

QIBA COPD/Asthma Technical Committee

July 25, 2012 at 2 PM CT

Call Summary

In attendance

Philip F. Judy, PhD (Chair)

Heather Chen-Mayer, PhD (presenter)

Paul Carson, PhD

Barbara Croft, MD

Michael Flynn, PhD

Zachary Levine, PhD

Joshua Levy

John D. Newell, Jr, MD

Daniel C. Sullivan, MD

RSNA

Joe Koudelik

Julie Lisiecki

General Updates/Deadlines

- Alfonso Rodriguez, PhD candidate at UW-Madison, submitted an abstract for *RSNA 2012* which was accepted.
- The next QIBA Annual Meeting will be held in the Washington, D.C. area from May 15-16, 2013.
 - Despite RSNA Staff efforts to accommodate schedules, the meeting still conflicts with the ATS Meeting (May 17-22, 2013 in Philadelphia)
- The deadline for submitting an abstract for the SPIE Conference is Monday, July 30th.

NIST Presentation (Dr. Chen-Mayer)

- Dr. Chen-Mayer previewed a presentation she will be giving at the AAPM conference on NIST foam calibration
- Acquisition and reconstruction parameters of the CT scan affect outcome of measurements
 - A standard reference material is desirable to mitigate these differences
- Goal is to establish a linear relationship between foam densities and HU values
 - There will be “NIST certified foams” once this calibration process is complete
 - Peak analyses were conducted for each density; the statistician concluded there were no large systematic errors

CT images of the COPDGene Phantom: Effects of Phantom Arrangements (Dr. Judy)

- Two COPDGene phantom scan protocols were briefly reviewed:
 1. Scanned the phantom with lung reference foams in the standard arrangement, placed flat on patient table
 2. Scanned the insert from the phantom in the standard arrangement and placed flat on patient
- Reconstructed images from 4 arrangements of these test objects were made as a result.

Next Steps

- Seek alternate sources of funding of RFP for computer program to analyze COPDGene
- Review and evaluate low-dose reconstruction protocols
- Plan a comparison of airway-size image analysis algorithms
- **Please Note:** [Plan for summer activities listed on the reverse side of this summary](#)

Next call: *QIBA COPD/Asthma Update Call, [Wednesday, August 8, 2012, 2 pm CT](#) - (Presenter will be Dr. Hoppel)*

QIBA COPD/Asthma Technical Committee Summer Events

1. AAPM - **7/28/2012 – 8/2/2012**
Status of round robin; round robin protocol
2. SPIE Abstract Deadline **7/30/2012** Meeting: 9-14 February 2013 Disney Coronado Springs, Orlando Florida
Evaluation of dose reduction protocols
NLST results – Use of low dose exams
Plan - face to face
3. COPD Genetics Conference **9/27/2012- 9/28/2012** AMSTERDAM

Proposed Summer Schedule (*times shown in Eastern*)

8/8/2012 - Wednesday 3 PM Regular Conference Call

1. Qualification of scanner models using COPDGene Phantom
2. Experience with Aquilion

8/22/2012 - Wednesday 3 PM Regular Conference Call

1. Review of CT lung density clinical applications
2. Normative CT lung density data

9/12/2012 - Wednesday 3 PM Regular Conference Call - TBD