



Lung Cancer Workshop VIII

## Application of Quantitative CT Imaging to Early Lung Cancer Management: Accelerating Progress

May 2 - 3, 2011 • Bethesda, Maryland • USA

### D R A F T    A G E N D A

#### Day One - Monday, May 2

##### 7:30 AM Conference Registration

Grand Ballroom Foyer

8:00 AM Welcome

Grand Ballroom A & B

Chairs:

- Carolyn R. "Bo" Aldigé, *Prevent Cancer Foundation*
- Thomas M. Baer, PhD, *Optical Society of America (OSA), Stanford Photonics Research Center*

8:10 AM Overview and Workshop Goals

- James L. "Jim" Mulshine, MD, *Rush University Medical Center*

8:30 AM Towards the Evaluation of 3D Tumour Volume for Use in Response Assessment

- Marietta L. J. Scott, PhD, *AstraZeneca UK Limited*

9:00 AM Integrating Quantitative Imaging for Screening Case Detection

- Mathias Prokop, MD, *Erasmus University*

9:30 AM Tightening Variance: Role of Phantom Integration in-Quantitative Imaging

- Ricardo S. "Rick" Avila, *Kitware, Inc.*

##### 10:00 AM 15-Minute Break

10:15 AM Approach to Biomarker Qualification

- Enrique E. Aviles, BSME, *Critical Path Institute*

10:30 AM RSNA's QIBA Volumetric CT: Rolling Towards Qualification

- Andrew J. Buckler, MS, *Buckler BioMedical LLC*

11:00 AM Moving to Automated VIA in Clinical Trials: Changes according to Nodule Characteristics

- David F. Yankelevitz, MD, *Mt. Sinai Medical Center*

11:30 AM Toward Quantitative X-ray CT Phantoms of Metastatic Tumors Using Rapid Prototyping Technology

- Terry S. Yoo, PhD, *National Library of Medicine*

12:00 PM Exploring Models for Integrating Quantitative Imaging in a National Infrastructure to Improve Lung Cancer Outcomes: View From Silicon Valley

- Thomas M. Baer, PhD, *Optical Society of America (OSA), Stanford Photonics Research Center*

## Day One - Monday, May 2 continued ...

### 12:30 PM Lunch

Kenwood/Montrose/  
Great Falls Room

1:30 PM

Grand Ballroom A & B

Panel: Grand Challenge: Algorithm Validation Process Discussion: Software Evaluation for Quantitative Analysis of Nodule Work Up from two Prospective Screening Studies

Facilitator: Ricardo S. "Rick" Avila, *Kitware, Inc.*

- Discussion NELSON Cases and Controls: Mathias Prokop, MD, *Erasmus University*
- Discussion of I-ELCAP Cases for Algorithm Validation: Claudia I. Henschke, PhD, MD, *Mt. Sinai Medical Center*:
- Presentation of Batch Image Analysis: Anthony P. Reeves, PhD, *Cornell University*

2:30 PM

Status of the NCI Quantitative Imaging Network

- Larry Clarke PhD, *National Cancer Institute*

2:50 PM

Introduction to Breakout Group Process

- James L. "Jim" Mulshine, MD, *Rush University Medical Center*

### 2:55 PM 5-minute Break

3:00 – 3:45 PM

Potomac/  
Bethesda Room

Breakout Group Work Session 1

**Group A: Strategic Planning Accelerating Qualification Through Process Optimization**

- Facilitators: Ricardo S. "Rick" Avila, *Kitware, Inc.*  
Andrew J. Buckler, MS, *Buckler BioMedical LLC*  
Marietta L. J. Scott, PhD, *AstraZeneca UK Limited*

**Group B: Strategic Planning: Exploring Models for Implementing a National Infrastructure for Quantitative Imaging in Early Lung Cancer Management**

- Facilitators: Thomas M. Baer, PhD, *OSA, Stanford Photonics Research Center*  
Laurie Fenton Ambrose, *Lung Cancer Alliance*  
Carolyn R. "Bo" Aldigé, *Prevent Cancer Foundation*

Montgomery/  
Democracy Room

### 3:45 PM 5-minute Break

3:50 PM

Grand Ballroom A & B

CT Imaging Progress with COPD

- Raul San Jose Estepar, PhD, *Brigham and Women's Hospital – Harvard Medical School*

4:10 PM

Quality Control Of Quantitative Lung Imaging In A Multi-center Trial: COPDGen Experience

- Jered Sieren, BS RT(R) CT MR, *University of Iowa*

4:30 PM

Quantitative Approaches to the Pathological Evaluation of NSCLC

- Jessica C. Sieren PhD, *University of Iowa*

4:50 PM

CT Approach to Measuring Other Tobacco-related Injury During Cancer Screening

- Claudia I. Henschke, PhD, MD, *Mt. Sinai Medical Center*

## Day One - Monday, May 2 continued ...

5:10 PM Panel: Lung Cancer and COPD: Collaboration Opportunities with Phantoms Archives and Algorithms

Chairs:

- Ricardo S. "Rick" Avila, *Kitware, Inc.*
- Raul San Jose Estepar, PhD, *Brigham and Women's Hospital – Harvard Medical School*
  - Jered Sieren, BS RT(R) CT MR, *University of Iowa*
  - Robert J. Nordstrom, PhD, *National Cancer Institute (NCI)*
  - Anthony P. Reeves, *Cornell University*

5:30 PM Meeting Adjourns for the Day

6:30 PM Departure for Reception and Dinner, the Cosmos Club

If you plan to attend the reception and dinner, please be in the Marriott Bethesda's lobby no later than 6:15 PM to catch the bus to the Cosmos Club

## Day Two - Tuesday, May 3

### 7:30 AM Continental Breakfast

Grand Ballroom Foyer

#### 8:00 AM New Image Processing Resources

Grand Ballroom A & B

- Anthony P. Reeves, PhD, *Cornell University*

#### 8:30 AM QIBA 1A: Evaluation of Nodule Sizing by Radiologists through CT Phantom Imaging of Synthetic Nodules

- Nicholas Petrick, PhD, *U.S. Food and Drug Administration (FDA)*

#### 9:00 AM Tumor Volume and Clinical Outcome - A role for Re-use of High Quality Quantitative Image Databases?

- TBD

#### 9:30 AM Personalizing Early Lung Cancer Clinical Trials

- Natasha Leighl, MD, *Princess Margaret Cancer Center*

#### 10:00 AM Breakout Group Work Session 2

Potomac/  
Bethesda Room

##### **Group A: Strategic Planning: Accelerating Qualification Through Process Optimization**

- Facilitators: Ricardo S. "Rick" Avila, *Kitware, Inc.*  
Andrew J. Buckler, MS, *Buckler BioMedical LLC*  
Marietta L. J. Scott, PhD, *AstraZeneca UK Limited*

##### **Group B: Strategic Planning: Exploring Models for Implementing a National Infrastructure for Quantitative Imaging in Early Lung Cancer Management**

- Facilitators: Thomas M. Baer, PhD, *OSA, Stanford Photonics Research Center*  
Laurie Fenton Ambrose, *Lung Cancer Alliance*

Montgomery/  
Democracy Room

#### 11:00 AM Panel: Image Qualification: Where Are We? Perception and Reality

Grand Ballroom A & B

Moderator: P. David Mozley, MD, *Merck Pharmaceutical*

- Gary J. Kelloff, PhD, *National Cancer Institute (NCI)*
- Andrew J. Buckler, MS, *Buckler BioMedical LLC*
- Enrique E. Aviles, BSME, *Critical Path Institute*

#### 11:30 AM Panel: Image Archives: Where Are They and What Next?

Moderator: Raul San Jose Estepar, PhD, *Brigham & Women's Hospital – Harvard Medical School*

- Status of "Give A Scan" Update: Laurie Fenton Ambrose, *Lung Cancer Alliance*
- Terry S. Yoo, PhD, *National Library of Medicine*
- Charles "Chuck" Fenimore, PhD, *National Institute of Standards & Techniques (NIST)*

### 12:30 PM Lunch

Kenwood/Montrose/  
Great Falls Room

#### 1:30 PM Progress in Quantitative Imaging Trial: Industry Perspective

Grand Ballroom A & B

- P. David Mozley, MD, *Merck Pharmaceutical*

#### 2:00 PM Breakout Group Reports

**Group A:** Strategic Planning: Accelerating Qualification Through Process Optimization

**Group B:** Strategic Planning: Exploring Models for Implementing a National Infrastructure for Quantitative Imaging in Early Lung Cancer Management

#### 2:30 PM Meeting Conclusion and Final Comments

- James L. Mulshine, MD, *Rush University Medical Center*

### 2:45 PM Program Concludes