

**1<sup>st</sup> Annual Advancing Research Computing on Campuses:  
Best Practices Workshop  
National Center for Supercomputing Applications-Condo of Condos  
Urbana, Illinois  
January 16-17, 2014**

**Overview:**

The evolving role of computing and data in scientific discovery has created new challenges for campus IT organizations. Infrastructure – both technical and human – has become increasingly generalized, making it difficult for a campus to effectively support the complex and diverse requirements of today’s compute and data intensive research-driven agenda. Compounded by the increasingly competitive nature of access to national resources, this has forced campuses to take on a larger role in supporting the increasing demands for research computing resources. As campus IT organizations build and expand infrastructure components to address the needs of their users, coordination between campuses is critical in order to create successful, sustainable, scalable, and flexible models.

On January 16-17, 2014, NCSA, in collaboration with Condo of Condos, will host a workshop titled Advancing Research Computing on Campuses: Best Practices Workshop. The workshop will feature a range of relevant topics in this emerging distributed infrastructure, spanning discussion of best practices for operating and supporting a campus shared research computing infrastructure to business models for advanced research computing resources and services. The objective of the workshop is to bring together professionals in the community and discuss ways to leverage the summation of experience and expertise for the overall community’s benefit. Trends in approaches will be examined in order to look at the changing landscape and how it is transforming campus interactions and sustainability models. In discussing best practices, it is expected the workshop will help increase collaboration between attendees, eventually extending to their current and future user bases.

The sustainability models for campus shared research computing resources and services cannot be discussed without addressing the ever-increasing ‘long tail’ of science. That is, researchers who have outgrown their desktops and now need access to advanced computing resources but may not have experience using such resources. Bridging these users and resources is a task that must be tackled in order for researchers to efficiently examine large datasets and ultimately advance science and discovery in a multitude of disciplines.

**Proposed topics of discussion include:**

- Best practices for running advanced computing resources in a higher education environment
- Interactions with national data centers and national infrastructures
- The condo model
- Business models
- Financial models with faculty investments

- Return on investment
- Sustainability plans

The target audience for the workshop includes academic research computing professionals and campus administrators supporting (or needing to support) research computing resources and services.

**Confirmed workshop speakers include:**

- David Lifka, Director of the Cornell University Center for Advanced Computing / Director of Research Computing at Weill Cornell Medical Center
- Guy Almes, Director of the Academy for Advanced Telecommunications and Learning Technologies, Texas A&M University
- Donna Cumberland, Director of Research Services and Support, Information Technology at Purdue (ITaP), Purdue University
- Erik Deumens, Director of Research Computing, University of Florida, and SSERCA (Sunshine State Education & Research Computing Alliance)
- James Cuff, Director of Research Computing and Chief Technology Architect, Harvard, and Massachusetts Green High Performance Computing Center
- Ruth Marinshaw, CTO - Research Computing, Stanford University
- Tracy Smith, Associate Director of Networking, University of Illinois at Urbana-Champaign

**Workshop Committee:**

Chairs:

- Co-Chair: John Towns, NCSA/University of Illinois
- Co-Chair: Jim Bottum, Clemson University
- Deputy Chair: Martin Biernat, NCSA/University of Illinois

Committee Members:

- James Cuff, Harvard University
- Tracey Hare, Clemson University
- Kate Mace, Clemson University
- Amber Moore, University of Illinois
- Barr von Oehsen, Clemson University
- Ruth Pordes, Fermilab
- Chuck Thompson, University of Illinois