Scott Stern

Associate Professor Management and Strategy Department Kellogg Graduate School of Management Northwestern University Leverone 609, 2001 Sheridan Road Evanston, IL 60208-2013 Ph: (847) 491-4526 Fax: (847) 467-1777 e-mail: s-stern2@northwestern.edu

PERSONAL

Born January 1, 1969 at Hempstead, NY US Citizen Married to Catherine Fazio Ethan Stern, born January 22, 2004

EDUCATION

PhD in Economics, Department of Economics, Stanford University, 1996 BA, Economics, New York University, 1990, Graduated with Honors London School of Economics, International Summer Program, 1989

PRIMARY FIELDS

Economics of Technological Change	Industrial Organization
Economics of Organizations	Strategic Management in High-Technology Industries

PRIMARY UNIVERSITY APPOINTMENTS

Associate Professor (with Tenure), Department of Management and Strategy, Kellogg Graduate School of Management, Northwestern University, 2004.

Associate Professor, Department of Management of Strategy, Kellogg Graduate School of Management, Northwestern University, 2001-2004

Mitsubishi Career Development Assistant Professor, MIT Sloan School, 1999 –2001.

NTU Career Development Assistant Professor, Sloan School of Management, 1998 – 1999.

Assistant Professor, Sloan School of Management, 1995 – 1998.

OTHER APPOINTMENTS

Research Associate, National Bureau of Economic Research, 2004. Appointed within Productivity, Industrial Organization, and Health & Aging Programs.

Faculty Research Fellow, National Bureau of Economic Research, 1996 – 2004. Appointed within Productivity, Industrial Organization, and Health & Aging Programs.

Non-Resident Senior Fellow, Economic Studies, Brookings Institution, 2001-2003.

Visiting Fellow, Economic Studies, Brookings Institution, 2001.

Health & Aging Fellow, National Bureau of Economic Research, 1999 –2000.

NORTHWESTERN ACTIVITIES

Academic Director, Kellogg Biotechnology Center, 2004 – present.

Student Affairs and Activities Committee, 2004 – present.

Affiliate, Center for the Study of Industrial Organization, January 2002 - present

Junior Recruiting Committee, Department of Management and Strategy, 2001.

Editorial Advisory Board, Kellogg Biotechnology Review, 2002-2003.

OTHER ACTIVITIES

Co-Organizer (with Adam Jaffe and Joshua Lerner), NBER Innovation Policy and the Economy Group, 1999 - present.

Associate Editor, *Management Science*, Business Strategy Section, 2001 – present. Technological Innovation and Entrepreneurship Section, 2004 – present.

Associate Editor, International Journal of Industrial Organization, 2005 – present.

Associate Editor, Journal of Business and Economic Statistics, 2005 – present.

Associate Editor, Antitrust Law Journal, 2005 - present.

Board of Management, International Schumpeter Society, 2004 – present.

Member, Committee on the Future of Supercomputing, Computer Science and Telecommunications Board, National Academy of Sciences, 2003 – 2005.

Program Committee, International Industrial Organization Conference of the Industrial Organization Society, 2004, 2005 and 2006 meetings.

International Board of Assessors, Intellectual Property Research Institute of Australia, University of Melbourne, 2004 – present.

Co-Organizer (with Steve Klepper, Hank Chesbrough, and Peter Murmann), CCC Doctoral Consortium, August 2001 – 2003.

PhD Recruitment, Management of Technology and Innovation, MIT Sloan School, 1996 – 2001.

Co-Organizer (with Shane Greenstein), NBER Universities Research Conference, Competition and

Organization in Technology-Intensive Industries, December, 1997.

Undergraduate Advisor, MIT Sloan School, 1996-2001.

PROFESSIONAL AWARDS

2005 Recipient, Ewing Marion Kauffman Prize Medal for Distinguish Research in Entrepreneurship, ASSA Meetings, January 2005.

RESEARCH FUNDING

2004	Kauffmann Grant for NBER Innovation Policy and the Economy Program, including partial sponsorship of annual DC conference, summer meetings, and occasional specialized conferences
2000	National Academy of Sciences Research Grant, Initiative on Intellectual Property in the Knowledge-Based Economy. Title: Patent Examiner Productivity & Quality, joint with Iain Cockburn and Samuel Kortum.
1999	NBER Health and Aging Fellowship
1998-2000	MIT Center for Innovation and Product Development. Title: Contracting versus Competition: The Two Faces of Appropriability, joint with Joshua Gans.
1996-8	MIT Program on the Pharmaceutical Industry. Title: Assessing the Patient Welfare Gains from Pharmaceutical Innovation, joint with Manuel Trajtenberg.
1996	MIT Sloan School Dean's Creative Research Award. Title: An Empirical Framework for Testing Theories About Complementarity in Organizational Design, joint with Susan Athey.
1996	Pfizer Pharmaceuticals. Title: Assessing the Patient Welfare Gains from Pharmaceutical Innovation, joint with Manuel Trajtenberg.

1996	MIT ICRMOT Research Grant. Title: Competition, Product Differentiation and the Incentives for Innovation in the Personal Computer Industry, joint with Tim Bresnahan and Manuel Trajtenberg.
1993, 1994	Lynde and Harry Bradley Foundation Fellowship, Stanford University.
1992	Research Fellow, Stanford Center on Conflict and Negotiation
1990	Mary Louise Bailey Award in Economics, 1990, New York University

DISSERTATION

Title:	Product Competition in High-Technology Industries
Primary Advisor:	Timothy F. Bresnahan
Other Advisors:	Nathan Rosenberg, Manuel Trajtenberg, Frank Wolak
University:	Department of Economics, Stanford University, 1996.

PUBLICATIONS

Articles in Refereed Journals

- 1. "Do Scientists Pay to Be Scientists?" Management Science, 2004.
- 2. "When Does Funding Research by Smaller Firms Bear Fruit?: Evidence from the SBIR," (with J. Gans), *Economics of Innovation and New Technology*, 2003.
- 3. "The Product Market and the Market for Ideas: Commercialization Strategies for Technology Entrepreneurs," (with J. Gans), *Research Policy*, 2003.
- 4. "When Does Start-up Innovation Spur the Gale of Creative Destruction?," (with J. Gans and D. Hsu), *RAND Journal of Economics*, 2002.
- 5. "The Impact of Information Technology and Job Design on Emergency Health Care Outcomes," (with S. Athey), *RAND Journal of Economics*, 2002.
- 6. "The Determinants of National Innovative Capacity," (with J. Furman and M.E. Porter), *Research Policy*, 2002.
- 7. "Innovation: Location Matters," (with M.E. Porter), *Sloan Management Review*, Summer 2001. Reprinted in *Innovation: Driving Product, Process, and Market Change* ed. Edward B. Roberts, Jossey-Bass.
- 8. "Untangling the Origins of Competitive Advantage," (with I. Cockburn and R. Henderson), *Strategic Management Journal*, 2000. Reprinted in *The Strategic Management Society Blackwell Handbook of Organizational Capabilities: Emergence, Development and Change* ed. Constance E. Helfat, Blackwell Publishers.

- 9. "Innovation Incentives, Compatibility, and Expropriation as an Antitrust Remedy: The Legacy of the Borland/Ashton-Tate Consent Decree," (with C. Fazio) *Antitrust Law Journal*, 2000.
- 10. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction," (with. J. Gans), *Journal of Economics and Management Strategy*, 2000.
- 11. "Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s," (with T. Bresnahan and M. Trajtenberg), *RAND Journal of Economics*, 1997. To be reprinted
- 12. "Urban Productivity and Factor Growth in the Late Nineteenth Century," (with R. Bostic and J. Gans), *Journal of Urban Economics*, 1996.

Refereed Books

13. Biological Resource Centers: Knowledge Hubs for the Life Sciences, Brookings Institution, 2004.

Articles in Refereed Proceedings

- 14. "Understanding the Drivers of National Innovative Capacity," (with M. Porter and J. Furman), *Academy of Management Best Papers in Proceedings*, 2000.
- 15. "All Are Patent Examiners Equal?: Examiners, Patent Characteristics and Litigation Outcomes," (joint with I. Cockburn and S. Kortum), *Intellectual Property in the Knowledge-Based Economy*, National Academy of Sciences, 2003.

Refereed Committee Report

- 16. *Getting Up to Speed: The Future of Supercomputing* (Committee Member), National Academy of Sciences, 2004.
- 17. *The Future of Supercomputing: An Interim Report*, (Committee Member), National Academy of Sciences, 2003.

Articles in Non-Refereed Publications

- 18. "Economic Experiments: The Role of Entrepreneurship in Economic Prosperity," Kauffman Foundation Thoughtbook, 2005.
- 19. "Managing Ideas: Commercialization Strategies for Biotechnology," (with J. Gans), *ICFAI Journal of Intellectual Property Rights*, 2003.
- 20. "Ranking National Innovative Capacity: Findings from the National Innovative Capacity Index," (with M. Porter), *Global Competitiveness Report 2003*.
- 21. "Biological Resource Centers: An Economic Perspective," *Biological Resource Centers: From Concept to Reality*, American Type Culture Collection, 2003.

- 22. "The Impact of Location on Innovation: Findings from the National Innovative Capacity Index," (with M. Porter), *Global Competitiveness Report 2002*.
- 23. "National Innovative Capacity," (with M. Porter), Global Competitiveness Report 2001.
- 24. "Patient Welfare and Patient Compliance: An Empirical Framework for Measuring the Benefits of Pharmaceutical Innovation," (with P. Ellickson and M. Trajtenberg), *Medical Care Output & Productivity*, NBER/CRIW Conference volume, 2001.
- 25. "The Adoption and Impact of Advanced Emergency Response Services," (with S. Athey), *The Economics of Non-Profit Hospitals*, 2000.
- 26. "The Drivers of National Innovative Capacity: Implications for Spain and Latin America," (with M. Porter and J. Furman), *Keys to the World Economy*, 2000.
- 27. "Understanding the Determinants of National Innovative Capacity: Implications for Central European Economies" *Wirtschaftspolitische Blaetter*, 2000.
- 28. "Information Technology and Training in Emergency Call Centers," *Industrial Relations Research Association Papers and Proceedings*, June 1999.
- 29. "Incentives and Focus In University and Industrial Research: The Case of Synthetic Insulin," *The University-Industry Interface and Medical Innovation*, edited by Annetine Gelijns and Nathan Rosenberg, Institute of Medicine, National Academy Press, 1995.

Non-Refereed Monographs

- 30. Assessing Australia's Innovative Capacity in the 21st Century, (with J. Gans), Australian Institute for Commercialization, August, 2003.
- 31. *The New Challenge to America's Prosperity: Findings from the Innovation Index,* (with Michael E. Porter), Council on Competitiveness, March, 1999.

Edited Volumes

- 32. "Introduction," (with A. Jaffe and J. Lerner), *Innovation Policy and the Economy*, Vol. 6, National Bureau of Economic Research, forthcoming.
- 33. "Introduction," (with A. Jaffe and J. Lerner), *Innovation Policy and the Economy*, Vol. 5, National Bureau of Economic Research, 2005.
- 34. "Introduction," (with A. Jaffe and J. Lerner), *Innovation Policy and the Economy*, Vol. 4, National Bureau of Economic Research, 2004.
- 35. "Introduction," (with A. Jaffe and J. Lerner), *Innovation Policy and the Economy*, Vol. 3, National Bureau of Economic Research, 2003.
- 36. "Introduction," (with A. Jaffe and J. Lerner), *Innovation Policy and the Economy*, Vol. 2, National Bureau of Economic Research, 2002.

37. "Introduction," (with A. Jaffe and J. Lerner), *Innovation Policy and the Economy*, Vol. 1, National Bureau of Economic Research, 2001.

Published Testimony

- 38. The Impact of Basic Research on Technological Innovation and National Prosperity, on Basic Research, House Science Committee, United States Congress, September 28, 1999.
- 39. Plenary Session, President's Committee on Science and Technology, Washington, DC, May 24, 1999.

Publications Under Submission or Revision for Refereed Journals

- 40. "Balancing Incentives in Pharmaceutical Research," (with R. Henderson and I. Cockburn), NBER WP 6882, under revision for resubmission.
- 41. "An Empirical Framework for Testing Theories about Complementarity in Organizational Design," (with S. Athey), NBER WP 6600, under revision for resubmission.
- 42. "Measuring the Ideas Production Function: Evidence from International Patent Output," (with M. Porter), NBER WP 7891, under revision for resubmission.
- 43. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," (with J. Furman), under revision for resubmission.
- 44. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," (with S. Novak), under revision for resubmission.
- 45. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: A Test of the Anti-Commons Hypothesis," (with F. Murray), under submission.
- 46. "Disclosure or Secrecy?: The Dynamics of Open Science," (with A. Mukherjee), under submission.
- 47. "How Does Outsourcing Affect Performance Over the Product Lifecycle? Evidence from the Auto Industry," (with S. Novak), under submission.

Working Papers Under Preparation or Revision for Submission

48. "The Biotechnology Industry: A Framework for the Evaluation of Occupational Categoriews and Industry Structure," prepared under the auspices of the National Opinion Research Council for the Bureau of Labor Statistics, 2005.

- 49. "The Impact of Uncertain IP Rights on the Market for Ideas: Evidence from Patent Grant Delays," (with J. Gans and D. Hsu), mimeo, Northwestern University, 2005.
- 50. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," (with M. Trajtenberg), NBER WP 6851, under revision.
- 51. "The Diffusion of Science-Driven Drug Discovery: Organizational Change in Pharmaceutical Research," (with R. Henderson and I. Cockburn), NBER WP 7359, under revision.
- 52. "Market Definition and the Returns to Innovation: Substitution Patterns in Pharmaceutical Markets," MIT POPI Working Paper, December, 1996, under revision.

Working Papers Available on Request

- 53. "Incentives and Knowledge in Organizational and Technological Change: The Case of Drug Discovery in the 1980s," MIT POPI Working Paper, December, 1996.
- 54. "Assessing America's Research Intensive Sector," (with G. Wright), mimeo, Stanford University, July, 1994.

SUBJECTS TAUGHT AT KELLOGG

MGMT 472	Applied Econometrics II	Winter, 2005
MGMT 463	Management of Innovation	Winter, 2002 Spring, 2002 Winter, 2003 Spring, 2003 Winter, 2004 Winter, 2005
MECS 469	Strategy Seminar Workshop	Spring, 2004

SUBJECTS TAUGHT AT MIT SLOAN SCHOOL

15.351 Introduction to Technological Innovation Management	Spring, 1996
	Spring, 1997
	Spring, 1998
	Spring, 1999
	Fall, 2000
15.932 Technology Strategy	Spring, 1996
	Fall, 1997
	Fall, 1998
	Spring, 1999

15.949 The Use of Economics and Econometrics in BPS Research	Spring, 1997
15.968 Explaining Heterogeneity in Firm Performance	Fall, 1998 Spring, 2001
15.971 Economic and Strategic Analysis of High-Technology Industries	Spring, 1999 Spring, 2001

THESIS SUPERVISION (COMPLETED)

Name	Program	Supervisory Role
Eugene Orlov Mercedes Delgado Jeff Prince Joshua Nixt Kwanghui Lim David Hsu Paul Ellickson Margaret Kyle Mara Berman Jeff Furman Pierre Azoulay Annabelle Gawer	Northwestern Econ Kellogg Visiting Student Northwestern Econ MIT Sloan Doctoral MIT Sloan Doctoral MIT Economics Doctoral MIT Economics Doctoral MIT Economics Doctoral MIT Sloan Doctoral MIT Sloan Doctoral MIT Sloan Doctoral	Thesis Advisor Informal Kellogg Advisor Thesis Advisor Thesis Advisor Thesis Advisor Thesis Advisor Thesis Advisor Thesis Advisor Thesis Advisor Committee Member Committee Member
Alvaro Cuervo	MIT Sloan Doctoral	Committee Member
Steven White	MIT Sloan Doctoral	Committee Member
Pek-Hooi Soh	MIT Sloan Doctoral	Committee Member
Luis Lopez	MIT Sloan Doctoral	Committee Member
Michael Liu	MIT Mech. Eng. Doctoral	Committee Member
Anupam Sahai	MIT SDM	Thesis Advisor
Mouris Saghir	MIT MOT	Thesis Advisor
Mark Verbrugge	MIT Sloan Fellow	Thesis Advisor
Irena Asmundson	MIT Economics Undergrad	Thesis Advisor
Amalia Miller	MIT Economics Undergrad	Thesis Advisor

THESIS SUPERVISION (IN PROGRESS)

Name	Program	Supervisory Role
Seongwuk Moon	Kellogg MECS	Thesis Advisor
Douglas Frank	Kellogg MECS	Committee Member
Joao Macieria	Northwestern Econ	Committee Member

PROFESSIONAL MEMBERSHIPS

Research Associate, National Bureau of Economic Research, 2004 – present. Productivity, Health & Aging, and Industrial Organization Programs Faculty Research Fellow, National Bureau of Economic Research, 1996 – 2004. Productivity, Health & Aging, and Industrial Organization Programs Member, American Economic Association Member, Academy of Management

REFEREEING

American Economic Review Quarterly Journal of Economics Journal of Political Economy **Review of Economic Studies** Rand Journal of Economics Management Science Journal of Economics and Management Strategy Journal of Industrial Economics **Review of Economics and Statistics** Journal of Health Economics **Research Policy** European Economic Review Economics of Innovation and New Technology Journal of Econometrics Journal of Business and Economic Statistics (Guest Associate Editor) Journal of Legal Studies LABOUR Financial Management National Science Foundation National Science Foundation (SBIR Proposal Review)

ACTIVE WORKSHOP PARTICIPATION

Kellogg Strategy Seminar Northwestern Industrial Organization Seminar

CONSULTING ACTIVITIES

Bureau of Labor Statistics	11/04 - 3/05
Brookings Institution	9/00-6/03
Economist's Advocate	1/00
Council on Competitiveness	1/98 - 3/99
AG Economics, Cambridge, MA	12/95 - 3/96
Institute for the Future, Menlo Park, CA	4/94 - 8/94

INVITED PRESENTATIONS

- 1. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: An Empirical Test of the Anti-Commons Hypothesis," Haas School of Management, University of California Berkeley, November 2005.
- 2. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: An Empirical Test of the Anti-Commons Hypothesis," IMT Lucca, Italy, July 2005.
- 3. "Innovation and the Italian Competitiveness Challenge," IMT Lucca, Italy, July 2005.
- 4. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: An Empirical Test of the Anti-Commons Hypothesis," R&D and Innovation in the Development Process, Universitat Pompeu Fabra, Barcelona, June 2005.
- 5. "The Impact of IP Rights on the Market for Ideas: Evidence from Patent Grant Delay," Sauder School, University of British Columbia, May, 2005.
- 6. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: An Empirical Test of the Anti-Commons Hypothesis," Wharton School, University of Pennsylvania, April, 2005.
- 7. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: An Empirical Test of the Anti-Commons Hypothesis," Rotman School of Management, University of Toronto, April 2005.
- 8. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: An Empirical Test of the Anti-Commons Hypothesis," NBER Academic Science and Entrepreneurship Conference, Santa Fe, New Mexico, April 2005.
- 9. "Global Capital Markets and Local Innovative Capacity: Implications for American Economic and Technological Leadership," Council on Foreign Relations, New York, March, 2005.
- 10. "Are All Patent Examiners Equal?: The Impact of Examiners on Patent Statistics and Litigation Outcomes," ASSA Meetings, Philadelphia, PA, January, 2005.
- 11. "The Challenge of Entrepreneurship for Economics Research," HBS Entrepreneurship Research Conference, Harvard Business School, December, 2004.
- 12. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," Michigan State University Department of Economics, December 2004.
- 13. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?: An Empirical Test of the Anti-Commons Hypothesis," MIT Industrial Organization Seminar, December 2004.
- 14. "Are All Patent Examiners Equal?: The Impact of Examiners on Patent Statistics and Litigation Outcomes," Southern Economic Association Annual Meetings, New Orleans, LA, November, 2004.
- 15. "The Innovation Index Challenge: Benchmarking Global Innovation Leadership," Innovation Measurement Symposium, University of Melbourne, November, 2004.
- 16. "Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge?" IPRIA Innovation and the Patent System Conference, University of Melbourne, November, 2004.
- 17. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," INFORMS Meetings, October, 2004.
- 18. "Do Formal Intellectual Property Hinder the Free Flow of Scientific Knowledge?: A Test of the Anti-Commons Hypothesis," Duke University Department of Economics, October, 2004.
- 19. "Do Formal Intellectual Property Hinder the Free Flow of Scientific Knowledge?: A Test of the Anti-Commons Hypothesis," University of Michigan Business School, September, 2004.
- 20. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," Economic History Association Meetings, September, 2004.

- 21. "Does Formal Intellectual Property Hinder the Free Flow of Scientific Knowledge: Evidence from Patent-Paper Pairs," NBER Academic Science and Entrepreneurship Pre-Conference, Cambridge, MA, July 2004.
- 22. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," NBER Summer Institute Industrial Organization Meetings, July, 2004.
- 23. "Does Formal Intellectual Property Hinder the Free Flow of Scientific Knowledge: Evidence from Patent-Paper Pairs," International Industrial Organization Conference, Chicago, IL, April 2004.
- 24. "The Future of Supercomputing: A Policy Framework," Joint National Academies and Japanese Academy of Engineering Conference on the Future of Supercomputing, Tokyo, Japan, March, 2004.
- 25. "The Impact of IP Rights on the Market for Ideas: Evidence from Patent Grant Delay," International Industrial Organization Conference, Chicago, IL April, 2004.
- 26. "The Impact of IP Rights on the Market for Ideas: Evidence from Patent Grant Delay," Harvard Business School, November, 2003.
- 27. "Does Formal Intellectual Property Hinder the Free Flow of Scientific Knowledge: Evidence from Patent-Paper Pairs," SPRU Conference in Honour of Keith Pavitt, November, 2003.
- 28. "The Impact of IP Rights on the Market for Ideas: Evidence from Patent Grant Delay," Roundtable on Engineering Entrepreneurship Research, Georgia Institute of Technology, November, 2003.
- 29. "The Paradox of Scientific Disclosure and What Innovation Policy Can Do About It," Northwestern University Domain Dinner, October, 2003.
- 30. "The Paradox of Scientific Disclosure and What Innovation Policy Can Do About It," Austrian Academy of Sciences, Vienna, September, 2003.
- 31. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," Harvard Business School Strategy Conference, October, 2003.
- 32. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," Stern School of Business, October, 2003.
- 33. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," University of Chicago GSB, October, 2003.
- 34. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," Melbourne Business School, August, 2003.
- 35. "Innovation, Reform and the Korean Growth Challenge," International Conference on Growth Engines for Korea, July, 2003.
- 36. "Standing on the Shoulders of Giants," Korean Technology and Education Foundation, July, 2003.
- 37. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," Northwestern-Toulouse Industrial Organization Annual Conference, May, 2003.
- 38. "Complementarity Among Vertical Integration Decisions: Evidence from Automobile Product Development," Olin School of Business, Washington University, April 2003.
- 39. "Complementarity Among Vertical Integration Decisions," Kellogg School of Management, M&S Seminar, April 2003 (co-author Sharon Novak was the principal presenter of the paper for this workshop).
- 40. "The Impact of IP Rights on the Market for Ideas: Evidence from Patent Grant Delays," NBER Entrepreneurship Conference, January 2003.
- 41. "The Product Market versus the Market for Ideas: The Impact of Intellectual Property on Competitive Dynamics," Melbourne Business School / IPRIA Thought Leaders Forum, December, 2002.

- 42. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," UC-Berkeley, Department of Economics, November, 2002.
- 43. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," Rotman School of Management, University of Toronto, November, 2002.
- 44. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," Iowa State University, Department of Economics, October, 2002.
- 45. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," Tuck School of Business, Dartmouth College, October, 2002.
- 46. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," University of Virginia, Department of Economics, October, 2002.
- 47. "The Product Market versus the Market for Ideas: Commercialization Strategy for Technology Entrepreneurs," National University of Singapore (invited public lecture), September, 2002.
- 48. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," Melbourne Business School, August, 2002.
- 49. "Innovation: The New Australian Competitiveness Agenda," Melbourne Business School / IPRIA Thought Leaders' Conference (invited public lecture), August, 2002.
- 50. "Assessing the Patient Welfare Benefits from the Diffusion of Pharmaceutical Innovation: An Economic Measurement Agenda," American College of Chest Physicians, August, 2002.
- 51. "Climbing Atop the Shoulders of Giants: The Impact of Institutions on Cumulative Knowledge Production," NBER Summer Institute, July 2002.
- 52. "Innovation Policy for the European Union: Challenges and Opportunities," European Union Enterprise Directorate General, Brussels, July, 2002.
- 53. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Southern Methodist University, April, 2002.
- 54. "Climbing Atop the Shoulders of Giants: The Economics of Cumulative Knowledge Hubs," Wharton Technology Mini-Conference, April 12, 2002.
- 55. "Challenges for Innovation-Based Competitiveness in Portugal," Keynote Speaker, Ideis and Negocios Competitiveness Conference, Porto, Portugal, November, 2001.
- 56. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Carnegie Mellon University, GSIA Microeconomics Seminar, November, 2001.
- 57. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Case Western Reserve University, October, 2001.
- 58. "Are All Patent Examiners Created Equal?: The Impact of Examiner Characteristics on Patent Characteristics and Litigation Outcomes," National Academy of Sciences, Washington, DC, October, 2001.
- 59. "The Impact of Information Technology on Emergency Health Care Outcomes," Northwestern Economics IO Seminar, October, 2001.
- 60. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" INSEAD Strategy Seminar, June, 2001.
- 61. "The Impact of Information Technology on Emergency Health Care Outcomes," ZEW Conference on the Economics of Information and Communication Technologies, June, 2001.
- 62. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" DRUID 'Nelson and Winter Celebration' Conference, Aalburg, Denmark, June 2001.
- 63. "The Determinants of National Innovative Capacity," Brookings Institution Executive Education Series for Government Managers, May, 2001.
- 64. "Balancing Incentives: The Tension Between Basic and Applied Research," University of Rochester, Simon School Strategy Department, May, 2001.
- 65. "Balancing Incentives: The Tension Between Basic and Applied Research," University of Michigan Strategy Department, April, 2001.

- 66. "Do Scientists Pay to Be Scientists?" NBER & AAAS Policy and Data Issues of the Scientific Workforce Workshop, March, 2001.
- 67. "The Determinants of National Innovative Capacity," University of Chicago, February 2001.
- 68. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Wharton School, January 2001.
- 69. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" University of Toronto Department of Economics, December, 2000.
- 70. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Columbia University, December, 2000.
- 71. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Kellogg Graduate School of Management, November 2000.
- 72. "Do Scientists Pay to Be Scientists?" UCLA Anderson School Policy Group, November, 2000.
- 73. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Duke University Economics Department, November, 2000.
- 74. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" HBS Strategy Conference, October, 2000.
- 75. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" MIT Industrial Organization Seminar, September, 2000.
- 76. "The Drivers of National Innovative Capacity: Challenges for Technology-Based Competitiveness in Chile," Inter-American Development Bank Conference on Chilean Competitiveness and Innovation, August 16, 2000, Santiago.
- 77. "Balancing Incentives: The Tension Between Basic and Applied Research," Academy of Management Meetings, August 7, 2000.
- 78. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" NBER Summer Institute, July 26, 2000.
- 79. "The Product Market and the Ideas Market: Commercialization Strategies for Technology Entrepreneurs," Technology Entrepreneurship conference, University of Maryland, May 19, 2000.
- 80. "The Product Market and the Ideas Market: Commercialization Strategies for Technology Entrepreneurs," Technological Entrepreneurs and Intrapreneurs Network, Washington, DC, May 18, 2000.
- 81. "The Impact of Information Technology on Emergency Health Care Outcomes," NBER Conference on the Industrial Organization of Health Care," Nashville, April 27, 2000.
- 82. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" NBER Productivity seminar, April 13, 2000.
- 83. "Do Scientists Pay to Be Scientists?" Kellogg Strategy Department, April 6, 2000.
- 84. "When Does Start-Up Innovation Spur the Gale of Creative Destruction?" Yale School of Management, April 3, 2000.
- 85. "Do Scientists Pay to Be Scientists?" Stanford GSB Strategy Conference, February 11, 2000.
- 86. "Do Scientists Pay to Be Scientists?" Organization Science Winter Research Conference, February 15, 2000.
- 87. "Balancing Incentives: The Tension Between Basic and Applied Research," UCLA Pharmaceutical Economics Workshop, November 18, 1999.
- 88. "When Does Funding Research in Smaller Firms Bear Fruit?" UCLA Department of Economics, November 16, 1999.
- 89. "When Does Funding Research in Smaller Firms Bear Fruit?" Wharton Strategy Department, UCLA Department of Economics, November 9, 1999.
- 90. "Do Scientists Pay to Be Scientists?" INFORMS Conference, November 6, 1999.
- 91. "Do Scientists Pay to Be Scientists?" NYU Department of Economics, November, 1, 1999.

- 92. "Do Scientists Pay to Be Scientists?" Stanford University Department of Economics, October, 28, 1999.
- 93. "Do Scientists Pay to Be Scientists?" Columbia University INTERFACES workshop, October 20, 1999.
- 94. "When Does Funding Research in Smaller Firms Bear Fruit?" NBER Productivity Seminar, October 5, 1999.
- 95. "The Impact of Basic Research on Technological Progress and National Prosperity," House of Representatives Basic Research Subcommittee, Washington, September 28, 1999.
- 96. "Do Scientists Pay to Be Scientists," NBER Summer Institute, July 29, 1999.
- 97. "The Product Market and the 'Ideas' Market: Commercialization Strategies for Technology Entrepreneurs," Testa Hurwitz and Tiebault, July 15, 1999.
- 98. "Patient Welfare and Patient Compliance: Measuring the Welfare Benefits from Pharmaceutical Innovation," International Health Economics Association meetings, June 7, 1999.
- 99. "The Impact of Basic Research on Technological Progress and National Prosperity," Plenary Session, President's Committee on the Advancement of Science and Technology, Washington, May 24, 1999.
- 100. "Balancing Incentives: The Tension Between Basic and Applied Research," MIT/Harvard Seminar on the Economics of Organizations, May 13, 1999.
- 101. "The Determinants of National Innovative Capacity," Industry Canada, May 7, 1999.
- 102. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," University of Chicago GSB, May 6, 1999.
- 103. "When Does Funding Research in Smaller Firms Bear Fruit?" Federal Trade Commission, April 8, 1999.
- 104. "When Does Funding Research in Smaller Firms Bear Fruit?" MIT Management of Innovation seminar, April 6, 1999.
- 105. "Balancing Incentives: The Tension Between Basic and Applied Research," Tufts University Department of Economics, November 30, 1998.
- 106. "The Determinants of National Innovative Capacity," October 7, 1998.
- 107. "Balancing Incentives: The Tension Between Basic and Applied Research," HBS Competition and Strategy Seminar, November, 1998.
- 108. "Balancing Incentives: The Tension Between Basic and Applied Research," Kellogg Strategy Department, October 30, 1998.
- 109. "The Provision of Incentives in Pharmaceutical Research," Industrial Organization Meetings, NBER Summer Institute, July 31, 1998.
- 110. "Does it Pay to Let Good Scientists Do Good Science?" Productivity/Labor Joint Meetings, NBER Summer Institute, July 29, 1998.
- 111. "Measuring the Ideas Production Function: Evidence from International Patenting," Productivity Meeting, NBER Summer Institute, July 27, 1998.
- 112. "Patient Welfare and Patient Compliance: An Empirical Framework for Measuring the Benefits Of Pharmaceutical Innovation," NBER/CRIW Medical Care Output and Productivity Conference, June 12, 1998.
- 113. "Evaluating U.S. Innovative Capacity: The Innovation Index," Council on Competitiveness, National Press Club, May 29, 1998.
- 114. "Contracting and Competition: The Two Sides of Profiting from Innovation," MIT ILP Research Directors Conference, May 6, 1998.
- 115. "The Provision of Incentives in Pharmaceutical Research," NBER Productivity Lunch, April 14, 1998.
- 116. "The Adoption and Impact of Advanced Emergency Response Services," NBER Productivity Lunch, April 7, 1998.

- 117. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," Industrial Organization Winter Meetings, January 30, 1998.
- 118. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," Harvard-MIT Health Economics Workshop, February 3, 1998.
- 119. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction," American Economic Association Meetings, January 3, 1998.
- 120. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction," MIT Industrial Organization Workshop, November 24, 1997.
- 121. "The Adoption and Impact of Advanced Emergency Response Services," Not-for-Profit Hospitals Conference, November, 22, 1997.
- 122. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," NBER Productivity Lunch, November 11, 1997.
- 123. "An Empirical Framework for Testing Theories About Complementarity in Organizational Design," INFORMS Meetings, October 26, 1997.
- 124. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," UCLA Pharmaceutical Economics Workshop, October 23, 1997.
- 125. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction," Brown University Microeconomics Workshop, October 9, 1997.
- 126. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction," University of British Columbia Strategy Workshop, September 26, 1997.
- 127. "An Empirical Framework for Testing Theories About Complementarity in Organizational Design," Academy of Management Meetings, August 6, 1997.
- 128. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction," University of Urbino Industry Economics Workshop, June 16, 1997.
- 129. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction," MIT Sloan School Strategy Workshop, May 2, 1997.
- 130. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," Department of Economics, Princeton University, March 25, 1997.
- 131. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," Wharton Strategy Seminar, March 27, 1997.
- 132. "Empirical Implications of Physician Authority in Pharmaceutical Decisionmaking," Structural Approaches to Firm Behavior, American Economic Association Meetings, New Orleans, LA, January 6, 1997.
- 133. "Calculating the Patient Welfare Benefits from Pharmaceutical Innovation: A Conceptual Framework," NBER Health Care and Productivity Winter Meetings, December 13, 1996.
- 134. "Market Definition and the Returns to Innovation: Substitution Patterns in Pharmaceutical Markets," Department of Economics, UCLA, November 1, 1996
- 135. "An Empirical Framework for Testing Theories About Complementarity in Organizational Design," Haas School of Business, UC-Berkeley, October 31, 1996.
- 136. "Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s," Department of Economics, Boston University, October 29,1996.
- 137. "An Empirical Framework for Testing Theories About Complementarity in Organizational Design," NBER Productivity Lunch, September 17, 1996.
- 138. "An Empirical Framework for Testing Theories About Complementarity in Organizational Design," Stanford Institute of Theoretical Economics, Structural Econometric Approaches Module, August 22, 1996.
- 139. "Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s," Department of Economics and Graduate School of Management, University of New South Wales, June 26, 1996.

- 140. "Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s," NBER Productivity Lunch, May 7, 1996.
- 141. "Pharmaceutical R&D in the New Environment," Ad-Hoc Working Group on the Economics of the Pharmaceutical Industry, Whitehouse Station, New Jersey, February 14, 1996.
- 142. "Empirical Tests for Complementarities in Organizational Design," with S. Athey, Human Resource Research Network Meeting, San Francisco, California, January 6, 1996.
- 143. "Product Demand in Pharmaceutical Markets," Department of Economics, University of Illinois Urbana-Champaign, Champaign, Illinois, November 28, 1995.
- 144. "Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s," Industrial Organization Workshop, Department of Economics, MIT, November 13, 1995.
- 145. "Evaluating the Welfare Gains from Pharmaceutical Innovation," Ad-Hoc Working Group on the Economics of the Pharmaceutical Industry, New York, New York, October 24, 1995.
- 146. "Product Demand in Pharmaceutical Markets," Department of Economics, Texas A&M University, College Station, Texas, October 23, 1995.
- 147. "Incentives and Focus in University and Industrial Research: The Case of Synthetic Insulin," Industrial Relations Research Seminar, Sloan School of Management, October 17, 1995.
- 148. "Product Demand, Pricing and Substitution in Pharmaceutical Markets," International Center for Research on the Management of Technology (ICRMOT) Seminar Series, Sloan School of Management, MIT, October 12, 1995.
- 149. "Product Demand in Pharmaceutical Markets," Joint Seminar, Federal Trade Commission and Department of Justice, Washington, DC, October 3, 1995.
- 150. "Product Demand in Pharmaceutical Markets," Econometric in Tel Aviv, Department of Economics, Tel Aviv University, Tel Aviv, Israel, June 14, 1995.
- 151. "When Entry Causes Prices to Rise: An Exploration of Product Demand in Pharmaceutical Markets," Productivity Seminar, Summer Institute, National Bureau of Economic Research, July 14, 1994.

"ROOKIE" JOB MARKET RESEARCH PRESENTATIONS

Title:Product Demand in Pharmaceutical MarketsDates:January - February, 1995

Sloan School of Management, Sloan School of Management, MIT Department of Economics, Harvard University Kennedy School of Government, Harvard University Harvard Business School, Harvard University Department of Economics, Yale University Department of Economics, UC-Berkeley Department of Economics, UC-San Diego Graduate School of Business, Stanford University Department of Economics, Princeton University School of Management, Yale University Heinz School of Public Policy, Carnegie Mellon University School of International and Public Affairs and Department of Economics, Columbia University Department of Economics, University of Maryland Department of Economics, Santa Clara University

DISCUSSANT & MODERATOR PRESENTATIONS

- 1. Discussant, "Industrial Scientific Discovery," James Adams and J. Roger Clemmons, NBER Productivity Meting, December 2005.
- 2. Discussant, "Identifying Technology Spillovers and Product Market Rivalry," Nick Bloom, Mark Schankerman, and John van Reenen, Center for Study of Innovation and Productivity, Federal Reserve Board of San Francisco, November 2005.
- 3. Panelist, "Entrepreneurship in a Globalized World," Americans for an Informed Democracy, November 2005.
- 4. Discussant, "Innovation and Incentives: Evidence from Corporate R&D," Josh Lerner and Julie Wulf, NBER Summer Institute, July 2005.
- 5. Moderator and Convenor, Economics of Intellectual Property Session, Productivity Group, NBER Summer Institute, July 2005.
- 6. Moderator and Convenor, Innovation Policy and the Economy Meetings, Productivity Group, NBER Summer Institute, July 2005.
- 7. Discussant, "Time Compression Diseconomies and Sustainable Competitive Advantage," Olin School Strategy Conference, May 2005.
- 8. Moderator and Co-Organizer, 2005 NBER Innovation Policy and the Economy Conference, Washington, DC, April 2005.
- 9. Program Committee, 3rd Annual International Industrial Organization Conference, Atlanta, GA, April, 2005.
- 10. Co-Organizer, NBER IPE Academic Science and Entrepreneurship Conference, Santa Fe, ME, April 2005.
- 11. Moderator, "Biotech Clusters, Home and Abroad," Kellogg Biotechnology Conference, April, 2005.
- 12. Moderator and Co-Organizer, "Biotechnology: Scientific, Commercial and Societal Risks," Zell Conference Series on Risk Research, February 2005.
- 13. Discussant, The Circulation of Ideas: Firms versus Markets," Thomas Hellmann and Enrico

Perotti, NBER Entrepreneur Meetings, October, 2004.

- 14. Panelist, Conversations on Innovation, Academy of Management Professional Development Workshop, August, 2004.
- 15. Panelist, Measuring Knowledge in Management Research, Academy of Management Professional Development Workshop, August, 2004.
- 16. Moderator and Convenor, Economics of Intellectual Property Session, Productivity Group, NBER Summer Institute, July 2004.
- 17. Moderator and Convenor, Innovation Policy and the Economy Meetings, Productivity Group, NBER Summer Institute, July 2004.
- 18. Moderator, "The Future of the Medical Device Industry," Kellogg Biotechnology Conference, April, 2004.
- 19. Discussant, What Do We Know About Innovation?, SPRU Conference in Honour of Keith Pavitt, November, 2003.
- 20. Discussant, "Building Fences or Opening Doors: University Patenting and the Pace of Knowledge Exploitation, Roundtable on Engineering Entrepreneurship Research," Kira R. Markiwicz, Georgia Institute of Technology, November, 2003.
- 21. Moderator and Convenor, Innovation Policy and the Economy Meetings, NBER Summer Institute, July 2003.
- 22. Moderator and Convenor, 2003 NBER Innovation Policy and the Economy Conference, Washington, DC, April 2003.
- 23. Moderator, "Platform Technologies: Can they Deliver on their Promise?," Kellogg Biotechnology Conference, April, 2003.
- 24. Moderator, "Technology Companies in Latin America," Kellogg Latin American Business Conference, March, 2003.
- 25. Discussant, "The Effects of Direct to Consumer Advertising in the Prescription Drug Market," Toshii Iizuka and Ginger Jin, NBER Industrial Organization Conference, Stanford, CA, February, 2003.
- 26. Discussant, "Leader Follower Behavior on the Web: Evidence from Online Bookstores," Karen Clay and Eric Wolff, ASSA Annual Meetings, January 2003.
- 27. Discussant, "Networks of Inventors and the Location of University Research: An Exploration of Italian Data," Margerita Balconi, et al, NBER Summer Institute, R&D and Organizations, July 2002.
- 28. Discussant, "Appropriability and the Timing of Invention: Evidence from MIT Invention," Marie Thursby, et al, NBER Summer Institute, Productivity Potpourri, July 2002.
- 29. Moderator and Convenor, 2002 NBER Innovation Policy and the Economy Summer Institute Meetings, NBER Summer Institute, July 2002.
- 30. Moderator and Convenor, 2002 NBER Innovation Policy and the Economy Conference, Washington, DC, April 2002.
- 31. Moderator, "Maximizing Through Miniaturization," Kellogg Biotechnology Conference, April 13, 2002.
- 32. Discussant, "Do Switching Costs Make Markets More or Less Competitive?: The Case of 800-Number Portability," Brian Viard, Stanford Strategy Conference, February, 2002.
- 33. Discussant, "Geographic Concentration, Knowledge Spillovers and the Evolution of the American Advertising Industry," Charles King, et al, NBER Industrial Organization Winter Meetings, January 2002.
- 34. Discussant, "Experts' Agency Problem: Evidence from Pharmaceutical Prescribing in Japan," Toshiaka Iizuka, NBER Industrial Organization Summer Meetings, July, 2001.
- 35. Discussant, "Information, Decisions, and Productivity: On-Board Computers and Capacity Utilization in Trucking," Tom Hubbard, Brookings Conference Series on Productivity

Measurement: Transportation, May, 2001.

- 36. Discussant, "Science and the Diffusion of Knowledge," Lee Fleming and Olav Sorenson, Harvard Research Workshop in Applied Statistics, April 2001.
- 37. Discussant, Brookings Conference Series on Productivity Measurement: Information Technology and Telecommunications, February, 2001.
- 38. Discussant, Silicon Valley and its Imitators, ASSA Annual Meetings, January 2001.
- 39. Discussant, "University Science, Venture Capital, and the Performance of U.S. Biotechnology Firms University Science, Venture Capital, and the Performance of U.S. Biotechnology Firms," Michael Darby et al, First Engineering Entrepreneurship Roundtable Conference, December, 2000.
- 40. Discussant, "Economics and Organizations, AOM BPS Doctoral Consortium, Aug 6, 2000.
- 41. Discussant, "Strategic Adoption in the Offset Press Industry," David Genesove, NBER Industrial Organization meetings, February 6, 2000.
- 42. Discussant, "Quantity Discounts for Taste-Varying Consumers," Eugenio Miravete, ASSA meetings, January 8, 2000.
- 43. Discussant, "Research Joint Ventures and Absorptive Capacity," Morton Kamien, ASSA Meetings, January 7, 2000.
- 44. Moderator, Harvard Conference on Biotechnology in the Global Economy, Harvard University, September, 1999.
- 45. Discussant, "Economics and Organizations, AOM BPS Doctoral Consortium, Aug 5, 1999
- 46. Discussant, "Fit or Fat? Convexity of Profit in the Oil Industry?" Joe Farrell and Severin Borenstein, Stanford Strategic Management Conference, January 1998.
- 47. Discussant, "The Timing of Adoption of MRI Technology in Small Markets," William Vogt, American Economic Association Meetings, January, 1998.
- 48. Discussant, "Cellular Telephone, Welfare Benefits and the CPI," by Jerry Hausman, Productivity Meetings, NBER Summer Institute, 1997.
- 49. Discussant, CCC Doctoral Consortium, 1997.
- 50. Discussant, "The Productivity Effects of HRM Practices: Evidence from Japanese Panel Data." by Takao Kato & Mother Maritime, NBER Universities Research Conference, "What Do Employers Do?" December, 1996.
- 51. Discussant, "Domestic Markets & International Competition: Generic and Product-Specific Competencies in the Engineering Sector," by Alfonso Gambardella and Ashish Arora, Strategic Management Journal Special Issue, October, 1996.
- 52. Discussant, "The Diffusion of Biotechnology in Japan," Productivity Meetings, NBER Summer Institute, August, 1996.
- 53. Discussant, "The Effect of Pharmaceutical Utilization and Innovation on Hospitalization and Mortality," by Frank Lichtenberg, Economics of Health Care Session, American Economic Association Meetings, San Francisco, California, January 7, 1996.
- 54. Discussant, "Microsoft Secrets," by Michael Cusumano and Richard Selby, Industrial Relations Research Seminar, Sloan School of Management, MIT, December 5, 1995.