

QIBA fMRI Technical Committee Update

Wednesday, April 10, 2013 at 11 AM CT

Call Summary

In attendance

Ted DeYoe, PhD (Co-Chair)

Cathy Elsinger, PhD (Co-Chair)

Jeffrey Petrella, MD (Co-Chair)

Barbara Croft, PhD

Erich Huang, PhD

Feng Luo, MD, PhD

Feroze Mohamed, PhD

Jay J. Pillai, MD

James Reuss, PhD

David Soltysik, PhD

Daniel Sullivan, MD

James T. Voyvodic, PhD

RSNA

Joe Koudelik

Julie Lisiecki

QIBA fMRI Technical Committee Call Agenda, Wednesday, April 10, 2013 (11 AM CT)

1. QIBA Annual Meeting

- May 14 -15 Breakout tentatively scheduled 5/14 – 3:15-5:00, 5/15 10:30 - end of day.
- Cathy will bring posters from ASFNR to display, small projector for working on profile
- Use phone for those who would like to call in

2. OIA/RIC effort – SC meeting update with Kathy Andriole

- a. Ted and Jim can I share your contact information with Kathy so that she can set up an account for you both?

3. <http://hackathon.neurosynth.org>

The Neurosynth Hackathon is an NIMH-supported event to be held in Boulder, Colorado, May 23 - 26, in affiliation with the Institute of Cognitive Science at the University of Colorado Boulder. Our goal is to bring together a creative, energetic, and interdisciplinary group of people for a 3-day marathon of brainstorming and hacking focusing on a core question in neuroimaging: How can we maximize the reliability, replicability, and interpretability of the functional neuroimaging data being collected in hundreds of labs around the world?

The event will be modeled after the highly successful Brainhack 2012 un-conference held last year at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig. The Boulder hackathon will be, in a sense, a conceptual replication of Brainhack, with a somewhat greater focus on software development and neuroimaging-specific applications, but all of the same ingredients (and many of the same people!) that made Brainhack such a success.

4. Profile Modifications and continued edits (3/27) – notes from last meeting below:

- Some additional detail related to the fMRI BOLD signal may be needed, particularly how the BOLD response will be related to the underlying magnitude of neuronal activity
- Group to read the Executive Summary and provide feedback to the co-chairs, paying close attention to clinical context and claims
- Drafted text for Bias Profile statement for claims 1 and 2.
- More information on potential consistency with inter-operative mapping is needed
- Erich Huang to write a short statement about repeatability coefficients with regard to precision and which measures are best for the 4/16 bias working group call
- More discussion is needed regarding ground truth, and analytic validity in respect to clinical endpoints

Discussion – Profile modifications and continued edits

1. QIBA Annual Meeting

- Dr. Elsinger will bring the fMRI Technical Ctte poster from RSNA 2012 and the fMRI Workflow Poll poster to the QIBA annual meeting
- Smartphone to be used to provide conference call access to the fMRI TC breakout session at May 2013 meeting; RSNA staff will distribute call details prior to the meeting on behalf of Dr. Elsinger.

Update on fMRI Workflow Poll:

- Over 30 active sites participated and patterns are emerging in the data.

2. OIA/RIC effort – SC meeting update with Kathy Andriole

- Dr. DeYoe will follow up with Drs. Elsinger and Voyvodic regarding next steps leading to data upload.

3. Comments about: <http://hackathon.neurosynth.org>

- Overlap with Conference topics and key issues that QIBA fMRI is trying to address.
- It was suggested that the co-chairs invite the hackathon organizers to share information on an fMRI TC call.

New Member:

- Dr. Feng Luo, MD, PhD was introduced by Dr. DeYoe as a new member of the group. Dr. Luo is interested in issues regarding precision and bias.

4. Profile Modifications and continued edits

- All are asked to read the Executive Summary and provide feedback to the co-chairs, paying close attention to clinical context and claims
 - Dr. DeYoe (deyoe@mcw.edu)
 - Dr. Elsinger (cathy@nordicneurolab.com)
 - Dr. Petrella (jeffrey.petrella@duke.edu)
- The 3/25 version has been posted to the wiki
- Some modifications were made during the call – when available, an updated version will be posted to the wiki

Action items:

- Feedback regarding the Executive Summary was requested and may be sent to the co-chairs:
 - Dr. DeYoe (deyoe@mcw.edu); Dr. Elsinger (cathy@nordicneurolab.com); Dr. Petrella (jeffrey.petrella@duke.edu)
- Dr. Huang to write a short statement about repeatability coefficients for the 4/16 bias working group call

Next calls:

- QIBA fMRI Bias WG call - **Tuesday, April 16th**, at **10am CT**
- QIBA fMRI tech committee call - **Wednesday, April 24th**, at **11am CT**