William B. Bonvillian is the director of the Massachusetts Institute of Technology's (MIT) Washington, D.C., office. Prior to that position, he served for seventeen years as a senior policy advisor in the U.S. Senate. His legislative efforts included science and technology policies and innovation issues. He worked extensively on legislation creating the Department of Homeland Security, on intelligence reform, on defense and life science research and development (R&D), and on national competitiveness and innovation legislation. His book, with Distinguished Professor Charles Weiss of Georgetown University, entitled Structuring an Energy Technology Revolution, was published in 2009. His chapter "The Connected Science Model for Innovation—The DARPA Role" appears in the book 21st Century Innovation Systems for the U.S. and Japan (2009). He teaches on the adjunct faculty at Georgetown and Johns Hopkins–SAIS.

Michael Darby currently serves as the Warren C. Cordner Distinguished Professor of Money and Financial Markets at the University of California, Los Angeles, Anderson School of Management and in the Departments of Economics and Public Policy at UCLA, and also serves as director of the John M. Olin Center for Policy at UCLA, Anderson. Concurrently, he holds appointments as chairman of the Dumbarton Group, research associate with the National Bureau of Economic Research, and adjunct scholar with the American Enterprise Institute. Darby served in a number of senior positions during the Reagan and Bush administrations, including Assistant Secretary of the Treasury for Economic Policy, Member of the National Commission on Superconductivity, Under Secretary of Commerce for Economic Affairs, and Administrator of the Economics and Statistics Administration. During his appointment, he received the Treasury's highest honor, the Alexander Hamilton Award.

**Kaye Husbands Fealing** is a professor at the Hubert H. Humphrey School of Public Affairs, University of Minnesota, where she received the distinction of

"Teacher of the Year" for academic years 2008-9 and 2009-10. Prior to coming to the Humphrey, she was the William Brough Professor of Economics at Williams College, where she began her teaching career in 1989. Dr. Husbands Fealing developed the National Science Foundation's Science of Science and Innovation Policy Program in 2006 and cochaired the Science of Science Policy Interagency Task Group from June 2006 through January 2008. She also served as a program director in NSF's Economics Program. Dr. Husbands Fealing was a visiting scholar at Massachusetts Institute of Technology's Center for Technology Policy and Industrial Development, where she conducted research on NAFTA's impact on the Mexican and Canadian automotive industries, and research on strategic alliances between aircraft contractors and their subcontractors. Dr. Husbands Fealing also participates on several panels and boards at the National Science Foundation, including the Advisory Committee for Social, Behavioral and Economic Sciences and the AAAS Committee on Science, Engineering and Public Policy. Dr. Husbands Fealing is the Midwest representative for the American Economic Association's Committee on the Status of Women in the Economics Profession. Dr. Husbands Fealing received her BA in mathematics and economics from the University of Pennsylvania and her PhD in economics from Harvard University.

Irwin Feller is professor emeritus of economics at Pennsylvania State University, where he has been on the faculty since 1963. Dr. Feller's current research interests include the economics of academic research, the university's role in technology-based economic development, and the evaluation of federal and state technology programs. He is the author of Universities and State Governments: A Study in Policy Analysis (1986) and of over one hundred refereed journal articles, final research reports, and book chapters, as well as of numerous papers presented to academic, professional, and policy audiences.

Richard B. Freeman holds the Herbert Ascherman Chair in Economics at Harvard University. He is currently serving as faculty director of the Labor and Worklife Program at Harvard Law School. He directs the National Bureau of Economic Research/Sloan Science Engineering Workforce Projects and is senior research fellow in Labor Markets at the London School of Economics' Center for Economic Performance. He received in 2006 the Mincer Lifetime Achievement Prize from the Society of Labor Economics. The following year he was awarded the Institut zur Zukunft der Arbeit (IZA) Prize in Labor Economics. His recent publications include the following: What Workers Want (2007, 2d ed.), Can Labor Standards Improve Under Globalization? (2004), Emerging Labor Market Institutions for the 21st Century (2005), America Works: The Exceptional

Labor Market (2007), and What Workers Say: Employee Voice in the Anglo American World (2007). His IZA Prize book is entitled Making Europe Work: IZA Labor Economics Series (2009). Coedited books include Reforming the Welfare State: Recovery and Beyond in Sweden (2009); Shared Capitalism: The Economic Issues (2009); International Comparison of the Structure of Wages (2009), and Science and Engineering Careers in the United States (2009).

Fred Gault is a professorial fellow at the United Nations University-Maastricht Economic and Social Research and Training Centre on Innovation and Technology (UNU-MERIT). He is also a professor at the Tshwane University of Technology (TUT) in South Africa and a member of the TUT Institute for Economic Research on Innovation. Prior to joining UNU-MERIT, he was a visiting fellow at the Canadian International Development Research Centre (IDRC), where his principal objective was making innovation part of the development agenda. In addition, he was a member of the management team responsible for the Innovation Strategy of the Organization for Economic Cooperation and Development (OECD), delivered in May 2010. Until April 2008, he was the director of the Science, Innovation, and Electronic Information Division at Statistics Canada and was responsible for the development of statistics on all aspects of research, development, invention, innovation, and the diffusion of technologies, as well as on related human resources. He also was responsible for the development of statistics on telecommunications and broadcasting, Internet use, and electronic commerce.

John S. Gero is a research professor at the Krasnow Institute for Advanced Study and at the Volgenau School of Information Technology and Engineering, George Mason University. Formerly he was professor of Design Science and codirector of the Key Center of Design Computing and Cognition at the University of Sydney. He is the author/editor of forty-eight books and over six hundred papers and book chapters in the fields of design science, design computing, artificial intelligence, computer-aided design, design cognition, and cognitive science. He has been a visiting professor of architecture, civil engineering, cognitive science, computer science, design and computation, and mechanical engineering at MIT, University of California (UC), Berkeley, UCLA, Columbia, and Carnegie Mellon University (CMU) in the United States, at Strathclyde and Loughborough in the United Kingdom, at Institut National des Sciences Appliquées de Lyon (INSA) and Provence in France, and at École Polytechnique Fédérale de Lausanne (EPFL) in Switzerland. His former doctoral students are professors in the United States, United Kingdom, Australia, India, Japan, Korea, Singapore, and Taiwan.

**David Goldston** has been the director of government affairs for the Natural Resources Defense Council since July 2009. He worked on science policy and environmental policy in the U.S. House of Representatives for more than twenty years. From 2001 through 2006, he served as chief of staff of the House Committee on Science, which oversees most of the federal civilian research and development enterprise. After leaving Capitol Hill, he was a visiting professor at Princeton and Harvard and wrote a monthly column on science policy for *Nature*.

Adam B. Jaffe, the Fred C. Hecht Professor in Economics, has served since 2003 as dean of the College of Arts and Sciences at Brandeis University. He also has held the position of chair of the Economics Department and chair of the Intellectual Property Policy Committee at Brandeis University. Prior to joining the university in 1993, Jaffe was an assistant and associate professor at Harvard University and a senior staff economist for the President's Council of Economic Advisers. Jaffe's research focuses on the economics of innovation. His highly acclaimed book Innovation and Its Discontents: How Our Broken Patent System Is Endangering Innovation and Progress, and What to Do About It, coauthored with Josh Lerner of Harvard Business School, was released in paperback in 2006.

Kei Koizumi is assistant director for federal research and development at the White House Office of Science and Technology Policy (OSTP). Before joining the OSTP, Koizumi served as the longtime director of the R&D Budget and Policy Program at the American Association for the Advancement of Science (AAAS). Koizumi received his master's degree from the Center for International Science, Technology, and Public Policy program at George Washington University and his bachelor's degree in political science and economics from Boston University. He is a fellow of the American Association for the Advancement of Science.

Julia I. Lane is the program director of the Science of Science and Innovation Policy program at the National Science Foundation, former senior vice president and Director, Economics Department at NORC/University of Chicago, Director of the Employment Dynamics Program at the Urban Institute, senior research fellow at the U.S. Census Bureau and assistant, associate and full professor at American University. She is an American Statistical Association Fellow. She has been the recipient of over \$20 million in grants; from foundations such as the National Science Foundation, the Sloan Foundation, the MacArthur Foundation, the Russell Sage Foundation, the Spencer Founda-

tion, the National Institute of Health; from government agencies such as the Departments of Commerce, Labor, and Health and Human Services in the United States, the ESRC in the United Kingdom, and the Department of Labour and Statistics in New Zealand, as well as from international organizations such as the World Bank. She is one of the founders of the Longitudinal Employer-Household Dynamics (LEHD) program at the U.S. Census Bureau, which is the first large scale linked employer-employee dataset in the United States.

Robert E. Litan is the vice president for research and policy at the Ewing Marion Kauffman Foundation in Kansas City, where he oversees the foundation's extensive program for funding data collection and research relating to entrepreneurship and economic growth. Dr. Litan also writes frequently with the foundation's president, Carl Schramm. Their book, Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity, coauthored with William Baumol (2007), has been translated into ten languages and is used as a college text around the world. Dr. Litan is also a senior fellow in economic studies at the Brookings Institution, where he previously was vice president and director of economic studies.

John H. Marburger III is the vice president for Research at Stony Brook University. He served as the Science Advisor to President George W. Bush and director of the Office of Science and Technology Policy from 2001–8, and was previously director of Brookhaven National Laboratory from 1998, and president of the State University of New York at Stony Brook (1980–94). From 1967 he was consecutively professor of Physics and Electrical engineering, Physics Department chairman, and dean of the College of Letters, Arts and Sciences at the University of Southern California where he performed research in non-linear and quantum optics and cofounded the USC Center for Laser Studies.

Susan Albers Mohrman is a senior research scientist at the Center for Effective Organizations at the University of Southern California. She researches organization design and effectiveness issues, knowledge and technology management, and useful research methodologies. She is the coauthor and/or editor of Large-Scale Organizational Change (1995); Self-Designing Organizations (1989); Designing Team-Based Organizations (1995); Organizing for High-Performance (2002); Handbook of Collaborative Management Research (2007); and Useful Research: Advancing Theory and Practice (in press).

**M. Granger Morgan** is the Lord Chair Professor in Engineering, professor and department head of Engineering and Public Policy, and professor of

Electrical and Computer Engineering at Heinz College. His research interests are focused on policy problems in which technical and scientific issues play a central role. Methodological interests include problems in the integrated analysis of large complex systems, problems in the characterization and treatment of uncertainty, problems in the improvement of regulation, and selected issues in risk analysis and risk communication. More recent works include his multiauthored book with Baruch Fischhoff, Ann Bostrom, and Cynthia Atman entitled *Risk Communication: A Mental Models Approach* (2002) and an edited book with Jon Peha, entitled *Science and Technology Advice to the Congress* (2003).

Jason Owen-Smith has held faculty appointments since 2002 in the Department of Sociology and the Organizational Studies Program at the University of Michigan. He is the recipient of a National Science Foundation Faculty Early Career Development (CAREER) award and an Alfred P. Sloan Foundation Industries Studies fellowship in biotechnology. He received in 2008 the University of Michigan's Henry Russel Award, which recognizes mid-career faculty for their exceptional scholarship and conspicuous teaching ability. He received his MA and PhD degrees in sociology at the University of Arizona and his BA in sociology and philosophy from the New College of Florida.

Janez Potočnik is the European Commissioner for the Environment. Prior to that, he was the European Commissioner for Science and Research and "shadow Commissioner" for the European Union enlargement. He was formerly Slovenia's Minister for European Affairs, head of the negotiating team for the accession of Slovenia to the European Union, and minister councillor at the office of the Prime Minister of Slovenia. He served as assistant director (1984–87) and director (1993–2001) at the Institute of Macroeconomic Analysis and Development in Ljubljana and obtained his PhD in economics at the University of Ljubljana. He was awarded the honorary degree of Doctor of Science by London Imperial College in 2008 and from Ghent University (Belgium) in 2009.

Walter W. Powell is professor of education and (by courtesy) sociology, organizational behavior, management science and engineering, and communication at Stanford University. He is also an external faculty member at the Santa Fe Institute and codirector of the Stanford Center on Philanthropy and Civil Society. He joined the Stanford faculty in July 1999, after previously teaching at the University of Arizona, MIT, and Yale. Professor Powell works in the areas of organization theory and economic sociology. He is the coauthor of Books:

The Culture and Commerce of Publishing (1982), an analysis of the transformation of book publishing from a family-run, craft-based field into a multinational media industry, and the author of Getting Into Print (1985), an ethnographic study of decision-making processes in scholarly publishing houses. He edited The Nonprofit Sector (1987, referred to by reviewers as "the Bible of scholarship on the nonprofit sector"). The second edition of this book, coedited with Richard Steinberg, was published in 2006. Powell is also coeditor with Elisabeth Clemens of Private Action and the Public Good (1998).

**E. J. Reedy** is a manager in research and policy at the Ewing Marion Kauffman Foundation, where he also oversees grants and conducts academic and policy research in the field of entrepreneurship. He has been significantly involved in the coordination of the foundation's entrepreneurship and innovation data-related initiatives, including the Kauffman Firm Survey and the foundation's multiyear series of symposiums on data, as well as in many Webrelated projects and initiatives.

Harvey M. Sapolsky is professor of public policy and organization, emeritus, at MIT and the former director of the MIT Security Studies Program. He has written extensively on science, health, and defense policy. His recent work includes US Defense Policy: The Origins of Security Policy (2008), written with E. Gholz and C. Talmadge and US Military Innovation Since the Cold War: Creation Without Destruction (2009), edited with B. Friedman and B. R. Green.

**Daniel Sarewitz** is codirector of the Consortium for Science, Policy and Outcomes, and professor of science and society in the School of Life Sciences and School of Sustainability at Arizona State University. Sarewitz's published work includes Frontiers of Illusion: Science, Technology, and the Politics of Progress (1996), Prediction: Science, Decision Making, and the Future of Nature (2000), and Living with the Genie: Essays on Technology and the Quest for Human Mastery (2003). He is a regular columnist for Nature magazine.

**Stephanie S. Shipp** is a senior research analyst for economics, energy, and environment, at the IDA Science and Technology Policy Institute. Her primary focus is on evaluation of federal science and technology funding. She also conducts research on high risk, high reward programs at NIH and other government programs. She is currently conducting a study on the commercialization landscape of federal labs. From 2000 to 2007, Dr. Shipp was the director of the Economic Assessment Office in the Advanced Technology Program at the National Institute of Standards and Technology. In that position she directed economic research and program evaluation that examined individual project and overall

program performance. She was one of the founders of the NORC Data Enclave, which permits researchers to remotely access microdata in a secure way and also allows replication of results by other researchers. Prior to that, Dr. Shipp was the assistant division chief in the Housing and Household Economic Statistics Division at the Census Bureau, Chief of Information and Analysis of the Consumer Expenditure Survey, Bureau of Labor Statistics, and an economist at the Federal Reserve Board. She is a fellow of the American Statistical Association (ASA) and the recipient of the ASA Pat Doyle Award. She is a member of the International Advisory Board of Vinnova, the Swedish Innovation Agency.

Laurel Smith-Doerr is an associate professor of sociology at Boston University. Her research has examined the tensions in the institutionalization of science, including an examination of networks in the biotechnology industry, commercialization in the university, contributions of immigrant entrepreneurs, gendered organizations, and scientists' responses to ethics education requirements. Her book Women's Work: Gender Equality vs. Hierarchy in the Life Sciences (2004) explains how network forms of organization are more conducive to gender equity than are more rule-bound hierarchical settings.

Mark Zachary Taylor is an assistant professor at the Sam Nunn School of International Affairs at the Georgia Institute of Technology. He was a solid-state physicist who now specializes in international relations, political economy, and comparative politics. His research seeks to explain why some countries are better than others at science, technology, and innovation. His research has been published in the journals Foreign Affairs, International Organization, Harvard International Review, Journal of Health Politics, Policy and Law, Journal of Political Science Education, and Review of Policy Research.

**Michael S. Teitelbaum** is program director at the Sloan Foundation and was a demographer educated at Reed College and at Oxford University, where he was a Rhodes Scholar. Over the course of his career, Dr. Teitelbaum has served in numerous high-profile academic and public policy positions. More recent coauthored books include *Political Demography, Demographic Engineering* (2001) and A Question of Numbers: High Migration, Low Fertility, and the Politics of National Identity (1998).

**Jim Thomas** was the founding director of the Department of Homeland Security's National Visualization and Analytics Center and a laboratory fellow at Pacific Northwest National Laboratory. With a career spanning thirty years of contributions in information technology, Thomas specialized in the re-

search, design, and implementation of innovative information and scientific visualization, multimedia, and human computer interaction technology. Thomas was internationally recognized for his contributions to the field of information visualization. He received several international science awards and was honored for transferring research technology to industry. Thomas sat on several national and international science and technology boards for universities, states, and industry. He was a member of the Association for Computing Machinery and Institute of Electrical and Electronics Engineers.

Lynne Zucker is a professor in the Department of Sociology at the University of California, Los Angeles. Her current major interests are on processes and the impact of knowledge transmission from basic science to commercial use, especially the impact on the economic performance of firms, the creation of new organizational populations (some of which become new industries), and productivity growth.