

# **Improving Federal Science Funding Outcomes: Process Experimentation and Evaluation. A Workshop**

## **Committee**

### **Paula E. Stephan**

#### **Chair**

Paula E. Stephan is Professor Emerita of Economics at the Georgia State University Andrew Young School for Policy Studies, a research associate at the National Bureau of Economic Research and a member of the National Academies Board on Science, Technology, and Economic Policy. Her research focuses on the economics of science and the careers of scientists and engineers. She holds a bachelor's degree in economics from Grinnell College (Phi Beta Kappa) and a Ph.D. in economics from the University of Michigan.

### **Pierre Azoulay**

#### **Member**

Pierre Azoulay is International Programs Professor of Management and Professor of Technological Innovation, Entrepreneurship, and Strategic Management at the Massachusetts Institute of Technology Sloan School of Management. His current research focuses on empirical studies of the supply of biomedical innovators, particularly at the interface of academia and the biopharmaceutical industry. He also is interested in the topic of academic entrepreneurship, having recently concluded a major study of the antecedents and consequences of academic patenting. He holds a Diplôme d'Études Supérieures de Gestion from the Institut National des Télécommunications, an M.A. from Michigan State University, and a Ph.D. in management from the Massachusetts Institute of Technology. Dr. Azoulay was a member of the National Academies planning committee on The Returns of Federal Investments in the Innovation System: A Workshop (2017-2018) and Committee on the Study on the Evaluation of ARPA-e Mission and Goals (2015-2017).

## **Chiara Franzoni**

### **Member**

Chiara Franzoni is a Professor in the School of Management at Polytechnic University of Milan, Italy. Her research focuses on economics of science, innovation, Intellectual Property rights and the funding of science and technology. In the area of economics of science, she has investigated the responses of scientists to different types of incentives on career events and has conducted a large cross-country study on the international mobility of researchers. In the area of economics of innovation, she has studied academic entrepreneurship and the crowdfunding of science and technology. Dr. Franzoni is now studying Grant Peer Review and the way in which experts take decisions in conditions of uncertainty, such as choosing which research projects to fund. She is particularly interested in the judgment of high-risk high-reward research. Her current work is sponsored by the Alfred P. Sloan Foundation and the Novo Nordisk Foundation. Her research has been published in *Science*, the *Proceedings of the National Academy of Sciences*, *Nature Biotechnology*, *Entrepreneurship Theory and Practice*, the *Journal of Management Studies*, *Research Policy* and elsewhere.

## **Kaye G. Husbands Fealing**

### **Member**

Kaye Husbands Fealing is Dean of the Ivan Allen College of Liberal Arts at the Georgia Institute of Technology. She specializes in science of science and innovation policy, the public value of research expenditures, and the underrepresentation of women and minorities in STEM fields and workforce. She developed and was the inaugural program director for the National Science Foundation's Science of Science and Innovation Policy program and co-chaired the Science of Science Policy Interagency Task Group, chartered by the Social, Behavioral and Economic Sciences Subcommittee of the National Science and Technology Policy Council. She holds a B.A. in mathematics and economics from the University of Pennsylvania and a Ph.D. in economics from Harvard University. Dr. Husbands Fealing is an elected member of the American Academy of Arts and Sciences, an elected fellow of the National Academy of Public Administration, and an elected fellow of the American Association for the Advancement of Science. She was a member of the National Academies Committees on the Review of the Small Business Innovation Research and Small Business Technology Transfer Programs at the Department of Energy (2017-2019), on Reengineering the Census Bureau's Annual Economic Surveys (2015-2017), and on Developing Indicators for Undergraduate STEM Education (2015-2017).

## **Adam B. Jaffe**

### **Member**

Adam Jaffe is Professor Emeritus of Economics at Brandeis University and chair of the National Academies Board on Science, Technology, and Economic Policy. His expertise is in industrial organization; technological change and innovation; the economics of science; and environmental economics. He was previously Co-Chair of The OECD Global Science Forum Experts' Group on "Effective Operation of Competitive Research Funding Systems". He holds an S.B. in chemistry and S.M. in technology and policy from the Massachusetts Institute of Technology and a Ph.D. in economics from Harvard University.

## **Karim R. Lakhani**

### **Member**

Karim R. Lakhani is the Dorothy and Michael Hintze Professor of Business Administration at Harvard Business School and Co-founder and Chair of the Digital, Data and Design Institute at Harvard University. He specializes in technology management, innovation, digital transformation, and artificial intelligence. He is known for his original scholarship on open-source communities, innovation contests and scientific collaboration and has pioneered the use of field experiments to help solve innovation-related challenges. He holds a bachelor's degree in electrical engineering and management from McMaster University and an S.M. degree in technology and policy and Ph.D. in management from the Massachusetts Institute of Technology. Dr. Lakhani is chair of the National Academies Committee on the Role of Inducement Prizes.

## **Danielle Li**

### **Member**

Danielle Li is the Class of 1922 Career Development Professor and Associate Professor of Technological Innovation, Entrepreneurship, and Strategic Management at the Massachusetts Institute of Technology Sloan School of Management. Her research interests are in economics of innovation and labor economics, with a focus on how organizations evaluate ideas, projects, and people. Dr. Li holds an A.B. in mathematics and the history of science from Harvard College and a Ph.D. in economics from the Massachusetts Institute of Technology.

## **Heidi Williams**

### **Member**

Heidi Williams is the Charles R. Schwab Professor of Economics at Stanford University. Her teaching and research focus on how society can best support science and innovation, and how we can best ensure that science and innovation generate broad benefits to society. She is the Director of Science Policy at the Institute for Progress, as well as Co-Chair (with Paul Niehaus) of J-PAL's Science for Progress Initiative. She is the Editor of the Journal of Economic Perspectives, and is a Research Associate at the National Bureau of Economic Research (NBER) where she is co-director (with Amy Finkelstein) of the Health Care program as well as co-director (with Ben Jones) of the Innovation Policy working group. Dr. Williams received her AB in mathematics from Dartmouth College in 2003, her MSc in development economics from Oxford University in 2004, and her PhD in economics from Harvard University in 2010.

## **Gail Cohen**

### **Staff Officer**