

# Research Computing Advisory Committee

## Minutes Aug 6, 2012 (taken by Erik Deumens)

**Present:** Paul Avery, Mike Conlon, Erik Deumens, Rob Ferl, Eric Ford, Peter lafrate, Rolando Milian, Alberto Riva, Laurie Taylor

### Reports

#### UF wins major NSF awards in support of the Campus Cyberinfrastructure Plan

1. A proposal was submitted to NSF Major Research Instrumentation in January 2012 with Prof. Andy Li of Electrical and Computer Engineering as PI. We learned this week that NSF will award this proposal with \$1,172,000 from NSF and \$509,000 matching from UF. The goal of the proposal is to upgrade the Campus Research Network to 120 Gbps and to research the use of software defined networking (SDN) to create innovative cloud services for computation and storage.
2. A second proposal was submitted to NSF Campus Cyberinfrastructure-Network Infrastructure Engineering in May 2012 with Erik Deumens as PI to acquire a 100 Gbps switch to connect the Campus Research Network to FLR and Internet2 at that rate. This will make UF one of 12 institutions that are designated as Internet2 Innovation Platform. See minutes of the June 3 meeting for prelude information.

#### HPC Center equipment

Several pieces of equipment have arrived and are being deployed.

1. A new rack with 1,000 cores for high throughput computing. This will allow the MPI cluster to grow from 512 cores to 1,024.
2. An extra set of nodes will add 24 Fermi GPUs, bringing the total to 72.
3. The computational biology cluster storage system has arrived. It will provide over 200 TB of storage for the computational biology cluster and was acquired with funds gathered within the matching program from last summer.
4. A large RAM node with 1 TB of RAM and 80 compute cores has been ordered.

### Discussion

The Gig.U initiative reported in the minutes of the June 3<sup>rd</sup> meeting has been announced by the city of Gainesville. The campus upgrade plan to increase the speed of all wall-plate ports to 1 Gbps has been funded and will be carried out during the coming year and a half.

The President of the United States has announced the US-Ignite program that complements initiatives like Gig.U and Internet2 Innovation Platform: It provides quick access to funding for ideas that promise to develop new and innovative applications that make use of high bandwidth to large numbers of people.

The need to bring uniformity and consistency to networking on campus between the UF CNS network and HealthNet was discussed. Progress is being made. The new unified

wireless network with SSID 'uf' is an example. UF Research Computing is engaged in making the Campus Research Network reach more research labs.

The term e-Science is a term that originated in Europe and means the same thing as the American cyberinfrastructure. UF Research Computing has a partnership with the UF Library to provide training and best practices on data life cycle management.

During the fall, the committee should discuss issues related with data banks that are created in various labs as part of research overseen by the IRB. Often the data banks are of questionable sustainability. Some policies and guidelines would help streamline the process and increase the long-term value of the data, in addition to prevent loss and security breaches.

The agenda for the fall can be found at <http://www.it.ufl.edu/governance/advisorycommittees/researchcomputing.html>.

Next meeting will be on September 10 at 1:30 pm in NPB 2205, unless changed by a poll that is being conducted.