The National Academies of SCIENCES • ENGINEERING • MEDICINE Innovation Policy Forum

"The Returns to Federal Investments in the Innovation System"

AGENDA

December 15, 2016

The Lecture Room National Academy of Sciences 2101 Constitution Avenue, NW Washington, DC

9:00 AM Welcome

David Hart, George Mason University, Innovation Policy Forum co-chair

9:10 AM <u>Introduction</u>:

Benjamin Jones, Northwestern University, planning committee chair

9:30 AM Panel I: What are the returns to federal funding of basic research?

The social returns to R&D are typically estimated to be very high, and yet there are difficult conceptual and empirical challenges in making accurate estimates, especially with regard to basic research. This panel will discuss (1) the theoretical frameworks and empirical evidence that bear on assessing the returns to federally-funded basic research; (2) data limitations; and (3) potentially fruitful directions for further research.

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Pierre Azoulay, MIT Benjamin Jones, Northwestern University Samuel Kortum, Yale University Robert Topel, University of Chicago

11:00 AM Coffee Break

11:15 AM Panel II: What are the social returns to direct private-sector innovation support?

Federal policy and institutions support private-sector innovation in numerous ways, including R&D tax credits, procurement and prize mechanisms, SBIR programs, and public-private venture funds, as well as the patent system. This panel will discuss the existing frameworks and empirical evidence used to evaluate the success of these programs and consider new opportunities to better assess the social returns of these programs.

Sabrina Howell, New York University Bhaven Sampat, Columbia University Timothy Simcoe, Boston University Heidi Williams, MIT

12:45 PM Break

1:00 PM Lunch Keynote Address Understanding and Communicating the Value of Federal Support for Innovation Jason Furman, Council of Economic Advisers

2:00 PM Panel III: What are the social returns to public investment in human capital and infrastructure?

People, both in their creativity and capacity to implement new ideas, are an essential input across the innovation landscape. Public infrastructure investments, meanwhile, may also play essential roles by enhancing market integration and access to general purpose technologies, like information technology. This panel will assess frameworks and empirical evidence regarding the role public investment in education and infrastructure play in underpinning the innovation system, while further considering open questions and opportunities to better understand the social returns of these investments.

Lee Branstetter, Carnegie Mellon University Richard Freeman, Harvard University Shane Greenstein, Harvard University Paula Stephan, Georgia State University (via WebEx)

3:30 PM Coffee Break

3:45 PM Panel IV: Social Returns to Innovation in Light of Inequality

The social returns to innovation are typically considered for a representative consumer, but the rise in inequality in the last decades in the United States raises questions about the distribution of gains from the fruits of innovation. This panel will consider theoretical frameworks and empirical evidence that link the innovation process to the distribution of income, assess how the social returns to innovation may be viewed in light of any such linkages, and consider open questions and directions for future work.

Philippe Aghion, Harvard University and College de France (via WebEx) Xavier Jaravel, Stanford University Neviana Petkova, U.S. Department of Treasury

5:15 PM Adjourn