

QIBA fMRI Bias Work Group Call
Tuesday, June 25, 2013 at 10 AM CT
Call Summary

Participants

James Voyvodic, PhD (chair)
Barbara Croft, PhD
Erich Huang, PhD
Feroze Mohamed, PhD

Jay J. Pillai, MD
David Soltysik, PhD
Daniel Sullivan, MD
Yong Zhou, PhD

RSNA

Joe Koudelik
Julie Lisiecki

Discussion:

- Follow-up from the 6/19 fMRI Technical Committee call to discuss next steps for proposed future QIBA fMRI projects.
 - fMRI proposal outline was sent to fMRI committee chairs and to Dan S. and Paul C.
 - Extracts from fMRI proposal were integrated into QIBA's NIH contract application
- First stage of proposed project will be generating DRO's:
 - Models for synthetic data – to contain both known brain signals plus different types of noise
 - DRO's will contain known "ground truth"
 - Time that will be needed for assembling the DRO
 - Acquisition of empirical data with correctly identified parameters
 - Incorporate variance based on examination of the literature and committee members' expertise
 - DRO's will be generated with at least 2 data sets for each combination of parameters to test reproducibility
- DRO's will be used to:
 - Compare analysis methods
 - Compare acquisition methods (stimulus timing, stimulus contrasts)
 - Assess signal to noise effects
 - Assess dynamic range over which fMRI is quantifiable
 - Assay of DRO's will be measuring signal location, spatial extent, and relative amplitude

Action items:

Next calls:

- QIBA fMRI Technical Committee, *Wednesday, July 3, 2013 at 11 am CT*
- QIBA fMRI Bias Working Group, *Tuesday, July 9, 2013 at 10 am CT*