8th Medical Imaging Alumni & Education Day
Li Ka Shing Knowledge Institute
February 10th 2018

Artificial Intelligence and Deep Learning

Forensic Radiology

Learning by Simulation

Radiology Jeopardy

3D Printing - Clinical and Educational Applications

Emerging Role of Breast Tomosynthesis
COURSE OVERVIEW

This one-day course for alumni of the Department of Medical Imaging, University of Toronto, community radiologists and trainees focuses on topics of interest to all radiologists. Feedback from the Alumni and Education Day 2017 was used to help plan the program. As well, the keynote address “Artificial Intelligence and Deep Learning: Will we still have a job?” by Dr. Masoom Haider is of general interest as he shares with us his vision of what our work will look like in the years ahead. Other presentations focus on current “hot topics” including breast tomosynthesis, learning by simulation and the role of 3D printing. An update on forensic radiology and radiology Jeopardy are back by popular demand. There are excellent opportunities for questions and discussion. Over coffee and lunch attendees can rekindle old friendships and meet new/future colleagues.

COURSE OBJECTIVES

At the end of this program, participants should be able to:

• Apply knowledge learned in these sessions to improve patient care.
• Review the emerging role of breast tomosynthesis.
• State the value of learning by simulation.
• Debate how artificial intelligence and deep learning will impact medical imaging.
• Explain the role of 3D printing in clinical practice and education.
• Discuss recent advances in forensic radiology.
• Recall the typical imaging appearance (Aunt Minnie) of common and less common conditions.

TARGET AUDIENCE

Attendance is offered to all alumni of the Department of Medical Imaging, University of Toronto. Retired alumni, non-alumni community radiologists and current trainees are also enthusiastically invited.
REGISTRATION
To register online and pay by VISA or MasterCard, please visit: http://my.alumni.utoronto.ca/ MedImgAlumniDay

Fees

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<tbody>
<tr>
<td>Alumni Physician</td>
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<td>Non-Alumni Physician</td>
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<td>Retired Alumni</td>
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Registration deadline is Friday, February 2, 2018. The Department of Medical Imaging Alumni are current and former faculty, and graduate trainees of University of Toronto Medical Imaging. We will not be able to accommodate on-site registration. Enrolment will be confirmed on the basis of receipt of payment. Receipts for payment are issued by e-mail only. Trainees and Retired Alumni: please contact Gary Cronin to register at 416-978-7944 or alumni.medicalimaging@utoronto.ca

CANCELLATION POLICY
Requests for cancellation must be made in writing.

We must receive all cancellation requests before January 26, 2018 in order to receive a refund of the registration fee; thereafter, refunds will not be issued. Registrations are not transferable.

DISCLOSURE
No members of the planning committee or faculty members have any conflict of interest to disclose.

FUNDING
Funding for this event is provided by the University of Toronto Department of Medical Imaging Alumni Association.
**CME Credits**

Royal College of Physicians and Surgeons of Canada – Section 1:

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, approved by Continuing Professional Development, Faculty of Medicine, University of Toronto up to a maximum of (5.5 hours)

**AGENDA**

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<th>Speaker(s)</th>
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<tr>
<td>8:00</td>
<td>Registration</td>
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<td>8:25</td>
<td>Opening Remarks</td>
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<tr>
<td>8:30</td>
<td><em>The Emerging Role of Breast Tomosynthesis</em></td>
<td>Dr. Rachel Fleming</td>
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<td>9:00</td>
<td>Questions and Discussion</td>
<td>Dr. Ivan Diamond</td>
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<td>9:15</td>
<td><em>Learning by Simulation</em></td>
<td>Dr. Ivan Diamond</td>
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<td>9:45</td>
<td>Questions and Discussion</td>
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<td>10:00</td>
<td>Refreshment Break</td>
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<td>10:15</td>
<td>Keynote Address: *Artificial Intelligence and Deep Learning: Will we still have a job?</td>
<td>Dr. Masoom Haider</td>
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<td>11:00</td>
<td>Questions and Discussion</td>
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<td>11:15</td>
<td>*3D Printing: Clinical and Educational Applications. Is it worth the effort and cost?</td>
<td>Dr. Massimiliano Meineri</td>
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<td>11:45</td>
<td>Questions and Discussion</td>
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<td>12:00</td>
<td>Lunch With The Presenters</td>
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<td>13:15</td>
<td><em>Update on Forensic Radiology</em></td>
<td>Michael Pickup</td>
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<td>13:45</td>
<td>Questions and Discussion</td>
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<td>14:00</td>
<td><em>Radiology Jeopardy</em></td>
<td>Dr. Jamil Addas, Dr. Marianne Stroz</td>
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<td>15.00</td>
<td>Questions and Discussion</td>
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<td>Adjournment and Evaluation</td>
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SESSION LEARNING OBJECTIVES

The Emerging Role of Breast Tomosynthesis (Dr. Rachel Fleming)
Goal: Summarize the benefits and challenges regarding the use of digital breast tomosynthesis (DBT) in clinical practice
At the end of this session including discussion time, the participant will be able to:
1. Explain how the DBT images are obtained and the important aspects of the synthetic view
2. Describe the benefits of DBT in screening
3. Outline the challenges associated with incorporation of DBT into clinical practice

Learning by Simulation (Dr. Ivan Diamond)
Goal: To understand the utility of simulation in medical education.
At the end of this session including discussion time, the participant will be able to:
1. Describe key concepts in medical simulation and how they relate to evolving models of medical education
2. Assess an online simulation project for Diagnostic Radiology residents
3. Consider means of incorporating simulation into continuing medical education

Keynote Address: Artificial Intelligence and Deep Learning: Will we still have a job? (Dr. Masoom Haider)
Goal: To review the current state of artificial intelligence in medical imaging and its implications for the specialty of Radiology
At the end of this session including discussion time, the participant will be able to:
1. Describe what is meant by Artificial Intelligence (AI) and Deep Learning
2. Recognize the importance of AI in the future of Medical Imaging
3. Describe some applications of Deep Learning in Medical Imaging

3D Printing: Clinical and Educational Applications. Is it Worth the Effort and Cost (Dr. Massimiliano Meineri)
Goals: Discuss the evolving role of 3D printing in medical education and clinical practice.
At the end of this session including discussion time, the participant will be able to:
1. Explain requirements in setting up a medical 3D printing laboratory
2. Identify obstacles and illustrate solutions
3. Demonstrate scenarios where 3D printing adds value
4. Question if the benefits outweigh the effort and cost

Update on Forensic Radiology (Michael Pickup)
Goals: Discuss the current role of forensic radiology.
At the end of this session including discussion time, the participant will be able to:
1. Review the death investigation system in Ontario
2. Explain the advantages and limitations of post-mortem imaging
3. Illustrate recent advances in this specialty and how they can be used in a modern clinical service
Radiology Jeopardy (Drs. Jamil Addas & Marianne Stroz)

Goals: Provide an informal, dynamic and engaging environment for participants to get involved in a friendly and informative competition around various imaging diagnoses.

At the end of this session including discussion time, the participant will be able to:

1. Identify an array of imaging-related diagnoses based on “Aunt Minnie” style imaging presentations. (CanMEDS Role: Medical Expert)
2. Describe the major imaging features that distinguish certain “Aunt Minnie” classical presentation type cases from other diagnoses in discussion and collaboration with other participants. (CanMEDS Roles: Medical Expert, Communicator & Collaborator)
3. Describe the session as FUN!