QIBA Nuclear Medicine Leadership WebEx

25 March 2016 at 9 AM CT

Call Summary

In attendance:

Edward Jackson, PhD *(QIBA Chair)*
Eric Perlman, MD *(QIBA Vice Chair, CC, Amyloid BC Co-chair)*
Paul Kinahan, PhD *(NM Scientific Liaison)*
P. David Mozley, MD *(CC Vice-Chair, SPECT BC Co-chair)*
Richard Wahl, MD, FACR *(CC Co-Chair)*
Anne Smith, PhD *(Amyloid BC Co-chair)*
Rathan Subramaniam, MD, PhD, MPH *(FDG-PET BC Co-chair)*
John Sunderland, PhD *(FDG-PET BC Co-chair)*
Scott Wollenweber, PhD *(FDG-PET BC Co-chair)*
Yuni Dewaraja, PhD *(SPECT BC Co-chair)*
John Seibyl, MD *(SPECT BC Co-chair)*

RSNA

Joe Koudelik
Julie Lisiecki

Agenda

1. Status of Rd 5 projects
2. Planning for Rd 6 proposals
3. Planning for f2f QIBA meeting
    a. CC report
    b. Breakouts
4. Planning for weekly meeting agendas
5. Scheduling for the April 15th meeting

1. Round 5 Project Updates:

- Dr. Perlman reviewed the list of the current Round-5 projects
- Dr. Subramaniam provided an update on the status of the metabolic tumor volume image analysis project. Reviewers have been identified; they will perform the reads at ACR Research Center where image data is currently located
- Dr. Kinahan provided an update on: *A PET-Metabolic Tumor-Volume-Digital Reference Object (PET-MTV-DRO)*
    - A request was sent out to all of QIBA Nuclear Medicine to test the PET-MTV-DRO
    - Feedback thus far has been positive
- Dr. Kinahan plans to review deliverables from Round 1-4 projects in to look for any cold cases that could benefit from follow-up projects, and will provide an update to NM leadership
- Dr. Lodge is expected to have a project proposal that extends research on his current phantom uniformity measurements project – looking at SUVpeak as the measurand and comparing PSF vs non-PSF reconstructions
- Dr. Subramaniam is preparing an abstract for RSNA 2016 on his meta-analysis that will further inform the PET-Amyloid claim

2. Round 6 Project Discussion – Request for Proposals

- Changes to the application template for Round 6 are as follows:
    - PIs must indicate which NIBIB objective categories the proposal will address / respond to (objectives are listed on the proposal form for reference)
    - PIs must indicate how proposed groundwork will advance their **Profile** and / or **conformance** specification completion and implementation
    - The budget worksheet must be completed and submitted along with the completed proposal form by April 15th
- Possible project topics are as follows:
    - **FDG-PET**:
        - Site-conformance activity
        - Collaboration for test-re-test (understanding that human subjects cannot be funded)
        - Dr. Lodge is expected to propose extending research on his current project on uniformity measurements
        - Dr. Subramaniam is interested in an electronic mechanism for site submission; he is looking into something related to QUIC-T (*Queriable Utility Information CAD*), a program that organizes data conversions
    - **PET-Amyloid**:
        - Phase II phantom / DRO updates by Drs. Sunderland and Kinahan
        - Feasibility Test – Collaboration with ADNI proposed
        - Assessing tracer uptake time differentials – Drs. Boellaard and Vanderheyden
        - Reader variability project – No champion named as of yet
        - Scanner reconstructions/harmonization project – No champion named as of yet

- **SPECT**:
  - Phantoms / DROs
    - Construction of fillable (or closed) phantoms
    - Develop DRO
    - Suggested SPECT proprietary training on how to use the phantoms
  - Gaps in knowledge
    - How many counts are enough?
    - How do you know what x-ray tube current is needed for attenuation correction?

3. **Planning for QIBA f2f meeting**

- Report-outs from the CC level should be prepared with the attendees in mind –
  - Full QIBA membership and NIBIB and other government representatives will be present
  - Two resources that can help with this preparation include:
    - A "dashboard" spreadsheet created by Dr. Perlman to track activities and project status for the BCs
    - A Google Doc created by Dr. Jackson is being used by scientific liaisons to update project statuses and QIBA citations
- Presentations should demonstrate better patient outcomes based on quantitation
- To increase the likelihood of continued funding , it will be important to demonstrate the value of QIBA projects and progress made

4. QIBA Annual Meeting Preparation(s)

- QIBA Annual Meeting attendees are asked to consider examples that demonstrate the impact and value of QIBA
  - Benefits of quantitative imaging vs. qualitative only
  - Imaging site conformance
  - Short term: publications, phantoms, DROs, software tools, process

Nuclear Medicine Calls (Fridays, 9 am CT):

Biomarker Committees:

- Apr 01: FDG-PET BC
- Apr 08: Amyloid BC
- Apr 15: No call
- Apr 22: SPECT BC
- Apr 29: TBD

SPECT Task Forces: (Tuesdays at 2 pm CT)

- Apr 05: Image Acquisition / Processing for DaTscan – *(Dr. Eric Frey)*
- Apr 12: No call
- Apr 19: Phantoms / DRO Group – *Drs. Dickson and Zimmerman*
- Apr 26: Clinical / Literature Review – *Dr. Seibyl*