

Letter of Support
CASC Cyberinfrastructure Sustainability Workshop
October 2, 2013

On behalf of my colleagues at the National Science Foundation, it is my great pleasure to welcome you to the CASC Sustainable Funding Workshop. Thank you for your commitment to addressing the crucial issue of sustaining robust cyberinfrastructures for the research community.

Exponential growth in microprocessor speed, storage capacity and network bandwidth, coupled with converging advances in software systems, middleware, data analytics, parallel algorithms, collaboration and visualization tools, are ushering in a new age for discovery and learning.

Access to diverse data sets and computational resources is motivating a profound transformation in the culture and conduct of science and engineering. And, cyberinfrastructure – including the necessary expert workforce—has increasingly become a critical component of the R&D ecosystem. Advanced cyberinfrastructure is accelerating the pace of discovery and innovation in all areas of inquiry and enables a platform on which cross-and inter-disciplinary research thrives. In fact, cyberinfrastructure enables distributed knowledge communities that collaborate across disciplines, distances and cultures. As a result, the deployment and use of cyberinfrastructure across the entire spectrum of science, engineering and education continues to expand each year.

Those of you here today certainly recognize the value and necessity of a robust, sustainable cyberinfrastructure, and have begun a dialogue about how to enable this in the future. It is imperative that we continue this discussion to begin to map a path forward. Though I cannot be with you in person, there are a few questions I'd like to pose for your consideration:

1. What are the roles/responsibilities of universities? Of the government?
2. What business and management models are needed?

- a. Does this vary by institution? By project?
3. In what ways should the private sector be engaged?
4. How do we enable cross-talk between disciplines and institutions?
5. In what ways should resources be leveraged within or between institutions?
6. What long-term strategies are needed to develop and sustain the CI workforce?

In closing, I would like to reiterate my appreciation for your participation in this important discussion. NSF remains strongly committed to creating secure, advanced, and global cyberinfrastructure through which multi-disciplinary collaboration networks can effectively address science and engineering grand challenges in an increasingly computational- and data-intensive world.

Best wishes for a productive week and many successful collaborations!

Sincerely,

Farnam Jahanian
NSF Assistant Director for CISE