

## QIBA COPD/Asthma LDRCS WG

April 11, 2012 at 2 PM CT

Call Summary

### In attendance

*Philip F. Judy, PhD (Co-chair)*  
Paul L. Carson, PhD  
Heather Chen-Mayer, PhD  
Martin Connell, BSc

Harvey O. Coxson, PhD  
Sean B. Fain, PhD  
Zachary Levine, PhD  
John D. Newell, Jr., MD

Frank Ranallo, PhD  
Jered Sieren  
Daniel C. Sullivan, MD

### RSNA

Joe Koudelik  
Julie Lisiecki

## Agenda

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### 1. Review of Lung QCT Conference at STR and follow-up

- a. COPD Biomarkers Qualification Consortium – Stephen Rennard
- b. Normative data – Graham Barr
- c. Incorporate into 2013 International Workshop for Pulmonary Functional Imaging in Madison from July 18-20, 2013.

### 2. Status of CT scanning and analysis of COPDGene Phantom with NIST Foams

- a. NIST
- b. UW
- c. Clinical Research Imaging Centre
- d. Iowa
- e. National Jewish

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## Discussion Summary

### Review of Lung QCT Conference at STR and follow-up

- Dr. Judy and Dr. Lynch agreed that the next one-day Quantitative Imaging of the Lung conference would be held in conjunction with the 2013 International Workshop for Pulmonary Functional Imaging in Madison, WI from July 18-20, 2013.
  - Better fit for the group than AAPM.
- Dr. Judy met with Dr. Graham Barr at the STR meeting to discuss normative data for lung mass.

### QIBA Annual Meeting (May 22-23, 2012)

- The American Thoracic Society (ATS) annual meeting and COPDGene meeting are in direct conflict with the QIBA Annual Meeting, making QIBA COPD/Asthma members unavailable.

### NIST report on experiments with foams – Dr. Chen-Mayer

- COPDGene phantoms were scanned using specific parameters with the new foams on a Philips 16 machine
- Both “in-air” and “in-phantom” tests were done
- Need actual measurements for the foam densities from Mr. Levy
- There are some variations within 1 Hounsfield Unit (HU) though all measurements are consistently within range of 1 HU
- Noted that improvement on measurements with regard to ROI may be needed
  - Jered Sieren offered to run Dr. Fain’s data on University of Iowa software to calculate volumes
  - Dr. Fain hopes to standardize airway measurements
- Dr. Judy is interested in measurements from the new phantoms and any variations

### Toshiba Scanners

- Toshiba scanners currently are the only ones that do not truncate reads below 1000 HU
- These extra-precise measurements may have issues in some experiments but are nice to have available

### Next Steps:

- Dr. Connell plans to scan the COPDGene phantom using a dose- reduction scheme with rings lent by Dr. Judy
- Dr. Hoppel and Toshiba team members plan to visit Dr. Connell’s lab facility in Scotland

### Next calls:

- Next COPD/Asthma Technical Committee update call: **Wednesday, April 18, 2012 at 2 PM CT**
- Next COPD/Asthma LDRCS WG update call: **Wednesday, April 25, 2012 at 2 PM CT**