

QIBA fMRI Technical Committee Update

Wednesday, June 5, 2013 at 11 AM CT

Call Summary

In attendance

Ted DeYoe, PhD (Co-Chair)

Cathy Elsinger, PhD (Co-Chair)

Jeffrey Petrella, MD (Co-Chair)

Paul Carson, PhD

Andrew Kalnin, MD

Feroze Mohamed, PhD

Jay J. Pillai, MD

James Reuss, PhD

Laura Rigolo, MS

Daniel Sullivan, MD

James T. Voyvodic, PhD

Zhiyue Jerry Wang, PhD

Yuxiang Zhou, PhD, DABR

RSNA

Joe Koudelik

Julie Lisiecki

QIBA fMRI Technical Committee Call Agenda, Wednesday, June 5, 2013 (11 AM CT)

1. Articles to circulate (Dr. Reuss) –

Neurosurg Focus. 2013 Apr;34(4):E6. doi: 10.3171/2013.2.FOCUS12413.

Association of functional magnetic resonance imaging indices with postoperative language outcomes in patients with primary brain tumors.

Kundu B, Penwarden A, Wood JM, Gallagher TA, Andreoli MJ, Voss J, Meier T, Nair VA, Kuo JS, Field AS, Moritz C, Meyerand ME, Prabhakaran V.

Source: *School of Medicine and Public Health, University of Wisconsin, Madison, Wisconsin, USA. bkundu@wisc.edu*

Neurosurg Focus. 2013 Apr;34(4):E7. doi: 10.3171/2013.2.FOCUS12410.

The role of secondary motor and language cortices in morbidity and mortality: a retrospective functional MRI study of surgical planning for patients with intracranial tumors.

Voss J, Meier TB, Freidel R, Kundu B, Nair VA, Holdsworth R, Kuo JS, Prabhakaran V.

Source: *Departments of Radiology, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin 53705, USA.*

2. NIBIB upcoming proposals (update from Dr. Sullivan)

NIH has issued a Notice of Intent to accept an application from QIBA for renewed funding.

[https://www.fbo.gov/spg/HHS/NIH/NHLBI/NHLBI-CSB-\(EB\)-2013-109-JES/listing.html](https://www.fbo.gov/spg/HHS/NIH/NHLBI/NHLBI-CSB-(EB)-2013-109-JES/listing.html)

The exact issue date is unknown, but it could be as early as end of next week. However, because it is late in the fiscal year, and because NIBIB would like to use funds from this fiscal year to fund the contract if our application is successful in review, the response time will be shorter than originally projected. The RFP is likely to request a response in 20 days (rather than the more typical 30 days). We may need to respond by June 21.

I believe the draft application we have from last fall puts us in a relatively good position for developing a final response once we see the RFP. There is little we can do to revise the draft application until we see the new RFP. **Each technical committee should focus in the next week or two on finalizing the priority order for projects you would like to propose for funding. It would also be good if you could identify one or a couple of people to be the lead for each priority project so we can contact them for details if the RFP calls for that.**

Discussion of Projects for QIBA Funding Consideration

- Dr. Sullivan provided an update regarding the potential funding opportunity. It is anticipated that an RFP will be issued within a week, resulting in deadlines being pushed up significantly to accommodate a 20-day response time.
- Technical Committees are urged to finalize priorities for their project proposals and submit their selections to Dr. Sullivan and RSNA staff as quickly as possible.
- Dr. Sullivan requested that information needed for finalizing the application should be top priority of the Technical Committees
- Focus should be on high-priority projects, although level of detail remains somewhat unclear
 - It is likely that less detail is needed as compared to previous years, because previous QIBA projects may be used as a point of reference
- Dr. Sullivan would like co-chairs to identify project leaders from whom he can obtain needed information

Suggested projects included

1. Develop fMRI Digital Reference Object (DRO) –
 - Creation of a DRO tool, including collection of real and synthetic data (“ground truth”) to be uploaded to the QIDW in a standardized format to test various fMRI software packages and mapping approaches
 2. DRO – Analysis – Systematic assessment using synthetic data and the Profile’s protocol
 - Measurements will be made using the synthetic data (DRO - knowing truth)
 - Some “real” data also must be included
 - Different methods of measuring reproducibility to be included
 - Synthetic data will be uploaded to the QIDW so that other sites may access and test the data
 - Scanning of new subjects to be included
 - Field testing using the sites identified in workflow survey
 - This will satisfy the compliance testing for the second version of the Profile, looking toward FDA qualification
 3. Measurement of bias / linearity at one or two sites using synthetic DRO data
- A plan is needed for these project proposals
 - Consideration to include how projects will advance the Profile

Action items:

- Final copy of proposed projects must be submitted to Dr. Sullivan/ RSNA staff **by June 21st**
- For next call, group needs to have a discussion about ASNR –related topics
- Drs. DeYoe and Voyvodic to document procedural steps used on their funded projects and send to Dr. Elsinger

Next calls:

- QIBA fMRI Bias WG call - **Tuesday, June 11th**, at **10am CT**
- QIBA fMRI tech committee call - **Wednesday, June 19th**, at **11am CT** - (Dr. DeYoe to lead)