

Richard R. Nelson

Curriculum Vita,

May 2010

George Blumenthal Professor of International and Public  
Affairs, Business, and Law, Emeritus, Columbia University

Director, Program on Science Technology and Global  
Development, Columbia  
Earth Institute

B.A., Oberlin College - 1952  
University - 1956

Ph.D., Yale

Assistant Professor, Oberlin College - 1957

Economist, the RAND Corporation - 1957-1960, 1964-1968

Associate Professor, Carnegie Institute of Technology - 1960-1961

Staff Senior Member, Council of Economic Advisors - 1961-1963

Professor of Economics, Yale University - 1968-1986

Director, Institute for Social and Policy Studies, Yale University -  
1980-1986

Professor, Columbia University, 1986 - 2005,

Director, Program on Science, Technology and Global Development,  
Columbia Earth Institute, 2005 -

My research has been largely on the process of long run economic  
change, with particular emphasis on technological advance and on the  
evolution of economic institutions. My recent work has focused on the  
varied roles of government in modern mixed economies.

### Awards

Tinbergen Award

Leontief Award

Fellow, American Academy of Arts and Sciences

Honorary Lifetime President, The International Schumpeter Society

Veblen- Commons Award

Honda Prize

Honorary Degrees from University of Maastricht, University of Sussex,  
Universite Louis Pasteur, University of Aalborg

## Recent Publications and Papers

Intellectual Property Rights, Development, and Catch-up with Hiro Odagiri, Akira Goto, and Atsushi Sunami, Oxford Un. Press, 2010

“An Evolutionary Theory of Household Consumption Behavior”, with Davide Consoli, The Journal of Evolutionary Economics, 2010

“Why do Firms Differ and How Does it Matter: A Revisitation” Seoul Journal of Economics, 2008

“Three Rules for Technological Fixes”, with Daniel Sarewitz, Nature, 2008, pp 871-872

“Progress in Know-how: Its Origins and Limits”, with Daniel Sarewitz, Innovation, 2008, pp 101-117

“Factors Affecting the Power of Technological Paradigms”, Industrial and Corporate Change, 2008

“What Enables Rapid Economic Progress: What are the Needed Institutions?”, Research Policy, 2008, pp 1-11

“Economic Development from the Perspective of Evolutionary Theory”, Oxford Development Studies, 2008, pp 9-23

“Public Research Institutions and Economic Catch-up” (with Roberto Mazzoleni), Research Policy, 2007, pp 1512-1528

“Bounded Rationality, Cognitive Maps, and Trial and Error Learning”, Journal of Economic Organization and Behavior, 2007

“Improving the Performance of the Education Sector: The Valuable, Challenging, and Limited Role of Random Assignment Evaluations” (with Richard J. Murnane), Economics of Innovation and New Technology, 2007

“Institutions and Economic Growth: Sharpening the Research Agenda”, Journal of Economic Issues, 2007

“Reflections on “The Simple Economics of Basic Scientific Research: Looking Back and Looking Forward” Industrial and Corporate Change, 2006

“Universal Darwinism and Evolutionary Social Science”, Biology and Philosophy, 2006

Technology, Institutions, and Economic Growth, Harvard University Press, 2005

The Limits of Market Organization, Russell Sage, 2005

The Oxford Handbook of Innovation (edited jointly with Jan Fagerberg and David Mowery). Oxford Un. Press, Oxford, 2004

Ivory Tower and Industrial Innovation (with David Mowery, Bhaven Sampat, and Avids Ziedonis), Stanford Business Books, Stanford, 2004

"The Challenge of Building an Effective Innovation System for Catch-up", Oxford Development Studies. Sept. 2004

'The Market Economy and the Scientific Commons', Research Policy, 2003

"On the Uneven Evolution of Human Know-how", Research Policy, 2003

"Physical and Social Technologies and Their Evolution", Economie Appliquee, 2003

"On the Complexities and Limits of Market Organization", Review of International Political Economy, Nov. 2003

"Evolutionary Economic Theory" (with Sidney Winter), Journal of Economic Perspectives, 2003

"On the Nature and Evolution of Human Know-How" (with Katherine Nelson), Research Policy, 2002

"The Problem of Market Bias in Modern Capitalist Economies" Industrial and Corporate Change, 2002

Technology, Institutions, and Innovation Systems, Research Policy, Feb. 2002

How Do University Inventions Get Into Practice?, (with Jeannette Colyvas, Michael Crow, Annetine Gelijns, Roberto Mazzoleni, Nathan Rosenberg, and Bhaven Sampat)  
Management Science., Jan 2002

The Influence of Public Research on Industrial R and D, (with Wesley Cohen and John Walsh) Management Science, Jan. 2002

Why and How Innovations Get Adopted: A Tale of Four Models (with A Peterhansl, and B. Sampat), Industrial and Corporate Change, 2002

The Growth of Patenting and Licensing by U.S. Universities: An Assessment of the Effect of the Bayh-Dole Act of 1980," (with

David Mowery, Bhaven Sampat, and Arvids Ziedonis), Research Policy, 2001.

Making Sense of Institutions as a Factor Shaping Economic Performance,≡ (with Bhaven Sampat), Journal of Economic Behavior and Organization, 2001.

Observations on the Post Bayh-Dole Rise of Patenting at American Universities,≡ Journal of Technology Transfer, 2001.

The Nature and Dynamics of Organizational Capabilities, (jointly edited with Giovanni Dosi and Sidney Winter), Oxford University Press, 2000.

Technological Learning and Economic Development: The Experience of the Asian NIEs, (jointly edited with Linsu Kim), Cambridge University Press, 2000.

"The Asian Growth Miracle and Modern Growth Theory," (with Howard Pack), Economic Journal, July 1999.

The Sources of Industrial Leadership, (jointly edited with David Mowery), Cambridge University Press, 1999.

"History Friendly Models of Industry Evolution: The Computer Industry," (with Franco Malerba, Luigi Orsenigo, and Sidney Winter), Industrial and Corporate Change, 1999.

"Economic Theories about the Benefits and Costs of Patents," (with Roberto Mazzoleni), Research Policy, 1998.

"The Agenda for Growth Theory: A Different Point of View," The Cambridge Journal of Economics, 1998.

"Why Bush's Science: The Endless Frontier Has Been a Hindrance to the Development of an Effective Civilian Technology Policy," in Claude Barfield (ed.), Science for the 21st Century, ACI Press, Washington, 1997.

"Factors Behind Cross-Industry Differences in Technical Progress," (with Edward Wolff), Structural Change and Economic Dynamics, 1997.

"The Evolution of Comparative or Competitive Advantage: A Preliminary Report on a Study," Industrial and Corporate Change, 1996.

"The U.S. Corporation and Technical Advance," (with David Mowery), in Carl Kaysen (ed.), The American Corporation, MIT Press, 1996.

The Sources of Economic Growth, Harvard University Press, 1996.

"Recent Evolutionary Theorizing About Economic Change," Journal of Economic Literature, March 1995.

"On the Sources and Significance of Interindustry Differences in Technological Opportunities," (with Alvin Klevorick, Richard Levin, and Sidney Winter), Research Policy, Spring, 1995.

Technonationalism and Technoglobalism: Conflict and Cooperation, (with Sylvia Ostry), Brookings, 1995.

"American Technological Leadership," (with Gavin Wright), in Economic Convergence in Historical Perspective (with William Baumol and Edward Wolff), Oxford University Press, 1994.

"The Coevolution of Technology and Institutions," Industrial and Corporate Change, 1994.

"On Limiting or Encouraging Rivalry in Technical Progress," (with Robert Merges), Journal of Economic Behavior and Organization, 1994.

"American Universities and Technical Advance in Industry," (with Nathan Rosenberg), Research Policy, 1994.

"What is Modern Capitalism?," in H. Redner, ed., An Heretical Heir of the Enlightenment: Essays in Honor of C.E. Lindbloom, Westview Press, 1993.

National Innovation Systems: A Comparative Study, Oxford University Press, 1993.

"The Rise and Fall of American Technological Leadership" (with Gavin Wright), Journal of Economic Literature, Winter 1992.

"Recent Writings on Competitiveness: Boxing the Compass," California Management Review, Spring 1992.

"Why Do Firms Differ, and How Does it Matter?," Strategic Management Journal, Winter 1991.

"The Complex Economics of Patent Scope," (with Robert Merges), Columbia Law Review, September 1990.

Editor (with Michael Tushman), special edition of Administrative Sciences Quarterly on ATechnology, Organization, and Innovation,≡ March 1990.

"The U.S. Technological Lead: Where Did It Come From and Where Did It Go?," Research Policy, 1990.

"Capitalism as an Engine of Progress," Research Policy, 1990.

## BOOKS

Technology, Economic Growth, and Public Policy, (with Merton J. Peck, and Edward Kalachek), Brookings, Washington, 1967.

Structural Change in a Developing Economy: Colombia's Problems and Prospects, (with T. Paul Schultz and Robert Slighton), Princeton University Press, 1971.

The Moon and the Ghetto, Norton, N.Y., 1977.

An Evolutionary Theory of Economic Change, (with Sidney Winter), Harvard, Cambridge, 1982.

High Technology Policies: A Five Nation Comparison, AEI Press, Washington, 1984.

Technical Change and Economic Theory, (coedited with Giovanni Dosi, Christopher Freeman, Gerald Silverberg, and Luc Soete), Francis Pinter, London, 1988.

## WIDELY CITED EARLIER ARTICLES

A Theory of the Low Level Equilibrium Trap in Developing Countries,≡ American Economic Review, 1956.

The Simple Economics of Basic Scientific Research -- A Theoretical Analysis,≡ Journal of Political Economy, Vol. 67, June 1959.

Aggregate Production Functions, and Medium-Range Growth Projections,≡ American Economic Review, Vol. 54, September 1964.

Investments in Humans, Technological Diffusion, and Economic Growth,≡ (with Edmund S. Phelps), American Economic Review, December 1966.

A Diffusion Model of International Productivity Differences in Manufacturing Industry,≡ American Economic Review. December 1968.

Assessing Private Enterprise: Parsimony, Responsiveness, Innovativeness,≡ Bell Journal of Economics, Spring 1981.

Research on Productivity Growth and Differences,≡ Journal of Economic Literature, September 1981.

The Role of Knowledge in R & D Efficiency,≡ Quarterly Journal of Economics, August 1982.

Appropriating the Returns to Industrial Research and Development,≡ (with Richard Levin, Alvin Klevorick, and Sidney Winter), Brookings Essays in Economic Activity, 1987.