

QIBA COPD/Asthma Technical Committee

June 27, 2012 at 2 PM CT

Call Summary

In attendance

Philip F. Judy, PhD (Co-chair)

Paul Carson, PhD

Heather Chen-Mayer, PhD

Martin Connell, BSc

Sean Fain, PhD

Michael Flynn, PhD

Bernice Hoppel, PhD

Zachary Levine, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Status of CBQC Collaboration

- Dr. Sullivan is awaiting a response regarding proposed 2 day workshop; Workshop proposed for January 2013 with a one-day focus on CT and one day on another imaging biomarker
- Suggested speakers for this workshop include:
 - Dr. David Lynch
 - Dr. Dave Gierada (low-dose research)
 - Dr. Harvey Coxson
 - Dr. Graham Barr
- Dr. Sullivan suggested a conference call among interested parties in the near future

Proposed Database for COPDGene Phantom Images

- Would like ability to share phantom images with interested investigators
- Database might attract software developers to test algorithms
- Technical Committee would get experience using QIBA image database resources

RFP for Airway Measurements

- Want a free and versatile tool for public domain that would let the group analyze data quickly and easily
 - Mechanisms suggested include: open source viewer, plugin, stand-alone Microsoft application, multi-platform Image J, Osirix, etc.
- Dr. Fain will draft some verbiage, working in tandem with Mr. Martin Connell to cite the literature with references for different published algorithms, to add to RFP
- Alternate sources of funding sought to support RFP for computer program to analyze COPDGene images
- Dr. Judy to check with Mr. Levy (Phantom Labs) for suggested resources

Linking lung cancer screening and low dose

- This link will provide useful emphysema metrics with more “power”
- A standardized protocol is needed to compare results
 - Repeatability and reproducibility need to be considered

Other topics

- Dr. Judy would like discussions on low-dose techniques; to include Dr. Fain’s dose reduction procedures
- Dr. Hoppel to provide Dr. Judy with a contact name – (Dr Narinder Paul in Toronto at UHN-JDMI)
- Round-robin phantom scanning to continue
 - individual teams to contact one another for shipping information

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 algorithms
- **Please Note:** [Plan for summer activities listed on the reverse side of this summary](#)

Next call: QIBA COPD/Asthma Update Call, **Wednesday, July 11, 2012, 2 pm CT**

QIBA COPD/Asthma Technical Committee Summer Events

1. AAPM - **7/28/2012 – 8/2/2012**
 - Face to face meeting?
 - 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*)

7/11/2012 - Wednesday 3 PM Regular Conference Call

1. Review RFP for computer program to analyze COPDGene
2. Plan a database of images of COPDGene Phantoms
3. Plan comparison of airway size algorithms

7/25/2012 - Wednesday 3 PM Regular Conference Call

1. Review NIST AAPM Presentation
2. Results of NIST scans of COPDGene Phantom

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