

QIBA DCE-MRI Technical Committee Update
Wednesday, December 14, 2011 at 11 AM CST

Call Summary

In attendance

Gudrun Zahlmann, PhD (Co-chair)
Edward Ashton, PhD
Daniel P. Barboriak, MD
Michael Boss, PhD
Orest B. Boyko, MD
Martin Buechert, PhD
Paul L. Carson, PhD
Barbara Croft, PhD
Daniel Gembris, PhD
Marko Ivancevic, PhD
Gregory Karczmar, PhD
Roe Lazebnik, MD, PhD

Jiachao Liang, PhD
David E. Purdy, PhD
Annette Schmid, PhD
Daniel C. Sullivan, MD
Gerald L. Wolf, PhD, MD
Hui Jing Yu
Ona Wu

RSNA

Joe Koudelik
Madeleine McCoy

Follow-up from DCE-MRI Breakout Session at the RSNA 2011 Annual Meeting

- Dr. Zahlmann thanked the group for their efforts and contributions in finalizing the Profile (v1.0)
- Ongoing projects include clinical test / re-test and perfusion / diffusion

QIBA/NIBIB Round-1 Phantom and Analysis Software Projects (Dr. Edward Ashton)

- The software will be available once the co-chairs have approved public access via the RSNA FTP site; waiting for DCE-MRI Phantom 2 image data test set to "bundle" with software
- Automated ROI process specifically designed for DCE-MRI Phantom 2
- Initial software test group includes: Drs. Barboriak, Boss, Boyko, Karczmar, Purdy, and Schmidt
- Framework needed to store DCE-MRI image data; recent QIBA/RIC Task Force discussions have focused on developing a searchable data warehouse for this purpose
- Dr. Zahlmann to propose a specific use-case for DCE-MRI phantom data to the QIBA/RIC for consideration
 - Dr. Laue is developing software to automate DICOM 23 operability across various software platforms when analyzing a single dataset; this example may lead to federal funding
 - Suggestion to work with Dr. Obuchowski of the Metrology Workshop Planning Ctte
 - Dr. Sullivan to reach out to Dr. Fred Prior (TCIA at U Washington) and Mr. John Freymann (NCI) to discuss database options for long-term QIBA data storage needs
- Analysis software version control deemed critical; may be solved by a track changes function using a notation in the naming file

Diffusion Weighted MR (DWI)

- Proposal to extend the task spectrum of the QIBA DCE-MRI Technical Committee by adding Diffusion Weighted MR (DWI) as the next MR Profile
- DWI draft proposal circulated among committee members; Ctte Co-chairs welcome all feedback
- Draft proposal posted to the QIBA Wiki under the "Working Documents" section
http://qibawiki.rsna.org/index.php?title=DCE-MRI_tech_ctte
- Input needed concerning DWI software vendors; Drs. Ashton, Gupta, Ivancevic and Purdy to explore companies providing DWI software packages

Next steps:

- Dr. Zahlmann to follow-up with Dr. Jackson regarding DCE-MRI Phantom 2 image dataset; would like to bundle image data with analysis software on FTP site before release
- Dr Ashton to modify analysis software to allow automated ROI function to work with DCE-MRI Phantom 1 data while Phantom 2 data is being acquired
- Drs. Ashton, Gupta, Ivancevic and Purdy to explore companies providing DWI software packages
- The next QIBA DCE-MRI call is scheduled for January 11, 2012 at 11 am CST