

QIBA fMRI Biomarker Committee (BC) Meeting

Wednesday, November 1, 2023, at 11 a.m. (CT)

Meeting Summary

In attendance

Jay Pillai, MD (Co-chair)

David Soltysik, PhD (Co-chair)

Mai-Lan Ho, MD

Ichiro Ikuta, MD, MMSc

Andrew Kalnin, MD

Anthony Liu, PhD

Balu Rajagopalan, PhD

Kiran Talekar, MD

James Voyvodic, PhD

RSNA staff

Susan Stanfa

Review of Previous Meeting Summary:

- The 10.18.2023 meeting summary was approved as presented

Drafting Special Report based on fMRI Profile: limitations related to performing clinical fMRI were identified and discussed

- Clustering (current software used contiguity, not geometry of clusters)
- Commercial software has limitations
- Lack of commercial products to perform calculations, e.g., center of mass
- Laterality index involves anatomically defined ROIs in language areas
 - Need to be able to overlay language areas
 - Need for left/right symmetrical ROIs
 - Calculation of laterality index
- Users need to be able to assess data, e.g., registration, QA, etc.
 - Ability to see brain structures, e.g., sulci, gyri, in EPI images
- Encouraging industry to provide similar tools
- Profile does not pertain to cases of NVU or large geometric distortion

Next Steps

- Dr. Soltysik to draft this section text into a paragraph or two and will then circulate
- The fMRI Language-Mapping Draft Profile, upon which the special report is based, to be completed and published prior to special report submission to *Radiology*; by the end of 2023
- Final full BC internal section-by-section review of Profile needed before the following can be initiated (Special Report to be worked on in parallel):
 - BC vote-to-release for Stage 1: Public Comment
 - MR CC vote-to-release to follow
 - Profile to be disseminated for public comment
- **Next meeting:** November 15, 2023, at 11 a.m. CT (1st & 3rd Wednesday of each month)
 - Profile writing group calls will continue independently after Dec. 22

QI Sessions and Activities at RSNA 2023

- *2023 QI Symposium: Sponsored by QIBA: Quantitative Imaging in the Era of Artificial Intelligence: Opportunities and Needs*, Wednesday, November 29, 2023, from 2 to 4 pm CT at McCormick Place. [Room E253AB \(East Building / Lakeside Center\)](#).
- *Building a Quantitative Imaging Research Study*, Tuesday, November 28, 2023, from 11:00 am to 12:00 pm CT at McCormick Place. [Room S405 \(South Building\)](#).

Participants are welcome to contact RSNA staff at giba@rsna.org if their attendance is not reflected in meeting summaries.