QIBA fMRI Technical Committee Agenda & Call Summary Wednesday, December 18th, 2013 at 11 AM CT Call Summary

In attendance

Ted DeYoe, PhD, (Co-Chair)	Jay Pillai, MD	Kirk M. Welker, MD
Cathy Elsinger, PhD, (Co-Chair)	James Reuss, PhD	Dewen Yang, MD, PhD
Jeffrey Petrella, MD, (Co-Chair)	Laura Rigolo, MS	Yuxiang Zhou, PhD
Edward Herskovits, MD, PhD	David Soltysik, PhD	RSNA
Andrew Kalnin, MD	James Voyvodic, PhD	Joe Koudelik
Feroze Mohamed, PhD	Zhiyue Jerry Wang, PhD	Madeleine McCoy

1. Funding news – New Projects

Updates?

- 2. **DICOM WG 16 activity** progress/discussions on standardizing parameters that should be included in MR DICOM objects by WG16 Bob Haworth from WG 16 has inquired about status
 - Provide somewhat scaled down set of expectations for fMRI DICOM support?
 - Volunteers to take the lead?

3. Proposal for second writing group/profile for Resting State fMRI

There is considerable interest in resting state - but variability in methodology makes this a challenge

Could we do some parallel groundwork within scope of DRO project as feasibility work regarding reproducibility/bias for initial drafting of claims?

Important points for clarification

- Is it the relative signal strength of identifiable networks that is measured, or the spatial distribution of nodes within networks, or both?
- What are the increasing clinical uses, how is data used (qualitative? quantitative? comparative?)
- How have these techniques been validated?

Practical steps for initiating this activity

- 1. Form "writing group", which functions as subgroup of our existing Technical Committee. RSNA staff will set up regular webex calls for writing groups, but cannot staff the calls or prepare summaries.
- Prepare a few sentences of response to the criteria for QIBA biomarkers (attached with agenda). All 5 of the criteria may not be relevant to a given biomarker, but for those that are we'd provide a few sentences that indicate how the proposed biomarker meets that criterion and is therefore appropriate for QIBA resources to be allocated. Submit to Fiona Miller

Discussion

• New committee members, Drs. Edward Herskovits and Dewen Yang, introduced themselves and received a brief overview of the fMRI Tech Ctte projects and Profile activities.

NIBIB Funding

• RSNA is waiting for news from the Federal Contract Officer.

DICOM WG 16 activity

• Dr. Reuss gave a brief summary regarding the feasibility to DICOMize commercially available software packages. Caution was voiced that elaborate solutions may meet with marginal vendor adoption.

- Immediate, moderate and long-term goals for DICOM standardization discussed, as well as specific uses for private vs. general DICOM header tags.
- Initial vendor feedback was received via Dr Ruess' survey; this data is to be re-evaluated.
- The MIAME Project through the FGED-Functional Genomics Data Society <u>http://www.fged.org/projects/miame/</u> was overviewed and the work was compared to the DICOM activities. <u>http://www.ncbi.nlm.nih.gov/pubmed/11726920</u>; the final step for the MIAME project is to develop a list and incorporate the information into different manufacturers.
- The next step is for Dr. Reuss to recapture the comments from DICOM survey and review the original immediate goals. Once this is complete, Dr. Reuss will move forward with the proposal to DICOM WG 16.
- Previous versions of the DICOM proposal are posted on the QIBA WIKI.

Proposal for second writing group/profile for Resting State fMRI

• Tabled for the January 15th t-con

Next calls:

- QIBA fMRI Bias WG call Tuesday, January 7th at 10am CT
- QIBA fMRI Tech Committee call Wednesday, January 15th, at 11am CT