



Role of Coordinating Mechanisms in Earth System Science

Virtual Roundtable Discussion

Friday, May 14, 2021, 11:00am - 1:00pm ET

Public Agenda

The National Academies of Sciences, Engineering, and Medicine committee on “[*Advancing a Systems Approach to Studying the Earth: A Strategy for the National Science Foundation*](#)” has been tasked to develop a compelling vision for a systems approach to studying the Earth in order to inform approaches to integrated research at NSF and to provide guidance as to how NSF can support the research community. The final report will also identify the facilities, infrastructure, coordinating mechanisms, computing, and workforce development needed to support a more integrated approach for studying components of the earth system. This roundtable discussion will help inform committee members about existing coordinating mechanisms relevant to Earth system science; identify potential synergistic opportunities within current facilities, infrastructure, and coordinating mechanisms; and discuss ways to leverage these efforts for Earth System Science.

**Friday, May 14, 2021
11:00am - 1:00pm ET**

11:00 AM Welcome and Purpose of Roundtable

Ruth DeFries, Columbia University, Committee Co-Chair

11:10 AM Remarks from Panelists

*11:10 am: **Diane McKnight**, University of Colorado Boulder, Chair of the LTER Science Council*

*11:20 am: **Matthew Kane**, NSF Program Director for the Center for Advancement and Synthesis of Open Environmental Data and Sciences*

*11:30 am: **John Towns**, University of Illinois at Urbana-Champaign, PI of XSEDE as well as **Miron Livny**, University of Wisconsin-Madison; **Frank Wuerthwein**, UC San Diego; **Henry Neeman**, University of Oklahoma*

11:45 AM Open Discussion and Q&A with Committee Members

Advancing a Systems Approach to Studying the Earth: A Strategy for the National Science Foundation

Potential discussion topics include:

- The extent to which these programs are equipped to handle human dimensions of Earth system science (human and managed systems and decision making), using anecdotes and specific experiences/examples
- The workforce needed to carry out integrated work across the natural, social, and engineering sciences
- The sub-disciplines that are currently served through these programs and efforts underway to make them useable by a wider range of disciplines (e.g., how is your program reaching out to new communities, beyond traditional user communities?)
- Extent to which computing resources are sufficient and accessible to the program. What happens when existing computing programs are retired?
- Plans for harnessing existing, planned, and future NSF-supported cyberinfrastructure for Earth System Science
- The accessibility and usability of program data to the broad scientific community
- The extent to which the program relies on agency partnerships for infrastructure (and, conversely, the extent to which agencies beyond NSF rely on these programs)

12:50 PM Wrap-up

Ruth DeFries, Columbia University, Committee Co-Chair

1:00 PM Adjourn