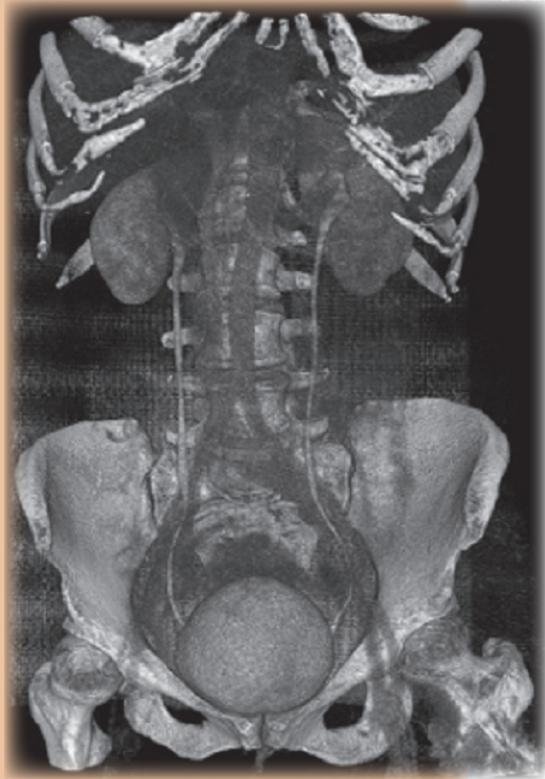


One-Day Seminar



Understanding CT Technology

Instructor:
Dianna Cody, PhD

Edmonton, ON
September 25, 2010

MTMI

Medical Technology
Management Institute

MOHAWK
COLLEGE



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



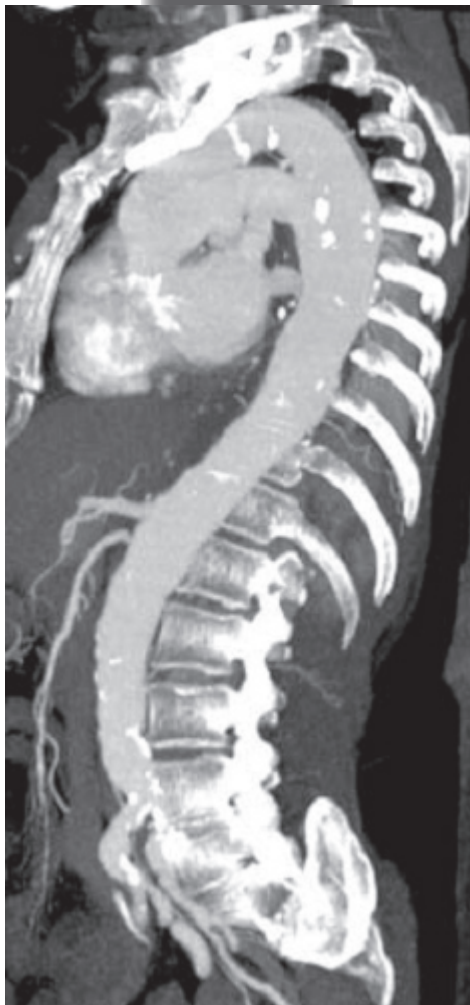
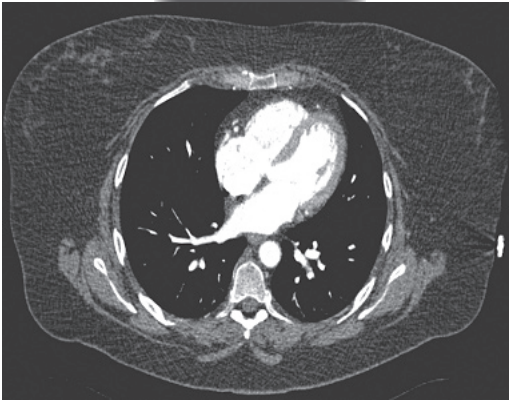
Dianna Cody, Ph.D., is a Professor of Diagnostic Imaging Physics at The University of Texas M.D. Anderson Cancer Center.

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.



Seminar Schedule

8:00 am	<i>Registration and Coffee</i>
8:30 am	Axial CT Basics <ul style="list-style-type: none"> • Overview/Objectives • Techniques parameters • Image reconstruction (no math) • Algorithms/kernels • Imaging Chain • CT number
10:10 am	<i>Informal Discussion and Break</i>
10:20 am	Helical & Multi-Slice/Multi-Detector-Row CT <ul style="list-style-type: none"> • Slip rings • Data channels • Detectors configurations • Differences in image recon • Pitch • Detectors • Z-sampling • Artifacts
12:00 pm	<i>Lunch (on your own)</i>
1:00 pm	MS/MD CT Dose... Is it really higher? <ul style="list-style-type: none"> • Factors affecting MSCT Dose • Pediatric CT dose • Radiation risk
1:50 pm	MS/MD CT Scan Protocols <ul style="list-style-type: none"> • Effective mAs • Combined CT protocols • Pediatric CT protocols • Variable mA options
2:40 pm	<i>Informal Discussion and Break</i>
2:50 pm	CT Quality Control <ul style="list-style-type: none"> • What to check and how often? • Artifact hunt • Annual check
3:15 pm	ACR Accreditation <ul style="list-style-type: none"> • Program overview • Personnel qualifications • ACR phantom • Protocol parameters: Table 1 • Accreditation phantom scanning
3:40 pm	Advanced MS/MD CT Applications <ul style="list-style-type: none"> • Cardiac CT • CT Fluoroscopy • CT Perfusion • CT Angiography • 3D Imaging • Hybrid imaging
4:30 pm	<i>Adjourn</i>

Sponsorship

This seminar is jointly sponsored by Mohawk college and **MTMI**. A partnership has been formed between Mohawk College and **MTMI** to bring **MTMI**'s popular continuing education seminars for technologists to Canada. This is one of a number of future opportunities for technologists to update their skills and earn continuing education credit. Let us hear from you about the types of programs you would like us to bring to your area.

Registration

To register for this seminar, complete the registration form and:

- ♦send it with your tuition to Mohawk College Enterprise, or
- ♦call (905) 667-6230 using MasterCard or Visa, or
- ♦fax (905) 667-6231 the form with credit card information.

The tuition for this seminar is \$239 CAD (**MTMI** members \$219) per person. A special advance price for those registering and paying prior to 14 days before the seminar is \$219 CAD (**MTMI** members \$199).

- ♦Refunds, minus a \$40 CAD processing fee will be granted for cancellations received prior to 3 days before the seminar.
- ♦Cancellations received within 3 days of the seminar will receive a credit toward a future Mohawk College/**MTMI** seminar, minus the \$40 CAD processing fee. No refunds will be made after the seminar.

Mohawk College/**MTMI** reserves the right to cancel any scheduled seminar due to low advance registration or other reasons. **MTMI**'s liability is limited to a refund of any program tuition paid.

Registration Discounts: Group discount for a group from one facility registering at the same time: 3-5 attendees 5%; 6 or more attendees 10% (discount is not applicable if the tuition is paid by purchase order). For student rates, contact **MTMI**. Members of **MTMI** receive a 10% discount. Only one discount may be applied.

Visit Mohawk College's web site at: <http://www.mohawkcollegeenterprise.ca>

Visit **MTMI**'s web site at <http://www.mtmi.net>

Registration Form

Understanding CT Technology

9/25/10 - Edmonton, ON

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

Name: _____ degree/title _____

Home Address _____ City _____

Province: _____ Postal code: _____ e-mail _____ e-mail address used only for notification of future programs

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

Credit Card Number: _____ Master Card Visa Check

Expiration Date _____ Signature _____

Please enclose payment to Mohawk College Enterprise in the form of check or credit card:

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

Regular price: \$239 CAD (**MTMI** members \$219 CAD) - within 14 days of seminar

Advance price: \$219 CAD (**MTMI** members \$199 CAD) - 14 days before seminar

Group discount: 3-5 attendees (5%) (must register together)

6 or more attendees (10%) (must register together)

Return to: **Mohawk College Enterprise**

101A-175 Longwood Road South, Hamilton, ON L8P 0A1

☎ 905-667-6230 Fax: 905-667-6231



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

Your satisfaction with **MTMI programs is guaranteed, a guarantee we are confident you won't need to use.**

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

Joining **MTMI** with this registration qualifies you for the member price. Check the membership box on the registration form or call **MTMI**. Annual membership dues for technologists are \$42.50 CAD. **Seminar discount effective immediately.**

Location & Accommodations

Specific location and accommodation information will be listed on the website as soon as arrangements have been made.

Please go to:

<http://www.mtmi.net> or

<http://www.mohawkcollegeenterprise.ca>

or call

800-765-6864