

CTSA Imaging Working Group Bi-monthly Update WebEx
Monday, August 17, 3:00 PM CDT
Call Summary

In attendance:

Daniel Sullivan, MD (moderator)
Gary Dorfman, MD
Bradley Erickson, MD, PhD
Randy Gollub, MD, PhD
Gordon Harris, PhD
Robert Jeraj, PhD
Michael Knopp, MD, PhD
John Kotyk, PhD

Daniel Marcus
Kevin O'Donnell,
Brian Reynolds, PhD
Ann Scherzinger, PhD
RSNA
Linda Bresolin, PhD, MBA
Susan Anderson
Mary Cerceo

Introduction of template for site updates (Dr Sullivan)

- Nine-question template with common themes to be used for future site updates on CTSA IWG bimonthly calls
- Dr. Sullivan requests comments and member suggestions for the template (daniel.sullivan@duke.edu)

CTSA Site Updates

University of Colorado, Denver Anschutz Medical Campus (Ann Scherzinger, PhD)

- Bio-Imaging Research Laboratory (BIRL): <http://www.uchsc.edu/ucbirl>
- Colorado Clinical and Translational Institutes (CCTSI): <http://ctsa1.uchsc.edu/Pages/index.aspx>
- The University of Colorado has several Imaging Cores that are associated with the CTSA program
 - Biobank Consortium
 - Gene Expression & Microarray Analysis
 - Metabolomics
 - Proteomics Consortium
 - Translational Therapeutics & Modeling
 - Experimental Pharmacology
 - Imaging Consortium-Microscopy
 - Small Animal Imaging
- The University of Colorado provides the following services to their imaging cores:
 - Protocol Review
 - UCH and UCD combined review
 - Study Design
 - Image Review
 - Image quality, protocol compliance
 - Research reads
 - Image Analysis – Human and Animal
 - RECIST
 - Volumetrics
 - Lesion characterization
 - Clinical trials
 - MRS, fMRI
 - Data Transmission
- The Specific aims of the CTSA award application are
 - Translational Technologies Program
 - Identification of research questions requiring novel methodology development
 - Analyzing the need in greater depth and determine what resources are required
 - Transformation from a need to a functioning novel methodology
 - Pilot and Collaborative Translational and Clinical Trials
 - Develop a broad-based grants system, impacting all levels of CCTSI participants

- Pilot award funding target area is bioengineering
 - Currently 1 MRI, 2MRS awards
- The CTSA award provides money for:
 - Integration of review services
 - Protocol review consolidation between affiliates
 - Research workflow standardization
 - Animal and human imaging analysis
- The transition administrative/organizational structure of the core is:
 - Director-Department Chair
 - Administrator – Radiology Grant manager
 - Protocol Review – RGM, UCH staff, Radiologists, Physicists
 - The BIRL and Radiological Sciences
 - Integration with affiliates on protocol needs
 - Image Analysis
 - Informatics
 - Protocol compliance and image quality review
- The users of the University of Colorado services pay fees:
 - Protocol review fee
 - Imaging fee
 - Technical-depends on imaging site
 - Professional - grant support or research read fees
 - Analysis depends on complexity
 - Other fees for research set up, data, transmission
 - The fee schedule is undergoing revision
 - Review is required to set pricing for studies; hospital requires that study be reviewed through this process
- The future plans, goals and priorities for the imaging program are
 - Protocol Review using MS SharePoint Services
 - Publication of SOPS and fees
 - Efficient protocol review between affiliates
 - Aiming to reduce current 2-week turnaround on protocol review and to review cancer protocols before pharmaceutical funding
 - Integration with the Translational Informatics core; very strong area at the university; aims to give researchers tools to get at data
 - Uses in-house software; goal is to bring in outside shareware
 - Enhancement of image handling abilities
 - Integration of C-TRIC with CTSA
 - Consolidation of imaging operations
 - Addition of research imaging services
 - Cores: Human Imaging, Animal Imaging, Radiochemistry, Image Analysis, Imaging Informatics, Imaging Education
 - Engaging CTSA cores in this development
 - Hope to consolidate small pockets on campus
 - Virtually bringing them together for structure of informatics, storage, etc. which will help researchers get access to data on campus
 - Building infrastructure in anticipation of physical integration
 - Submitted stimulus funding grants for facilities

Ohio State University Medical Center (Michael V. Knopp, MD, PhD)

- <http://www.radiology.osu.edu/>
- Ohio State University has multiple services that function similar to a core lab.
 - Extensive efforts are ongoing in relation to caBIG and development GRID-enabled imaging analytics.
 - The imaging effort within the CTSA grant is scheduled to fully start in Year 3.

- Strong linkage to biomedical informatics
- OSU team is developing imaging middleware for caBIG
- Provides the following services:
 - Protocol review (have roadmap for protocol development; review is more case-by-case rather than requirement)
 - Trial management
 - Trial assessment
 - Analytics
 - Microimaging service
 - Small animal imaging core
 - Imaging agent core service (in development)
 - Protocol development
 - Budget planning
 - Performance of imaging (all modalities)
 - Data management
 - Data analytics
 - Blinded assessment
 - Grant and publication support
 - Compliance-IRB and animal use protocol management and review
 - Imaging is one of six signature services on campus; \$1 million support at university level
 - There are 25 clinical trials out of core lab
- The specific aims of the award application are:
 - Development of a clinical imaging core in Years 3-5 that consolidates the different clinical research support services established at OSUMC via PI-initiated grants
 - Linkage to caBIG and other bioinformatics development and support activities
- There is currently no direct support to an imaging core
- The transition administrative/organizational structure of the core is:
 - The largest research support infrastructure is the Wright Center of Innovation in Biomedical Imaging, a self-sustainable, PI-led environment
 - The dedicated administrative lead and organization are integrated into the Dept. of Radiology and the Imaging Signature Program of the Medical Center.
 - All services have scientific leads that are supported by research and technical staff including graduate students, device and service specific technical and scientific leaders.
- Users of services pay for utilization of imaging services, analytics and protocol setup.
 - A considerable number of start-up projects are funded out of WCI-BMI operations.
 - User fees overall are utilization dependent-higher charges in off hours.
- The future plans, goals and priorities for the imaging program are
 - A trans-institutional environment to guide protocol development
 - Efficient utilization of imaging services and centralized data repository and data management
 - Technical staff driven imaging services; was contentious at beginning
 - Goal is to have fully SOP-driven environment

Update on Steering Committee balloting/election

- Steering Committee ballots returned; deadline for voting is Aug 21
- Plan to schedule first Steering Committee call in September 2009.

Defining Scope and Major Priorities of IWG (Dr. Sullivan)

- How can the IWG help with national collaborative projects?
 - Imaging Informatics is exploring consensus on image management and transfer formats
- The steering committee will focus on identifying IWG priorities.
- IWG comments welcome on template
- Suggestion that it would be helpful to have a database of SOPs available, e.g. review process, processes of investigators dealing with laboratories

CTSA Activities at the ACRIN Meeting (Dr. Sullivan)

- Wednesday, September 30, 2009
 - Lunch and subgroup reports: 11:30AM – 1:00PM
 - Educational Sessions: 1:00 – 4:30PM
 - 1:00 – 2:30PM Quantitative Imaging

- Faculty will hold a planning call on Monday, August 31, 10:00AM (CDT)
- 3:00 – 4:30PM Conducting Multisite Clinical Trials w/Industry

RSNA 2009 (Dr. Sullivan)

- Educational Course: Drs Gollub, Macura, Yap, and Reynolds course on Quantitative Imaging on Tuesday, December 1, 3:00PM – 4:30PM

Sub-group update

- **Imaging Informatics (Dr. Erickson)**
 - Focusing on image-transfer management and workflow and security issues
 - Sub-group is working on white paper

Next Steps:

- Educational Course teleconference is scheduled for August 31, 2009 at 10:00AM
- First Steering Committee call will be scheduled in September
- Next IWG call: October 19, 3:00PM (CDT)