

# Quantitative CT Imaging of the Lung

## Saturday, March 15, 2014

### Grand Hyatt San Antonio San Antonio, Texas



#### Program Description

This one-day course, co-sponsored by the Society of Thoracic Radiology and the Quantitative Imaging Biomarkers Alliance, will summarize the current state of knowledge regarding the role of quantitative CT of the lungs in diffuse lung disease.

#### Learning Objectives

At the completion of the course, the attendee will be able to:

- Describe the technical parameters recommended for performing quantitative CT of the lung parenchyma in diffuse lung disease
- Understand the role of CT as a biomarker of diffuse diseases, including COPD and lung fibrosis
- Comprehend newer methods for quantification pulmonary vasculature and lung texture
- Understand the emerging role of MRI in the lung parenchyma

#### Target Audience

Thoracic radiologists, pulmonologists, imaging scientists.

#### Credit Information

The Society of Thoracic Radiology is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

The Society of Thoracic Radiology (STR) designates this live activity for a maximum of **6.0 AMA PRA Category 1 Credits™**. Physicians should claim only credit commensurate with the extent of their participation in the activity.

#### Course Directors

David A. Lynch, MB and Jonathan Goldin, MBChB, PhD

#### Course Schedule

##### Moderator: David A. Lynch, MB

|                     |                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------|
| 7:30 AM - 8:00 AM   | Continental Breakfast                                                                                  |
| 8:00 AM - 8:10 AM   | Quantitative CT: Role of the Quantitative Imaging Biomarkers Alliance<br><i>Daniel C. Sullivan, MD</i> |
| 8:10 AM - 8:30 AM   | What Do Clinicians Want from Imagers<br><i>James D. Crapo, MD</i>                                      |
| 8:30 AM - 8:50 AM   | QCT of the Airways<br><i>Sean B. Fain, PhD</i>                                                         |
| 8:50 AM - 9:10 AM   | Clinical Evidence for CT as a Biomarker in COPD<br><i>Jonathan Goldin, MBChB, PhD</i>                  |
| 9:10 AM - 9:30 AM   | QIBA Profile: Computed Tomography: Lung Densitometry<br><i>Philip F. Judy, PhD</i>                     |
| 9:30 AM - 10:00 AM  | Discussion                                                                                             |
| 10:00 AM - 10:20 AM | Break                                                                                                  |

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### Program Continued

**Moderator: John D. Newell, Jr., MD**

10:20 AM - 10:40 AM QCT in Lung Cancer Screening  
*Pim de Jong, MD, PhD*

10:40 AM - 11:00 AM Quantification of Pulmonary  
Vasculature on CT  
*Raul San Jose Estepar, PhD*

11:00 AM - 11:20 AM QCT in Lung Fibrosis  
*David A. Lynch, MB*

11:20 AM - 11:40 AM Texture Based Approaches to Image  
Analysis  
*Joyce D. Schroeder, MD*

11:40 AM - 11:50 AM Discussion

12:00 PM - 1:30 PM Sponsored Lunch: Workstation  
Demonstrations

**Moderator: Geoffrey D. Rubin, MD**

1:30 PM - 2:30 PM Scientific Presentations

**Moderators:**

**Jonathan Goldin, MBChB, PhD and  
Raul San Jose Estepar, PhD**

2:30 PM - 2:50 PM MRI of the Lung  
*Yoshiharu Ohno, MD, PhD*

2:50 PM - 3:10 PM Break

3:10 PM - 3:30 PM Quantitative CT of the Lung in Normal  
Subjects  
*Eric A. Hoffman, PhD*

3:30 PM - 4:15 PM Panel Discussion: What is Necessary to  
Bring QCT into your Reading Room  
*All Speakers*

**Moderator: Warren B. Gefter, MD**

## Faculty

**James D. Crapo, MD**

*National Jewish Health*

**Pim de Jong, MD, PhD**

*University Medical Center Utrecht*

**Raul San Jose Estepar, PhD**

*Brigham and Women's Hospital*

**Sean B. Fain, PhD**

*University of Wisconsin - Madison*

**Warren B. Gefter, MD**

*University of Pennsylvania*

**Jonathan Goldin, MBChB, PhD**

*UCLA – David Geffen School of Medicine*

**Eric A. Hoffman, PhD**

*University of Iowa*

**Philip F. Judy, PhD**

*Brigham and Women's Hospital*

**David A. Lynch, MB**

*National Jewish Health*

**John D. Newell, Jr., MD**

*University of Iowa*

**Yoshiharu Ohno, MD, PhD**

*Kobe University*

**Geoffrey D. Rubin, MD**

*Duke University*

**Joyce D. Schroeder, MD**

*National Jewish Health*

**Daniel C. Sullivan, MD**

*Duke University*