The Changing Frontier: Rethinking Science and Innovation Policy

With the 1945 publication of *Science: The Endless Frontier*, Vannevar Bush established an intellectual architecture that helped define a set of public science institutions that were dramatically different from what came before yet largely remain in place today. Now, at the start of the 21st century, many aspects of the science and innovation system – from its organization and scale to the role of geography, networks, and legal institutions – have witnessed important changes, with potentially substantial implications for the design of science policy and institutions both today and in the decades ahead.

With funding from the National Bureau of Economic Research and the Erwin Marion Kauffman Foundation, the conference and subsequent volume will explore two overarching questions: (1) what are the critical dimensions of change in science and innovation systems, and (2) what are the implications of these changes for policies and institutions in the 21st Century?

Topics of interest include, but are not limited to:

* The influence of increasing market scale and globalization on the demand for and supply of innovations;
* Innovation in financing, such as venture capital, and the role of entrepreneurship in driving innovation;
* Changes in the knowledge production function, including the human and physical capital intensity of R&D, changes in the salient features of the scientific workforce, and the implications of new research tools;
* Shifts in the geography of R&D, including regional and international dimensions, the implications of shifting geography for where the returns to R&D are captured, and analysis of the evolving forces that shape agglomeration and collaboration tendencies;
* Changes in intellectual property regimes and their use, with particular reference to its impact on licensing and alliances;
* Changes in public views of science;
* How information technology and digitization are impacting the production and diffusion of knowledge;
* The evolving roles of different research institutions (including government agencies, universities, and the private sector) in regional, national or global innovation systems, including changes in the relative scale of these types of institutions, the organizational forms these institutions take, the incentive mechanisms these institutions provide, and the ways these institutions interact;
* Unique features of “new” innovative sectors (e.g., biotech, clean energy, nanotech, and mobile broadband) and any implications for innovation policy; and
* Interactions among the above.

This list of topics is intentionally broad and open-ended, and is meant to simply highlight some of the many possible areas witnessing substantive changes in the science and innovation process that may also raise important questions for policy and institutional design.

Interested authors are encouraged to submit a 2-page research proposal that includes an abstract of the intended paper, an outline of the methodologies to be used, and a brief statement about the current state of the research project. The research proposals are to be submitted by **April 15, 2012,** to confer@nber.org or by mail to Rob Shannon, National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Accepted papers will ultimately be published together in an edited volume.

Authors will be notified of acceptance by May 6, 2012. A pre-conference is scheduled to be held on October X-X, 2012, and the formal conference will be scheduled for summer 2013. Authors of accepted papers will be reimbursed for regular transportation expenses for both the pre-conference and conference, and receive an honorarium of $7500 for timely submission of the draft and final manuscripts.

**Conference Organizers**

Adam Jaffe, Brandeis University and NBER

Ben Jones, Northwestern University and NBER