

## QIBA Perfusion, Diffusion and Flow – MRI Technical Committee Update Call

Wednesday, 11-June-2014 at 11 AM CDT

### Call Summary

#### Participants

**Marko Ivancevic, PhD (Co-Chair)**

**Mark Rosen, MD, PhD (Co-Chair)**

**Gudrun Zahlmann, PhD (Co-Chair)**

Michael Boss, PhD

Orest Boyko, MD

Thomas Chenevert, PhD

Caroline Chung, MD

Amita Dave, PhD

Benjamin Ellingson, PhD

James Ewing, PhD

Daniel Gembris, PhD

Martha Heckel

Edward Jackson, PhD

Chen Lin, PhD

Thorsten Persigehl, MD

David Purdy, PhD

Walter Schneider, PhD

Mark Shiroishi, MD

Daniel Sullivan, MD

Ying Tang, PhD

Ona Wu, PhD

Dewen Yang, MD, PhD

Yuxiang Zhou, PhD

#### RSNA

Joe Koudelik

Madeleine McCoy

#### Agenda:

- 1) Introduction of 'writing groups' to the PDF MR committee  
(proposal by co-chairs, discussion and decision making) (committee co-chairs)
- 2) ADC phantom status and outline of activities for designing version 2 (Dr. Michael Boss)

#### PDF MR Committee Writing Groups (Dr. Zahlmann)

- Background of the PDF-MRI Committee
  - *Where we are coming from?*
    - MR Tech Ctte is the founding committee of QIBA
    - Overview of objectives
- Issues facing the current structure
  - *What is the problem?*
    - Greater interest in the Profiles
    - The number of committee members has increased over the years
    - Limited time and resources
- Moving Forward
  - *What is the proposal?*
    - Build smaller working groups consisting of a chair plus a maximum of 5 members
    - The working groups would report to the PDF MR Technical Committee regularly
    - Goal would be to produce one Profile per year
    - The Tech Ctte would review the Profile, assist in decision making and guide future activities
    - The three new groups would include:
      - DWI Writing Group
        - Chairs: Drs. Boss and Chenevert
        - Members: Drs. Ivancevic, Rosen and Wu...
        - Goal: Profile ready for public review 12/2014
      - DCE Compliance Writing Group
        - Chair: Dr. Guimaraes
        - Members: Drs. Jackson, Barboriak, Zahlmann...
        - Goal: Compliance document ready by 10/2014
      - DTI Writing Group (Proposed)
        - Chairs: Drs. Provenzale and Schneider
        - Members: Drs. Boss, Bassar, Jackson, vendor representative

- Goal: Profile claim consolidated and first draft ready by 12/2014
  - Constraint: Work is currently linked to requested DoD project support; decision needed in case DoD project isn't funded
  - Discussion:
    - The group is looking for representation from all major vendors—GE/Siemens/Philips
    - DSC MR Imaging Data Group may be developed with Drs. Shiroishi and Erickson as co-chairs
    - Guidance needed by the Cttee re Digital Phantom and reproducibility studies
- ADC Phantom Update (Dr. Boss)
  - *New Vial Form Factor, 3D Print Method* slides shown
    - Explanation of vial size changing from 50mL to 20mL in respect to design and scanning capabilities
    - Coronal (image distortion) vs. Axial ADC (better quality) Map discussed
    - 15 total Phantoms are to be produced and expenses split between QIBA and NIST
  - Dr. Boss gave an overview of the locations for the Phantom to be shipped
    - Dr. Chen Lin of Indiana University to focus on phantom orientation during scanning
    - Discussions offline between Drs. Boss and Lin re scanning and hold times, orientation details and test/retest
    - Additional sites include and vendors include
      - University of Wisconsin-GE (Dr. Jackson to receive a Phantom by June 13<sup>th</sup>)
      - University of Pennsylvania-Siemens
      - Michigan-Philips
      - 4 European sites including Cologne, Manchester, Institute of Cancer Research & Royal Marsden NHS Trust (ICR)
      - Dr. Dave from MGH volunteered-Siemens and GE

**Next t-con:**

**QIBA PDF-MRI Tech Cttee Update T-Con, Wednesday, June 25, 2014 at 11am (CT)**