

**QIBA fMRI Biomarker Committee Call Summary**  
**Wednesday, March 9, 2016 at 11 AM CST**  
Call Summary

**In attendance**

*Edgar DeYoe, PhD (Co-Chair)*

*James Reuss, PhD (Co-Chair)*

Thomas Chenevert, PhD

Cathy Elsinger, PhD

Edward Jackson, PhD

Feroze Mohamed, PhD

Nancy Obuchowski, PhD

Jay Pillai, MD

David Soltysik, PhD

James Voyvodic, PhD

Yuxiang Zhou, PhD, DABR

**RSNA**

Joe Koudelik

Susan Weinmann

*Moderator: Dr. Reuss*

**Review of Previous Call Summary**

- The call summary was approved as amended

**Profile 1.0 status draft (Dr. Mohamed, et al.) – MEETING FOCUS**

- Drs. Mohamed, DeYoe and Pillai have been working on various aspects of this document
- Profile 1.0 content is being converted to the latest Profile template, which can be found on the QIBA Wiki at: [http://qibawiki.rsna.org/index.php?title=Main\\_Page](http://qibawiki.rsna.org/index.php?title=Main_Page)
- Polished draft to be ready for distribution to fMRI BC by the end of March (~two weeks prior to the QIBA Annual Meeting)
- fMRI BC Members to review the Profile and identify high-level issues for discussion at the QIBA Annual Meeting breakout session;
  - Missing content/sections
  - Discuss “testing” of this Profile
  - What is needed for moving forward with version 2.0
  - “Big picture” discussion
- Agenda for fMRI breakout session to be drafted
- Profile to be updated after QIBA Annual Meeting and distributed for internal feedback
- Profile will be available for public comment through Fall 2016
- Funding for feasibility testing to be discussed

**NIBIB Round-5 project status (Drs. Voyvodic & Pillai)**

- Dr. Voyvodic reprocessed 600 patient scans
  - Had 4 staff members perform subject scoring on 991 language scans in efforts to filter-out unacceptable exam scans/data
  - 200 subjects out of the original 600 meet QA criteria and will be studied further
  - Because language areas are the same, difference in paradigms can be corrected
  - Goal is to localize language areas in efforts to increase scan reproducibility and correct observed differences among paradigms used
- Dr. Pillai has submitted his 3-month project report to RSNA staff

- Goals are similar to Dr. Voyvodic's project, but with fewer subjects
- Original goal was 30 – 50 subjects; but will be exceeded slightly
- Two paradigms chosen because one is the same as incorporated in ASSR clinical trials and they are well-established
- Slightly different language areas are activated
- Challenge is to sample data sets and narrow down to 15 – 16
- Looking at repeatability for each of the two paradigms

### **Profile 2.0 general discussion of scope (all)**

- While version 1.0 focused on motor-mapping, 2.0 will expand upon that and focus on language
- Issues unable to be addressed in version 1.0 will be revisited in 2.0
- Thresholding remains an open issue in version 1.0
  - Need to discuss different thresholds that might be used
  - Thresholding is needed to meet claim
  - Threshold used will not affect center of mass
  - Multiple thresholds will work and results will be similar
  - Threshold and QA parameters in version 1.0 to be addressed before moving forward with 2.0
- There is a great deal of interest and demand for clinical trials for brain using fMRI
- Need to determine audience(s) interested in quantitating fMRI; the Profile should be written to capture a wide audience
- Profile version 2.0 will be drafted, based on a clinical trials use case
- Profile topics in order of priority:
  - Pre-surgical mapping/planning
  - Motor-mapping
  - Language-mapping
- Applications for quantitating fMRI were discussed
- The main challenge is to figure out how to make fMRI reproducible/quantitative

### **QIBA Annual Meeting: April 13 – 14, 2016 at the Hilton Alexandria Old Town in Alexandria, VA**

- The majority of breakout session time will be spent discussing open issues in the Profile
- Group members were encouraged to complete the online meeting registration form, if they have not done so

### **NIBIB round 6 – prepare concepts for BC consideration (all)**

- The timeline for Round-6 project proposals has been distributed
- High-level project concepts should be submitted directly to BC leaders asap
- Because QIBA has continued to grow, the funding process for Year 6 projects may be more competitive
- The deadline for proposal submissions (including budget sheet) is April 15

### **Next calls:**

- QIBA fMRI Bias TF call - Tuesday, March 15 at 10am CDT
- QIBA fMRI Biomarker Committee call - Wednesday, March 23 at 11am CDT