

UC Research Cyberinfrastructure Meeting October 10-11, 2005, Calit2 at UCSD

Meeting Objectives and Draft Agenda (Updated October 6, 2005)

Meeting Objectives:

In February 2005, UC's Information Technology leaders and Vice Chancellors for Research held a joint meeting to discuss UC's "cyberinfrastructure"¹ requirements for future research competitiveness.² A follow-on meeting with faculty colleagues is being held at the California Institute for Telecommunications and Information Technology (Calit2, <http://www.calit2.net>) on October 10-11, 2005

Meeting Goals:

- Motivate federal (e.g., NSF, DOE) cyberinfrastructure funding opportunities and position UC to benefit from such opportunities
- Identify current UC research computing infrastructure capabilities and best practices throughout UC
- Understand strategic directions in UC research (and related requirements for cyberinfrastructure) in the major disciplines and identify the drivers for University wide collaboration
- Develop an architecture or blueprint for UC research cyberinfrastructure
- Forge the internal and external UC partnerships required for success.

Meeting Sponsors:

- Calit2 (California Institute for Telecommunications and IT, <http://www.calit2.net/>)
- Citris (Center for IT Research in the Interest of Society, <http://www.citris.berkeley.edu/>)
- Vice Chancellors – Research
- IT Leadership Council (<http://www.ucop.edu/irc/itlc/>)
- Industry University Cooperative Research Program and UC Discovery Grant Program
- CENIC (Corporation for Education Network Initiatives in California; <http://www.cenic.org/>)

¹ Cyberinfrastructure (CI) includes:

Computing cycles and broadband networking, massive storage and managed information as well as leadership on shared standards, middleware and basic applications for scientific computation. Cyberinfrastructure is more than high performance computing and connectivity. It is focused on sharing, efficiency, making greater capabilities available across the science and engineering research communities. It facilitates new applications and collaboration and interoperability across institutions and disciplines. (Source: NSF)

² Meeting information can be found at <http://www.ucop.edu/irc/itlc/meetings/feb2005.html>.

AGENDA

Monday, October 10 (10:00 a.m.-5:00 p.m.)

- 10:00 Welcome, Objectives**
-Larry Smarr, Director, Calit2
-Shankar Sastry, Director, Citris
-Beth Burnside, Vice Chancellor Research, UCB
-Kristine Hafner, Associate Vice President, Information Resources and Communications, UCOP
- 10:15 Cyberinfrastructure direction at NSF/NIH and implications for UC / DOE research**
-Larry Smarr, Director, Calit2, Optiputer PI
-Fran Berman, Director, San Diego Super Computer
-Guy Almes, NSF Office of Cyberinfrastructure
-Horst Simon, Associate Laboratory Director, LBNL
- 10:45 UC / national network infrastructure update**
Jim Dolgonas, President, CENIC (Corporation for Education Network Initiatives in California)
-John Silvester, Board Chair CENIC
- 11:00 Comments, Q&A**
- 11:15 UC campus/lab research computing cluster survey results**
-David Walker, UCOP and campus colleagues
- 11:30 Campus/lab research computing support strategies**

-**UCLA:** Alan Laub, Director of the Institute for Digital Research and Education
Bill Labate, Associate Director, Academic Technology Services
-**UCI:** Frank J. Wessel, Manager, Research Computing Support, NACS
-**UCD:** Dr. Peter Yellowlees, Interim Vice Provost, Informational and Educational Technology
-**LBNL:** A.X. (Sandy) Merola, Division Director, Information Technology Division, Chief Information Officer
- 12:30 Break for box lunches**
- 1:00 Comments, Q&A**

1:15 Faculty overviews of research directions and cyberinfrastructure requirements
(15 minutes per update)

Mathematical and Physical Sciences:

- Clay Heathcock, UCB, College of Chemistry
- Russell Caflisch, UCLA Mathematics (*via video conference*)

Humanities and Social Sciences:

- Diane Favro, UCLA Arts and Architecture (*via video conference*)
- David Goldberg, UC Humanities Institute
- Henry Brady, UCB, Political Science and Public Policy, Survey Research Center and UC DATA

2:30 Comments, Q&A

3:00 Break

3:20 Biological / Life Sciences:

- Daniel J. Valentino, UCLA, Laboratory of Neuro Imaging (LONI)
- Frank Doyle, UCSB, Chemical Engineering, Institute for Collaborative Biotechnologies

Engineering and Computer Science:

- Kathy Yelick, UCB, EECS, Computer Science
- Bernd Hamann, UCD, Computer Science
- Ruzena Bajcsy, UCB EECS, CITRIS

4:45 Comments, Q&A

5:15 Requirements for information and data curation – Dan Greenstein, California Digital Library (CDL)

5:30 Day 1 Wrap up

Reception (wine and appetizers) in the Calit2 building foyer

Tuesday October 11 (8:00 a.m. - 2:00 p.m.)

8:00 Continental breakfast

8:30 Recap of Monday discussion

8:45 UC future cyberinfrastructure requirements/blueprint
Initial overview of opportunities – Shankar Sastry, Director, CITRIS

9:10 **Break out groups** to identify UC wide requirements and opportunities for collaboration. Final break out topics to be determined based on Day 1 discussions. Possible topics:

1. High performance computing and network-based services
2. Information architecture requirements: creation, management, preservation of information assets
3. New models for development and hosting / management of research computing platforms/infrastructure

10:15 **Break**

10:30 **Feedback** from break out groups

11:15 **Action planning / Next steps**

12:00 **Close** / Box lunches to go
Optional: Tour of Calit2 facility