

QIBA Perfusion, Diffusion and Flow – MRI Biomarker Committee (BC) Update Call

Wednesday, September 16 at 11 AM (CT)

Call Summary

Participants

John Kirsch (Co-Chair)

Joseph Borrello

Ryan Bosca

Mark Brown, PhD

Thomas Chenevert, PhD

Catherine Coolens, PhD

Amita Dave, PhD

Bradley Erickson, MD, PhD

Jacob Fluckiger, PhD

John Garber, MBA

Daniel Gembris, PhD

Alexander Guimaraes, MD, PhD

Edward Jackson, PhD

Timothy Kaufmann, MD

Daniel Krainak, PhD

Hendrik Laue, PhD

Dariya Malyarenko, PhD

Elizabeth Mirowski, PhD

Savannah Partridge, PhD

Daniel Sullivan, MD

Ying Tang, PhD

Ona Wu, PhD

Junqian (Gordon) Xu, PhD

Yuxiang Zhou, PhD

RSNA

Joe Koudelik

Susan Weinmann

Moderator: Dr. Kirsch

RSNA Annual Meeting QIBA PDF-MRI Poster

- The plan is to have three MR-related posters at the RSNA Annual Meeting, focusing on:
 - PDF-MRI
 - fMRI
 - DROs (scope to be determined, i.e., limited to MR-only or cross-modality)
- The draft PDF poster circulated by Dr Rosen contains space for updates on the four PDF-MRI TFs as well as for overviews of Round 4 and future 5 projects
- Feedback on format and content was requested
- A volunteer/leader was requested from each task force to submit poster content
 - DCE-Dr Laue
 - DSC-Dr Erickson
 - DTI-Dr Schneider
 - DWI-Dr Boss
- Poster content review expected in early October by committee members
- The deadline for a print-ready PPT poster to RSNA staff is October 30
- RSNA will print, ship and mount all QIBA posters at the convention hall by Nov 28th
- Providing names and contact information of BC and TF leaders was suggested:
 - Separate hard-copy printouts displayed near the poster
 - A Power Point slideshow and information panels at the QIBA kiosk will highlight organization and leadership

DSC Update (Dr. Erickson)

- There are two major activities occurring:
 - Literature review using PubMed to search for articles and Zotero to categorize them
 - 1224 articles remaining for review
 - Volunteer readers were requested
 - As part of her Round-5 project, Dr. Wu will be developing a phantom to create and refine protocols for image acquisition, analysis, quality control, etc., for specific clinical utility

NIBIB RFP Update

- By September 25th, RSNA should receive a decision regarding NIBIB funding for Round 5 projects

Round 4 DCE Evaluation Demonstration (Dr. Jackson and Mr. Bosca)

- Dr. Jackson provided some background on this phantom and analysis software, which was used in the ACRIN 6701 clinical trial
 - More information on the trial can be viewed at: https://www.acrin.org/6701_protocol.aspx
 - Phantom integrated data analysis package in the Matlab environment for Windows, Mac, and Linux workstations was developed
 - Deidentified DCE-MRI phantom sample data from GE, Philips, and Siemens scanners, and associated analysis reports, were uploaded to the QIDW
 - Executable versions of the package for common operating systems are ready for use
- Mr. Bosca gave a demonstration of the software and explained how it works
- Phantom data and software information (i.e., manual) is accessible to members through the QIDW

Vendor sub-committee proposal to MR Coordinating Committee – Deferred to a future call

Action items:

- Dr Kirsch to follow-up with all TF leaders regarding poster content and timeline
- Dr Guimaraes to follow-up with Drs Obuchowski and Barboriak regarding a DRO poster

Next PDF-MRI Biomarker Committee Call: September 30 at 11 AM CT [Dr. Rosen to moderate]