



Hands-on Workshop^{for} Surveying Digital Mammography Units

MTMI Education Center in
Milwaukee (Waukesha), WI
March 1-2, 2012



Scan this QR code for more
information on this program
and to register on-line.

This workshop provides
15 hours of
Medical Physics Continuing
Education Credit (MPCEC)
more than satisfying
the MQSA requirement!

MTMI

Medical Technology
Management Institute

Making Technology Work for You!

About the Workshop

Full field digital mammography (FFDM) holds promise to improve image quality and reduce radiation dose in the detection of breast cancer. Commercial systems have been approved by the FDA and make up a large majority of the systems in the clinical setting. The Mammography Quality Standards Act (MQSA) requires 8 hours of training on all new modalities, such as FFDM, before performing surveys on these units. The FDA also strongly recommends that the required training include hands-on instruction on surveying these units. This workshop provides an opportunity to receive hands-on training for both FFDM surveying and quality control procedures on units from several manufacturers.

Who Should Attend

This workshop is for medical physicists wanting to learn surveying and quality control procedures on FFDM units as well as to obtain the 8 hours of training required by the FDA before surveying these units. It is also appropriate for experienced mammography QC technologists, medical physics students, residents and fellows, biomedical engineers, state and federal mammography facility inspectors and others interested in surveying and QC testing of FFDM units.

Workshop Format

The workshop will consist of lecture as well as laboratory training. Lectures will review the technology and surveying/QC procedures. There will be 7 laboratory sessions. Attendees will be divided into small groups to rotate through all 7 labs. **FFDM machines from Carestream Health, Fuji, GE, Hologic and Siemens will be used to demonstrate the set up, collection and analysis of survey and QC data.** A syllabus with supporting material for the lectures and labs will be provided to all attendees as well as a CD-ROM with lectures, software, test images, and some QC manuals.

Acknowledgements

Appreciation is expressed to the following companies for their support and participation to make this workshop possible:



Educational Objectives

By participating in this workshop attendees will:

- Review the various technologies being used for full field digital mammography.
- Collect survey data required for FFDM units.
- Learn the quality assurance procedures approved for various manufacturers units.
- Analyze survey and QC data for various manufacturers FFDM units.
- Become familiar with the DICOM Part 14 Gray Scale Display Standard.
- Perform appropriate QC tests on soft copy display devices.

Faculty

Jerry Thomas, MS

Via Christi Regional Medical Center

Robert Pizzutiello, MS

Global Physics Solutions

Don Jacobson, PhD

Medical College of Wisconsin

Gregg Cretella

Fujifilm Medical Systems

Marika Bazley

Carestream Health

J. Ed Barnes, PhD

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Continuing Education Credit

This workshop will provide 15 hours of continuing education on surveying of full field digital mammography units. An application has been made to CAMPEP for approval of up to 15 hours of Medical Physics Continuing Education Credit (MPCEC) for qualified medical physicists. An application has been filed for approval of Category A credits for radiologic technologists. A certificate documenting attendance will be provided to all participants.

Workshop Schedule*

Day One ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

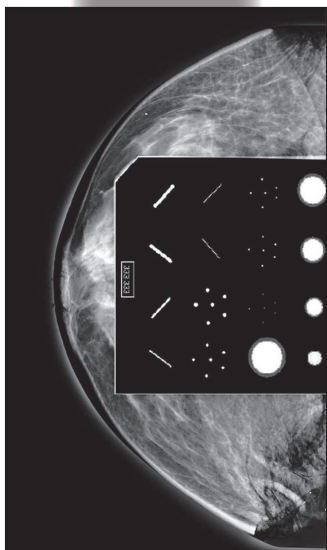
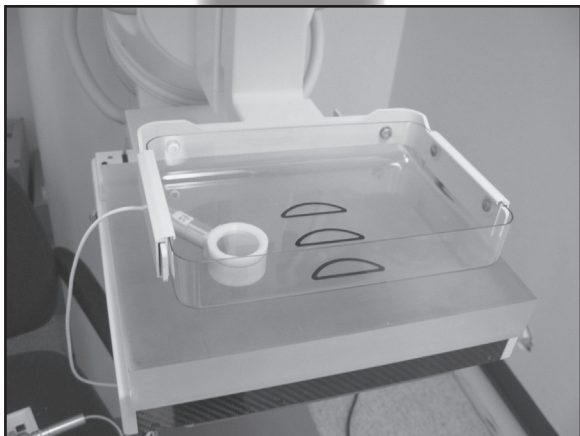
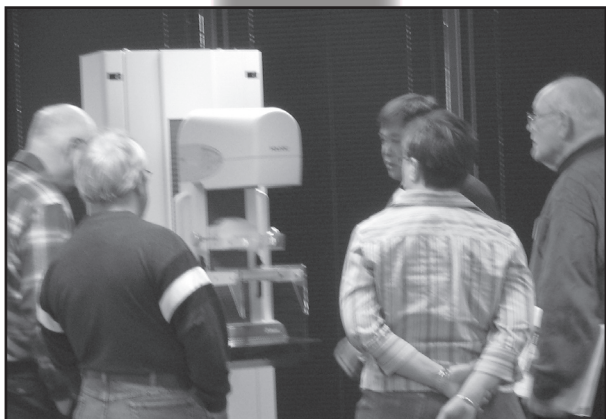
- 7:00 am **Registration**
- 7:30 am **Review of Digital Detectors in Mammography**Barnes
- Overview of detector technologies used in digital mammography
 - detector design
 - expected resolution
 - Future applications of digital mammography
- 8:45 am **Informal Discussion and Break**
- 9:00 am **Quality Assurance Measurements**Thomas
- Detector measurements: Direct, Indirect & CR
 - flat field
 - AEC
 - SNR/CNR
 - field uniformity
 - MTF
- 11:00 am **Lab Session 1**
- 12:30 pm **Lunch (provided)**
- 1:00 pm **Lab Session 2**
- 2:30 pm **Informal Discussion and Break**
- 2:45 pm **Lab Session 3**
- 4:15 pm **Lab Session 4**
- 5:45 pm **Discussion**
- 6:00 pm **Adjourn for the Day**

Day Two ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

- 7:00 am **Coffee**
- 7:30 am **Workstation Performance/QC**.....Thomas
- Monitor design/types
 - flat panel displays
 - remote display management
 - DICOM Part 14 Gray Scale Display Standard
 - meaning/usefulness
 - how it is applied to workstations
 - Techniques to validate DICOM Part 14 Gray Scale Standard
- 8:45 am **Hard Copy Device QC**Thomas
- Acceptance testing
 - NEMA tests
- 9:30 am **Break and Informal Discussion**
- 9:45 am **Lab Session 5**
- 11:15 am **Lunch (provided)**
- 12:00 pm **Lab Session 6**
- 1:30 pm **Lab Session 7**
- 3:00 pm **Wrap Up and Evaluations**
- 3:30 pm **Adjourn**






Workshop Labs

- | | |
|---|--|
| <p>Lab A
Survey/QC Procedures for GE Essential FFDM unit</p> <p>Lab C
Survey/QC Procedures for Siemens Inspiration FFDM unit</p> <p>Lab E
Survey/QC Procedures for Fuji CR FFDM unit</p> | <p>Lab B
Survey/QC Procedures for Hologic Dimensions FFDM unit</p> <p>Lab D
Survey/QC Procedures for Fuji Aspire FFDM unit</p> <p>Lab F
Survey/QC Procedures for Carestream Health CR FFDM unit</p> <p>Lab G
Calibration and QC of Softcopy Display Monitors</p> |
|---|--|



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 \$50 administration fee, will be granted for cancellations received prior to 10 days before the course. Cancellations received within 10 days of the course will receive a credit toward a future **MTMI** program, minus the \$50 processing fee. No refunds will be made after the course.

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.

Membership

Membership in the Medical Technology Management Institute includes:

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

Joining **MTMI** with this registration qualifies you for the member discount. Indicate your interest in membership on the registration form or call **MTMI**. Annual membership dues for physicists is *\$65, technologists *\$39. Discount effective immediately. Also available, discounted **Group** Membership.

Registration Form: **Hands-on Workshop for Surveying Digital Mammography Units - Waukesha, WI - March 1-2, 2012**
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 () _____

I am a Medical Physicist; MQSA Inspector; Biomedical Engineer; technologist; other; specify: _____

I work in the following: Mammography, CT, MRI, Ultrasound, Nuc Med, Rad Therapy, XR.

Total enclosed:

\$ _____



Call 800-765-6864
if you have
special needs.

Please enclose payment to **MTMI**: \$995

MTMI member discount: \$960

Yes, I want to become an **MTMI** member! *\$65/**\$39 (discount effective immediately)

* physicist member fee, ** technologist member fee

Credit Card Number: _____ Master Card Visa Amex

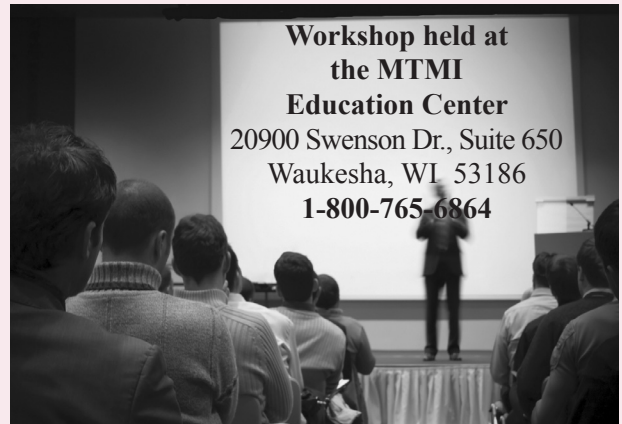
Expiration Date: _____ Signature _____

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

800-765-**MTMI**(6864) or 262-717-9797 or fax 262-717-9171 or e-mail custservice@mtmi.net

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

Location & Accommodations



Workshop held at
the **MTMI**
Education Center
20900 Swenson Dr., Suite 650
Waukesha, WI 53186
1-800-765-6864

Sleeping rooms at the Sheraton Milwaukee Brookfield

375 South Moorland Road
Brookfield, WI 53005
262-364-1100

www.sheraton.com/milwaukeebrookfield
MTMI Guest Room Rate: \$89/single, \$99/double
Make hotel reservations no later than 2
weeks before the event and identify
yourself as an MTMI attendee

Guest Room Rate Includes:

- 15% discount for food/beverage in Alferes Restaurant
- Complimentary internet
- Complimentary microwave and refrigerator upon request and availability
- Free Parking
- Complimentary airport shuttle (Contact hotel front desk for shuttle times and to make arrangements for pick up. 262-364-1100)
- Complimentary shuttle to and from MTMI
- Reception on first night of course