

ACCI UPDATE TO MPSAC

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ANTICIPATED TOPICS FOR UPCOMING ACCI MEETING

- NAS Final Report Readout expected: Future Directions for NSF Advanced Computing Infrastructure to Support U.S. Science in 2017-2020
- National Strategic Computing Initiative (NSCI) Plan
 - Executive Order Signed July, 2015
 - NSF co-lead with DOE and DOD
 - Initial Multi-agency Plan approved in March, 2016
- Cyberinfrastructure for the 21st Century (CIF21) NSF-wide priority initiative sunsets after 2017
 - CIF21 Data activities basis for future data infrastructure planning and beginning to transition to new activity in 2017
 - CIF21 Software activities are targeted to NSCI and are beginning to transition in FY2017 given the critical role of scientific software in NSCI

ACCI DEVELOPMENTS

- Two working groups have been established and one newly formed:
 - Data and Code Access and Reproducibility
 - Software Scale and Scope
 - Learning and Workforce Development (Henry Neeman as chair)
- Working groups will use the meeting to make significant strides on their individual topics.
- **Would any MPSAC members be interested in WG participation?**

DATA AND CODE ACCESS AND REPRODUCIBILITY

CHAIR: HELEN BERMAN

CHARTER:

New policies and the changing research landscape, including the increasing role of computational and data science in research and education, have driven issues of data and code preservation and sharing to the fore. This Working Group will consider how research and development activities in the computational and data sciences can be augmented in light of these changes, **including attention to such issues as reproducible research, re-use of data and codes, the need for data repositories or sharing platforms, standards for shared code and shared data, citation and incentive mechanisms**, for example, new questions are being raised regarding the research process, including the development of software, the capture and sharing of workflows and data, appropriate statistical considerations, and ensuring reproducibility in the computational and data science software stack.

CURRENT CHARGE:

The committee shall recommend a framework for Data Management Plans that is consistent with the NSF Public Access Plan

SOFTWARE SCALE AND SCOPE

CO-CHAIRS: MICHAEL HILDRETH, DAVID BADER

CHARTER:

The Software Scale and Scope Working Group will articulate a strategy for the development of a sustainable and integrated scientific software, data, and HPC infrastructure to enable discovery science in the 21st century, consistent with the goals of the NSCI.

This strategy should be based upon pressing scientific problems whose solutions can only be obtained by large-scale, potentially data-intensive computation and whose importance will drive the necessary development of applications, computation, and/or data infrastructure.

STATUS: Focus areas have been identified.