# CURRICULUM VITAE Patricia M. Danzon

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### **EDUCATION**

Ph.D., University of Chicago, Economics, 1973MA, University of Chicago, Economics, 1969BA, University of Oxford, England, Politics, Philosophy and Economics, 1968. First Class.

#### ACADEMIC POSITIONS

Celia Moh Professor, Health Care Management Department, Wharton School, University of Pennsylvania, 1985 – 2016, Professor Emeritus 2016 - present.

Chair, Health Care Management Department, 1994 – 1997, 2004-2007

Visiting Professor, Indian School of Business, Hyderabad and Mohali, India 2012-2016

Visiting Professor, University of Chicago, Center for the Study of the Economy and the State, 1988 – 1989

Associate Professor, Center for Health Policy and Institute of Policy Sciences; Adjunct Professor, Department of Economics; Lecturer, Law School; Duke University, 1984 – 1985

Senior Research Fellow, Hoover Institution, Stanford University, 1980 – 1984

Research Economist, Rand Corporation, and Instructor, Rand Graduate Institute for Policy Studies 1974 – 1980

Visiting Assistant Professor, Economics Department, University of California, San Diego, 1978

Lecturer, University of Chicago, 1972

# SELECTED CONSULTING EXPERIENCE

Alliance of American Insurers American Hospital Association American Medical Association Analysis Group, Inc. Asian Development Bank California Commission on Tort Reform Committee for Economic Development CS First Boston Florida Medical Association Global Alliance for Vaccines (GAVI) Health Insurance Association of America Hospital Corporation of America Institute for Civil Justice, The Rand Corporation Insurance Services Office Merck & Co. Inc. New Zealand Business Roundtable New Zealand Treasury Pharmaceutical Research and Manufacturers Association Pfizer, Inc. U.S. AID USHealthCare World Bank

#### OTHER PROFESSIONAL ACTIVITIES Editorial Boards

International Journal of Health Finance and Economics, 2000 – 2017 Journal of Health Economics, 1984 – 2009 Research in Law and Economics, 1990 – Journal of Bio-Law and Business, 1997 – 2000 Journal of Risk and Insurance, 1990 – 1997 Law, Medicine and Health Care, 1984 – 1989 American Economic Review, 1982 – 1985

# **Other Professional Appointments**

National Bureau of Economic Research, Research Associate, 2000-2019. Institute of Medicine/National Academy of Medicine, Member, 1991 to present National Academy of Social Insurance, Member, 1992 to present National Academies, Policy & Global Affairs Oversight Board, Member, 2004 – 2010 National Institutes of Health, Fogarty International Center Advisory Board, Member, 2004 – 2008 GAVI Economic Expert Group, Advance Market Commitment for Pneumococcal Vaccine, 2007 – 2008 Center for Global Development, Drug Resistance Working Group, 2007 – 2008 Institute of Medicine, Board on Global Health, Member, 2000 – 2004 Institute of Medicine Committee on Malaria, Member, 2002 – 2004 California Health Benefits Review Program, National Advisory Board, Member, 2004 – 2006 American Enterprise Institute, Adjunct Scholar, 1993 – 2006 European Commission, Working Party on Creating a Single Market in Pharmaceuticals, 1996 – 1998 Association for Health Services Research, AHSR Fellow New Palgrave Dictionary of Economics and the Law, Advisory Board Member Australian National University, Centre for Law & Economics, Overseas Advisory Committee Board American Law and Economics Association, Board Member, 1991 – 1993 Economic Institute for Federal Judges, Faculty Member Program on Liability and Insurance, George Mason Law School, 1990, 1991 Committee for Economic Development, Project Director for Who Should Be Liable?: A Guide to Policy for Managing Risk (published May 1989), 1987 – 1989 Co-editor, with Richard Epstein, Journal of Legal Studies, August 1984

# **Corporate and Other Boards**

Office of Health Economics, London, Policy Board, 1995 to present Congressional Budget Office (CBO) Advisory Board, 2011 – 2012 Medarex Inc., Director, 2005 – 2009 Merck Vaccines Advisory Board, 2003 – 2009 International Health Economics Association Board, 2000 – 2004 BIOSIS Board, 1999 –- 2000 Choral Arts Society of Philadelphia, 1999 – 2002 Presbyterian Medical Center, Board, 1991 – 1993

# Selected Executive Education and Conference Organization

Novo Nordisk, 2011–2013 Wharton/Windhover Program for Pharmaceutical Executives, Academic Co-Director, 1999–2012 Glaxo Smith Kline, 2012 Sanofi, 2010 Merck Vaccines, 2010 Teva Program on Global Pharmaceuticals, Academic Director, July 2007 Wyeth/Pfizer Global Positioning, Nov. 2004–2010 Merck, Finance, 2004–2010 Wharton Impact Conference on Pharmaceutical Innovation in the Global Economy, The Wharton School, Conference Organizer, October 2002

# HONORS AND AWARDS

American Society of Health Economists (<u>ASHEcon</u>), 2020 Victor R. Fuchs Award for Lifetime Contributions to Health Economics.

Agency for Health Research and Quality (AHRQ), John Eisenberg Award for Excellence in Mentoring PhD Students, June 2012.

American Risk and Insurance Association, Award for Outstanding Article. "Alternative Liability Regimes for Medical Injuries: Evidence from Simulation Analysis," August 1995.

American Association of Risk and Insurance, Award for Outstanding Article. "Occupational Disease: Evaluating the Options," Journal of Risk and Insurance, June 1987, 1988.

American Risk and Insurance Association, Elizur Wright Award, for *Medical Malpractice: Theory, Evidence and Public Policy*, 1987.

# VISITING FELLOWSHIPS

Visiting Fellow, London School of Economics and City University, Spring 1998 Visiting Fellow, Institute de Sciences Politiques, Paris, Summer 1992, 1993 Visiting Fellow, CS First Boston and Victoria University, New Zealand, Summer 1990 Visiting Fellow, Australian National University, Summer 1989 Mont Pelerin Society Fellowship, 1982 Ford Foundation Fellowship,University of Chicago, 1968 – 1973 Fulbright Travel Grant, 1968 – 1973

### PUBLICATIONS

# **Books and Monographs**

"The Biopharmaceutical and Medical Equipment Industries." Section Editor. In <u>Encyclopedia of Health</u> <u>Economics</u>, Volume 3. Ed. Anthony J. Culyer. San Diego: Elsevier. 2014. <u>The Oxford Handbook on the Economics of the Biopharmaceutical Industry.</u> Co-editor (with Sean Nicholson). Oxford: Oxford University Press. 2012.

<u>The Life Cycle of Pharmaceuticals: A Cross National Perspective</u> with Jeong Kim. London: Office of Health Economics. March 2002.

<u>Prices, Competition and Regulation in Pharmaceuticals: A Cross-National Comparison</u> with LiWei Chao. London: Office of Health Economics. June 2000.

<u>Price Comparisons for Pharmaceuticals: A Review of U.S. and Cross-National Studies.</u> Washington D.C.: The American Enterprise Institute Press. January 1999.

<u>Rate Regulation of Workers' Compensation Insurance</u> with Scott E. Harrington. Washington, D.C.: The American Enterprise Institute Press. January 1998.

<u>Pharmaceutical Price Regulation: National Policies vs. Global Interests</u>. Washington, D.C.: The American Enterprise Institute Press. March 1997.

<u>Trade and Price Differentials for Pharmaceuticals: Policy Options</u>. London: Office of Health Economics. May 1997.

<u>Global Budgets Versus Competitive Cost-Control Strategies</u>. Washington, D.C.: American Enterprise Institute Special Studies in Health Reform. September 1994.

<u>Responsible National Health Insurance</u> with Mark Pauly, Paul Feldstein and John Hoff. Washington, D.C.: The American Enterprise Institute Press. April 1992.

Medical Malpractice: Theory, Evidence and Public Policy. Cambridge, MA: Harvard University Press. 1985.

# Journal Articles

"The Neglected Concern of Firm Size in Pharmaceutical Mergers" (with Michael Carrier) *84 Antitrust Law Journal* 487 (2022) available <u>here</u>

"Firm Size and Pharmaceutical Mergers: A Cross-National, Cross-Sector Perspective," *Concurrences Competition Law Review* N°3-2021 www.concurrences.com

"Differential Pricing of Pharmaceuticals: Theory, Evidence and Emerging Issues." *PharmacoEconomics* 36(12) 2018: 1395-1405-. https://doi.org/10.1007/s40273-018-0696-4.

"Objectives, Budgets, Thresholds, and Opportunity Costs – A Health Economics Approach: An ISPOR Special Task Force Report." *Value in Health* 21(2) 2018: 140-145. DOI: https://doi.org/10.1016/j.jval.2017.12.008.

"Affordability Challenges to Value-based Pricing: Mass Diseases, Orphan Diseases and Cures." *Value in Health*. 2018 21(3): 252-257.

"Pharmacy Benefit Management: Are Reporting Requirements Pro or Anti-Competitive?" International Journal of the Economics of Business 22(2) 2015: 245-261.

"Pharmaceutical Pricing in Emerging Markets: Effects of Income, Competition, and Procurement" with Andrew W. Mulcahy and Adrian K. Towse. *Health Economics* 2013. DOI: 10.1002/hec.3013.

"Value-Based Differential Pricing: Efficient Prices for Drugs in a Global Context" with Adrian K. Towse and Jorge Mestre-Ferrandiz. *Health Economics* 2013. DOI: 10.1002/hec.3021.

"Setting Cost-Effectiveness Thresholds as a Means to Achieve Appropriate Drug Prices in Rich and Poor Countries" with Adrian Towse and Andrew Mulcahy. *Health Affairs* 30(8) 2011: 1529-1538.

"Vaccine Supply: Effects of Regulation and Competition" with Nuno Sousa Pereira. *International Journal of the Economics of Business* 18(2) July 2011: 239-271.

"Commercial Importation of Prescription Drugs in the U.S.: Short-run Implications" with Scott J. Johnson, Genia Long and Michael F. Furukawa. *Journal of Health Politics, Policy and Law* 36(2) April 2011: 295-316.

"Drug Pricing and Value in Oncology" with Erin Taylor. *The Oncologist* 15(S1) 2010: 24-31.

"International Prices and Availability of Pharmaceuticals in 2005" with Michael Furukawa. *Health Affairs* January-February 27(1) 2008: 221-233.

"Crises' in Medical Malpractice Insurance: Evidence of Excessive Price-Cutting in the Preceding Soft Market" with Scott Harrington. *Journal of Banking and Finance* 32 2008: 157-169.

"Dynamic Competition in Pharmaceuticals: Cross-National Evidence from New Drug Diffusion" with Ernie Berndt and Greg Kruse. *Managerial and Decision Economics* 28(2) August 2007: 231-250.

"Mergers and Acquisitions in the Pharmaceutical Industry" with Sean Nicholson and Andrew J. Epstein. *Managerial and Decision Economics* 28 August 2007: 207-328.

"Prices and Availability of Biopharmaceuticals: An International Comparison," with Michael Furukawa. *Health Affairs* 25(5) September/October 2006: 1353-1362.

"Vaccine Supply: A Cross-National Perspective" with Nuno Sousa Pereira and Sapna S. Tejwani. *Health Affairs* 24(3) May/June 2005: 706-717.

"Why Sole Supplier Vaccine Markets May be Here to Stay" with Nuno Sousa Pereira. *Health Affairs* 24(3) May/June 2005: 694-696.

"Alternative Strategies for Medicare Payment of Outpatient Prescription Drugs - Part B and Beyond" with Gail R. Wilensky and Kathleen E. Means. *American Journal of Managed Care* 11(3) 2005: 173-180.

"The Impact of Price Regulation on the Launch Delay of New Drugs – Evidence from Twenty-Five Major Markets in the 1990s" with Y. Richard Wang and Liang Wang. *Health Economics* 14(3) 2005: 269-292.

"Productivity in Pharmaceutical-Biotechnology R&D: The Role of Experience and Alliances" with Sean Nicholson and Nuno Sousa Pereira. *Journal of Health Economics* 24(2) 2005: 317-339.

"Biotech-Pharmaceutical Alliances as a Signal of Asset and Firm Quality" with Sean Nicholson and Jeff McCulloch. *Journal of Business* 78(4) July 2005: 1433-1464.

"From the Field: Closing the Doughnut Hole: No Easy Answers." *Health Affairs Web Exclusive*. July 2004.<u>http://content.healthaffairs.org/cgi/reprint/hlthaff.w4.405v1</u>.

"Prices and Availability of Pharmaceuticals: Evidence from Nine Countries" with Michael F. Furukawa. *Health Affairs Web Exclusive*. October 2003. <u>http://content.healthaffairs.org/content/early/2003/10/29/hlthaff.w3.521.citation</u>.

"Differential Pricing for Pharmaceuticals: Reconciling Access, R&D, and Patents" with Adrian Towse. International Journal of Health Care Finance and Economics 3(3) 2003: 183-205.

"Effect of Tiered Prescription Copayments on the Use of Preferred Brand Medications" with Tom Rector, Michael Finch and Mark Pauly. *Medical Care* 41(3) March 2003: 398-406.

"Health Insurance and the Growth of Pharmaceutical Expenditures" with Mark Pauly. *Journal of Law and Economics* 45(S2) October 2002: 587-613.

"Welfare Effects of Supplementary Insurance: A Comment." *Journal of Health Economics* 21(5) 2002: 923-926.

"Comments on 'The Assault on Managed Care: Vicarious Liability, the ERISA Preemption and Class Actions'" with Frank Sloan. *Journal of Legal Studies* 30(2) 2002: 661-668.

"The Economics of Gene Therapy and of Pharmacogenetics" with Adrian K. Towse Value in Health 5(1)2002:5-13.

"A General Model of the Impact of Absenteeism on Employers and Employees" with Mark Pauly et al. *Health Economics* 11(3) 2002: 221-232.

"Insurance and New Technology: From Hospital to Drugstore" with Mark Pauly. *Health Affairs* 20(5) 2001: 86-100.

"Workers' Compensation Rate Regulation: How Price Controls Increase Costs" with Scott E. Harrington. *Journal of. Law and Economics* 44(1) 2001: 1-36.

"Making Sense of Drug Prices." Regulation 23(1) 2000: 56-63.

"Pharmaceutical Benefit Management: An Alternate Approach." *Health Affairs* 19(2) March 2000: 24-25.

"Cross-National Price Differences for Pharmaceuticals: How Large and Why?" with LiWei Chao. *Journal of Health Economics* 19(2) 2000: 159-195.

"Does Regulation Drive out Competition in Pharmaceutical Markets?" with LiWei Chao. *Journal of Law and Economics* 43(2) 2000: 311-357. Reprinted in <u>Law, Medicine, and Medical Technology: Cases and Materials</u>. Eds. Lars Noah and Barbara A. Noah. Foundation Press. 2002.

"The Genomic Revolution: Is the Real Risk Under-Investment Rather than Bankrupt Health Care Systems?" with Adrian K. Towse. *Journal of Health Services Research and Policy* 5(4) October 2000: 253-255.

"Rate Regulation, Safety Incentives, and Loss Growth in Workers' Compensation Insurance" with Scott E. Harrington. *Journal of Business* 73(4) 2000: 569-595.

"Medical Negligence and the NHS: An Economic Analysis" with Adrian Towse. Health Economics 8(2) 1999:93-101

"The Economics of Parallel Trade." *PharmacoEconomics* 13(3) March 1998: 293-304.

"Competition in the Off-Patent Sector: The U.S Experience." *Pharma Pricing Review* 3(3) 1998.

"Competition for Off-Patent Pharmaceuticals: Lessons from the U.S." *EuroHealth* 4(2) 1998: 24-26.

"International Price Comparisons for Pharmaceuticals: Measurement and Policy Issues" with Jeong Kim. *PharmacoEconomics* 14(S1) 1998: 115-128.

"Price Differentials for Medicines Between and Within Countries." In <u>Price Controls for Medicines and the Single</u> <u>Market</u>, *European Pharmaceutical Law Notebooks* 3(8) 1997.

"Price Discrimination for Pharmaceuticals: Welfare Effects in the U.S. and the E.U." *International Journal of the Economics of Business* 4(3) 1997: 301-321.

"Price, Financial Quality, and Capital Flows in Insurance Markets" with J. David Cummins. *Journal of Financial Intermediation* 6 January 1997: 3-38.

"Tort Liability: A Minefield for Managed Care?" Journal of Legal Studies XXVI (2) Part 2 June 1997: 491-519.

"Consolidation is a Tonic for Health Care Providers" with Paul E. Greenberg and Laura G. Boothman. *National Law Journal*, September 18, 1995.

"Merger Mania: An Analysis." *Health Systems Review* 27(6): 18.

"Health Care Reform: An International Perspective" with Grant D.H. Maclaine. *Australian Economic Review* 27(2) 1994: 81-88.

"Price Cutting in Liability Insurance Markets" with Scott E. Harrington. *Journal of Business* 67(4) 1994: 511-538.

"The Swedish Patient Compensation System: Myths and Realities." *International Review of Law and Economics* 14(4) 1994: 453-466.

"Alternative Liability Regimes for Medical Injuries: Evidence from Simulation Analysis." *Journal of Risk and Insurance* 61(2) June 1994: 219-244.

"Tort Reform: The Case of Medical Malpractice." Oxford Review of Economic Policy 10(1) 1994: 84-98.

"The Swedish Patient Compensation System: Lessons for the U.S." *Journal of Legal Medicine* 15(2) June 1994: 199-247.

"Economic Implications of Public Disability Insurance in the U.S." Journal of Labor Economics 11 (1) Jan. 1993

"Hidden Overhead Costs: Is Canada's System Really Less Expensive?" Health Affairs 11(2) Spring 1992: 21-43.

"Liability for Medical Malpractice." *Journal of Economic Perspectives* 5(3) Summer 1991: 51-69.

"A Plan for Responsible National Health Insurance" with Mark Pauly, Paul Feldstein and John Hoff. *Health Affairs* Spring 1991: 6-25.

"The "Crisis" in Medical Malpractice: Trends in the United States, Canada, the United Kingdom and Australia." *Law, Medicine and Health Care* 18(1-2) Spring-Summer 1990: 48-58.

"The Effects of Malpractice Litigation on Physicians' Fees and Incomes" with Mark V. Pauly and Raynard S. Kington. *American Economic Review* 80(2) May 1990: 122-127.

"Alternative Liability Regimes for Medical Injuries." *Geneva Papers on Risk and Insurance: Issues and Practice* 15(54) January 1990: 3-21.

"The Political Economy of Workers' Compensation: Lessons for Product Liability." *American Economic Review* 78(2) May 1988: 305-310.

"The Effects of Tort Reforms on the Frequency and Severity of Medical Malpractice Claims." *Ohio State Law Journal*, 48(2) 1987: 413-417.

"Compensation for Occupational Disease: Evaluating the Options." *Journal of Risk and Insurance* 54 (2) June 1987: 263-282.

"The Frequency and Severity of Medical Malpractice Claims: New Evidence." *Law and Contemporary Problems* 49(2) Spring 1986: 57-84.

"Liability and Liability Insurance for Medical Malpractice." *Journal of Health Economics* 4(4) 1985: 309-331.

"Comments on Landes and Posner, 'A Positive Economic Analysis of Products Liability." Journal of Legal Studies 14(3) December 1985: 569-574.

"Separation of the Redistributive and Allocative Functions of Government: A Public Choice Perspective" with Marilyn R. Flowers. *Journal of Public Economics* 24(3) 1984: 373-380. Reprinted in <u>The Foundations of 20<sup>th</sup></u> <u>Century Economics: Landmark Papers Selected by Nobel Laureates.</u> Ed. James Buchanan. Ed.Elgar Press. 2001.

"Tort Reform and the Role of Government in Private Insurance Markets." *Journal of Legal Studies* 13(3) August 1984: 517-549.

"The Frequency and Severity of Medical Malpractice Claims." *Journal of Law and Economics* 27(1) April 1984: 115-148.

"Factors Affecting Laboratory Test Use and Prices" with Willard G. Manning, Jr. and M. Susan Marquis. *Health Care Financing Review* 5(4) 1983: 23-32.

"Rating Bureaus in U.S. Property-Liability Insurance Markets: Anti or Pro-Competitive?" *Geneva Papers on Risk and Insurance* 8(29) October 1983: 371-402.

"Settlement Out of Court: The Disposition of Medical Malpractice Claims" with Lee A. Lillard. *Journal of Legal Studies* 12(2) June 1983: 345-377.

"An Economic Analysis of the Medical Malpractice System." Behavioral Sciences and the Law 1(1) 1983: 39-54.

"Hospital 'Profits': The Effects of Reimbursement Policies." Journal of Health Economics 1(1) 1982: 29-52.

"Contingent Fees for Personal Injury Litigation." The Bell Journal of Economics 14(1) Spring 1983: 213-224.

"Economic Incentives to Order Lab Tests: Theory and Evidence." *Socioeconomic Issues in Health* June 1980.

"Solvency Regulation in the Property-Liability Insurance Industry: Empirical Evidence" with Dennis Smallwood. *The Bell Journal of Economics* 11(1) Spring 1980: 261-279.

"Comment on Victor R. Fuchs, 'From Bismarck to Woodcock: The Irrational Pursuit of National Health Insurance." *Journal of Law and Economics* 19(2) August 1976: 365-369.

"An Economic Analysis of Eminent Domain." Journal of Political Economy 84(3) June 1974: 473-498.

### **Chapters in Books**

"Drug Pricing and Value in Oncology." In <u>Regulatory and Economic Aspects in Oncology</u>. Springer Nature. 2018.

"Regulation of the Pharmaceutical-Biotechnology Industry" with Eric L. Keuffel. In <u>Economic Regulation and its</u> <u>Reform: What Have We Learned</u>? Ed. Nancy Rose. NBER and University of Chicago Press. 2014: 407-484.

"Economics of the Biopharmaceutical and Medical Equipment Industries." In <u>Encyclopedia of Health Economics</u>, Volume 1. Ed. Anthony J. Culyer. San Diego: Elsevier. 2014: 77-85.

"Pricing and Reimbursement for Biopharmaceuticals and Medical Devices in the USA." In <u>Encyclopedia of Health</u> <u>Economics</u>, Volume 3. Ed. Anthony J. Culyer. San Diego: Elsevier. 2014: 127-135.

"Introduction" and "Regulation of Price and Reimbursement for Pharmaceuticals." In <u>The Oxford Handbook of</u> <u>the Economics of the Biopharmaceutical Industry</u>. Eds. Patricia Danzon and Sean Nicholson. Oxford: Oxford University Press. 2012.

"Regulation of the Biopharmaceutical Industry." In <u>Regulation and Economics</u> (Encyclopedia of Law and <u>Economics</u>, 2nd edition). Eds. Roger J. Van den Bergh and Alessio M. Pacces. Edward Elgar. 2012.

"Effects of Regulation on Drug Launch and Pricing in Interdependent Markets" with Andrew J. Epstein. In <u>The</u> <u>Economics of Medical Technology: Advances in Health Economics and Health Services Research</u>, Volume 23. Eds. Kristian Bolin and Robert Kaestner. Emerald Books. 2012: 35-71.

"The Economics of the Biopharmaceutical Industry." In <u>The Oxford Handbook of Health Economics</u>. Eds. Sherry Glied and Peter C. Smith. Oxford: Oxford University Press. 2011: 520-553.

"The Regulation of the Pharmaceutical Industry" with Adrian Towse. In <u>The Oxford Handbook of Regulation</u>. Eds. Robert Baldwin, Martin Cave, and Martin Lodge. Oxford: Oxford University Press. 2010: 548-571.

"Drug Pricing and Value in Oncology Compared to Other Areas in Medicine" with Erin Taylor. In <u>Assessing and</u> <u>Improving Value in Cancer Care</u>. Washington, D.C.: Institute of Medicine, The National Academies Press. 2009: 33-39.

"Product Development Priorities" with Adel Mahmoud, John Barton and Roy Mugerwa. In <u>Disease Control</u> <u>Priorities in Developing Countries</u>, Second Edition. Eds. Dean Jamison, Joel Bremen et al. Washington, D.C.: Oxford University Press and The World Bank. April 2006: 139-155.

"Theory and Implementation of Differential Pricing for Pharmaceuticals" with Adrian Towse. In <u>International</u> <u>Public Goods and Transfer of Technology Under a Globalized Intellectual Property Regime</u>. Eds. Keith E. Maskus and Jerome H. Reichman. Cambridge: Cambridge University Press. 2005: 425-456.

"The 'Crisis' in Medical Malpractice Insurance" with Andrew J. Epstein and Scott J. Johnson. In <u>Brookings-</u> <u>Wharton Papers on Financial Services: 2004</u>. Eds Richard Herring and Robert Litan. Washington, D.C.: Brookings Institution Press. 2004: 55-96.

"Reference Pricing of Pharmaceuticals for Medicare: Evidence from Germany, the Netherlands, and New Zealand" with Jonathan D. Ketcham. In <u>Frontiers in Health Policy Research</u>, Volume 7. Eds. David M. Cutler and Allan M. Garber. National Bureau of Economic Research and MIT Press. 2004: 1-54.

Comment on "Malpractice Pressure, Managed Care and Physician Behavior." In <u>Regulation through Litigation</u>. Ed. W. Kip Viscusi. Washington, D.C.: AEI Brookings Joint Center for Regulatory Studies. July 2002: 205-211.

"Differential Pricing for Pharmaceuticals: Reconciling Access, R&D and Patents." Report for Working Group 2 of the <u>WHO Commission on MacroEconomics and Health.</u> Dec. 2001. <u>www.cmhealth.org</u>.

"The Economics of Parallel Trade." Chapter 15 In <u>The Economics of Intellectual Property</u>, Volume IV, Part II. Eds. Ruth Towse and Rudi Holzhauer. Edward Elgar. 2002.

"Reference Pricing: Theory and Empirical Evidence." In <u>The Economics of Reference Pricing and Pharmaceutical</u> <u>Policy</u>. Eds. G. López-Casasnovas and Bengt Jonsson. Colección de Economía de la salud y Gestión Sanitaria. Barcelona: Springer Verlag. 2001.

"Health Care: Competition and Productivity" with Michael Furukawa. Chapter 26 In <u>The Economic Payoff from</u> <u>the Internet Revolution: The Brookings Task Force on the Internet</u>. Eds. Robert E. Litan and Alice M. Rivlin. Washington, D.C.: Brookings Institution Press. 2001.

"Liability for Medical Malpractice." Chapter 26 in <u>Handbook of Health Economics</u>. Eds. J .P. Newhouse and A.J. Culyer. Elsevier. 1999: 1339-1404.

"The Pharmaceutical Industry." In <u>The Encyclopedia of Law and Economics</u>. Eds. B. Bouckaert and G. de Geest. Cheltenham: Edward Elgar. 2000: 1055-1091. <u>http://encyclo.findlaw.com/tablebib.html</u>.

"The Effect of Price Regulation on Productivity in the Pharmaceutical Industry" with Allison Percy. In <u>International and Interarea Comparisons of Income, Output and Prices</u>. Eds. A. Heston and R. Lipsey. NBER-Chicago: U.Chicago Press. 1999: 371-418.

"The Economics of Liability Insurance" with Scott E. Harrington. In <u>Handbook of Insurance</u>, Huebner International Series on Risk, Insurance, and Economic Security, Volume 22. Ed. Georges Dionne. Kluwer. 2000: 277-313.

"The Economic Implications of Genomics." In <u>Genomics and the Pharmaceutical Industry.</u> London: Office of Health Economics. 1999.

"Medical Malpractice." In <u>The New Palgrave Dictionary of Economics and the Law</u>, Volume 2. Ed. Peter Newman. Hampshire: Palgrave MacMacmillan Press. 1999.

"The Perspectives of Buyers and Sellers of Pharmaceuticals: A Comment." In <u>Policy Issues in Pharmaceutical Cost</u> <u>Effectiveness Research.</u> Ed. John Calfee. Washington, D.C.: American Enterprise Institute Press. 1998.

"The Uses and Abuses of International Drug Price Comparisons." In <u>Competition Strategies in the Pharmaceutical</u> <u>Industry</u>. Ed. Robert B. Helms. Washington D.C.: American Enterprise Institute for Public Policy Research. 1996: 85-106.

"International Price Comparisons." In <u>Quality of Life and Pharmacoeconomics in Clinical Trials</u>. Ed. Bert Spilker. Philadelphia: Raven Press. 1996: 773-778.

"Consolidation and Restructuring: The Next Step in Managed Care." In <u>Health Care Management: State of the</u> <u>Art Reviews</u>, Volume 2 (1). Eds. Harvey Jolt and Martin M. Leibovici. Hanley and Belfus, Inc. August 1995

"Global Budgets: Why, What, How?" In <u>Health Policy Reform: Competition & Controls</u>. Ed. Robert B. Helms. American Enterprise Institute Press. 1994: 73-100.

"The Effects of Shifting Medical Expense from PIP Auto Coverage to First Party Health Insurance." In <u>Insurance</u>, <u>Risk Management</u>, and <u>Public Policy</u>. Eds. Sandra G. Gustavson & Scott E. Harrington. Boston: Kluwer. 1994.

"The Hidden Costs of Budget-Constrained Health Insurance Systems." In <u>American Health Policy:</u> <u>Critical Issues for Reform</u>. Ed. Robert B. Helms. Washington, D.C.: American Enterprise Institute Press. 1993: 256-292.

"Capital Flows and Underwriting Cycles in Liability Insurance" with David Cummins. In <u>Workers' Compensation</u> <u>Insurance: Claim Costs, Prices and Regulation</u>. Eds. David Durbin & Philip Borba. Kluwer. 1993: 97-128.

"The Determination of Workers' Compensation Benefit Levels." In <u>Workers' Compensation Insurance: Claim</u> <u>Costs, Prices and Regulation.</u> Eds. David Durbin & Philip Borba. Kluwer. 1993: 1-24.

"Health Care Industry." In <u>The Fortune Encyclopedia of Economics</u>. Eds. David Henderson & Rena Henderson. New York: Warner Books. 1993: 679-680.

"Malpractice Liability: Is the Grass on the Other Side Greener?" In <u>Tort Law and the Public Interest</u>. Ed. Peter Shuck. American Assembly/Norton. 1991: 176-204.

"The Demand for and Supply of Liability Insurance" with Scott E. Harrington. In <u>Insurance Economics.</u> Ed. Georges Dionne. Kluwer. 1991: 25-58. "Market Incentives and the Costs of Medical Malpractice." In <u>Care and Cost: Current Issues in Health Policy</u>. Eds. Ken McLennan and Jack Meyer. Westview Press. 1989.

"Medical Malpractice Liability." In <u>Liability: Perspectives and Policy</u>. Eds. Robert E. Litan and Clifford Winston. Washington, D.C.: The Brookings Institution. 1988: 101-127.

"Medical Malpractice: An Economic Perspective." In <u>Medical and Hospital Negligence</u>. Eds. Miles Zaremski and Louis Goldstein. Callaghan & Co. 1988.

"Medical Malpractice: Trends and Reforms." In <u>Medical Malpractice: Proceedings of the Eleventh Private Sector</u> <u>Conference</u>. Eds. Duncan Yaggy and Patricia Hodgson. Duke University Press. 1987.

"Liability and Insurance for Medical Maloccurrences: Are Innovations Different?" Chapter 13 in <u>Medical</u> <u>Innovation and Bad Outcomes: Legal, Social and Ethical Responses</u>. Ed. Mark Siegler. Health Administration Press. 1987.

"Health Policy in 1984: The Crisis in Costs." In <u>To Promote Prosperity: U.S. Domestic Policy in the Mid-1980s</u>. Ed. John Moore. Stanford: Hoover Institution Press. 1984.

"Reimbursement Policies: Lessons from Medicare." In <u>National Health Policy: What Role for Government?</u> Ed. Isaac Ehrlich. Stanford: Hoover Institution Press. 1982.

"Theory of Solvency Regulation in the Property and Casualty Insurance Industry" with Dennis Smallwood. In <u>Studies in Regulation</u>. Ed. Gary Fromm. MIT Press. 1981: 119-180.

"A Dynamic Model for Optimum Bonus Management." In <u>Defense Manpower Policy</u>. Ed. Richard V. L. Cooper. The Rand Corporation. 1979.

"Causes of the Medical Malpractice Insurance Crisis: Risk and Regulation." In <u>The Economics of Medical</u> <u>Malpractice</u>, Ed. S. Rottenberg. American Enterprise Institute Press. December 1978.

### Working Papers

"Cross-National Evidence on Generic Pharmaceuticals: Pharmacy vs. Physician-Driven Markets" with Michael Furukawa. NBER Working Paper 17226. July 2011.

"Differential Pricing of Pharmaceuticals: Reconciling Access, R&D and Patents." Report for Working Group 2 of the WHO Commission on MacroEconomics and Health. Dec. 2001.

"Defined Daily Doses for Pharmaceuticals: Risks and Potential." Health Care Systems Department, The Wharton School. January 1996.

"Can Cost Control and Innovation Co-Exist?" OECD. September 1995.

"The Effects of Price Regulation in the Pharmaceutical Industry." April 1995.

"The Effects of Health Care Reform on Incentives for Innovation" with LiWei Chao and Allison Percy. Feb. 1995.

"Radical Alternatives for Medical Malpractice: Lessons from Sweden and New Zealand." March 1993.

"The New Zealand Accident Compensation Scheme: Lessons for the U.S." Revised, March 1993.

"Administrative Costs, Price Regulation and Efficiency: A New Look at Old Issues." December 1992.

"Gap and Supplementary Insurance in New Zealand: Theory, Evidence and Policy Options." February 1992.

"Medical Malpractice: Incidence and Incentive Effects." March 1990.

"Mandated Employment-Based Health Insurance: Incidence and Efficiency Effects." Revised, November 1989.

#### Other Published Reports

"Competition and Anti-Trust Issues in the Pharmaceutical Industry." Report to the Regional Competition Center for Latin America. July 2014.

"The Effects of Regulation on the Pharmaceutical Industry." Report to the Chaire D'Economie et Gestion de la Sante, Institut d'Etudes Politiques de Paris. October 1994.

"Pharmaceutical Price Regulation in New Zealand." Report to the New Zealand Department of Health. 1991.

"Options for Health Care in New Zealand." Report to the New Zealand Business Roundtable. CS-First Boston New Zealand Inc. 1990.

"Covering the Uninsured: How Much Would It Cost?" with Frank Sloan. LDI Policy Decision Paper No. 9. December 1986.

"State Health Insurance Pools: An Evaluation." Report to the Program on Access to Care, North Carolina. August 1987.

"Expanding Employment-Based Health Insurance." Report to the Program on Access to Care, North Carolina. August 1987.

"An Evaluation of Solvency Regulation in the Property-Liability Insurance Industry" with Scott E. Harrington. Report to the Alliance of American Insurers. July 1986.

"Alternative Financing of Health Care in Jamaica." Report to the World Bank. October 1985.

"Health Care for the Uninsured Poor" with C. Johnston Conover. Center for Health Policy Research and Education, Duke University. August 1985.

"The Resolution of Medical Malpractice Claims: Modelling the Bargaining Process" with Lee A. Lillard. The Rand Corporation, R-2792-ICJ. 1982.

"The Resolution of Medical Malpractice Claims: Research Results and Policy Implications" with Lee A. Lillard. The Rand Corporation, R-2793-ICJ. 1982.

"Economic Factors in the Use of Laboratory Tests of Office-Based Physicians." The Rand Corporation, R-2525/1-HCFA. 1982.

"Civilian Earnings of Military Retirees." The Rand Corporation, R-2355-MRAL. 1981.

"The Disposition of Medical Malpractice Claims." The Rand Corporation, R-2622-HCFA. 1980.

"Why are Malpractice Premiums So High or So Low?" The Rand Corporation, R-2623-HCFA. 1980.

"Comments on NAIC Program to Monitor Competition in the Property-Liability Insurance Industry." NAIC Proceedings. 1979.

"Costs and Benefits of the Tort System if Viewed as a Compensation System." Rand Corporation, P-5921. 1977.

"Professional Liability Insurance: The Case for Regulation" with Dennis Smallwood. The Rand Corporation, WN-9936-CCCTR. May 1977.

"Professional Liability" with Dennis Smallwood. California Citizens' Commission on Tort Reform. 1976.

"Projections of Military Retirement Costs: 1975-1993." Rand Corporation, WN-9064-ARPA. June 1975.

### SELECTED TESTIMONY AND INVITED SPEECHES

Federal Trade Commission-Dept. of Justice. "The Future of Pharmaceuticals: Examining the Analysis of Pharmaceutical Mergers" June 2022

European Policy for Intellectual Property Conference. "Patent Exhaustion: Update on Pharmaceuticals in North America." Basel September 2019

National Academies of Science, Engineering and Medicine Workshop on *The Role of NIH in Drug Development Innovation and its Impact on Patient Access*. "Pricing and Reimbursement of Pharmaceuticals in the US." Washington DC July 2019.

Canadian Centre for Health Economics Roundtable on Drug Price Regulation in Canada: Economic & Global Considerations. *Thoughts on the PMPRB Proposals.* Toronto, June 2019.

Canadian Health Economics Study Group. *Invited Keynote: Pharmaceutical Policy: Reimbursement/Pricing for Optimal R&D Incentives*. May 2019

Testimony to the ERISA Advisory Council. "PBM Compensation and Fee Disclosure." Washington DC. July 2014

Institute of Medicine Conference on Costs of Cancer Care. "Value-based Pricing for Cancer Drugs." Washington DC. July, 2014

ISI Investor Conference. "Payer Systems and Reimbursement for Pharmaceuticals in the US." Woodstock, Vermont. February 2014.

South Asia Pharma Council. "Global trends in the biopharma industry." Princeton, NJ. October 2012.

Office of Health Economics. "Value-based differential pricing." London. October 2012.

Toulouse Institute for Industrial Economics. Conference on Health Economics and the Pharmaceutical Industry. Plenary address. "Launch and Pricing of New Drugs in Interdependent Markets." January 2008.

Portuguese Health Economics Association. National Conference on Health Economics. Plenary address. "Competition and Regulation in the Pharmaceutical Industry." December 2007.

Institute of Medicine/National Institutes of Health. Conference on Nutrigenomics. "The Potential Economic Impact of Nutrigenomics." June 2006.

NIH Conference on Assessing the Health Effects of Bioactive Food Components. "Estimating the Economic Contribution of Dietary Components in Managing Health Costs." March 2005.

Institute of Medicine, Annual Meeting. "Differential Pricing: International and Ethical Implications" Washington D.C. October 2005.

Haverford Trust Investors Conference. "The Pharmaceutical Industry." October 2005.

Office of Health Economics/Office of Free Trade (London). "Regulation of the Pharmaceutical Industry." December 2005

National Association of Social Insurance. Medicare Modernization Conference. "Drug Reimportation." Washington D.C. January 2005.

The Economist Conference on the Pharmaceutical Industry. "Drug Importation: Economic Effects." Nov. 2004.

Biotech Industry Organization (BIO) Annual Meeting. "Effects of Drug Importation." San Francisco. June 2004.

Deutsche Bank Annual Health Care Conference. "Drug Pricing and Reimportation." May 2004.

National Association of Attorneys General, Pharmaceutical Pricing Meeting. "The Economics of the Pharmaceutical Industry." Columbus, Ohio. August 2002.

Syracuse University, Maxwell School of Citizenship and Public Affairs, Center for Policy Research. The 13<sup>th</sup> Annual Herbert Lourie Memorial Lecture on Health Policy. "Pharmaceuticals: Access, Cost, Pricing, and Directions for the Future" with Stephen Soumerai. Reprinted as monograph. Syracuse University Policy Brief 23/2002.

Royal Institute for Economic Affairs, London, Conference on Squaring the Circle: Shareholder Value and Corporate Social Responsibility. "Differential Pricing for Pharmaceuticals: Reconciling Access, R&D and IP." March 2002.

UK Treasury.. "Competition in the Pharmaceutical Industry" and "New Evidence on International Price Comparisons." London. December 2001.

Economist Conference on the Pharmaceutical Industry. "Pharmaceutical Pricing." Princeton, NJ. December 2001.

US Senate Committee on Health, Labor, Education and Pensions. "Pharmaceutical Price Differences and Trade." June 13, 2000.

Congressional Budget Office. "E-Health: Potential and Productivity Effects." June 2000.

National Health Policy Forum. "Pharmaceutical Prices: An International Perspective." May 31, 2000.

UK Treasury. "Pharmaceutical Price Differentials, Regulation and Trade." London. May 12, 2000.

National Health Policy Forum. "A Competitive Medicare Drug Benefit." March 2000.

Lehman Brothers. "Making Sense of Pharmaceutical Prices." January 2000.

Managed Health Care Association. "Managing the Pharmacy Benefit." January 2000. Brookings Institution. Washington D.C. December 1999.

International Federation of Pharmaceutical Manufacturers. "Defined Daily Doses for Pharmaceuticals." November 1999.

American Enterprise Institute. "Reference Pricing." Washington DC. June 1999.

American Enterprise Institute. A Review of Price Comparisons for Pharmaceuticals." Washington DC. May 1999.

Central and Eastern European Forum, PHRMA-US Department of Trade. "Regulation vs. Competition for Pharmaceuticals." Washington D.C. April 1999.

IBC Pharmaceutical Law Forum. "Reference Pricing." Brussels. March 1999.

International Pharmaceutical Manufacturers Association. "Reference Pricing." Boca Raton. March 1999.

OHE Conference on Genomics. "Economic Implications of Genomics." London. February 1999.

Conference on Reference Pricing. "Reference Pricing: Theory and Evidence." Barcelona. December 1998.

SMI Conference on Health Economics. "Health Economics." London. December 1998.

Handbook of Health Economics Conference. "Medical Malpractice." University of Chicago. July 1998.

World Bank, Symposium on Pharmaceutical Pricing. "Pricing and Regulation of Pharmaceuticals: The International Experience." Washington D.C. April 1998.

IBC Pharmaceutical Law Forum. "The Single Market for Pharmaceuticals: Where Next?" Brussels. March 1998.

Office of Health Economics. "Medical Negligence." London. March 1998.

Irish Pharmaceutical Manufacturers' Association. "Parallel Trade in Pharmaceuticals." Dublin. November 1997.

The Fraser Institute. "The Effects of Regulation on Pharmaceutical R&D". Toronto and Vancouver. Nov. 1997.

American Conference Institute: Liability Frontiers in a Changing Health Care Environment. "Tort Liability: A Minefield for Managed Care" New York. January 1997.

European Commission, Roundtable on the Pharmaceutical Industry. "Trade and Price Differentials for Pharmaceuticals." Frankfurt. December 1996.

Japan Pharmaceutical Manufacturers Association. "The Problems and Challenges of International Price Comparisons." Tokyo. May 1996.

OECD, Business and Industry Advisory Cmtee. "Health Care Reform, Industrial Policy and Innovation." May 1995.

World Economic Forum, Health Care Industry Group. "Managed Care." January 1995.

National Health Policy Forum. "Overhead Costs of Public and Private Insurance." Sydney, Australia. March 1993.

Jackson Hole Group on Health Care Reform. "Options for Tort Reform within Health Care Reform." January 1993.

American Enterprise Institute, Conference on Competitive Strategies in the Pharmaceutical Industry. "International Drug Price Comparisons: Uses and Abuses." October 1993.

American Bar Association, Annual Meeting. Sections on Taxation, Anti-Trust Law, and Torts and Insurance. "Consolidation and Restructuring in the Health Care Industry: A Precursor to Health Care Reform." August 1994.

American Bar Association. "Collateral Source Offset and Tort Reform." May 1992.

American Enterprise Institute, Conference on Critical Issues in Health Policy. "Hidden Costs of Budget-Constrained Health Care Systems." October 1991.

American Assembly on Tort Liability. "Malpractice Liability: Is the Grass on the Other Side Greener?" The American Assembly and the American Bar Association, Arden House. May, 1990.

Testimony to the U.S. Senate Committee on the Judiciary. "The Effect of Tort Reforms on the Frequency and Severity of Medical Malpractice Claims." March 26, 1986.

National Academy of Sciences, Inst. of Medicine Task Force on Medical Malpractice. "Tort Reform." March 1986.

Maryland Joint Executive/Legislative Task Force on Medical Malpractice Insurance. Topic: "The Effects of Tort Reform Measures on the Medical Malpractice Insurance Problem." October 1985.

Testimony to the Florida House of Representatives, Committee on Health Care and Insurance. February 1985.

Testimony to the U.S. Senate Committee on Labor and Human Resources, Hearings on Medical Malpractice and Defensive Medicine. July 10, 1984.

# SELECTED ACADEMIC CONFERENCE PRESENTATIONS

International Health Economics Association. "Pricing of On-Patent Pharmaceuticals: Matching US Policy to Fit the Problem." July 2019

Canadian Health Economics Association. "Pricing of Generics in the US." May 2019.

International Society for Pharmacoeconomics and Outcomes Research. "Value-based Pricing for Drugs in Medicare" and "Affordability in a Value-Based Pricing Framework." May 2017.

International Health Economics Association. "Value-based Differential Pricing: Setting Optimal Prices for Drugs Cross-Nationally" with Adrian Towse; "Exits from Vaccine Markets in the US: The Role of Competition vs. Regulation" with Nuno Pereira. July 2011.

American Society of Health Economics. "Generic Markets for Pharmaceuticals" with Mike Furukawa. "Pharmaceutical Pricing in Emerging Markets" with Andrew Mulcahy and Adrian Towse; "Coverage and Reimbursement for Cancer Drugs" with Erin Taylor. June 2010.

Princeton Center for Economic and Policy Studies Symposium on Health Care: Policy and Prospects. Nov. 2006.

American Economic Association "Dynamic Competition in the Pharmaceutical Industry" with Ernie Berndt. Jan. 2005.

NBER Regulation Project. "Regulation of the Pharmaceutical Industry." Cambridge, MA. September 2005.

International Health Economics Association Meetings. "Effects of Regulation on Launch Prices and Launch Lags" with Andrew Epstein. "Crises in Medical Malpractice Insurance" with Andrew Epstein. July 2005.

Pfizer Conference on Pharmaceutical Economics. "Dynamic Competition in the Pharmaceutical Industry." Barcelona. December 2005.

Lehigh University. "Effects of Regulation on Drug Launch." April 2005.

MIT Forum on Global Drug Pricing. "Differential Pricing through Confidential Rebates." Boston. August 2004.

Princeton Pharma, Biotech and Device Colloquium. "Drug Importation." Princeton. June 2004.

University of Chicago. "International Price Comparisons for Pharmaceuticals: Evidence and Policy." May 2004.

Harvard University. "Productivity in Pharmaceutical-Biotechnology R&D: The Role of Experience and Alliances." Baltimore. April 2004.

Royal Institute for Economic Affairs. London. "Squaring the Circle: Shareholder Value and Corporate Social Responsibility." London. March 2002.

Bocconi University, Italy. "Pharmaceutical Policy: National vs. Regional?" November 2001.

International Health Economics Association. "New Evidence on International Price Comparisons" with Michael Furukawa; "A Hedonic Approach to International Price Comparisons" with LiWei Chao. July 2001.

University of Chicago Conference on Medical Innovation. "Health Insurance And The Growth of Pharmaceutical Expenditures" with Mark V. Pauly. April 2001.

University of Alabama. "Pharmaceutical Prices." March 2000.

U. of Pennsylvania, Institute for Law and Economics. "Managed Care Liability for Medical Malpractice." 1998.

Tufts University, European Conference on Health Care. "International Price Comparisons for Pharmaceuticals: Measurement and Policy Issues" July 1997

American Economic Association. "Reference Pricing and Physician Drug Budgets: The German Experience in Controlling Pharmaceutical Expenditures." New Orleans. January 1997.

International Health Economics Association. "Controlling Pharmaceutical Costs: Lessons from Germany" and "Trends in Pharmaceutical Prices: Cross-national Comparisons." May 1996.

University of Chicago Law School, Conference on Tort Reform. "Tort Liability: A Minefield for Managed Care?" May 1996.

National Bureau of Economic Research, Conference on Income and Wealth. "The Effects of Price Regulation on Productivity in the Pharmaceutical Industry." March 1996.

University of Memphis, Hirff Lecture. "Consolidation and Restructuring in the Health Care Industry." April 1995

University of Kansas, Erhart Lecture. "Consolidation and Restructuring in the Health Care Industry." April 1995.

Institut d'Etudes Politiques de Paris. "Effects of Price Regulation in the Pharmaceutical Industry." Nov. 1994.

Conference on Health Care Reform Strategies in Central Europe. "The Role of Pharmaceuticals in Health Care Reform." November 1993.

Arne Ryde Symposium on Law and Economics. "The Swedish Patient Compensation System: Myths and Realities." August 1993.

American Enterprise Institute., Conference on Health Care Expenditure Controls. "Global Spending Limits: Why, What, How?" April 1993.

Harvard University, Kennedy School, Conference on Pharmaceutical Industry Research, Innovation and Public Policy. "Drug Price Reimbursement Policies in the U.S. and Abroad." February 1993.

American Risk and Insurance Association. "Options for National Health Insurance." August 1992.

Association for Health Services Research. "Hidden Overhead Costs: Is Canada's System Really Less Costly?" 1992.

Geneva Association, 18th Seminar of the European Group of Risk and Insurance Economists. "Price Shocks and Capital Flows in Liability Insurance Markets" with D. Cummins. September 1991. American Law and Economics Association. "Price Cutting in Property-Liability Insurance" with Scott E. Harrington. May 1991.

American Economic Association. "The Effects of Malpractice Litigation on Physicians' Fees and Incomes." December 1989.

American Academy of Arts and Sciences. "Medical Care in the U.S.: Problems and Solutions." October 1989.

American Society of Law and Medicine, International Conference on Health Law and Ethics. "The 'Crisis' in Medical Malpractice: Trends in the U.S., Canada, the U.K. and Australia." July 1989.

National Bureau of Economic Research, Conference on Social Insurance. "Mandated Employment-Based Health Insurance: Incidence and Efficiency Effects." Cambridge, MA. April 1989

Geneva Association, Conference on Professional Liability. "An Evaluation of Alternatives for Medical Liability." March 1988.

American Economic Association. "Insurance Aspects of Product Liability." December 1987.

National Council on Compensation Insurance, Seventh Annual Workers' Compensation Research Seminar. "The Political Economy of Workers' Compensation." November 1987.

American Risk and Insurance Association. "The Incidence of the Costs of Employment-Based Health Insurance." August 1987.

The Brookings Institution, Conference on the Crisis in Liability Law. Topic: "Medical Malpractice: An Overview of the Issues." June 1987.

Yale Law School. "The Insurance Crisis, Tort Reform and Insurance Regulation." 1987.

Association of American Law Schools. "The Tort Crisis and Tort Reform." 1987.

World Bank, Conference on Risk-Sharing for Health Provision in Developing Countries "Jamaican Case Study" 1985.

American Academy of Actuaries/Casualty Actuarial Society, 1983 Casualty Loss Reserve Seminar. "Reserving for Medical Malpractice Claims: Lessons from Litigation Models and Time Series Analysis." 1983.

Ninth Conference of the European Group of Risk and Insurance Economists. "Rating Bureaus in U.S. Property-Liability Insurance Markets: Anti or Pro Competitive?" 1982.

Hoover Institution, Conference on National Health Insurance. "Reimbursement Policies: Lessons from Medicare." 1982.

NBER Conference on Public Regulation. "Solvency Regulation in the Property/Casualty Insurance Industry" with Dennis Smallwood. December 1977.

American Economic Association. "Causes of the Medical Malpractice Insurance Crisis." September 1976.

Conference on Defense Manpower. "A Dynamic Model of Optimum Bonus Management." February 1976.

Conference in Celebration of George Stigler's 65th birthday. Discussant of paper by Victor R. Fuchs, "The Irrational Pursuit of National Health Insurance." Chicago. January, 1976.

RESEARCH GRANTS RECEIVED (PI or Co-PI)					
Year	Source	Purpose			
2008-2009	Eli Lilly and Company	Fair Pricing of Pharmaceuticals			
2002-2001	Merck Co. Foundation	Pharmaceutical Policy, Economics and Management			
2002-2008	AHRQ	Advanced Training in Health Services Research (NRSA Institutional Training Program (Support for Doctoral students)			
2004-2006	Merck & Co. and Pfizer, Inc. NBER.	International Price Comparisons for Pharmaceuticals.			
2003-2005	Ad Hoc Committee of the Pharmaceutical Industry. NBER.	Dynamic Competition in the Pharmaceutical Industry			
2002-2005	Yamanouchi USA Foundation	Research and Education on the Pharmaceutical and Biotechnology Industry			
1990-2003	AHCPR	Advanced Training in Health Services Research, NRSA Institutional Training Program (Support for PhD students)			
2002-2003	Leonard Davis Institute	Models of Procurement for Vaccines			
2000-2001	Huntsman Emerging Technologies Program	m Determinants of R&D Success Biotech and Pharmaceuticals			
2000-2001	Huntsman Emerging Technologies Progra Pharmaceutical-Biotech Deals	m Efficiency in the Market for			
1999-2001	Merck & Co. Inc.	International Price Comparisons for Pharmaceuticals			
1994-1996	Pfizer, Inc.	Competition & Regulation for Pharmaceuticals			

1992-1994	Pfizer, Inc.	International Pharmaceutical Price Comparisons
1991-1992	Robert Wood Johnson Foundation	No-Fault Insurance Systems for Medical Malpractice
1991	University Research Council	Pricing of Pharmaceuticals
1989-1990	NAIC	Price Reductions and Cycles in Property Liability Insurance
1989-1990	National Association of Insurance Commissioners	Capital Flows and Underwriting Cycles
1988-1990	Hartford Foundation Hospital Quality Index	Development of a Community
1986-1990	Robert Wood Johnson Foundation	Alternative Liability Regimes for Medical Malpractice
1987-1988	UPS Grant Program	Demand for Health Insurance
1983-1986	Program on Access to Care Uninsured	Evaluation of Options for The
1975	California Commission on Tort Reform	Professional Liability
1975-1978	Health Care Financing Administration	Analysis of the Malpractice Crisis
1974-1976	Health Care Financing Administration	Reimbursement of Physicians and Hospitals for Lab Tests