

Irwin Feller  
1426 Ridge Master Drive  
State College, PA 16803  
Phone: (814)237-6276  
Cell phone: (814) 883-9247  
E-mail: iqf@ems.psu.edu

#### POSITIONS

Senior Visiting Scientist, American Association for the Advancement of Science, 2002–2012  
Professor, Department of Economics (1973–2002)  
Director, Institute for Policy Research and Evaluation (1977–2001)

#### EDUCATION

Ph.D., Economics, University of Minnesota, 1966  
BBA, Economics, City University of New York, 1959

#### HONORS AND AWARDS

National Academies, National Associate, 2004-

American Society for Public Administration, Joseph S. Wholey Distinguished Scholarship Award, Best Scholarly Article on Performance-based Governance in 2002, (“Performance Measurement Redux”, American Journal of Evaluation)

American Evaluation Association, 2004 Outstanding Publication Award -“A Toolkit for Evaluating Public R&D Investment: Models, Methods, and Findings from ATP’s First Decade”- with Connie Chang and Rosalie Ruegg

The College of the Liberal Arts Alumni Society Distinction in the Social Sciences Award, The Pennsylvania State University, 1988

American Society of Mechanical Engineers International, State Government Fellow in Pennsylvania (February 1996–June 1997)

MANUSCRIPTS IN PROGRESS

“Transformative Organizations and Transformative Science: Evidence from the Performance of National Science Foundation Science and Technology Centers” (with D.Chubin, E. Derrick, and P. Pharityal) Under review

“Interdisciplinary Research and Transformative Research as Facets of National Science Policy”

Alternative Approaches to the Diffusion of Innovations:-A Fresh Look After Almost 50 Years”

SELECTED PUBLICATIONS

“This Time It Really May be Different”, (2016) in Research on the Sociology of Organizations, Vol. 46: Pressures on the University, edited by E. Berman and C. Paradeise, Emerald Publishing

“Peer Review and Expert Panels as Techniques for Evaluating the Quality of Academic Research”, in Handbook on the Theory and Practice of Program Evaluation, (2013) edited by A. Link and N. Vonortas, (Cheltenham, UK: Edward Elgar Publishers), 115-142

“Performance Measurement as Forms of Evidence for Science and Technology Policy Decisions”, (2013), Journal of Technology Transfer, 38:565-576.

“The Challenges of Evaluating Multi-Objective, Multi-Purpose Academic Research Centers” (with D.Chubin, E. Derrick, and P. Pharityal), (2012) in Cooperative Research Centers, edited by C. Boardman, D. Gray, and D. Rivers, Springer, 219-246.

“ Science of Science and Innovation Policy” (2011) in The Science of Science Policy: A Handbook”, edited by K. Husbands Fealing, J. Lane, J.Marburger III, and S. Shipp (Palo Alto, CA: Stanford University Press), 131-155.

“The Promises and Limitations of Performance Measures”, (2011) in Measuring the Impacts of Federal Investments in Research”, edited by S. Olson and S. Merrill (Washington, DC: National Academies Press), 119-152.

“The Commercialization of Academic Patents” Black Boxes, Pipelines and Rubik’s Cubes”, with Maryann Feldman, (2010) Journal of Technology Transfer, 35: 597-616.

“Performance Measurement and the Governance of American Academic Science” (2009), Minerva, 47:323-344.

“A Policy-Shaped Research Agenda on the Economics of Science and Technology” (2009) in *The New Economics of Technology Policy*, edited by D. Foray (Cheltenham, UK: Edward Elgar), 99-112.

“Size, Share, and Structure: The Changing Role of America’s Public Research Universities” (2009) in *Globalization’s Muse*, edited by J. Douglass, C.J. King, and I. Feller (Berkeley, CA: Berkeley Public Policy Press), 67-80.

“Evaluation, Accountability and Performance Measurement in National Education Systems: Trends, Methods and Issues” with Katherine Ryan, (2009) in *The Sage International Handbook of Education Evaluation*, edited by K.E. Ryan and J.B. Cousins (Thousand Oaks, CA: Sage), 171-189. (Reprinted in *Educational Leadership* (2012), edited by M. Preedy, N. Bennett, and C. Wise (SAGE), 173-188)

“Industry-University R&D Partnerships in the United States”, in *21<sup>st</sup> Century Innovation Systems for Japan and the United States* (2009), edited by S. Nagaoka, M. Kondo, K. Flamm, and C. Wessner (Washington, DC: National Academies Press), 169-185

“Mapping the Frontiers of Evaluation of Public Sector R&D Programs”, *Science and Public Policy*, 2007, 34:681-690

*A Strategy for Assessing Science*, co-editor with Paul Stern (Washington, DC: National Research Council, 2007)

“Interdisciplinarity: Paths Taken and Not Taken”, *Change*, November/December 2007, 46-51

“Who Races with Whom; Who is Likely to Win (Or Survive); Why”, in *Future of the Public Research University*, edited by R. Geiger, C. Colbeck, R. Williams, and C. Anderson (Rotterdam: Sense Publishers, 2007), 71-90

“Science Measures as Accurate and Relevant Forms of Evidence”, with George Gamota, *Minerva* (2007) 45: 17-30

“Multiple Actors, Multiple Settings: Multiple Interpretations of Quality as a Criteria for Assessing Interdisciplinary Research” *Research Evaluation* (2006) 15: 5-15

“An Historical Perspective of Government-University Partnerships to Foster Entrepreneurship and Economic Development” in *Government-University Partnerships to Enhance Economic Development Through Entrepreneurship* in *Economic Development Through Entrepreneurship*, edited by Scott Shane, (Cheltenham, UK: Edward Elgar Publishers, 2005), 6-28

“Understanding and Assessing Bibliometrics as a Method for Measuring Interdisciplinarity”, *Measurement: Interdisciplinary Research & Perspective*, 3:20-23

“Virtuous and Vicious Cycles in State Government Funding of Research Universities”,

Economic Development Quarterly (2004), 18: 138-150

“Developing Science Indicators for Basic Science Offices within Mission Agencies” (with George Gamota and William Valdez), *Research Evaluation*, (2003) 12:71-79

“The Academic Policy Analyst as Reporter: The Who, What, and How of Evaluating Science and Technology Programs” (2003) in Philip Shapira and Stefan Kuhlmann (eds.), *Learning from Science and Technology Policy Evaluation*. (Cheltenham, UK: Edward Elgar): 18-31

“A Toolkit for Evaluating Public R&D Investment-Models, Methods, and Findings from ATP’s First Decade (with Rosalie Ruegg) (2003) NIST GCR 03-857

“Performance Measurement Redux.” *American Journal of Evaluation* 23 (2002): 435–452.

“New Organizations, Old Cultures: Strategy and Implementation of Interdisciplinary Research Programs.” *Research Evaluation*, 11: (2002) 109-116

“The Good, the Indifferent, and the Less than Attractive: II”, *Research Evaluation*, 11:(2002), 95-99

Feldman, Maryann, Irwin Feller, Janet Bercovitz, and Richard Burton (2002). “Equity and the Technology Transfer Strategies of American Research Universities.” *Management Science* 48(1): 105–121.

Feller, Irwin, Maryann Feldman, Janet Bercovitz, and Richard Burton (2002). “The State of Practice for University Technology Transfer Activities.” *Research Management Review* 12(2): 8–16.

Feller, Irwin (2001). “Elite and Distributed Science: An Analytical and Empirical Guide to Public Policy on the Distribution of Federal Academic R&D Funds.” Pp. 189–209 in Maryann Feldman and Albert Link (eds.), *Innovation Policy in the Knowledge-based Economy* (Boston, MA: Kluwer Academic Publishers).

Feldman, Maryann, Irwin Feller, Janet Bercovitz, and Richard Burton (2001). “Understanding Evolving University–Industry Relationships.” Pp. 171–188 in Maryann Feldman and Albert Link (eds.), *Innovation Policy in the Knowledge-based Economy* (Boston, MA: Kluwer Academic Publishers).

Feller, Irwin, Catherine P. Ailes, and J. David Roessner (2000). “Impacts of Research Universities on Technological Innovation in Industry: Evidence from Research Centers.” *Research Policy*, 31(2002) 457-474

Feller, Irwin (2000). “Strategic Options to Enhance the Research Competitiveness of EPSCoR Universities.” Pp. 341–363 in Albert H. Link, Stephen D. Nelson, Celia McEnaney, and Stephen

L. Lita (eds.), *AAAS Science and Technology Policy Yearbook*. Washington, DC: American Association for the Advancement of Science.

Bercovitz, Janet, Maryann Feldman, Irwin Feller, and Richard Burton (2000). "Organizational Structure as a Determinant of Academic Patent and Licensing Behavior: An Exploratory Study of Duke, Johns Hopkins, and Pennsylvania State Universities." *Journal of Technology Transfer* 26: 21–35.

Feller, Irwin (2000). "The Remainder of the Cost Sharing Policy Agenda." *Research Management Review* 11(1): 31–39.

Feller, Irwin (2000). "Social Contracts and the Impact of Matching Fund Requirements on American Research Universities." *Educational Evaluation and Policy Analysis* 22(1): 91–98.

Feller, Irwin (1999). "The American University System as a Performer of Basic and Applied Research and More." Pp. 65–101 in L. M. Branscomb, F. Kodama, and R. Florida (eds.), *Industrializing Knowledge: University–Industry Linkages in Japan and the United States* (Cambridge, MA: The MIT Press).

Feller, Irwin, and Jon P. Nelson (1999). "The Microeconomics of Manufacturing Modernization Programs." *Research Policy* 28(4): 807–818.

Roessner, J. David, Irwin Feller, Catherine P. Ailes, and Linda Parker (1998). "How Industry Benefits from NSF's Engineering Research Centers." *Research Technology Management* 41(5): 40–44.

Glasmeier, Amy K., Irwin Feller, Kurtis G. Fuellhart, and Melvin M. Mark (1998). "The Relevance of Firm Learning to the Design of Manufacturing Modernization Programs." *Economic Development Quarterly* 12: 107–127.

MacRae, Duncan, Jr., and Irwin Feller (1998). "The Structure of and Prospects for Policy Research as Suggested by Journal Citation Analysis." *Policy Studies Review* 15: 115–135.

Feller, Irwin (1997). "Federal and State Government Roles in Science and Technology Policy." *Economic Development Quarterly* 11(4): 283–295.

Mark, Melvin M., Irwin Feller, and Scott Button (1997). "Integrating Qualitative Methods in a Predominantly Quantitative Evaluation: A Case Study and Some Reflections." In J. Greene and V. Caracelli (eds.), *Advances in Mixed-Method Evaluation*. New Directions in Evaluation (San Francisco, CA: Jossey-Bass).

Feller, Irwin (1997). "Manufacturing Technology Centers as Components of Regional Technology Infrastructures." *Regional Science and Urban Economics* 27: 181–197.

Feller, Irwin (1996). "Technology Transfer from Universities." Pp. 1–42 in J. C. Smart (ed.), *Higher Education: Handbook of Theory and Research* (New York: Agathon Press).

Feller, Irwin (1996). "The Determinants of Research Competitiveness Among Universities: A Critical Review of the Issue and the Literature." Pp. 35–72 in Albert Teich (ed.), *Assessing Research Competitiveness* (Washington, DC: American Association for the Advancement of Science).

Feller, Irwin, and J. David Roessner (1995). "What Does Industry Expect from University Partnerships?" *Issues in Science and Technology* 12(1): 80–84.

Geiger, Roger, and Irwin Feller (1995). "The Dispersion of Academic Research in the 1980s." *Journal of Higher Education* 66(3): 336–360.

Feller, Irwin, and Gary Anderson (1994). "A Benefit-Cost Approach to the Evaluation of State Technology Development Programs." *Economic Development Quarterly* 8(2): 127–140.

Feller, Irwin (1993). "State Investments in Science and Innovation: Effectiveness for Innovation?" Pp. 129–148 in Stanley Johnson and Sheila Martin (eds.), *Industrial Policy for Agriculture in the Global Economy* (Ames, IA: Iowa State University Press).

Feller, Irwin (1993). "What Agricultural Extension Has to Offer as a Model for Manufacturing Modernization." *Journal of Policy Analysis and Management* 12(3): 574–581.

Feller, Irwin (1992). "American State Governments as Models for National Science Policy." *Journal of Policy Analysis and Management* 11(2): 288–309.

Feller, Irwin (1992). "The Impacts of State Technology Programs on American Research Universities." Pp. 64–88 in Roger Geiger and Thomas Whiston (eds.), *University and Research: The United Kingdom and the United States* (Buckingham, England: Open University Press).

Feller, Irwin (1992). "Recent Theoretical and Organizational Approaches to U.S. Technology Policy." Pp. 117–133 in W. Henry Lambright and Dianne Rahm (eds.), *Technology and Competitiveness* (New York: Greenwood Press).

Feller, Irwin (1990). "University Patent and Technology Licensing Strategies." *Educational Policy* 4: 327–340.

Feller, Irwin (1990). "Universities as Engines of R&D-based Economic Growth: They Think They Can." *Research Policy* 19(4): 335–348.

Feller, Irwin (1990). "University-Industry Research and Development Relationships." Pp. 313–343 in Jurgen Schmandt and Robert Wilson (eds.), *Growth Policy in the Age of High Technology: The Role of Regions and States* (New York: Unwin).

Feller, Irwin (1988). "Evaluating State Advanced Technology Programs." *Evaluation Review* 12(3): 232–252.

Feller, Irwin (1988). "Political and Administrative Aspects of State High Technology Programs." Pp. 105–117 in J. David Roessner (ed.), *Government Innovation Policy: Design, Implementation, Evaluation* (New York: Macmillan Press).

Feller, Irwin (1987). "Technology Transfer, Public Policy and the OMB-Cooperative Extension Imbroglia." *Journal of Policy Analysis and Management* 6: 1–21.

Feller, Irwin (1987). "Technology Transfer, Public Policy, and the Cooperative Extension Service." Pp. 175–210 in Vernon Ruttan and Carl Pray (eds.), *Policy for Agriculture Research* (Boulder, CO: Westview Press).

Feller, Irwin, Patrick Madden, Lynne Kaltreider, Dan Moore, and Laura Sims (1987). "The New Agricultural R&D Policy Agenda." *Research Policy* 16: 315–325.

Feller, Irwin (1986). *Universities and State Governments* (New York: Praeger Publishers).

Feller, Irwin, and Irene Johnston (1984). "The Innovation-Productivity Connection in the Public Sector." Pp. 171–189 in Marc Holzer and Stuart Nagel (eds.), *Productivity and Public Policy* (Beverly Hills, CA: Sage Publications).

Feller, Irwin (1984) "Reconsideration of the Agricultural Transfer Model", *Journal of Technology Transfer*, 8:47-56

Feller, Irwin, Gregory Elmes and James Meyer (1982) "Spatial Aspects of the Diffusion of Technological Innovations Among American Municipal Governments", *Socio-Economic Planning Studies*, 16: 225-238

Feller, Irwin (1982) "Innovation Processes: A Comparison in Public Schools and Other Public Sector Organizations", *Science Communication* 4(2) 271-291

Feller, Irwin (1980). "Managerial Response to Technological Innovations in Public Sector Organizations." *Management Science* 26: 1021–1030.

Feller, Irwin (1980). "Public Sector Innovation as 'Conspicuous Production'." *Policy Analysis* 6: 1–20.

Feller, Irwin (1979) "Three Coigns on Diffusion Research." *Science Communication* 1(2): 293–312.

Feller, Irwin (1978) "The Applicability of Economic Analysis to the Adoption of Innovations by Public Sector Organizations" in *The Diffusion of Innovations: An Assessment*, edited by Michael

Radnor, Irwin Feller and Everett Rogers (Evanston, IL: Northwestern University Center for the Interdisciplinary Study of Science and Technology), Chapter 5

Feller, Irwin, and Donald C. Menzel (1977). "Diffusion Milieus as a Focus of Research on Innovation in the Public Sector." *Policy Sciences* 8(March): 49–68.

Feller, Irwin (1975). "Invention, Innovation and the Location of Industry." Pp. 83–108 in Lyn Collins and David Walker (eds.), *Dynamics of Industrial Location* (London: John Wiley Publishers).

Feller, Irwin (1975) "Issues in the Design of Federal Programs to Improve the Policy Management Capabilities of State Legislatures", *Public Administration Review*, 35: 780-785

Feller, Irwin (1974) "The Diffusion and Location of Technological Change in the American Cotton Textile Industry, 1890-1970", *Technology and Culture*, 15: 569-593

Feller, Irwin (1972). "Production Isoquants and the Analysis of Technological Change." *Quarterly Journal of Economics* 86: 154–161.

Feller, Irwin (1971) "The Urban Location of United States Invention, 1860-1910", *Explorations in Economic History*, 8: 285-303

Feller, Irwin (1967) "Approaches to the Diffusion of Innovations", *Explorations in Entrepreneurial History*, 4: 232-244

Feller, Irwin (1966) "The Draper Loom in New England Textiles, 1894-1914: A Study of Diffusion of an Innovation", *Journal of Economic History*, 26: 320-347

#### OP-ED ARTICLES

"Research Subverted by Academic Greed", *The Chronicle Review*, January 16, 2004; B 6-7.

"It's about More than Money", (with Susan Cozzens), *Issues in Science and Technology*, (Summer, 2008), 24: 28-31

#### PRESENTATIONS

Numerous papers at U.S. and international professional meetings, invited seminars, and workshop and panel presentations.

#### NATIONAL ADVISORY BOARDS

National Science Foundation, Panel to Review the Science and Technology Policy Institute (Chair), 2007-2008



National Academies-National Research Council, Committee to Assess the Vitality of the Behavioral and Social Sciences with Respect to Aging (Chair) 2004--2007

National Science Foundation, Advisory Committee to the Assistant Director, Social, Behavioral, and Economic Sciences, 1999–2002, 2002–2004 (Chair)

National Academies–Institute of Medicine Committee for Assessment of Centers of Excellence Programs at NIH, 2002-2003

National Institute of Standards and Technology–Manufacturing Extension Partnership Program Advisory Board, 1997–2000, 2000–2001

National Research Council, Transportation Research Board, Research and Technology Coordinating Committee, 1997–2000, 2000–2003

National Academy of Sciences/National Research Council, Panel on International Benchmarking of U.S. Research Fields—Immunology, 1998

National Academy of Sciences-Manufacturing Studies Board

American Society for Mechanical Engineering, Department of Energy Peer Review Research Committee, 1999–2002

Committee on Science, Engineering and Public Policy, American Association for the Advancement of Science (1991–1993; 1993–1997; Chair, 1994–1996)

#### PROFESSIONAL ORGANIZATION POSITIONS

National Council for the Advancement of Research, Conference Committee (1991–1995)  
Association for Public Policy Analysis and Management, Chair, Institutional Representatives Caucus (1989–1990)

Association for Public Policy Analysis and Management, Policy Council 2005-2008

#### PROFESSIONAL SOCIETIES

Association for Public Policy Analysis and Management  
American Association for the Advancement of Science

#### CONSULTANTSHIPS

ABT Associates  
American Association for the Advancement of Science  
Carnegie Commission on Science, Technology, and Government  
Cleveland Foundation  
CONSAD Research Corporation  
COSMOS Corporation  
European Commission-DG Research

Ford Foundation  
Hilton Foundation  
Maine Science and Technology Foundation  
National Conference of State Legislatures  
National Governor's Association  
National Science Foundation  
Nexus, Inc.  
National Institute of Standards and Technology  
Organization for Economic Cooperation and Development  
President's Office of Science and Technology Policy  
RAND  
Science and Technology Management Associates  
SRI International  
TASC  
Technopolis  
U.S. Department of Education  
U.S. Department of Energy  
U.S. General Accounting Office  
University of California, President's Office  
University of Maryland System, Chancellor's Office