

# EDUCAUSE2009 参加報告

## – Emerging Technologies and Trends; Research Computing, Networking, Infrastructure, and Middleware –

学術情報基盤センター長 蛭名邦禎

### 1 技術トレンド/教育研究用計算機システム/ネットワーク

#### 1.1 Emerging Technologies

- **20th- and 21st-Century Climate Change: Computer Modeling, Societal Impacts, and Environmental Justice** (Featured Session)  
Speaker: Warren A. Washington (NCAR)
- **Going Global: The Critical Role of IT as Institutions Expand Globally**  
Speakers: Tom Delaney, R. Ben Maddox (NYU)
- **The Merits of Lecture Capture Systems**  
Speakers: Sadie R. Gregory, Christopher Brittan-Powell, Habtu Braha, Ahmed El-Haggan (Coppin State U.)
- **Cloud Computing and New Research Services: A Case Study**  
Speakers: Beth Secrist (Association of Research Libraries)
- **A Framework for Developing an Environmentally Sustainable Organization**  
Speakers: Malcolm Wolski (Griffith University)
- **Thin Clients: Lean, Green Computing Machines**  
Speaker: Vasken Hauri (Plymouth State University)
- **E-Learning Implementation Alternatives: Lessons from 12 Years of Webfuse**  
Speaker: David Jones (Central Queensland University)

#### 1.2 Networking and Infrastructure

- **Networking & Infrastructure Lightning Round**  
Speakers: Karl Horvath (Gwynedd-Mercy College), Linda L. Deneen (U. of Minnesota Duluth), Keith W. McIntosh (Pima County Community College District), Stephan Lengacher (McGill U.), Elizabeth A. Salley (U. of Michigan-Ann Arbor)
- **Enterprise Identity Management: Bridging the Identity Management Chasms**  
Speaker: Daniel A. Nanto (Vanderbilt U.)
- **Federating with NIH, NSF, and the National Student Clearinghouse**  
Speakers: Ardoth A. Hassler (NSF), Kenneth L. Servis (USC), Renee Shuey (Pennsylvania State U.)
- **UTORvpn: Secure Remote Access for the Masses**

Speaker: Russell Sutherland (U. of Toronto)

- **Identity Management: The Need for a Scalable Solution**

Speakers: Chris Bonhorst, Keith W. McIntosh (Pima County Community College District)

- **Campus Champions: Bringing High-Performance Computing to Your Campus**

Speakers: Arun K. Datta (National U.), S. Kay Hunt (Purdue U.), Roger Moye (Rice U.), James Barr von Oehsen (Clemson U.)

- **Just a Spoonful of SUGR Helps Get Research Computing Done**

Speaker: Gary Kidney (Rice U.)

- **The Heat Is On: Taming the Data Center**

Speakers: Terence Doub, Ric Simmons (Louisiana State U.)

- **Cyberinfrastructure in a Carbon-Constrained World**

Speakers: Larry Smarr (UCSD), Bill St. Arnaud (CANARIE)

- **Network Virtualization Brings Huge Payoffs**

Speakers: Dennis O'Reilly (UBC)

- **Building a Research IT Division from the Ground Up**

Speakers: Marc Overcash, Richard A. Mendola (Emory U.)

- **Technical Triumphs and Battle Scars with Classroom Technology Lecterns**

Speakers: Greg Grimes, Kathleen C. Olivieri (Mississippi State U.)

- **A College-Wide Collaboration Develops a Multilayer Approach for Improving Campus Safety**(Lightning Round Session)

Speaker: Joseph A. Moreau (SUNY College at Oswego)

- **Free Virtualization with the Linux Kernel Virtual Machine**

Speakers: Cameron Miller, Randall Smith (Adams State College)

## 2 講演紹介

- **Building a Cost-Effective Cloud Computing Campus Cyberinfrastructure for Education and Research**

Patrick Dreher (U. of North Carolina at Chapel Hill)

This talk will focus on the design of a university cloud computing system implemented at NC State. Operational data over the past five years will be presented, showing how the integration of teaching and research computing in a cloud architecture serves the educational and research missions of the university in a more economical and cost-effective manner than if each were supported separately. Some of the opportunities to enhance this coherent campus cyberinfrastructure and the challenges of expanding cloud computing architectures across multi-institution environments will also be discussed.

<http://www.educause.edu/E09+Hybrid/EDUCAUSE2009FacetoFaceConferen/BuildingaCostEffectiveCloudCom/176887>

<http://www.renci.org/>

- **Alternative IT Sourcing: From the Campus to the Cloud**

by Philip J. Goldstein (EDUCAUSE)

This 2009 ECAR research study explores a multitude of strategies used by colleges and university information technology organizations to deliver the breadth of technologies and services required by their institutions. Findings illustrate that although total outsourcing of institutional technology organizations is rare, so is self-operation of all IT functions and services. The study focuses on “alternative sourcing,” which is defined as the range of options institutions have for providing technology services or operating technology functions aside from doing it themselves. This includes traditional outsourcing of all or part of the IT organization, accessing cloud services and externally managed applications, development environments, or hardware via the Internet, and use of contractors and consultants as a part of the IT organization. The study is informed by 372 responses to a survey of EDUCAUSE member institutions, interviews with 20 senior IT leaders, consultation with focus groups, and three case studies.

<http://www.educause.edu/Resources/AlternativeITSourcingStrategie/177700>

- **Campus Champions: Bringing High-Performance Computing to Your Campus**

by Kay Hunt (Purdue U.)

Faculty and staff whose research requires HPC resources are sometimes unaware of the “free” resources available from NSF via the TeraGrid. This panel will discuss how the TeraGrid Campus Champions program engages campus representatives to minimize entry barriers and enable scientists to use the TeraGrid.

<http://www.educause.edu/E09+Hybrid/EDUCAUSE2009FacetoFaceConferen/CampusChampionsBringingHighPer/176085>