QIBA fMRI Biomarker Committee (BC) Meeting
Wednesday, February 15, 2023, at 11 a.m. (CT)
Meeting Summary

In attendance			**RSNA staff**
Jay Pillai, MD (Co-chair)	Erin Kelly, PhD	James Voyvodic, PhD	Susan Stanfa
David Soltysik, PhD (Co-chair)	Anthony Liu, PhD	Yuxiang Zhou, PhD, DABR	
Shruti Agarwal, PhD			

Review of Previous Meeting Summary:

- The 02.01.2023 meeting summary was approved as presented

Topics Discussed:

- Process of selecting clusters for comparison
- Profile progress update – remaining issues
- Appendix A9, subsection title "Draw Regions of Interest for Language" renamed "Register Atlas to Subject's Brain"
  - Once reference locations are confirmed, this subsection will be based on assessing distance from expected centers for ROIs as opposed to drawing them
  - There is a need to identify the empirical average expected at locations of expressive and receptive language, i.e., Broca's and Wernicke's areas, as a reference ROI
  - Alternatively, one can use the anatomical ROI from the atlas, e.g., Montreal Neurological Institute (MNI) atlas
  - The purpose is to identify functional activation volumes near anatomic Broca's and Wernicke's areas
  - The procedure would involve registering the atlas brain to the patient's brain, as opposed to registering the patient's brain to an atlas brain

Next Steps / Action Items:

- Dr. Voyvodic explained his current process for recalculating reproducibility measurements for the following cluster criteria: (1) largest in size, (2) closest to anatomical landmarks, and (3) strongest activation
  - Dr. Liu's method will also be used to compare clusters

- Dr. Voyvodic recently recalculated peak and center of mass of cluster plots, and found that there was better reproducibility with centers of mass than peaks
  - Peak and center of mass will be recalculated again using clusters determined with new methods
  - Having sensible criteria for deciding which of the many clusters are fundamental to the Claim will accelerate progress on the Profile

- Once the fMRI BC decides how to identify which clusters are fundamental to the Claim, **Dr. Voyvodic will draft the explanatory text for the method to determine which clusters need to be repeated in a second scan to add to Section 4**
- Next steps following completion of the Profile:
  - Circulation for full BC review and a vote-to-release for Stage 1: Public Comment
  - MR CC vote-to-release will follow

Next meeting: Wednesday, March 1, 2023, at 11 a.m. CT (1st & 3rd weeks of each month)