co-authored with John Martin, December, 1986, Vol. 7, No. 4, pp. 219-228.

"Floating Rate Securities and Immunization: Some Further Results," *Journal of Financial and Quantitative Analysis*, March, 1986, Vol. 21, No. 1, pp. 87-94.

"Forward Market Equilibrium," *Southern Economic Journal*, co-authored with Richard MacMinn and Stephen Smith, July 1984, Vol. 51, No. 1, pp. 41-58.

"On the Adequacy of Bank Capital Regulation," *Journal of Financial and Quantitative Analysis*, June, 1984, Vol. 19, No. 2, pp. 141-162.

"Environmental Factors in the Pricing of NOW Accounts in 1981," *Journal of Bank Research*, co-authored with Susan Becker, Autumn 1982, Vol. 13, No. 3, pp. 168-178.

"Forward and Futures Pricing of Treasury Bills," *Journal of Banking and Finance*, December 1981, Vol. 5, No. 4, pp. 483-496.

"Standardizing Yields on Mortgages and Other Securities," coauthored with George Kaufman, *AREUEA Journal*, Summer 1980, Vol. 8, No. 2, pp. 163-179.

Other Publications

"Determinants of Transnational Regulatory Regimes," co-authored with Mark Thorum, Chapter 7 in "Global Economy in Transition: The European Union and beyond," Editors Linda A. Winkler and Harold Codrington, pp. 91-119, Vernon Press, 2017.

"Borrowing and Lending," feature in *Virginia Tech Business* magazine 50th anniversary issue, with Susan Felker, Spring 2015, available at http://www.magazine.pamplin.vt.edu/spring15/Borrowing-and-lending.html

"A banking expert responds to the column on Wells Fargo" August 28, 2011, *Daily Letter* to Dan Casey, columnist, *Roanoke Times*, available at

http://blogs.roanoke.com/dancasey/2011/08/your-daily-letter-to-the-columnist-aug-28-2011/#more-22880 (generated 37 comments)

"A Business Model Framework for Dynamic Spectrum Access for Cognitive Networks," *Proceedings of World Telecommunications Congress*, Nikhil Kelkar, Yaling Yang, Dilip Shome and George Morgan. IEEE Global Telecommunications Conference ("Globecom/WTC"), IEEE Communications Society, New Orleans, Dec. 2, 2008.

"Going 'Un-global'," *Inside Higher Ed.com*, June 16, 2008, on home page. Available with comments at http://www.insidehighered.com/views/2008/06/16/morgan

"Catalyzing Multidisciplinary Research through Innovative Multidisciplinary Graduate Education." *Proceedings of the International Conference on Engineering Education and Research*, Scott F. Midkiff, George Morgan, et al, 2006. Available at http://fie.engrng.pitt.edu/icee2006/papers/3239.pdf

"Entrepreneurial Skills for Engineers - An Interdisciplinary, Team Project Approach," *Proceedings of the International Conference on Engineering Education and Research "Progress Through Partnership,"* Ostrava, Czech Republic, June 2004, ISSN 1562-3580

"The 9-11 Call for Study Abroad," *Global Network*, Vol. 7, No. 1 (Spring), 2002, Virginia Tech International Programs, p. 1 (Cover article).

"Combining Electromagnetic Propagation, Geographic Information Systems, and Financial Modeling in a Software Package for Broadband Wireless Wide Area Network Design," Co-authored with L.W. Carstensen and C.W. Bostian, *Proceedings of the International Conference on Electromagnetics in Advanced Applications* (ICEAA 01), pp. 799-810, Torino, Italy, September 10-14, 2001.

"Fundamentals of Financial Institutions Management," by Marcia Millon Cornett and Anthony Saunders, Book Review, *The Journal of Finance*, October 1999, pp. 1917-23 (3,000 words).

"How Valuable is Eight Times More Bandwidth? Evidence from the LMDS Auction," co-authored with Sheryl Ball, *Proceedings of the 3rd Annual Wireless Communications Conference*, sponsored by International Microelectronics and Packaging Society, November 1-3, 1998, pp. 134-139.

"New Bands, New Rules, and New Technologies: The Current State of the Wireless Industry," *Advancing Microelectronics*, co-authored with Christie Thompson, Dennis Sweeney, and Charles Bostian, Fall, 1998.

"Competitive Issues in Personal Communications Services," *Wireless Personal Communications: Research Developments* edited by Brian Woerner, Theodore Rappaport, and Jeffrey Reed, Kluwer Academic Publications, 1995, pp. 267-270.

"Finance Education Needs to Return to the Basics," *The Chronicle of Higher Education*, Vol. XL, No. 8, October 13, 1993, p. A56 (Back Page).

"A Moral Hazard Rationale for Early Closure in FDICIA," co-authored with Raman Kumar, *Conference on Bank Structure and Competition - 1993*, Federal Reserve Bank of Chicago, pp. 421-431.

"The Art and Science of LEO Satellite License Game," coauthored with Julia Kwok and Hiren Patel, *Proceedings of the 1992 Meetings of the International Institute for Space Law*, presented at the World Space Congress, September 4, 1992, pp. 400-410.

"Capital Adequacy," The New Palgrave Dictionary of Money and Finance, 1992, 2900 words.

"The Relationship Between Returns to Risky Lending and Gap Management," co-authored with Stephen Smith, *A Conference on Bank Structure and Competition - 1987*, Federal Reserve Bank of Chicago, pp. 497-506.

"Immunizing Floating Rate Notes," co-authored with Don Chance, in *Floating Rate Instruments* edited by Frank Fabozzi, Chicago: Probus Publishing Co., 1986, pp. 295-306.

"Money Bazaars: Understanding the Banking Revolution Around Us by Martin Mayer," *Business Horizons*, University of Indiana, book review, November/December, 1985, Vol. 28, No. 6, pp. 81-82.

"The Error Learning Model and the Financial Futures Market," co-authored with Charles Franckle, *Interest Rate Futures: Concepts and Issues*, 1982, edited by Gerald Gay and Robert Kolb, Robert F. Dame, Inc., p. 325-38, and also invited lecture at the Chicago Board of Trade's Futures Seminar for Educators, November 1980.

"A Theory and Test of the Effect of Competition on Risk: The Case of DIDMCA," coauthored with Stephen D. Smith *A Conference on Bank Structure and Competition - 1983*, Federal Reserve Bank of Chicago, Illinois, pp. 53-77.

"Financial Institutions, Markets, and Economic Activity by Tim Campbell," *Journal of Banking and Finance*, book review, Vol. 7, No. 1, March 1983, pp. 148-152.

Recent Presentations at Professional Meetings and Technical Briefings

"Notes on a Simple Taxonomy of Capital and Leverage Regulation, Conflicts, and Compliance" Southwestern Finance Association annual meetings, Houston, Texas, March 14, 2019.

"Student-Managed Bond Fund Panel," organizer and moderator, academic and practitioner discussion and presentation, Southern Finance Association annual meetings, San Destin, Florida, November 16-19, 2016.

"The Dynamics of Capital Regulation and US Banks' Risk-Taking," co-authored with Letizia Conversano, Financial Management Association Annual Meetings, October 21, 2016 and MidWest Finance Association, Atlanta, Georgia, March 2016.

"Determinants of Transnational Regulatory Regimes," coauthored with Mark Thorum, Congress of Political Economists annual meeting, Madrid, Spain, July 10, 2016 (presented via FaceTime).

"Mr. Jefferson's Trust – bond portfolio management," co-authored with Cara Spicer, Financial Educators Association annual conference, San Antonio, TX, November 24, 2015.

"Assessing the Intertemporal Effects of Regulatory Restrictions on Banks: An International Perspective," coauthored with Letizia Conversano, International Atlantic Economic Society, Philadelphia, PA, October 10-13, 2013.

"Intertemporal Effects of Capital Adequacy Regulation on Bank Risk-Taking," co-authored with Letizia Conversano, Academy of Banking of the National Bank of the Ukraine, annual conference, Sumy, Ukraine, May 23, 2013.

"Fixed Income Student-Managed Funds – A Report on Recent Innovations" coauthored with Vikas Vora, Financial Education Association annual conference, Hilton Head, SC, September 18-20, 2008.

"Earnings Announcements and Accounting Misrepresentation." Co-authored with Kyung Mun, presented at European Financial Management Association, Vienna, Austria, June 27, 2007 (presented by Mun).

"When Do We Want to Know? A Supervisory Perspective on Disclosure," co-authored with Kyung Mun, presented at FMA annual European conference, Barcelona, June 1, 2007.

"Catalyzing Multidisciplinary Research through Innovative Multidisciplinary Graduate Education." *ICEE annual conference*, Scott F. Midkiff, George Morgan, et al, (presented by Midkiff) Summer 2006, San Juan, Puerto Rico.

"A Financial Perspective on the Conflicts and Pitfalls of Commercializing Technology," lead presentation, *Managing and Financing of Small High Tech Firms*, Hotel Roanoke and Conference Center, April 22, 2004, conference organizers K.C. Das, sponsored by Virginia Tech and VCU.

"The Wireless World," National Telephone Cooperative Association annual meeting, Keynote Address, Seattle, Washington, October, 2003.

"After GETWEBS: Continuing Wireless Research at VT," co-authored with Charles Bostian and Bill Carstensen, NSF Principal Investigators' conference, University of Hawaii, October 15, 2003.

"The Telecom Collapse and the Future of Broadband Wireless," WINMEC Spring Conference, UCLA, May 21, 2003. Chaired session on "Industry Verticals."

"The Future for Wireless," Center for Innovative Technology, Technology briefing, Lynchburg, VA, January 12, 2003.

"Interoperability Issues in Public Safety and Disaster Response," NSF Digital Government Conference, Redondo Beach CA, May 2002. Organized and chaired session on Public Safety and Disaster Response.

"Economic Outlook for the Dan River Region," invited community presentation, Danville, VA, January 2002.

"Fixed Broadband Wireless: Coming or Going," Technology Briefing, CONNECT Scotland, June, 28 2001, University of Strathclyde, Glasgow Scotland.

"Wireless Business Trends," pre-conference seminar, International Wire and Cable Symposium annual meeting, November 13, 2000, Atlantic City.

"An Analysis Tool for LMDS Equipment and Deployment," ICM Conference on LMDS and Fixed Broadband Wireless Access -- Ensuring Fast Return on Investment, May 24-25, 1999, Washington, DC. and at Wireless Opportunities Workshop, Herndon, Virginia, September 13, 1999.

"State of the Wireless Business," International Microelectronics and Packaging Society annual meeting, Plenary Session, November 1, 1998.

"New Bands, New Technologies, and Spectrum Auctions: What's Happening in Wireless," coauthored with Christie Thompson and Charles Bostian, IEEE-Region 3, Southeastcon, '97, April 14, 1997.

"Satellite Spectrum Auctions: Regulatory Feedback in Transnational Markets," co-authored with Julia Kwok and Pankaj Lal, Telecommunications Policy Research Conference, Solomons, MD, October 1996.

"Cross-Hedging Foreign Exchange Rate Risks: The Case of Depository Financial Institutions in Emerging Asian Countries," co-authored with Kyung Chun Mun, Financial Management Association annual meetings, October 1996.

"Passing the Bucks: Gross versus Net Margining," co-authored with Katherine Daigle, presented at the Financial Management Association meetings, October 12-15, 1994.

"Bank Regulatory Triage: Optimal Closure Rules and an Economic Explanation of Forbearance," co-authored with Raman Kumar, presented at the Western Finance Association annual meetings, June 1993 and invited paper at Wake Forest University Symposium on Economics and Public Policy, May 1-2, 1992.

"Firm Valuation and Growth: The Role of R&D in the 1980s," co-authored with Andy Hall and Dilip Shome, presented at the Financial Management Association annual meetings, October 1992.

"Agency Theory and the Interaction of Capital Structure and Dividend Decisions," co-authored with Dilip Shome and Greg Noronha, presented at the Financial Management Association annual meetings, October 1992.

"An Investigation of the Acquisition Process in the Market for Corporate Control," co-authored with Dilip Shome and Nilanjan Sen, presented at the Financial Management Association annual meetings, October 1992.

"Customer Risk and the Regulation of Futures Commission Merchants," co-authored with James Jordan, presented at the American Finance Association annual meetings, December 1989.

"Some Estimates of Minimum Risk Maturity Gaps for Savings and Loans," co-authored with Jim McNulty and Steve Smith, presented at the Financial Management Association annual meetings, October 1989.

"The Role of Covariance in the Theory of a Forward-Futures Price Differential," presentation at the Southern Finance Association annual meetings, November 1988.

"A Theoretical Examination of the Effects of Expanded Asset Powers on Mutual S&L Portfolios," co-authored with Sylvia Hudgins, presented at the annual meetings of the Eastern Finance Association, April 1988.

"Financial Management of High Technology Firms," co-authored with Karen Morgan, presented at the annual meetings of the Southern Finance Association, November 1987.

"The Effects of Expanded Asset Powers on S&L Portfolio Diversification," co-authored with Sylvia Hudgins, presented at the annual meeting of the Financial Management Association, October 1987.

Other Scholarly Works

"Notes on a Simple Taxonomy of Capital and Leverage Regulations, Conflicts and Compliance" Southwest Finance Association Annual conference, Houston TX, March 2019. Under Revision.

"Timeout," coauthored with Tom Kanes and Kenneth Portier, white paper in progress, December 2017.

"Intertemporal Effects of Capital Adequacy Regulation on Bank Risk-Taking," co-authored with Letizia Conversano, working paper, December 29, 2016. Under Revision.

"Convexity is the New Duration," working paper, March 2014.

"Real World-Oriented Design for Cognitive Radio Networks," coauthored with Dilip Shome and Yaling Yang, 2010

Proposal submitted to National Science Foundation NeTS program.

"A Financial Perspective on the Conflicts and Pitfalls of Commercializing Technology," white paper, 2004.

"Managing New Security Risks In Faculty-Led Study Abroad Programs to Europe," coauthored with Christine Jarchow, working paper 2004.

"Globalizing U.S. Ivory Towers with Faculty-Led Study Abroad -- Relevance and Risks Post September 11th," working paper 2004.

"The Economics of Bank Closure and Forbearance When Insurance Premia Are Exogenously Determined," coauthored with Raman Kumar, working paper, July 2003.

"Capture of Federal Banking Regulators Since the New Deal," working paper, 1993.

"Economic Analysis of FCC Licensing Costs: Endogenous Entry Barrier or Regulatory Cost Control?" 1994.

"Space Debris: An Economic and Regulatory Perspective," white paper, 1993.

"The Role of Expectations in the Transmission of Monetary Policy," Phd. Dissertation, December 1977. Builds a two period microeconomic model of a bank and examines the implications of bankers' expectations for aggregates.

"The Analysis of Binary Dependent Variables in Business and Economics," Master's Essay, Department of Statistics, University of North Carolina, Chapel Hill, 1975.

Other Professional Activities

Faculty coordinator for Risk Management and Banking option, 2018-20

Co-leader of first Credit Corps Deal Team -- \$100,000 loan to private company, approved Dec. 2019

Faculty leader of student team proposing \$2.4mm funding for academic program in credit. Presented to VTF Investment Committee, April 29, 2019. Approved \$2mm funding.

Interviewed on radio news shows:

WINA, Les Sinclair on recession indicators, Sept. 2019

Discussant, "Performance of BHC's," by Atul Saxena, Southwestern Finance Association annual meetings, March 13-16, 2019

Session Chair and Discussant, "Government Policy," Southern Finance Association, Asheville, NC, November 2018

"Victor Torres Family Trust," case study on bond portfolio management and return attribution. July, 2018.

Session Organizer and Chair, Southern Finance Association, San Destin, Florida, November 2016.

Session Chair, Bank Failures, Midwest Finance Association, Atlanta, Georgia, March 2016.

Program Committee and Session Chair, Southern Finance Association, Captiva, Florida November 2015.

"Notes on Convexity and Speed of Adjustment," Learning notes for use by Financial Modeling instructor.

"Managing Mr. Jefferson's Portfolio," case study on fixed income portfolio management, with teaching notes (5 pages single-spaced), solution file. Co-authored with Cara Spicer, to be used in new Financial Modeling course.

"Protecting the EU's Mediterranean Flank," Parts A and B, role-playing case study in collaboration with Pooja Thakur.. January 2014.

Altria Leadership Investment Fund Grant. Prepared and successfully acquired \$10,000 grant doubling prior two \$5,000 grants from Altria to support BASIS and SEED operating expenses. September 2016, September 2015, September 24, 2014 and September 30, 2012.

"Black Gold," Presentation on oil markets to Blacksburg and Auburn High School classes with BASIS students, February and March 2015.

"Ukrainian Crisis: From Russia with Love," Presentation to Blacksburg High School business classes with a group of BASIS students: May 2, 2014.

"How does the crisis in Greece (and Italy) affect you. Why should you care?" Presentations to high school business and accounting students at Blacksburg High School and Christiansburg High School with a group of BASIS students: December 10, 2013, March 23, 2012, and December 14, 2011.

Co-designer of two new hybrid (exchange/customized) semester programs (for Spring 2013 enrollment)

Zurich University of Management and Law, designed for finance majors in junior year

IES and Autonomous University of Barcelona, designed for international business minors

Co-leader and organizer of in-residence summer study abroad programs

"International business and culture in Barcelona" 2005, 2009, 2010

"Finance and Technology in the UK and Ireland" 2001

Assisted with preparation and participated in 3-week "Spotlight" feature on VT web page and in video on student managed investment fund management. April 2, 2012. Garnered nearly 2000 hits in ten days. Available at http://www.vt.edu/spotlight/impact/2012-04-02-investing/seed-basis.html

Video available also at http://vimeo.com/39482385 Had the highest percentage of full plays of any VT video in the month of April. Fourth highest hit rate competing against two April 16th memorial videos.

"Understanding the Financial Crisis," Invited moderator of panel discussion, Roanoke Higher Education Center, February 11, 2009. Sponsored by Junior Achievement of Roanoke.

"The Financial Crisis: Causes, Consequences and Solutions" October 2008, invited panel participation for the Graduate Student Assembly, Virginia Tech. Co-panelist/presenter with Raman Kumar and Randy Billingsley.

Session Chair, Financial Educators Association annual meeting, September 18-20, 2008.

College award for "Excellence in International Programs," Pamplin College of Business, 2007.

Session Chair (Banking, Session #71) and Discussant ("Opaqueness of European Banking Firms"), FMA annual European conference, June 2007.

Invited guest lecturer BIT Phd seminar: "Career paths for business PhDs – lessons learned" April 4, 2007.

Invited presentation to Liberty University Finance Club: "Opportunities and pitfalls in forming a fixed income fund," November 8, 2006.

Principal Investigator on Sponsored University Research (supporting graduate students and faculty) since 1991 aggregating to \$2,084,000. 2001: LMDS deployment in Southside, \$155,000. 1999: NSF grant for \$200,000. 1997 Volume: \$237,000. Sponsors include: Hughes Electronics, ParTechnology, SpaceVest, Federal Bureau of Investigation, Office of Technology Assessment, National Science Foundation.

New Courses Developed:

Credit Analysis (Spring 2019)

Credit Corps Lending Practicum (FIN 4225-26) – proposal at UCC for final approval as of Dec. 2019

"Commercializing Network Technologies," team taught with economist for engineers and MBAs (2003)

Teamed with engineer and geographer to create interdisciplinary course on deploying wireless (2001)

MBA banking course revised to focus on international aspects of commercial banking (Spring 2000)

Member of the University's "Spectrum Allocation Board" for setting policy on use of broadband wireless and member of ad hoc committee to receive and evaluate industry proposals for partnerships with the VT Foundation.

Governing Board, member, International Space University, 2003

Led bidding team in 1999 FCC electronic auction of LMDS licenses.

Session Chair, "Broadband Technologies for the Digital Millenium," Wireless Opportunities Workshop September 25, 2000

Creator and organizer of the *Wireless Opportunities Workshops* September 1999 on LMDS technologies and business opportunities. Presentations on the creation of an LMDS Research Consortium and on Mobile LMDS as well as Equipment and Deployment Analysis.

Lead an interdisciplinary team responsible for designing and implementing a strategy to bid and acquire radio licenses in the 1998 FCC LMDS auctions for the VT Foundation. Final winning bids: \$1,104,000.

Creator and organizer of the *Wireless Opportunities Workshops* at the Hotel Roanoke and Conference Center, October 1997. Presentation on Project Financing and on the Location Business.

Creator and organizer of new "in-residence" programs for summer study abroad: Freiburg (1998), Dijon (1999), Vienna (2000)

Fellow, Center for Organizational and Technological Advancement, 1997-98.

Invited Panelist, "Workshop on Mobility and Wireless Telecommunications Technologies," Office of Technology Assessment, U.S. Congress, October 31, 1994.

Visiting Lecturer, International Space University, 1993.

"Enhancing the Role of Wireless in the National Information Infrastructure," Third Annual Virginia Tech Symposium on Short Term Profits, R&D and US Competitiveness, October 7, 1994 in Herndon, Virginia. Creator and Organizer of Symposium.

"Communications Un-Plugged," Second Annual Virginia Tech Symposium on Short Term Profits, R&D and US Competitiveness, February 11-12, 1993, Creator and Organizer of Symposium.

"Space: The Final Frontier for US Business?" First Annual Virginia Tech Symposium on Short Term Profits, R&D and US Competitiveness, March 27, 1992, Creator and Organizer of Symposium.

"US Competitiveness: Are We the Problem or the Solution?," Special Session on Financial Education, FMA annual meetings, October 24, 1992, organizer and chair of panel discussion.

Faculty Advisor, Macintosh Blacksburg Users Group (Macbug), 1989-91.

Faculty President, Beta Gamma Sigma, 2000-2001.

Program Committee, Financial Management Association Annual Meetings.

Financial Institutions Track, 1991, 1992, 1993, 1994.

Futures and Options Competitive Paper Award Committee, 1992.

Program Committee, Southern Finance Association Annual Meetings 2014, 1983.

Honors and Recognitions

"Master Mentor," Pamplin Magazine, Spring 2019, by Sookhan Ho.

Nelson Marquis Lifetime Achievement Award, Who's Who, 2019.

"Not Monopoly Money," by Jason Roop, *Virginia Business Magazine*, The real world. December 30, 2019 https://www.virginiabusiness.com/article/the-real-world/

Membership in Honorary and Professional Organizations:

American Finance Association American Statistical Association
American Economics Association Financial Management Association

Southern Finance Association Beta Gamma Sigma

Referee:

Journal of Finance Journal of Financial and Quantitative Analysis

Southern Economic Journal Journal of Banking and Finance

Journal of Financial Research Financial Management

Dissertation Committee Chairman and Member - most recently: Dr. Julia Kwok (1998)

Dissertation Committee Member - most recent: Mark Thorun (2015), Dr. Roberto Conte (2001), Christian Rieser, Tae Park

Departmental Committee Chair or Member: Promotion and Tenure(Chair), Summer Research Grant, Honorifics College Committee Member: Associate Dean Reviews (3), International Programs, Honorifics , International Programs Scholarhip (2018)

College Committee Chair: International Programs Committee, 1998-2000 University Committee Member: Academic Support, Intellectual Properties

Community Service

Chair, Alumni Admissions Committee #220, Southwest Virginia, Georgetown University, 2005-09,; Committee member, 2009-19

Treasurer and Production Board member, *Summer Musical Enterprise*, 2004-10 Board of Directors, Performing Arts Institute of Virginia, 2002-12 Board of Directors, Blacksburg Regional Youth Symphony Orchestra, 2001, 2002, 2003

Coach, *Odyssey of the Mind*, 1999 Regional Champion, Division II Team; Primary Team Coach, 1993 Spontaneous Problem Judge, *Odyssey of the Mind*, Blue Ridge Mountain Regional Competition, 1998 Long Term Problem Judge, *Odyssey of the Mind*, Blue Ridge Mountain Regional Competition, 1997 Site Set Up Coordinator, Blue Ridge Mountain Regional Competition, *Odyssey of the Mind*, 1995, 1996

Chair, Finance Committee, *Summer Musical Enterprises*, 1997, 1998, 1999, member, 2001 Backstage and Road Crew Volunteer, *Summer Musical Enterprises*, 1992, 1994, 1995, 1996, 1997 Construction Volunteer, Hand-in-Hand Playground, *Blacksburg Recreation Department*, 1991