

QIBA fMRI Biomarker Committee (BC) Call

Thursday, June 1, 2017 at 11 AM CT

Call Summary

In attendance

Jay J. Pillai, MD (Co-Chair)

James Reuss, PhD (Co-Chair)

Andrew Kalnin, MD

Feroze Mohamed, PhD

Nancy Obuchowski, PhD

David Soltysik, PhD

James Voyvodic, PhD

RSNA

Joe Koudelik

Susan Weinmann

Announcements

- Dr. Petrella has stepped down as BC Co-chair and was thanked for his valuable service
- Dr. Pillai was welcomed as he took on the role of fMRI BC Co-chair

Review of Previous Call Summary

- The 5.3.2017 call summary was approved as presented

fMRI Profile v1.0 draft (All)

- Vote-to-release e-ballot, sent out to seventeen MR CC eligible voters, closed with 10 “Yes” and 0 “No,” thus approving Profile release
- The fMRI Profile v1.0 draft will move to the Public Comment Stage as described on the QIBA Wiki at: http://qibawiki.rsna.org/index.php/Public_Comment_Process
 - The Profile draft-for-release will be sent to RSNA staff to be posted on the Profiles page of the QIBA Wiki at: <http://qibawiki.rsna.org/index.php/Profiles>
 - An announcement including a link to the Public Comment form will then be sent to the 1,000+ QIBA membership roster and approximately 100 sister association contacts
 - fMRI BC Chairs to send names, email addresses and specialized language for a separate announcement to subject matter experts, e.g., ASFNR contacts expected
 - The announcement notes that recipients may forward it to anyone else who may be interested
 - Public comment stage is typically 2 – 3 months long
- Public comments to be collated and addressed after the close of this stage, but fMRI BC leadership may request status updates throughout the public comment period

DRO Specifications and Creation of 1.0 Assessment Sets

- Additional sites to create variety of DROs may be needed
- Discussion on DROs to be generated and how to use them to test conformance
 - Performance specifications in Profile to be resolved to help determine what kind of DROs are needed
 - Those who plan to create DROs can share work and tools
 - Range of data quality needed (good to bad) based upon a variety of DROs that range in measurement difficulty

DICOM Supplement 189 - Final Text (Dr. Reuss)

- The final text can be found here: ftp://medical.nema.org/medical/dicom/final/sup189_ft.pdf
- Current progress on new DICOM supplements can be found here: <http://dicom.nema.org/Dicom/News/Current/index.html>
- Supplement 189 blends functional imaging
- Multiple imaging volumes are blended
- Based upon parametric map technology
- In effort to demonstrate greater DICOM value, a Connectathon status was suggested to gain traction with manufacturers, e.g., manufacturers to demonstrate DICOM 'tractography'

Profile 2.0 Language Mapping (Dr. Reuss)

- Volunteers needed for literature search for fMRI Profile v2.0
- Dr. Mohamed to work with his students on language applications and verifications
- Focus of articles to choose for review should be on quantitative language mapping and reproducibility
- Drs. Pillai and Voyvodic are drafting manuscripts related to their Round-5 groundwork project; Dr. Pillai's project dealt mostly with reproducibility of language localization and lateralization.
- ASFNR white paper recommendations are based on the mostly clinically viable and widely accepted language paradigms
- Discussion as to whether more quantitative assessment of paradigms is needed since the white paper only makes qualitative statements.
- Dr. Pillai selected only the two most highly recommended language-mapping paradigms for his Round-5 project based on ASFNR recommendations, i.e., the paradigms that were used in the ASFNR multicenter trial and recommended in the ASFNR white paper; these are also described on the following website: <https://www.asfnr.org/paradigms/>

Next calls:

- QIBA fMRI Bias TF call - TBD
- QIBA fMRI Biomarker Committee call – Wednesday, June 14 at 11am CT