

Understanding
CT
Technology

One-Day Seminar

January 30, 2010 - Sacramento, CA

March 13, 2010 - Raleigh, NC

May 22, 2010 - Atlantic City, NJ

June 26, 2010 - Anaheim, CA

July 10, 2010 - Detroit, MI

August 21, 2010 - Cleveland, OH

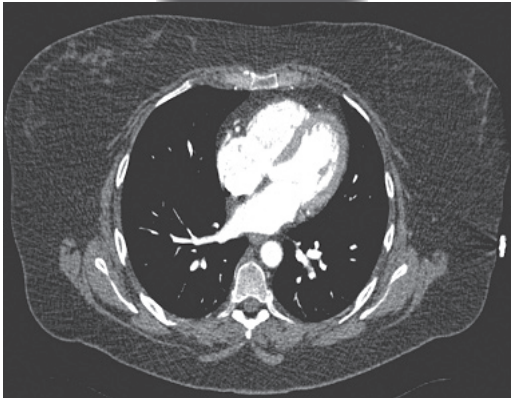
September 25, 2010 - Edmonton, ON
Canada

8 hours
Category A
Continuing
Education
Credits

MTMI

Medical Technology
Management Institute

Making Technology Work for You!



Seminar Schedule

- 8:00 am **Registration and Coffee**
- 8:30 am **Axial CT Basics**
- Overview/Objectives
 - Techniques parameters
 - Image reconstruction (no math)
 - Algorithms/kernels
 - Imaging Chain
 - CT number
- 10:10 am **Informal Discussion and Break**
- 10:20 am **Helical & Multi-Slice/Multi-Detector-Row CT**
- Slip rings
 - Data channels
 - Detectors configurations
 - Differences in image recon
 - Pitch
 - Detectors
 - Z-sampling
 - Artifacts
- 12:00 pm **Lunch (on your own)**
- 1:00 pm **MS/MD CT Dose... Is it really higher?**
- Factors affecting MSCT Dose
 - Pediatric CT dose
 - Radiation risk
- 1:50 pm **MS/MD CT Scan Protocols**
- Effective mAs
 - Combined CT protocols
 - Pediatric CT protocols
 - Variable mA options
- 2:40 pm **Informal Discussion and Break**
- 2:50 pm **CT Quality Control**
- What to check and how often?
 - Artifact hunt
 - Annual check
- 3:15 pm **ACR Accreditation**
- Program overview
 - Personnel qualifications
 - ACR phantom
 - Protocol parameters: Table 1
 - Accreditation phantom scanning
- 3:40 pm **Advanced MS/MD CT Applications**
- Cardiac CT
 - CT Fluoroscopy
 - CT Perfusion
 - CT Angiography
 - 3D Imaging
 - Hybrid imaging
- 4:30 pm **Adjourn**

About the Seminar

The technology of computed tomography has made significant strides in the past few years, first with the development of spiral/helical scanning and more recently with multi-slice/multi-detector CT scanning capability. These technological developments have opened the doors to new and improved applications for CT scanning. An understanding of these advances will provide career growth opportunities for technologists working in CT. This seminar will provide an improved understanding of multi-slice/multi-detector CT as well as scan protocols, quality control procedures and ACR accreditation procedures and requirements. Advancements in clinical applications of this technology will also be reviewed.

Who Should Attend

- CT technologists
- CT imaging specialists
- any technologist interested in learning multi-slice/multi-detector CT imaging techniques

Objectives

At the completion of this seminar, participants will be able to:

- ♦ Understand the difference between spiral/helical and multi-slice CT technologies.
- ♦ Describe how multi-slice CT images are reconstructed.
- ♦ Handle patient questions about radiation dose from MS/MD CT exams.
- ♦ Understand the factors to consider when designing scan protocols for MS/MD CT.
- ♦ Describe the requirements for ACR accreditation of CT facilities.
- ♦ Understand the importance of CT quality control measurements.
- ♦ Describe the CT applications enhanced by MS/MD CT.

About the Instructor



Dianna Cody, Ph.D., is a Professor of Diagnostic Imaging Physics at The University of Texas M.D. Anderson Cancer Center.

She is board certified in Diagnostic Radiologic Physics and has a Ph.D. degree in bioengineering. Dianna has conducted CT research through grants from the NIH and industry, is active in consulting for the imaging community, and has written several recent book chapters on multi-slice CT. Dianna regularly teaches courses and directs training programs, and combines this with her experience in an internationally recognized medical facility to present an informative and enjoyable seminar.








Continuing Education Credit

This program provides **8 hours of Category A continuing education credit** recognized by the ARRT for radiologic technologists. A certificate of attendance will be provided for each individual upon completion of the seminar. All attendees must attend the entire seminar to receive full credit.

Registration

To register for this seminar:

-  go to www.mtmi.net or
-  complete the registration form below and
-  mail it with your tuition to **MTMI**, or
-  call **(800) 765-6864** using MasterCard or Visa, or
-  fax the form to **(262) 717-9171** w/credit card info

- Refunds, minus a \$30 processing fee, will be granted for cancellations received prior to the Tuesday before the seminar.
- Cancellations received after the Tuesday preceding the seminar will receive a credit toward a future **MTMI** seminar, minus the \$30 processing fee. No refunds will be made after the seminar.

Registration Discounts:

Group discounts:

- 3-5 attendees receive a 5% discount on each registration
 - 6+ attendees receive a 10% discount on each registration
- The discount is not applicable if the tuition is paid by purchase order. For student rates, contact **MTMI**. Members of **MTMI** receive a 10% discount.

MTMI reserves the right to cancel any scheduled program because of low advance registration or other reasons.

MTMI's liability is limited to a refund of any program tuition paid. **MTMI** recommends that attendees use refundable airline tickets. In case of cancellation of a seminar for any reason, **MTMI** is not responsible for travel costs incurred by attendees including non-refundable airline tickets.

Membership

Membership in the Medical Technology Management Institute includes:

- discounts on **MTMI** services
- member newsletter
- web access to **MTMI** records
- yearly transcripts
- special benefits throughout the year exclusive to members

Save up to \$44 off the registration fee!

- Check the membership box on the registration form or call **MTMI** at 800-765-6864.
- Seminar discount effective immediately.
- Annual membership dues for technologists are \$42.50.

Location and Accommodations

Specific location and accommodation information will be listed on our web-site as soon as arrangements have been made.

Please go to
www.mtmi.net
 or call
 800-765-6864

Become a MTMI Member, organize a group and save up to \$44 off regular price!

Registration Form Understanding CT Technology City/date: _____

Please Print Clearly - This is how your name will appear on your certificate.

Name: _____ degree/title _____

Home Address _____ City _____

State: _____ Zip code: _____ *e-mail _____

* registration confirmation will be sent to this e-mail address - **print clearly**

Day phone () _____ Eve. phone () _____ FAX () _____

Credit Card Number _____ Master Card Visa

Expiration Date _____ Signature _____

Please enclose payment to MTMI:

- \$42.50 Yes! Enroll me in an Annual **MTMI** membership (discount effective immediately)

Regular price: \$195 (**MTMI** members \$175) - within 14 days of seminar

Advance price: \$185 (**MTMI** members \$166) - 14+ days before seminar

At-the-door price: \$205 (**MTMI** members \$185)

Group discount: 3-5 attendees (5%)

- 6 or more attendees (10%)

Total:
 \$ _____



Call 800-765-6864
 2 weeks before the
 seminar if you have
 special needs.

Return to: **MTMI** ♦ 20900 Swenson Dr., Suite 650 ♦ Waukesha, WI 53186

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