

SEAAPM 2012 Symposium and Meeting

Quality, Safety and Compliance: How to address the triple challenge of modern imaging and therapy

April 18-20, 2012
Marriot Downtown, Atlanta, GA

Directors:

Ehsan Samei, Ph.D., Duke University

Larry Marks, MD, UNC Chapel Hill

Kevin Junck, Ph.D., Univ. of Alabama at Birmingham Health System

Abstract

In recent years, radiation imaging and therapy have experienced a new surge of advanced technologies in the clinic. While these new technologies enable a higher level of clinical performance, they also pose new challenges that stem from complexities of the new systems and the degree of variability in their implementation. At the same time, patient safety has taken a center stage in medical practice, and new regulatory and compensation methods have brought forth new requirements for the standardization of therapy and imaging operations in compliance with professional guidelines. While all these movements are encouraging as positive steps towards improving patient care, they pose new challenges for clinical practitioners including clinical medical physicists. How can we concurrently achieve the triple goals of maintaining a high degree of patient safety and a high level of quality performance while remaining compliant? This symposium addresses this very objective through invited lectures given by the thinkers, enforcers, and practitioners of quality imaging and therapy operations. The symposium strives to cover three topics of 1) the basics of quality and safety – the “why” question, 2) the process of achieving and maintaining enhanced quality and safety – the “how” question with ACR accreditation as the platform – and, 3) the effectiveness and the limitations of clinical implementations towards the ultimate goal.

Target Audience: Medical Physicists, Medical Dosimetrists, Radiation Therapists, and Professionals in radiology, radiation therapy, and nuclear medicine

CAMPEP credits: 13.5 (9.5 for Symposium and 4 for Meeting) of MPCEC hours requested for approval

MDCB credits: 16.5 of MDCB hours requested for approval

Symposium Faculty

Theresa Branham, BSRS

Program Manager, CT/MR Accreditation
American College of Radiology, Reston, VA

Benedick A. Fraass, Ph.D., FAAPM, FASTRO, FACR

Vice Chair for Research and Director of Medical Physics
Department of Radiation Oncology
Cedars-Sinai Medical Center, Los Angeles, CA

Mannudeep K. Kalra, MD

Assistant Radiologist
Massachusetts General Hospital, Boston, MA

Carolyn R. MacFarlane, MS, CNMT, RT(N)

Program Manager, Nuclear Medicine/PET Accreditation, Ultrasound Accreditation
American College of Radiology, Reston, VA

Lawrence B. Marks, MD

Professor and Chairman
Department of Radiation Oncology
University of North Carolina, Chapel Hill, NC

Brian T. Monzon, MBA, RT(R)(T)

Program Manager, Quality and Safety, Radiation Therapy Accreditation
American College of Radiology, Reston, VA

Todd Pawlicki, PhD

Associate Professor, Director of Medical Physics and Clinical Operations
Department of Radiation Oncology
University of California, San Diego, CA

Donald Peck, PhD, DABR, FACR, FAAPM

Vice Chair, Department of Radiology, Imaging Physics and Research
Henry Ford Medical Group, Detroit, MI

Douglas Pfeiffer, MS, DABR

Medical Physicist, RSO
Boulder Community Hospital, Boulder, CO

Ronald Price, PhD, FAAPM

Professor of Radiology
Vanderbilt University, Nashville, TN

Ehsan Samei, PhD, DABR, FAAPM, FSPIE

Professor and Director
Carl E. Ravin Advanced Imaging Laboratories (RAI Labs) and Clinical Imaging Physics Group
Department of Radiology
Duke University Medical Center, Durham, NC

Prabhakar Tripuraneni, MD, FACR, FASTRO

Head, Division of Radiation Oncology
Scripps Clinic Torrey Pines, La Jolla, CA

Symposium Schedule

Wednesday, April 18

6:00-8:00 Symposium Registration & Ice Breaker

Thursday, April 19

I. Clinical Perspective

Session co-chairs: Ehsan Samei, PhD and Larry Marks, MD

8:00-8:15 Welcome and Introduction

8:15-9:15 Current State of Quality and Safety in Radiation Therapy
Larry Marks, MD, UNC Chapel Hill

9:15-10:15 Current State of Quality and Safety in Diagnostic Radiology
Mannudeep Kalra, MD, Mass General Hospital

10:15-10:45 BREAK

II. Imaging

Session chair: Ehsan Samei, PhD

Ila. Principles

10:45-11:30 Principles of Quality and Safety in Diagnostic Radiology
Ehsan Samei, PhD, Duke University

11:30-12:15 Quality Control in Diagnostic Radiology: Why and How?
Doug Pfeiffer, MS, Boulder Community Hospital

12:15-1:30 LUNCH

Ilb. ACR Accreditation

1:30-2:15 Nuclear Medicine and PET
Carolyn MacFarlane, MS, ACR

2:15-3:00 Computed Tomography
Theresa Branham, BSRS, ACR

3:00-3:45 MRI and Breast MRI
Ron Price, PhD, Vanderbilt University

3:45-4:14 BREAK

Ilc. Achieving the Balance

4:15-5:00 Clinical Experience of Quality, Safety, and Achieving ACR Accreditation in DI
Don Peck, PhD, Henry Ford Medical Group

5:00-5:45 Putting it all together – Panel Discussion and Q&A

Friday, April 20

III. Therapy

Session chair: Larry Marks, MD

IIIa. Principles

8:00-8:45 Principles of Quality and Safety in Radiation Therapy
Benedick Fraass, PhD, Cedar-Sinai Medical Center

8:45-9:15 Quality Control in Radiation Therapy: Why and How?
Todd Pawlicki, PhD, UC San Diego

IIIb. ACR Accreditation

9:15-10:00 ACR Accreditation of Radiation Therapy Operations
Brian Monzon, MBA, RT, ACR

10:00-10:30 BREAK

IIIc. Achieving the Balance

10:30-11:15 Clinical Experience of Quality, Safety, and Achieving ACR Accreditation in RT
Prabhakar Tripuraneni, MD, Scripps Clinic Torrey Pines

11:15-12:00 Putting it all together – Panel Discussion and Q&A

12:00 Symposium adjourn

SEAAPM 2012 Annual Meeting

Session 1

1:00 – 1:15 Welcome and Introduction
Kevin Junck, PhD, Univ of Alabama at Birmingham Health System

1:15 – 1:45 A simple phantom to test multiple non IMRT treatment planning QA parameters
Ingrid Marshall, MS, PhD, DABR
Georgetown Cancer Center, Medical University of South Carolina

1:45 – 2:15 Clinical Quality Control Metrics in Radiation Oncology
Charles Able, MS, DABR, Wake Forest University Medical Center

2:15 – 2:45 Physics Aspects of the ACR MR Accreditation Program –
the Good, the Bad, and the Ugly.
Wlad Sobol, PhD University of Alabama at Birmingham

2:45 – 3:15 ACR Accreditation: A Regional Radiation Oncology Network's Quest
Charles Able, MS, DABR and Alan deGuzman, PhD, DABR,
Wake Forest University Medical Center

3:15 – 4:45 **Student/Trainee Poster Session in Vendor Exhibit Area**

5:00 - 10:00 **SEAAPM 2012 Annual Night Out at Atlanta Aquarium**
Aquarium open to SEAAPM attendees from 5pm-7pm
Dinner Buffet in AT&T Dolphin Tales Gallery 7pm -10pm

Saturday, April 21

Session 2

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| 8:00 - 8:15 | Welcome and Introduction |
| 8:15 – 8:45 | AAPM Initiatives, 2012 and beyond
Gary Ezzell, PhD AAPM President, Mayo Clinic Scottsdale |
| 8:45 – 9:15 | A Measure for Quality Assurance of Deformable Registration Fields in Clinical Settings
Eduard Schreibmann, Emory University |
| 9:15 - 9:45 | BREAK in Vendor Exhibit Area |
| 9:45 – 10:15 | IMRT plan quality check: modeling the inter-patient organ dose sparing variation
Lulin Yuan, PhD Duke University Medical Center |
| 10:15 – 10:45 | Clinically Focused Physics Education:
The Foundation for Image Quality and Effective Dose Management
Perry Sprawls, Ph.D. Emory University |
| 10:45-11:00 | Memorial Tributes |
| 11:00-11:30 | Chapter Awards and Wrap-Up |
| 12:00 – 1pm | SEAAPM Business Meeting |