

QIBA DCE-MRI Technical Committee Update

Wednesday, July 20, 2011 at 11 AM CDT

Call Summary

In attendance

Edward Jackson, PhD (Co-Chair)
Sandeep Gupta, PhD (Co-Chair)
Daniel Barboriak, MD
Michael Boss, PhD
Andrew Buckler, MS
Martin Buechert, PhD
Daniel Gembris, PhD
Luna Hilaire, PhD
Gregory Kaczmar, PhD
Chen Lin, PhD
Mark Rosen, MD, PhD
Michael Steckner

Daniel Sullivan, MD
Gerald Wolf, PhD, MD

RSNA

Joe Koudelik

Brief Updates from Phase 1 NIBIB Subcontract Recipients

- MD Anderson CC - Phantom project update nearly on track (Dr Jackson)
 - Phantom Labs contacted with phantom drawing for fabrication quote
 - Machine drawing modified by Josh Levy and returned with suggestions to reduce cost and make more robust (for possible future commercial production)
 - Dr Jackson to finalize changes within a week
 - Filling solutions to be mixed/added at MD Anderson CC
- VirtualScopics - Software development to analyze phantom data on track as well (Dr Jackson for Dr Ashton)
 - Deliverable will be executable, not source code; still need all algorithm details defined
 - To be used to analyze data obtained with QIBA DCE-MRI phantom testing
 - Guideline for data acquisition in-hand for GE, Philips and Siemens scanners
- Duke University - Synthetic Data Project Update (Dr Barboriak)
 - QIBA sub-award executed and full project effort underway; programmer and physicist already engaged
 - Request to post synthetic data to Wiki (currently on the Barboriak Laboratory website)
 - Dr Jackson to provide ranges of T1 & R1 represented by phantom
 - Small ad hoc work group proposed to focus on synthetic data project; need input
 - September T-con of all interested to be coordinated to discuss forward direction and real-world use; how to provide synthetic data for T1 and R1 measurements
 - Dr Barboriak to draft email language that staff can send requesting participation (describing interest) to all DCE Tech Ctte membership
 - Need to outreach to vendors, if possible

Update on Phase II NIBIB Subcontract (Dr Rosen)

- UPenn Update – Test/Re-test Patient Prostate Study (Dr Rosen)
 - Protocol concept finalized for human test/re-test prostate study in conjunction with ACRIN
 - 30 patients across 6 sites proposed with data analysis being done at ACRIN
 - Details of image analysis still being determined by Dr Rosen
 - Dr Jackson to be co-PI on technical aspects
 - Protocol to be wiki posted for group reference and feedback (no proprietary concerns from UPenn)
 - Protocol feedback needed re: feasibility; logistical and clinical details still required; participating sites need to be identified
 - ACRIN still discussing details of NIBIB (QIBA) sub-award; proposal not approved yet
 - In-person working group proposed for ACRIN fall meeting to work through details
 - Contact with QIN proposed: Drs Rosen, Jackson, Lawrence Clarke and David Mankoff

Updates on the Profile (Mr Buckler)

- Process of Profile review posted to wiki for reference at:
- http://qibawiki.rsna.org/index.php?title=Review_Process

- Wiki site hosting DCE-MRI Profile (v1.0) for Public Comment:
- http://qibawiki.rsna.org/index.php?title=Work_Product_for_Review

- Primary assessment and issue resolution “burden” to be placed on the commenter (submitter); actionable comments needed via downloadable comment form
- General comments also welcome and can be sent directly to RSNA staff
- Updated resolutions table and record of comments to be Wiki posted for reference

Next steps:

- Dr Jackson to finalize phantom design changes for The Phantom Laboratory
- Dr Barboriak to provide language for synthetic data project feedback e-request
- Dr Rosen to follow-up with QIN contacts
- Next call scheduled for Wednesday, August 3, 2011 at 11 am CDT