

Multi- Energy Workshop CT Workshop, Saturday September 17th, 7:00am – 12:00pm

New this year! We are excited to announce an addition to our traditional Annual Course, our new half day workshop, Multi-Energy CT! This new workshop will take place during the first half of the day, September 17th, 7:00am – 12:00pm MST, before the start of SCBT-MR's 2016 Annual Course. For just \$200 you will be able to partake in three individual sessions that will provide:

- Practical, case based lectures with emphasis on the workflow and clinical applications.
- Workstation based discussion of three commercial DECT technologies by faculty with clinical and research expertise.
- A friendly and interactive environment with ample opportunity for discussion.

7:00 - 8:15 am: Technology and Workflow, Moderator: Dushyant Sahani, MD, FSCBTMR

7:00 - 7:05: **Introduction to DECT**, Dushyant Sahani, MD, FSCBTMR

7:05 - 7:20: **Single Source DECT Workflow**, Desiree Morgan, MD, FSCBTMR

7:20 - 7:35: **Dual Source DECT Workflow**, Carlo De Cecco, MD, FSCBTMR

7:35 - 7:50: **Detector Based DECT**, Lakshmi Ananthakrishnan, MD

7:50 - 8:05: **A Technologist's Perspective**, Cristy Savage, RT(R)(CT) CIIP

8:05 - 8:15: **Question and Answer Session**

Break

8:30 - 9:55am: Material Separation, Musculoskeletal, and Vascular Application, Moderator: Desiree Morgan, MD, FSCBTMR

8:30 - 8:45: **Material Separation in DECT**, Andrew Hardie, MD, FSCBTMR

8:45 - 9:00: **Metal Artifact Reduction with DECT**, Daniele Marin, MD, FSCBTMR

9:00 - 9:15: **DECT in the Musculoskeletal System**, Daniele Marin, MD, FSCBTMR

9:15 - 9:30: **Thoracic Vascular Applications of DECT**, Subba Digumarthy, MD

9:30 - 9:45: **Reduced Iodine Dose Abdominal DECTA**, Dushyant Sahani, MD, FSCBTMR

9:45 - 9:55: **Question and Answer Session**

Break

10:05 - 12:00pm: Multi-System Applications, Moderator: William Shuman, MD, FSCBTMR

10:05 - 10:20: **DECT of the Liver**, William Shuman, MD, FSCBTMR

10:20 - 10:35: **DECT in the Pancreas**, Desiree Morgan, MD, FSCBTMR

10:35 - 10:50: **DECT in Renal Stones and Masses**, Ravi Kaza, MD

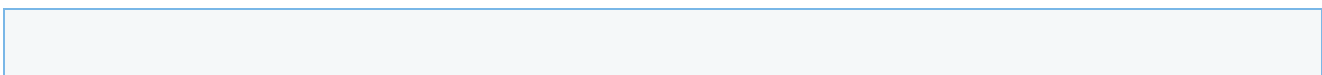
10:50 - 11:05: **DECT Oncologic Applications in the Abdomen**, Avinash Kambadakone Ramesh, MD

11:05 - 11:20: **Dual-Energy CT of the Pediatric Patient 2016: How I Do It**, Marilyn Siegel, MD, FSCBTMR

11:20 - 11:35: **Is There a Role for DECT in the Emergency Department?**, Avinash Kambadakone Ramesh, MD

11:35 - 11:50: **Dual Energy CT: Incorporation into Clinical Practice**, Rendon Nelson, MD, FSCBTMR

11:50 - 12:00: **Question and Answer Session**



Saturday, September 17, 2016

1:00 – 3:00: SCBT-MR Welcome & CT: Technical Advances and Contrast Media, Moderator: Dushyant Sahani, MD, FSCBTMR

1:00 - 1:15: **Welcome, President's Address, and Program Committee Update**, Erik Paulson, MD, FSCBTMR

1:15 - 1:30: **New DECT Techniques**, Dushyant Sahani, MD, FSCBTMR

1:30 - 1:45: **Wide Detector CT: Axial Versus Helical**, W. Dennis Foley, MD, FSCBTMR

1:45 - 2:00: **Contrast Media 2016**, Matthew Davenport, MD, FSCBTMR

2:00 - 2:15: **New Contrast Injection Strategies in Low kV and keV Imaging**, Carlo De Cecco, MD, FSCBTMR

2:15 - 2:30: **Recent Advances in CT Radiation Dose Reduction Techniques**, Kalpana Kanal, PhD, FSCBTMR

2:30 - 2:45: **Advances in CT Radiation Dose Reduction Techniques in Children**, Marilyn Siegel, MD, FSCBTMR

2:45 - 3:00: **Question and Answer Session**

3:00 – 3:15: Break

3:15 – 3:45: Thoracic Imaging Debate, Debate Moderator: Leslie Quint MD, FSCBTMR

3:15 - 3:45: **Debate - Chasing Lung Nodules - Helping or Hurting Patients?**

Debaters: Ella Kazerooni, MD, MS, FSCBTMR & Geoffrey Rubin, MD, FSCBTMR

Panelists: Philip Costello, MD, FSCBTMR, Michael Orsi, MD, Subba Digumarthy, MD, & William Shuman, MD, FSCBTMR

3:45 – 5:00: Thoracic Imaging, Moderator: Geoffrey Rubin, MD, FSCBTMR

3:45 - 4:00: **Lung Cancer Screening in Practice: Optimizing Your Program**, Ella Kazerooni, MD, MS, FSCBTMR

4:00 - 4:15: **Lung Cancer Staging Update with CT and PET/CT**, Leslie Quint, MD, FSCBTMR

4:15 - 4:30: **Choosing Wisely - Approaches to Guiding Utilization of Chest Radiography**, Leif Jensen, MD, MPH

4:30 - 4:45: **Is Dual Energy CT Ready for Prime Time in the Chest?**, Phillip Costello, MD, FSCBTMR

4:45 - 5:00: **Question and Answer Session**

Sunday September 18th

7:00 – 7:45: Round Table Discussions

Teaching at the PACS Station: How I Do It, Leslie Quint, MD, FSCBTMR, Jill Jacobs, MD, FSCBTMR, & Reena Jha, MD

Dose Monitoring in CT/Radiation Dose Reduction: How Much is Too Much?, Kalpana Kanal, PhD, FSCBTMR, & Sanjay Saini, MD, MBA, FSCBTMR

Update on MRI and Gadolinium Safety, Ihab Kamel, MD, PhD, FSCBTMR, & Martin Prince, MD, PhD, FSCBTMR

8:00– 8:45: Keynote Talk: The Transformation to Value Driven Health Care, Vivian Lee, MD, PhD, MBA

8:45 – 10:00: Efficient MR Protocols, Moderator: Susan Ascher

8:45 - 8:57: **Economics of Efficient MRI Protocols**, Sanjay Saini, MD, MBA, FSCBTMR

8:57 - 9:09: **Pelvic MRI Under 30 minutes**, Susan Ascher, MD, FSCBTMR

9:09 - 9:21: **Prostate MRI Under 30 minutes**, Jurgen Futterer, MD, PhD, FSCBTMR

9:21 - 9:33: **Liver MRI Under 30 minutes**, Scott Reeder, MD, FSCBTMR

9:33 - 9:45: **Fast Knee MRI**, Garry Gold, MD, FSCBTMR

9:45 - 10:00: Question and Answer Session (5 ARS Questions)

10:00 – 10:20: Break

10:20 – 11:05: Workshops

Rectal Cancer MRI, Mukesh Harisinghani, MD, FSCBTMR & Kartik Jhaveri, MD, FSCBTMR

Airways: Large and Small, Philip Costello, MD, FSCBTMR

Checklist for CT of Blunt Abdominal Trauma, R. Brooke Jeffrey, MD, FSCBTMR

Radiation Dose Monitoring in CT: Quality Improvement Considerations, Kimberly Applegate, MD, MS, FSCBTMR, & Olga Brook, MD, FSCBTMR

11:15 - 12:00: Workshops

Musculoskeletal Findings for Abdominal Radiologists, Kimberly Amrami, MD, FSCBTMR & Aarti Sekhar, MD

Adrenal MR: Pearls and Pitfalls, Frank Miller, MD, FSCBTMR, & Michael Blake, FFR(RCSI)FRCR, FSCBTMR

Structured Radiology Reports - Who Are They For?, Brian Herts, MD, FSCBTMR

CTA Runoffs; Upper and Lower Extremity, W. Dennis Foley, MD, FSCBTMR

12:00 – 1:15: Annual Business Meeting (Members Only)

1:15 – 2:30: Don't Let This Happen to You! (Cases We'd Like Do Over), Moderator: Geoffrey Rubin, MD, FSCBTMR

Mark Baker, MD, FSCBTMR

Olga Brook, MD, FSCBTMR

W. Dennis Foley, MD, FSCBTMR

Jay Heiken, MD, FSCBTMR

Reena Jha, MD

Ihab Kamel, MD, PhD, FSCBTMR

Gaurav Khatri, MD

Elizabeth McFarland, MD, FSCBTMR

Venkateswar Surabhi, MD

Joseph Yacoub, MD

2:30 – 3:00: Break

3:00 – 5:15: Cardiovascular CT & MRI Moderator: Leon Axel, MD, FSCBTMR

3:00 - 3:15: **Vasculogenic Basis of Imaging**, John Haaga, MD, FSCBTMR

3:15 - 3:30: **Cardiac CT: State of the Art in 2016**, U. Joseph Schoepf, MD, FSCBTMR

3:30 - 3:45: **Cardiovascular Disease Evaluation: Case Based Approach for Choice of Imaging Modality**, Lynne Hurwitz Koweek, MD, FSCBTMR

3:45 - 4:00: **Adult Aortic Coarctation: Imaging and Management**, W. Dennis Foley, MD, FSCBTMR

4:00 - 4:15: **Have You Met My Aunt Minnie? Cardiac Entities You Should Know!**, Jill Jacobs, MD, FSCBTMR

4:15 - 4:30: **Perforator Flap MR Angiography**, Martin Prince, MD, PhD, FSCBTMR

4:30 - 4:45: **Wide Detector TAVR Planning CT with Reduced Iodine Dose**, William Shuman, MD, FSCBTMR

4:45 - 5:00: **CT Pulmonary Angiography Update**, Olga Brook, MD, FSCBTMR

5:00 - 5:15: **Question and Answer Session**

Monday, September 19th

7:00 – 7:45: Round Table Discussions

Iterative Reconstruction Techniques: Use in Current CT Practice and Integration of Dual Energy CT, William Shuman, MD, FSCBTMR, Rendon Nelson, MD, FSCBTMR

Talking to Your Colleagues & Hepatologists About LI-RADS, Frank Miller, MD, FSCBTMR, Joseph Yacoub, MD
Prostate MRI - Getting it Right, Katarzyna Macura, MD, PhD, FSCBTMR, & Pranay Krishnan, MD

8:00 – 8:30: Oncologic/Quantitative Imaging Debate, Moderator: Erik Paulson, MD, FSCBTMR

Debate: “Should My Practice Invest in PET MRI?”, Alexander Guimaraes, MD, PhD, Anwar Padhani, MBBS, FRCP, FRCR, FSCBTMR, Lynne Hurwitz Koweek, MD, FSCBTMR, Venkateswar Surabhi, MD, Vikas Kundra, MD, PhD, FSCBTMR, N. Reed Dunnick, MD, FSCBTMR

8:30 – 10:00: Oncologic/Quantitative Imaging, Moderator: John Haaga

8:30 - 8:45: **Cholangiocarcinoma**, Kartik Jhaveri, MD, FSCBTMR

8:45 - 9:00: **Pancreatic Cancer Update**, R. Brooke Jeffrey, MD, FSCBTMR

9:00 - 9:15: **Neuroendocrine Tumors**, Michael Blake, FFR(RCSI)FRCR, FSCBTMR

9:15 - 9:30: **DW MRI of Bone Marrow in Health and Oncologic Diseases**, Anwar Padhani, MBBS, FRCP, FRCR, FSCBTMR

9:30 - 9:45: **Quantitative CT Imaging for Tumor Response Assessment**, Andrew Smith, MD, PhD, FSCBTMR

9:45 - 10:00: **Question and Answer Session**

10:00 – 10:20: Break

10:20 – 11:05: Workshops

Prostate MRI PIRADS v2.0, Jurgen Futterer, MD, PhD, FSCBTMR

MRI of Sports Medicine, Garry Gold, MD, FSCBTMR

Tumor Assessment, RECIST or ENABLE with More Informative Multimedia Radiologist Reports, Marilyn Siegel, MD, FSCBTMR, Les Folio, DO, MPH, FAOCR

Genitourinary Cancer Imaging, Susan Ascher, MD, FSCBTMR, Anwar Padhani, MBBS, FRCP, FRCR, FSCBTMR

11:15 - 12:00: Workshops

MR Neurography: Case Based Interactive Session, Kimberly Amrami, MD, FSCBTMR, Avneesh Chhabra, MD

Cardiovascular Imaging Interactive Case Discussions, U. Joseph Schoepf, MD, FSCBTMR, Satinder Singh, MD

Navigating the Biliary Tract with CT & MR: An Imaging Approach to Biliary Obstruction, Ann Fulcher, MD, FSCBTMR

Building a Successful Female Pelvic Floor Imaging Practice, Gaurav Khatri, MD, Jurgen Futterer, MD, PhD, FSCBTMR

1:30 – 5:00: Scientific Sessions

Myocardial Infarct Quantification Technique Accounting for Partial Volume Averaging Predicts Segmental Left Ventricular Myocardial Contraction, Akos Varga-Szemes

Assessment of prototype ECG-compatible iterative reconstruction metal artifact reduction (iMAR-ECG) algorithm for cardiac implanted electrical devices on MDCT examination, Raj Gondalia

Evaluation of Myocardial Late Gadolinium Enhancement Using a Dark-Blood Inversion Recovery Cardiac MR Technique, Akos Varga-Szemes

Application of Image Registration Based Local Displacement Technique (Lung Motionography) for the Assessment of Lung Fibrosis, Kum Ju Chae

Acinar Scale Relative Regional Air Volume Change Maps Reflecting Mechanics of LAAs in COPD patients, Kum Ju Chae

Dual Energy CT Evaluation of Deep Inferior Epigastric Perforators (DIEP), Chenchan Huang

Evaluation of two different single-source, rapid kV-switching dual energy MDCT platforms: Are there differences in contrast sensitivity, noise characteristics and accuracy of iodine quantitation?, Wendy Ehieli

Optimization of a Frequency-Based Fusion Technique for Improving the Image Quality on Low Energy Virtual Monochromatic Images from Dual-Energy CT, Brian Jiang

Noise-Optimized Virtual Monoenergetic Dual-Energy CT Improves Diagnostic Accuracy for the Detection of Arterial Bleeding, Moritz Albrecht

Prototype Detection-based Spectral CT scanner derived Virtual Non-Contrast Attenuation Values compare favorably to Attenuation Values on Unenhanced Images, Lakshmi Ananthakrishnan
3:20 - 3:30 Break

Bacterial Contamination of CT Equipment: Use of ATP Detection and Culture Results to Target Quality Improvement, Matthew Davenport, MD FSCBTMR, presenting for John Childress III

The separation of simultaneously administered intravascular and oral x-ray contrast agents using Spectral CT: pre-clinical examples of pseudo-cloaking with high-Z materials, Todd Soesbe

Prospective Evaluation of Reduced Dose Computed Tomography for the Detection of Low-Contrast Liver Lesions: Direct Comparison with Concurrent Standard Dose Imaging, B. Dustin Pooler

Effect of Fixed-Volume and Weight-Based Dosing Regimens on the Cost and Volume of Administered Iodinated Contrast Material at Abdominal CT, Kushal Parikh

MRI Liver Surface Nodularity Score as a New Noninvasive Biomarker for Chronic Viral Hepatitis, Kelly Cox

Reproducibility of hepatic proton density fat fraction measurements across scanners and field strengths and between multiple reviewers, Andrew Trout

MR Elastography in Primary Sclerosing Cholangitis: Correlating liver stiffness with bile duct strictures and parenchymal changes, Candice Bookwalter

Quantification of splanchnic blood flow in cirrhosis with respiratory self-navigated parallel-imaging compressed-sensing 4D flow MRI, Ryan Brunsing

Effect of Gadoxetate Disodium on Arterial-Phase Respiratory Waveforms, Matthew Davenport, MD, FSCBTMR

Statistical Clustering of Quantitative DCE-MRI Parametric Maps and an Associated Decision Tree for Non-Invasive Tumor Grading of T1b/T2 Solid Clear Cell Renal Cell Carcinoma, Yin Xi

Tuesday, September 20th

7:00 – 7:45: Round Table Discussion

Pancreatic Cancer Imaging: CT/MR/PET/EUS, Eric Tamm, MD, FSCBTMR, Abjihit Roychowdhury, MD

Creating and Adopting Structured Report Templates, Brian Herts, MD, FSCBTMR, Venkateswar Surabhi, MD

Changing the Way Radiologists Work: How and Why We Need to Embrace a Culture of Safety, Kimberly Applegate, MD, MS, FSCBTMR, Julia Fielding, MD, FSCBTMR

8:00 - 8:30: **Debate: “Oral Contrast, Yea or Nay?”** Erik Paulson, MD, FSCBTMR, Mark Baker, MD, FSCBTMR, Michael Gee, MD, PhD, Julia Fielding MD, FSCBTMR, Cristy Savage, Avinash Kambadakone Ramesh, MD

8:30 – 10:00: Gastrointestinal Imaging, Debate Moderator: Judy Yee

8:30 – 9:40: **Gastrointestinal Imaging Lectures,** Moderator: Elizabeth McFarland MD, FSCBTMR

8:30 - 8:45: **Interpreting CTE/MRE in Crohn's Disease,** Mark Baker, MD, FSCBTMR

8:45 - 9:00: **Gastrointestinal Stromal Tumors,** Eric Tamm, MD, FSCBTMR

9:00 - 9:15: **Small Bowel Obstruction: When to Worry,** Erik Paulson, MD, FSCBTMR

9:15 - 9:30: **Update on CTC,** Judy Yee, MD, FACR, FSCBTMR

9:30 - 9:40: **Question and Answer**

9:40 – 10:10: Power Posters

10:10 - 10:25 Break

10:25 – 11:10: Workshops

Lung Cancer Screening in Practice: State of the Art, Reginald Munden, DMD, MD, MBA, FSCBTMR

Imaging Biomarkers of Crohn's Disease Activity and Treatment Response, Michael Gee, MD, PhD

Imaging and Managing Pancreatic Cystic Lesions: CT and MRI, Isaac Francis, MBBS, FSCBTMR, Pardeep Mittal, MD

MRI of Femoracetabular Impingement, Garry Gold, MD, FSCBTMR, David Mayer, MS, MD

11:20 – 12:05: Workshops

Recent Advances in CT Radiation Dose Reduction Techniques, William Shuman, MD, FSCBTMR & Kalpana Kanal, PhD, FSCBTMR

Dual Energy CT in Thoracic Masses, Subba Digumarthy, MD

How to Start a DECT Program, Rendon Nelson, MD, FSCBTMR, Avinash Kambadakone Ramesh, MD

Interesting and Challenging Liver Lesions, Barak Friedman, MD & Sudhakar Venkatesh, MD, FRCR, FSCBTMR

10:25 – 12:05: Scientific Poster Presentations, Authors Available for Comments/ Questions

12:05: Lunch Break

12:05: Gadolinium Deposition and the Safety of MRI Contrast Agents Symposium

12:05 - 12:15 What Happened to NSF? Jeff Weinreb, MD Moderator: Neil Rofsky

12:15 - 12:25 A Review of Gd Deposition Robert Lenkinski, PhD

12:25 - 12:35 Allergic Considerations Matthew Davenport

12:35 - 12:50 Panel Discussion: 3 Case Scenarios – What Would You Do? Jeff Weinreb, MD, Robert Lenkinski, PhD, Matthew Davenport, Reena Jha, Nicole Hindman

1:15 – 2:45: Image Interpretation Team Competition, Moderators: Desiree Morgan, MD, FSCBTMR & Matthew Davenport MD, FSCBTMR

Michael Gee, MD, PhD

Lakshmi Ananthkrishnan, MD

Philip Costello, MD, FSCBTMR Pardeep Mittal, MD

Brian Herts, MD, FSCBTMR Joseph Yacoub, MD

Judy Yee, MD, FACR, FSCBTMR Aarti Sekhar, MD

2:45 – 3:00: Break

3:00 – 5:15: Multi-System and Special Interest, Moderator: Garry Gold MD, FSCBTMR

3:00 - 3:15: CT and MR MSK Imaging in Metal, Garry Gold, MD, FSCBTMR

3:15 - 3:30: MR Neurography: Technical Considerations, Avneesh Chhabra, MD

3:30-3:45: Artifacts in Body MRI, Thomas McCauley, MD, FSCBTMR

3:45 - 4:00: Abdominal MRI in Emergent Settings, Ivan Pedrosa, MD, FSCBTMR

4:00 - 4:15: Prostate MRI Update 2016: MRI/US Fusion Biopsy, Katarzyna Macura, MD, PhD, FSCBTMR

4:15 - 4:30: 4D Flow MRI for in Congenital Heart Disease, Scott Reeder, MD, PhD, FSCBTMR

4:30 - 4:45: Multiple Myeloma: No More Skeletal Surveys, Kimberly Amrami, MD, FSCBTMR

4:45 - 5:00: Radiologist Burnout: The Challenge and a Remedy, Stephen Swensen, MD, FSCBTMR

5:00 - 5:15: Question and Answer

5:15 - Research Reception

Wednesday, September 21st

7:00 – 7:45: Round Table Discussion

Tumor Response Assessment Criteria in Clinical Practice, Richard Gore, MD, FSCBTMR, Andrew Smith, MD, PhD, FSCBTMR

Practical Implementation of CT Colonography, Judy Yee, MD, FACR, FSCBTMR, Elizabeth McFarland, MD, FSCBTMR

Radiologist Productivity Measures in the Era of Healthcare Reform, Giles Boland, MD

8:00 – 10:15: Liver Imaging, Moderator: Ihab Kamel, MD, PhD, FSCBTMR

8:00 - 8:15: Chronic Liver Disease and HCC Screening Strategies, Jeffrey Weinreb, MD, FACR, FSCBTMR

8:15 - 8:30: **LI-RADS: Update 2016**, Jay Heiken, MD, FSCBTMR

8:30 - 8:45: **Hypervascular Liver Lesions in the Non-Cirrhotic Patient**, Ihab Kamel, MD, PhD, FSCBTMR

8:45 - 9:00: **Hepatobiliary Contrast Agents**, Scott Reeder, MD, PhD, FSCBTMR

9:00 - 9:15: **Fibrosis Quantification/MR Elastography**, Sudhakar Venkatesh, MD, FRCR, FSCBTMR

9:15 - 9:30: **Liver Fat and Iron Quantification**, Scott Reeder, MD, PhD, FSCBTMR

9:30 - 9:45: **Targeted Therapy for Hepatic Tumors: Assessing Response**, Frank Miller, MD, FSCBTMR

9:45-10:00: **Decision Support in Radiology**, Giles Boland, MD

10:00 - 10:15: **Question and Answer**

10:15 – 10:30: Break

10:30 – 12:45: Genitourinary Imaging, Moderators: Julia Fielding, MD, FSCBTMR & Isaac Francis, MBBS, FSCBTMR

10:30 - 10:45 pm: **Problematic Renal Masses**, Vikas Kundra, MD, PhD, FSCBTMR

10:45 - 11:00 pm: **Adnexal Incidentalomas**, Richard Gore, MD, FSCBTMR

11:00 - 11:15 pm: **Radiogenomics of Ovarian Cancer**, Srinivasa Prasad, MD, FSCBTMR

11:15 - 11:30 pm: **Radiomics in Kidney Cancer**, Ivan Pedrosa, MD, FSCBTMR

11:30 - 11:45 pm: **How to Interpret Prostate MRI with PI-RADS**, Vikas Kundra, MD, PhD, FSCBTMR

11:45 - 12:00 pm: **MRI in Benign Gynecological Conditions**, Susan Ascher, MD, FSCBTMR

12:00 - 12:15 pm: **DECT: GU Applications**, Ravi Kaza, MD

12:15 - 12:30 pm: **Retroperitoneal Sarcoma: What Your Surgical Oncologist Wants to Know**, Aarti Sekhar, MD

12:30 - 12:45 pm: **Question and Answer**