

QIBA COPD/Asthma Lung Density Reference and Consistency Standards Work Group (LDCRS WG) Update

June 8, 2011 at 2 PM CDT

Call Summary

In attendance

Philip Judy, PhD (Co-chair)

John D. Newell Jr., MD (Co-chair)

Heather Chen-Mayer, PhD

Sean Fain, PhD

Frank Ranallo, PhD

RSNA

Julie Lisiecki

Agenda:

1. Experience with COPD Gene Phantom with foams identified by NIST
2. Variation of foam CT number in Gammex phantom with foams identified by NIST

General Discussion:

- Dr. Judy is concerned about adaptive filtering on the projection table
- Focus of presentation and discussion: the new phantom model – modifications to be posted on the WIKI
 - Change: added 3 new NIST-identified foams – yet to be calibrated
 - CT numbers obtained from phantom foam inserts discussed
 - CT numbers of air and water are less sensitive to spectral differences
 - Use of different scanners
 - Positioning of phantom in relation to another object
 - Positioning material within the phantom
 - Using the term “reference standard” to replace “phantom”
 - Concerns about table height, rings, and pixel size
 - Adding a measurable “uncertainty error” in a given HU on a system that has been well calibrated

Next steps:

- Postpone Profile discussion until next call
- RSNA Staff to post edited PowerPoint presentation to the QIBA WIKI: <http://qibawiki.rsna.org/>

Next calls:

- **Wednesday, June 15th** – (COPD/Asthma Technical Committee Update Call)
- **Wednesday, June 22nd** - (Lung Density Reference and Consistency Standards Work Group)