

The following is the 2010 Update of new Information Technology initiatives across MUSC. The update is organized by category to facilitate reading. Items in the report reflect Information Technology projects underway by both the OCIO and other IT groups on the campus.

Education

1. Learning Management System (LMS) MoodleRooms LMS was selected to be utilized by all Colleges with the exception of the College of Pharmacy. The implementation team, Chaired by Dr. Mary Mauldin, is convened and the process of implementing the new system to replace WebCT and Blackboard is underway.

- Implementation includes bidirectional interfaces between Colleague Student system and MoodleRooms for automatic creation of courses and rosters and grade posting.
- Course migration and or recreation from WebCT and Blackboard.

2. College of Nursing Database Consolidation - Analysis of 7 existing shadow databases is underway to determine appropriate consolidation and/or transition to existing institutional applications such as Datatel Colleague, E*Value, FAIR CV Repository as well as development of a central data warehouse to support reporting requirements (regulatory, accreditation, annual reports).

3. Education - Support

- **Tegrity** - support and upgrade; will be implementing AARIS and Shibboleth which will allow Tegrity to interface with multiple sources of class rosters .
- **ID Badge** – Expands ability to utilize multiple badge readers. This additional web based function identifies individuals based their badge proximity code in addition to existing badge bar code identification.
- **CME Tracker** – The CME Tracker system and SC.Gov implemented credit card processing for MUSC CME. First credit card payments were processed in early February 2011.
- **Colleague 1098T Reporting** - an enhancement to provide itemized information on the student 1098T form and to reduce the volume of phone calls fielded by Student Accounting.
- **Colleague Regulatory Enhancements** – Implemented State and Federally mandated requirement for multiple Race and Ethnicity.

4. FAIR – Faculty Academic Information Reporting CV Bank

- Automated nightly update from Provost to FAIR to manage new and terminated faculty.
- Colleges and/or Departments need to establish Guidelines and Training for their faculty and staff to enter/update CV information.
- Feedback from the Department of Medicine on the benefits of FAIR application led by Frances Glanville:
 - Maintenance of CVs supports faculty evaluations, professional status checks, documentation for letters, etc.
 - The Initial entry into FAIR is a significant effort. Future effort will be minimal requiring only updates.
 - Automated calculation of publications for accreditation bodies and others interested in productivity; count/number of awards, physicians with board certifications, etc.
 - Utilized program heavily in preparing for 5 year review of the College of Medicine.
 - Downloaded the 300+ CVs in bulk.
 - Able to list last 5 years of publications easily
 - Creates supplement lists of awards and other achievements.

- Regulatory Reporting Support
 - CHE (Commission on Higher Education) student and faculty (instructors)
 - IPEDS - Faculty
- Provost Web Enhancements
 - Added tenure end date to support additional COM reporting requirements (can be utilized by all colleges)
- Women Scholars Initiative – provided initial women faculty data load to populate email list. Will ultimately be set up as a Group Membership in Grouper.
- **Space Allocation Management Webb Application**
Created exception reports to identify Faculty with no space assigned and terminated Faculty with space assigned
- **SCIQUEST e-procurement system**, implementation began in February 2011.
- **Transparency Web Site** – Under construction to meet pending transparency legislation.

5. Grouper Implementation –Grouper, an Internet2 collaboration software product, enables departments to create and manage institutional and personal groups. Its owner (steward) controls the group and enables the owner to manage membership and which resources it can access.

Grouper builds entitlements to control access to web based systems. Grouper allows the OCIO to publish multiple entitlement values to our enterprise LDAP. It allows both authentication and authorization for specific entitlements. Examples include:

- **COI** - restricts access to the COI application to only those required to complete the disclosures (excludes contractors, reduced hour employees, etc.) Population is updated automatically for new hires and terminations. Allows COI Compliance Committee to override rules when appropriate.
- **Library** – restricts access to online Library resources to students and employees and others identified specifically by the Library.
- **Clinical Data Warehouse (CDW)** – Grouper will be used to distinguish the different groups accessing the CDW and establish group memberships. Hospital staff and other IRB approved personnel will have access to identified patient information. Researchers will have access to de-identified patient data via a self-service query system. CDW is a joint OCIO and OBIS project.

Research

1. Coeus Awards Management application

- OCIO Role is Technical Support and Project Management (Carol Boyer)
- CoeusTest Server and database implemented
- Implemented LDAP authentication
- Nightly update to Coeus of personnel information.
- Complete implementation by end of March
- ORSP will transition to Coeus July 1, to manage Active Awards.

2. Research/Administration Dashboard

- Based on end user working group review and input we are redesigning some aspects of the dashboard to add value to the department's reporting requirements.
- R/A Dashboard to be presented at March 21 Dean's Council.

3. Microstrategy Business Intelligence reporting and presentation tool installed.

4. DLAR (Department of Lab Animal Research) Improvements:

- Website revamp (Office of Research Development will work with Russell Cox to update)
- Migrated existing DLAR databases to OCIO Data Center
- Protocols and investigator data moved from old SIRIUS system to new DLAR database.
- Online Forms to streamline animal order processing

5. T32 Reporting (JoAnn Sullivan, Office of Research Development):

- Identifying existing systems which can support the extensive requirements for completing T32 Training Grants.

6. Research - Support

- Institutional Biosafety Committee (IBC) - added roles to application for audits
- Corporate IRB Proposal Review – added billing for Western IRB and Click Commerce proposals.
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7. Palmetto Profiles – Collaboration and mentoring tool installed by SCIPR and in beta testing to replace Colexis (Jihad Obeid, Randall Alexander)

8. CLIN-R – On-line Roadmap for clinical trials development. (SCTR and OCIO)

9. MAP-R – On-line Roadmap for Tier 1 Researchers to develop research projects. (SCTR and OCIO)

Infrastructure:

Desktop

1. **Windows7:** Currently pilot testing to replace XP on 9,000 PCs with Win7 by the end of summer 2011.

2. **Payment Card Industry (PCI)** regulations: PC model developed and implementation begun for isolation of credit card data and applications from outside sources (hackers). This secure environment is required to prevent credit card breaches that could lead to costly fines or the elimination of credit card use by MUSC.

3. **Research Storage** – Built a new research data storage facility which grew from 20Terabytes of storage to 50Terabytes of storage available to faculty in the past year.

Security

4. **Email encryption** and access (see 2nd attachment)

4. **Forefront anti-virus and Network Registration** of all end devices (see 2nd attachment)

5. **Enterprise Security Policy Changes:** Asset Inventory/Classification and Data Protection

- a. Changes to address known policy gaps (asset inventory, data classification, data protection, program management).
- b. E-Mail Encryption/E-Mail Access/Malware prevention

Network Services:

1. **Adobe Connect** Server upgrade to version 7.5. to support Education, Research, and Telemedicine.
2. **Wireless Network** upgraded to all MUSC academic areas to **802.11n** with increase in bandwidth.
3. **Data Center** upgrade bandwidth capacity to **10Gigabits**

4. **Videoconferencing**, TMS and MOVI upgrades to Active Directory for global videoconference dialing directory.
5. **Network Security Enhancements (NAC)**: Network Access Control has been added to increase security of the MUSC network.
6. **Increase bandwidth** to CHP building (all Buildings now have GB to the desktop)
7. **Palmetto State Providers Network (PSPN)** now serving 46 hospitals across the state. Supports Telemedicine, Telehealth (AHEC has 25 Hospitals) and HIE applications
8. **South Carolina Light Rail (SCLR)** fully deployed, 4 10GB circuits in use, redundant Commodity Internet and Internet2.
9. **Telemedicine Support Services** initiated and supporting new and existing telemedicine applications.

Clinical:

1. **Computerized Provider Order Entry (CPOE)**: Installation completed to all adult units in the main hospital and ART, including critical care.
2. **ClinDoc, AdminRx, and CPOE**: installed in the Institute of Psychiatry.
3. **ClinDoc and AdminRx**: installed on four units in Children's Hospital (7A, 7E, 7B, 8D) and working on a CPOE pilot scheduled for the spring.
4. **"Care Alerts"** being installed, triggers alerts to care providers based on various clinical conditions, i.e. a no response to pain medication documented two hours after administration.
5. **New health summary module** Currently, implementing a new health summary module, which will lay the groundwork for a large upgrade we will be starting in June in preparation to meet meaningful use criteria.
6. **Cardiology Imaging System**: Siemens Acorn system is being sunset. An RFP process is underway to replace this system. Implementation anticipated to begin summer 2011.
7. **Practice Partner**: The replacement for Practice Partner, the Epic Corporation was selected and a contract will be signed by mid-February 2011. The targeted go-live with Epic is spring 2012.