

Continuing Professional Development  
Perfectionnement professionnel continu

2008-2009



Canadian Association of  
Medical Radiation Technologists

Association canadienne des  
technologues en radiation médicale

[www.camrt.ca](http://www.camrt.ca)

CANADIAN ASSOCIATION OF MEDICAL RADIATION TECHNOLOGISTS  
ASSOCIATION CANADIENNE DES TECHNOLOGUES EN RADIATION MÉDICALE

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**TABLE OF CONTENTS \_ TABLE DES MATIÈRES**

<b>GENERAL INFORMATION</b>	<b>03</b>
<b>REGISTRATION INFORMATION</b>	<b>06</b>
<b>FINANCIAL INFORMATION</b>	<b>10</b>
<b>PROFESSIONAL DEVELOPMENT COURSES &amp; PROGRAMS</b>	<b>12</b>
ACHIEVING OPTIMAL IMAGES THROUGH QUALITY ASSURANCE .....	12
<b>CT IMAGING</b> .....	12
CT Imaging 1 .....	12
CT Imaging 2 .....	13
CT Imaging 3 .....	13
CT Discipline Specific Supplements .....	13
• CT Colonography/Cardiac CT (Radiological Technology) .....	14
• PET Theory, PET/CT and SPECT/CT Imaging (Nuclear Medicine) .....	14
• CT SIM (Radiation Therapy) .....	14
CT Imaging Specialty Certificate Program .....	14
<b>DOSIMETRY</b> .....	15
Dosimetry 1 .....	15
Dosimetry 2 .....	16
Dosimetry 3 .....	16
Dosimetry Specialty Certificate Program .....	16
<b>EDUCATION IN THE CLINICAL ENVIRONMENT</b> .....	17
<b>HEALTH CARE ETHICS: AN INTRODUCTION</b> .....	17
<b>IMAGING BREAST PATHOLOGY</b> .....	18
<b>INTRODUCTION TO PHARMACOLOGY</b> .....	18
<b>LEADERSHIP SKILLS</b> .....	19

**PROFESSIONAL DEVELOPMENT COURSES & PROGRAMS ( CONTINUED )**

---

**MAMMOGRAPHY** .....19  
Mammography 1 .....19  
Mammography 2 .....22  
Specialty Certificate in Breast Imaging .....22

**MULTIDISCIPLINARY COURSE** .....23

**PATHOLOGY** .....24  
Pathology 1 (Revised 2007) .....24  
Pathology 2 (Revised 2008) .....24

**PEDIATRIC IMAGING** .....24

**RADIOBIOLOGY** .....25

**SECTIONAL ANATOMY** .....25  
Sectional Anatomy 1 .....25  
Sectional Anatomy 2 .....25  
Sectional Anatomy 3 .....26

**THE CHEST IMAGE** .....26

**EN FRANÇAIS** .....27

---

**SIMULATION DE TDM – UN APERÇU** .....27  
**RADIOGRAPHIE NUMÉRIQUE AVEC ÉCRANS À PHOTOSTIMULATION – ÉLÉMENTS DE BASE** .....27  
**LES ARTÉFACTS EN RADIOGRAPHIE NUMÉRIQUE AVEC ÉCRANS DE PHOTOSTIMULATION – CAUSES ET SOLUTIONS** .....27

**QUICK SELF STUDIES** .....28

---

**FELLOWSHIP** .....33

---

**IN DEVELOPMENT** .....34

---

**COURSES AND SPECIALTY CERTIFICATES IN DEVELOPMENT** .....34  
**CREDIT APPROVAL PROGRAM** .....35  
**COURSE DEVELOPMENT OPPORTUNITIES** .....36

**PROVINCIAL REGISTRARS** .....37

---

**CAMRT DIRECTORY** .....39

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## GENERAL INFORMATION

**IT IS THE STUDENT'S RESPONSIBILITY TO BE AWARE OF THE POLICIES AND REQUIREMENTS.**

**IMPORTANT: THE SUCCESSFUL COMPLETION OF ANY CAMRT COURSE DOES NOT CONSTITUTE ENTITLEMENT TO WORK IN THAT FIELD IF NOT CERTIFIED TO WORK IN CANADA.**

### TEXTBOOKS

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The textbooks listed, unless otherwise indicated, can be purchased from the University of Toronto Bookstore, 214 College Street, Toronto, ON M5T 3A1.

Tel: 416-640-5830 or 1-800-387-4420 (Canada).

Fax: 416-640-5336 or 1-800-665-8810 (Canada).

Email: [medical@utpress.utoronto.ca](mailto:medical@utpress.utoronto.ca)

The bookstore accepts Visa and MasterCard orders by telephone or in writing.

**NOTE: Please refer to the specific course for textbook requirements. Those not available through the University of Toronto bookstore are clearly indicated and a source is provided.**

### ASSIGNMENTS

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Each course has six assignments and one final exam. Failure to follow the assignment submission schedule will result in a loss of marks. See page 7 for more details. **Assignments are to be submitted to the Instructor and not to CAMRT.** Please check your course manual for correct contact information. **Students should contact the instructor, and not the CAMRT, for the status of their assignment.**

### FINAL EXAM

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CAMRT final exams consist of a mixture of multiple choice, true/false, short answer and/or labeling questions. Certain exams may also include essay questions and/or case studies. Please note that if the invigilator is unwilling to absorb the cost of returning the final exam to the CAMRT, it is the student's responsibility to do so.

- Only the most current version of each exam will be available.
- Exams are not returned to students.
- Any cheating and/or plagiarism will result in automatic failure.

\* The student may not register for this course again and must wait a full year before applying for another course.

## **COURSE MATERIALS**

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Each course package mailed within Canada will include a hard copy of the course manual and a CD. CDs allow for better viewing of higher resolution images.

## **NEW**

### **SHIPPING POLICY FOR INTERNATIONAL DESTINATIONS**

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Effective immediately, the CAMRT will be shipping course manuals **on CD only** to all international registrants. This will allow CAMRT to maintain reasonable shipping/handling expenses. Printed course manuals are available on request however, the shipping/handling costs of distributing the printed course manual will be charged directly to the student.

### **PASSING REQUIREMENTS**

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The final course mark is representative of:

- Assignments: 40%
- Final exam: 60%

However, to successfully complete a course, the following two criteria must be achieved:

- 60% on the final exam AND
- 60% on the final course marking (assignments & final exam)

\* 75% must be achieved on the final exam in order to apply to a Specialty Certificate Program.

### **EXAM REWRITES**

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Students are allowed one original write and 2 rewrites in a two-year period following the original write date. To rewrite an exam there is a \$75 administration fee. Applications to rewrite must be received a minimum of 6 weeks prior to the exam date. **ONLY the most current version of the exam will be available for ALL rewrites.**

**Failure to pass a course after 3 attempts will require the student to wait one full year before reapplying to take the full course.**

### **CHALLENGING THE FINAL EXAM**

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Students who feel they have the knowledge and experience equivalent to the content of CAMRT's correspondence courses have an opportunity to bypass the course and assignments and write the final exam only. The course manual may be purchased separately as a study aid. Contact the Continuing Professional Development Coordinator for ordering and payment of the manual.

Allowing students to challenge exams reflects current knowledge of educational theory and cannot be considered "new learning". Therefore, challenge exams are not eligible for credit.

Please note that the final exam date for Challenge Exams is the same as for full course registrations. See page 7.

**The Multidisciplinary course and the Dosimetry series are not eligible for challenge.**

## **NOTIFICATION OF RESULTS**

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CAMRT sends a result letter indicating marks achieved on the course. Allow two months for receipt of letter. Certificates for course completion are not offered by the CAMRT. An administrative fee of \$20 + GST or HST will be charged for reissuing any result letter.

## **TRANSCRIPTS**

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Students wishing to receive a formal transcript of courses will be charged an administration fee of \$20 + GST or HST.

**POLICIES AND FEES ARE SUBJECT TO CHANGE AT THE DISCRETION OF THE CAMRT.**

## REGISTRATION INFORMATION

To register for a course, use the application form provided in this booklet. Applications can be sent either by fax or mail. CAMRT will not accept registrations over the telephone. If faxing, do not mail the original as payment may be duplicated. A credit card number must be included on the faxed application. Course materials will not be mailed until full payment is processed. Before submitting the application, please ensure that all required information is included and accurate.

Method of Payment:

- 1) Visa
- 2) Mastercard
- 3) Personal cheque (not post-dated) or money orders  
Make cheque or money order payable to the CAMRT.

### COURSE TERMS

Two course terms per year are offered for full-length courses, with each term consisting of 13 study weeks.

- \_ Fall 2008 Term .....August 29 – November 21
- \_ Winter 2009 Term .....February 6 – May 8

### EXCEPTIONS

- \_ The Multidisciplinary course is delivered over two consecutive terms. See page 23 for specific dates.
- \_ Quick Self Studies are available year round. See page 28-32 for QSS options.

### REGISTRATION DEADLINES

**CAMRT offers two registration deadlines. Registrations will NOT be accepted after the late registration date.**

TERM	REGISTRATION DATE	FEE (MEMBER/ NON-MEMBER)	LATE REGISTRATION DATE	FEE (MEMBER/ NON-MEMBER)
FALL 2008	AUGUST 1	\$325/\$525	AUGUST 15	\$375/\$575
WINTER 2009	JANUARY 9	\$325/\$525	JANUARY 23	\$375/\$575



We strongly recommend early enrollment to ensure the student receives the course material in time to submit the first assignment. There is up to a 20 business day delay between processing of payment and receipt of course materials. This delay also applies to late registrations.

**DEADLINES FOR FALL 2008 TERM**

Deadline for Registration	August 1, 2008
Late Registration Deadline	August 15, 2008
Assignment # 1	August 29, 2008
Assignment # 2	September 12, 2008
Assignment # 3	September 26, 2008
Assignment # 4	October 10, 2008
Assignment # 5	October 24, 2008
Assignment # 6	November 7, 2008
<b>Final Exam</b>	<b>November 21, 2008</b>
<b>Final Exam for Hong Kong*</b>	<b>November 23, 2008*</b>

**DEADLINES FOR WINTER 2009 TERM**

Deadline for Registration	January 9, 2009
Late Registration Deadline	January 23, 2009
Assignment # 1	February 6, 2009
Assignment # 2	February 20, 2009
Assignment # 3	March 6, 2009
Assignment # 4	March 20, 2009
Assignment # 5	April 3, 2009
Assignment # 6	April 17, 2009
<b>Final Exam</b>	<b>May 8, 2009</b>
<b>Final Exam for Hong Kong*</b>	<b>May 10, 2009*</b>

Assignment due dates are **NOT FLEXIBLE** – penalties will occur for late submissions. See late assignment policy below.

(\*) — HK students will receive official notification from the HKRA prior to this date.

**LATE ASSIGNMENT POLICY**

**Penalties will apply for students not respecting the assignment submission deadlines.**

**1. Mark deduction penalty**

- If the instructor does not receive assignments 1, 2 & 3 by the 3<sup>rd</sup> assignment deadline, 5% of the mark on the late assignment(s) will be deducted.
- If the instructor does not receive assignments 4, 5 & 6 by the 6<sup>th</sup> assignment deadline, 5% of the mark on the late assignment(s) will be deducted.

**2. Failure penalty**

*The last accepted date for assignments' submissions is seven days prior to the exam date. Assignment(s) received by the instructor after that date will result in an automatic failure.*

## **DATE CHANGE POLICY FOR FINAL EXAM**

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- *Please take note of the final exam date at the time of registration to make appropriate arrangements.*
- *A request for a change in date to the final exam must be submitted in writing to the CAMRT. Date change must be within the parameters established by CAMRT.*

*There will be a non-refundable \$25 fee for the request to change the final exam date.*

## **INVIGILATOR**

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Students must arrange for a reputable individual to invigilate the final exam. If the invigilator's contact information is not included at the time of application, it must be submitted by **September 19, 2008** for the fall term and by **March 6, 2009** for the winter term. If the information is not received by the deadline, your application may be transferred to the following term, **upon receipt of the applicable transfer fee**. A chosen invigilator should be a person employed in a medical facility. If this is not possible, you may contact your local library or high school as an alternate option. When possible, students from the same facility should arrange for the same invigilator in order to help maintain reasonable exam mailing expenses.

## **INVIGILATOR FOR HONG KONG STUDENTS**

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All Hong Kong students registered in CAMRT courses will be invigilated by the Hong Kong Radiographers Association (HKRA), as per an agreement between the HKRA and the CAMRT. They are responsible for organizing all CAMRT Correspondence Course Exams in the Hong Kong region. Please note: There is an additional fee of \$10 HKD for postage and handling for HKRA members and of \$30 HKD for non-HKRA members. These charges cover the cost of returning the exams back to the CAMRT and are payable to the HKRA.

## **NEW**

### **INTERNATIONAL SHIPPING POLICY**

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Effective immediately, the CAMRT will be shipping course manuals **on CD only** to all international registrants. This will allow CAMRT to maintain reasonable shipping/handling expenses. Printed course manuals are available on request. However, the shipping/handling costs of distributing the printed course manual will be charged directly to the student.

### **CANCELLATIONS/REFUNDS FOR COURSES**

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Upon withdrawal:

- 90% of the course fee can be refunded IF no materials have been mailed to the student.
- 75% will be refunded if the request to withdraw is received prior to the 3<sup>rd</sup> assignment due date AND if no assignments have been submitted.
- No refund will be issued if any assignments have been submitted and/or if the request is received AFTER the 3<sup>rd</sup> assignment due date.

- \_ No refund will be issued if the course has already been transferred.
- \_ Shipping and handling fees (if applicable) are not refundable. This also applies to Quick Self Studies.

**NOTE:** All course materials must be returned and received by the CAMRT before a refund is issued.

## **CANCELLATIONS/REFUNDS FOR SPECIALTY CERTIFICATE FEES**

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Upon withdrawal:

- \_ 75% of the certificate fee will be refunded if the request to withdraw is received within six months of applying for the Specialty Certificate.
- \_ 50% of the certificate fee will be refunded if the request to withdraw is received within a year of applying for the Specialty Certificate.
- \_ No refund will be issued after one year of the application being received by the CAMRT.

## **TRANSFERS**

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Students are allowed to transfer a course only once within a 12-month period. A \$50 administration fee will apply for the transfer. Final exams will not be mailed until all outstanding fees are paid.

## **EXAM PENALTY FEE**

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It is the student's responsibility to inform the CAMRT's Continuing Professional Development Department if they do not intend to write their exam on the scheduled date. Notice must be provided at least 6 weeks prior to the exam date. Failure to provide notice will result in a \$50 penalty fee payable before your next opportunity to write. *Please note: this fee is **in addition** to the mandatory transfer fee that will be associated with your registration.*

## **COURSE CHANGES**

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A student may change the course in which they originally registered provided that assignments have not been submitted. Prior to receiving the new course materials, the student **MUST** send the old course materials back to the CAMRT. **A \$75 administrative fee will apply and includes the cost of the new course manual.**

**FINANCIAL INFORMATION****CONTINUING PROFESSIONAL DEVELOPMENT FEE SCHEDULE  
(ALL FEES ARE IN CANADIAN FUNDS)**

<b>COURSE MATERIALS</b>	<b>MEMBER</b>	<b>NON-MEMBER</b>
Full Course Fee		
(includes assignments + exam) . . . . .	\$325.00	\$525.00
CT Discipline Specific Supplements . . . . .	\$50.00	N/A

**QUICK SELF STUDIES**

Quick Self Studies . . . . .	\$50.00	\$60.00
*Additional Quizzes for QSS . . . . .	\$10/each	\$15/each

**OTHER FEES**

	<b>MEMBER</b>	<b>NON-MEMBER</b>
Late Registration . . . . .	\$50.00	\$50.00
Challenge Exam . . . . .	\$125.00	\$200.00
Exam Rewrite . . . . .	\$75.00	\$75.00
Transfer Fee . . . . .	\$50.00	\$50.00
Exam Penalty Fee . . . . .	\$50.00	\$50.00
Course Manual only . . . . .	\$50.00	\$50.00
Transcripts (\$20+GST) . . . . .	\$21.00	\$21.00
Transcripts (\$20+HST) . . . . .	\$22.60	\$22.60

**SHIPPING AND HANDLING FEES (S/H)  
(FOR US AND INTERNATIONAL RESIDENTS ONLY)****The fee listed is PER course**

	<b>MEMBER</b>	<b>NON-MEMBER</b>
Shipping and Handling (US) . . . . .	\$30.00	\$30.00
Shipping and Handling (International) . . . . .	\$120.00	\$120.00
Shipping and Handling (International)		
<b>EXAM ONLY</b> . . . . .	\$80.00	\$80.00
Quick Self Studies Shipping and Handling . . . . .	\$80.00	\$80.00

*\* Those are only available to institutions NOT to individuals*

## **INCOME TAX RECEIPTS**

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Canadian residents may be eligible to claim a tuition tax and education tax credit in the year that they complete their professional development. Administration and processing fees do not qualify as eligible tuition fees. CAMRT will issue official T2202A income tax receipts to eligible individuals at the end of each calendar year. According to Canada Customs and Revenue Agency rules, total tuition fees of \$100 or less from one institution are not eligible for a tax deduction.

**QUICK SELF STUDIES:** Tax receipts will be issued at year's end for total tuitions of \$100 or more.

If you have questions related to income taxes and educational deductions, please contact your local Canada Customs and Revenue Agency Office. You can find them in the blue section of your telephone directory.

## PROFESSIONAL DEVELOPMENT COURSES & PROGRAMS

### ACHIEVING OPTIMAL IMAGES THROUGH QUALITY ASSURANCE

CATEGORY "A" CREDIT: 40

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**This course will appeal to the experienced technologist as well as recent graduates.**

This course covers all aspects of Quality Assurance and Quality Control in Radiological Technology. Prefaced by an in-depth overview of Image Quality and all of the factors contributing to it, this course provides a detailed description of testing procedures for radiographic equipment. Through readings and exercises, the student will review Quality Control procedures and discover how and why they contribute to the optimum image. A review of radiographic testing procedures, including CR, DR, and PACS will be included in the material.

**TEXTBOOK:** Papp, Jeffrey. Quality Management in the Imaging Sciences, 3<sup>rd</sup> edition, Mosby Inc., 2006 (\$60.95).

### CT IMAGING COURSES & SPECIALTY CERTIFICATES

CT is becoming a common imaging modality in the field of medical imaging and is crossing all the disciplines with the onset of fusion imaging. All Technologists and Therapists practicing in dedicated CT, CTSIM, PET/CT or SPECT/CT will find these courses informative and practical. They will enhance your knowledge and skill, enabling you to provide 'best practice' care in the delivery of diagnostic and therapeutic healthcare services.

#### CT IMAGING 1 (THEORY)

CATEGORY "A" CREDIT: 40

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This course provides the technologist or therapist with a comprehensive view of CT, including computers and digital imaging, system design and components, image reconstruction, image display and manipulation, parameter options, image quality and radiation dose

**TEXTBOOK:** Seeram, Euclid. Computed Tomography. Physical Principles, Clinical Applications and Quality Control, 2<sup>nd</sup> edition, WB Saunders Co., 2001 (\$88.95).

\* new edition will be available for Winter 2009

## **CT IMAGING 2 (APPLICATIONS A)**

**PREREQUISITE: CT IMAGING 1**

**CATEGORY "A" CREDIT: 55**

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This course takes an in-depth look at CT anatomy of the brain and cranium, orbits & facial bones, sella & temporal bones, sinuses, neck & spine, pathology to cover the most common disease processes seen on CT imaging, and clinical protocols (both CT and CT SIM) to assist in providing the optimal diagnostic and/or therapeutic exam.

**TEXTBOOK:** Kelley, Lorrie and Connie Petersen. Sectional Anatomy for Imaging Professionals, 2<sup>nd</sup> edition Mosby-Year Book, Inc., 2007 (\$91.95).

## **CT IMAGING 3 (APPLICATIONS B)**

**PREREQUISITE: CT IMAGING 1**

**CATEGORY "A" CREDIT: 40**

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This course takes an in-depth look at CT anatomy of the chest, abdomen & pelvis, upper & lower extremities, pathology to cover the most common disease processes seen on CT imaging, and clinical protocols (both CT and CT SIM) to assist in providing the optimal diagnostic and/or therapeutic exam. Also covered in detail are interventional CT, pediatric CT and CT angiography.

**TEXTBOOK:** Kelley, Lorrie and Connie Petersen. Sectional Anatomy for Imaging Professionals, 2<sup>nd</sup> edition, Mosby-Year Book, Inc., 2007 (\$91.95) AND Seeram, Euclid. Computed Tomography. Physical Principles, Clinical Applications and Quality Control, 2<sup>nd</sup> edition, WB Saunders Co., 2001 (\$88.95).

\* new edition will be available for Winter 2009

## **CT IMAGING DISCIPLINE SPECIFIC SUPPLEMENTS**

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Beginning September 2008, any technologist/therapist registering in, or currently registered in the CTIC Specialty Certificate program will be required to complete a discipline-specific supplement course in addition to the 3 CT courses.

The supplemental course will be offered free of charge to candidates who have been registered in the program prior to September 2008. Effective September 2008, a \$50 fee will be required for all new CTIC registrants.

The discipline-specific supplemental course will provide an advanced level of learning in the application of CT in the specific discipline. This supplemental course must be completed prior to completing the clinical component of the Specialty Certificate.

**Each supplement will be provided on CD only.**

## **CT COLONOGRAPHY/CARDIAC CT (RADIOLOGICAL TECHNOLOGY)**

**CATEGORY "A" CREDIT: 2**

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This supplement to the CTI courses provides more comprehensive learning of two advanced procedures in Diagnostic CT. Discussed in detail are the theory, anatomy, pathology and protocols required for CT Colonography which is fast replacing the Barium Enema and has become an important adjunct to Colonoscopy. Also discussed in detail are the theory, anatomy, pathology and protocols required for Cardiac CT, which has provided a quick, effective and relatively non-invasive approach to diagnosis of coronary artery disease.

## **PET THEORY, PET/CT AND SPECT/CT IMAGING (NUCLEAR MEDICINE)**

**CATEGORY "A" CREDIT: 2**

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Computed Tomography has joined with Positron Emission Tomography (PET) and SPECT in augmenting the practice of nuclear medicine. This supplemental module gives an in depth look at the theory and practicality of PET and how the field of CT is incorporated into nuclear medicine through PET/CT and SPECT/CT hybrid systems.

## **CT SIMULATION (RADIATION THERAPY)**

**CATEGORY "A" CREDIT: 2**

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An introduction to the CT Simulator and the process of CT Simulation. Covers the components of a CT Simulator, patient positioning, scanning procedures, different methods of determining the isocentre, virtual simulation, fusion and QA procedures for a CT Simulator. Case studies are used to illustrate the use of the CT Simulator and to allow the MRT to become more familiar with this new and developing technology.

\* Students wishing to obtain the Specialty Certificate in CT Imaging must achieve 75% or above on the final exams for CT Imaging 1, 2 and 3 and on the supplemental quiz.

## **CT IMAGING SPECIALTY CERTIFICATE PROGRAM (CTIC)**

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**You must be a CAMRT full practice member to be eligible for this Specialty Certificate program.**

The purpose of the CT Imaging Specialty Certificate (CTIC) Program is to provide recognition of competency in the discipline-specific area of CT Imaging as applied in either Radiography (dedicated CT), Radiation Therapy (CTSIM) or Nuclear Medicine (PET/CT &/or SPECT/CT).

**The CT Imaging Specialty Certificate has two components:**

– **The Didactic Component** is the successful completion of CT Imaging 1, 2 and 3 (or an equivalent course of study) with a minimum score of 75% on the final exams. In the event that 75% is not achieved, candidates can apply to rewrite or challenge the final exams.



A maximum of two rewrites is allowed within a two-year time frame from the original write. In the event of a third failure, the candidate must wait one year to reapply.

- **The Clinical Component** utilizes a discipline-specific summary of clinical competence and a clinical advisor to verify clinical competence. For detailed information, please consult the website at [www.camrt.ca/english/professional/computed\\_tomography.asp](http://www.camrt.ca/english/professional/computed_tomography.asp) or contact CAMRT Education Department, Specialty Certificates.

**PLEASE NOTE:** For a complete description of the specialty certificates eligibility requirements and program conditions, please visit the Professional Development section of our website at [www.camrt.ca/english/professional/index.asp](http://www.camrt.ca/english/professional/index.asp), where the candidate Handbook may be downloaded.

**It is the responsibility of the candidates to maintain familiarity with of all of the program eligibility requirements and conditions.**

## **NEW**

### **DOSIMETRY COURSES & SPECIALTY CERTIFICATES**

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The profession of radiation therapy is rapidly evolving to keep pace with the constant changes in technology. For some years, our counterparts in the United States have recognized treatment planning as a specialty area within radiation oncology and have designated those individuals who have displayed the knowledge, skills, aptitude, and judgments necessary to become a competent treatment planner as Certified Medical Dosimetrist (CMD). In the past Canada has not recognized treatment planning as a specialty. In recognition of treatment planning being a specialty within radiation therapy, the CAMRT is now offering a Dosimetry Specialty Certificate program. Through a combination of didactic courses, demonstrated competencies, research skills and a required maintenance of competency component, the successful candidate will attain the skills, knowledge and judgment necessary to become a valued member of the health care professional team.

#### **DOSIMETRY 1**

**\*CONTACT CAMRT FOR ACCEPTABLE EQUIVALENCY**

**CATEGORY "A" CREDIT: 55**

**This course has been approved for 55 credits by the Medical Dosimetrist Certification Board.**

This course is designed as a treatment planning refresher course for radiation therapists. It allows the candidate to become acquainted with their current treatment planning system and discusses some of the site-specific issues that arise within everyday treatment planning practice. Radiation therapists currently working in treatment planning or those who simply wish to refresh their treatment planning skills will find this course to be both informative and practical.

Many activities and assignments will require the use of a treatment planning system (TPS). Depending on how much experience the candidate has in dosimetry, some help may be required in learning the TPS. Throughout the chapters, there are many references made to

a mentor. This is a person that could provide you with assistance from time to time throughout the course of study, if required. This may be one individual or a group of individuals that are willing to assist you with the TPS basics as well as treatment planning fundamentals and principles.

**TEXTBOOK:** Khan, Faiz M. The Physics of Radiation Therapy, 3<sup>rd</sup> Edition, 2003 (\$169.95)

## **DOSIMETRY 2**

(SPONSORED BY VARIAN MEDICAL SYSTEMS)

**PREREQUISITE: DOSIMETRY 1 OR EQUIVALENT**

**CATEGORY "A" CREDIT: 55**

**This course has been approved for 55 credits by the Medical Dosimetrist Certification Board.**



Dosimetry 2 “ Future Trends and Technologies in Radiation Therapy 1” investigates some of the current trends and emerging technologies that are changing the scope of radiation therapy. Selected topics such as stereotactic radiotherapy, IMRT and quality assurance, and the expanding role of biological modeling in the evaluation of treatment plans will be discussed. Each topic is written from the point of view of the treatment planner to evaluate issues and concerns that may arise in the implementation of these techniques and technologies.

**TEXTBOOK:** No textbook required.

## **DOSIMETRY 3 \* - NEW STARTING DATE WINTER 2009**

**PREREQUISITE: DOSIMETRY 1 OR EQUIVALENT**

**CATEGORY "A" CREDIT: TBD**

**This course will be reviewed by the Medical Dosimetrist Certification Board. Credits TBD.**

“Future Trends and Technologies in Radiation Therapy II” investigates several topics that may globally influence the practice of radiation therapy. Tomotherapy, PET, Brachytherapy, Image-guided RT (IGRT) for Adjustments, Adaptation, and On-line Planning, and Respiratory Gating will be discussed detailing their impact on our current practices. Each topic will focus on their impact on the practice of treatment planning and the evolving role of the radiation therapist in relation to these emerging technologies.

**TEXTBOOK:** No textbook required.

**PLEASE NOTE:** The Dosimetry courses are not available for the Challenge exam.

## **DOSIMETRY SPECIALTY CERTIFICATE PROGRAM**

**You must be a CAMRT full practice member to be eligible for this Specialty Certificate program.**

**The Dosimetry Specialty Certificate program has four components:**

\_ The **Didactic Component** is the successful completion of Dosimetry 1 (or an equivalent

course), Dosimetry 2 and Dosimetry 3 with a minimum score of 75% on each course final exam. In the event that 75% is not achieved, candidates can apply to rewrite or challenge the final exams. A maximum of two rewrites is allowed within a two-year time frame from the original write. In the event of a third failure, the candidate must wait one year to reapply.

- The **Clinical Component** utilizes a summary of clinical competence and a clinical advisor to verify clinical competence. For detailed information, please consult the website at [http://www.camrt.ca/english/professional/dosimetry\\_specialty\\_cert.asp](http://www.camrt.ca/english/professional/dosimetry_specialty_cert.asp) or contact the CAMRT Education Department, Specialty Certificates.
- The **Research Component** \*see the Dosimetry handbook for details
- **Maintenance of Competence** \*see the Dosimetry handbook for details

For a complete description of the Dosimetry Specialty Certificate, eligibility requirements and program conditions, please visit the Professional Development section of the CAMRT website at [http://www.camrt.ca/english/professional/dosimetry\\_specialty\\_cert.asp](http://www.camrt.ca/english/professional/dosimetry_specialty_cert.asp) where the candidate handbook may be downloaded.

*It is the responsibility of the candidates to maintain familiarity with all of the program eligibility requirements and conditions.*

## EDUCATION IN THE CLINICAL ENVIRONMENT

**CATEGORY "A" CREDIT: 40**

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The provision of an educational experience in the clinical environment creates a complex relationship between students, technologists, instructors, clinical facilities and training institutions. This course will examine the impact of government, regulatory bodies and professional associations on this situation. Topics covered will include the use of reflective practice, problem-based learning and experiential learning in identifying problems and creating solutions.

**TEXTBOOK:** Rose, Miranda , [Transforming Practice through Clinical Education, Professional Supervision and Mentoring](#), Elsevier Ltd. 2005 (\$64.95).

## HEALTH CARE ETHICS: AN INTRODUCTION

**CATEGORY "A" CREDIT: 40**

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This course provides an introduction to health care ethics. Theory and application will be combined to analyze current issues that arise in the clinical setting. Topics and cases that are relevant to radiation science professionals will be included. The six chapters will cover: ethical theory; consent to treatment and decision making; privacy and confidentiality; professional ethics; research ethics; and end of life issues. The course does not presuppose any previous educational experience in ethical theory or philosophy. Through exploration and analysis participants will develop a greater understanding of the complexity of ethical issues and be able to reflect upon them with more thorough and in-depth analytical tools.

**TEXTBOOK:** No textbook required.

## IMAGING BREAST PATHOLOGY

CATEGORY "A" CREDIT: 40

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This imaging course has been designed to provide a basic review of breast anatomy and pathology and a detailed review of breast radiography. Understanding and having a cogent approach to breast imaging provides advantages to the technologist as a vital member of the health care team.

Students will review the imaging techniques used for screening and for diagnostic purposes, various breast surgical procedures and the effect of these procedures on breast images. To communicate with other health care providers, the language of breast imaging must be understood; so this course will introduce the technologist to the ACR Breast Imaging and Reporting and Data System. Successful completion of this course will provide the technologist with information required to recognize breast anatomy and pathology, to better understand and use breast-imaging techniques, and will improve their ability to communicate with other members of the breast health care team.

**Each module contains a synopsis of the required readings, directed assignments for the student's learning experience, and a list of references to assist in the organization of the information required to be able to successfully complete this course. This course combines text to provide an overview of the subject while incorporating individual learning activities integral to the self-directed acquisition of specified knowledge and skills to fulfill course objectives.**

**TEXTBOOK:** Cardenosa, Gilda. Breast Imaging Companion, 3<sup>rd</sup> edition, Williams & Wilkins, 2008, (\$82.50) AND Love, Susan. Dr. Susan Love's Breast Book, 4<sup>th</sup> edition, Perseus, 2005, (\$26.50)

## INTRODUCTION TO PHARMACOLOGY

CATEGORY "A" CREDIT: 40

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This course provides a detailed introduction to pharmacology. It is designed to enhance the knowledge of the health care professional by providing an understanding of various common medications and the variety of pharmaceuticals used in a Diagnostic Imaging Department. The focus is on drug classification, administration, metabolism, indications and contraindications for use, as well as adverse effects. The goal of this course is for the student to obtain an understanding of the basic fundamentals of pharmacology.

**TEXTBOOK:** Brennar, George M., Pharmacology, 2<sup>nd</sup> edition, WB Saunders Text, 2006 (\$60.95).

## LEADERSHIP SKILLS

CATEGORY "A" CREDIT: 40

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This course is designed to introduce the concept of transformational leadership in a health care environment, and will be relevant to all those with an interest in leadership, in either a formal or informal setting. It addresses effective methods of communication, improving employee satisfaction and motivation and the concept and frameworks for ethical decision-making. Skills learned in this course will be applied to the areas of change management and conflict management and are directly applicable to those working in the field of medical radiation technology. The course will help relate the theories and concepts of leadership to individual work experiences, and will be of benefit at any stage of career.

**TEXTBOOK:** No textbook required.

## MAMMOGRAPHY COURSES & SPECIALTY CERTIFICATES

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Mammography continues to play a central part in the early detection of breast cancer. Technologists and practicing mammographers will find this series of mammography courses and the Specialty certificate an avenue to enhance their knowledge and clinical expertise. As well successful completion offers a mechanism for recognition for an achieved standard of excellence that is valued by peers and patients as technologists continue to be an integral member of the healthcare team in the fight against and early detection of breast cancer.

### MAMMOGRAPHY 1

CATEGORY "A" CREDIT: 50

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Provides a detailed overview of equipment and radiographic principles and their application to mammography. This course focuses on breast anatomy and physiology, mammographic technique, positioning skills, critical equipment features, image receptor features and image quality management.

This course has been recently enhanced to incorporate improved and current material to facilitate an understanding of how breast and patient anatomy relate to positioning for mammography. This will be particularly useful for the technologist who finds visual tools useful in comprehending principles and techniques. Also, the concept and role of 'body mechanics' as it relates to the field of mammography are explored. All mammographers will benefit from these exciting and useful topics.

**TEXTBOOK:** Cardenosa, Gilda. Breast Imaging Companion, 3<sup>rd</sup> edition, Williams & Wilkins, 2008, (\$82.50) AND Long, Shirley M., The Handbook of Mammography, 4<sup>th</sup> edition, 2000 (\$129.95 + S/H).

# CAMRT CONTINUING PROFESSIONAL DEVELOPMENT REGISTRATION FORM

DISCIPLINE:  RTR  RTT  MRI  NM

COURSE(S):

## APPLICANT INFORMATION

Name:

Registration # :

Mailing Address:

Member:

Non-member

City:

Province:

Postal Code:

Home Tel: ( )

Work Tel: ( )

Fax: ( )

E-mail address:

## INVIGILATOR INFORMATION \*\*REQUIRED FOR FULL LENGTH COURSES ONLY

Name:

Registration #:

Position (title):

Employer/Facility:

Department:

Exam Mailing Address:

City:

Province:

Postal Code:

Work Tel: ( )

Fax: ( )

Email:

**METHOD OF PAYMENT** Visa Mastercard Cheque/Money Order

Cardholder Name:

Credit Card Number:

Expiry Date:

Cardholder Signature:

Amount:

**FEES AND INFORMATION**

Full Length Course (assignments and exam)	\$325	\$525	
Challenge Exam (exam only)	\$125	\$200	
Rewrite Fee (exam only)	\$ 75	\$ 75	
Quick Self Studies	\$ 50	\$ 60	
Late fee Registration	\$ 50	\$ 50	

**(ALL PRICES ARE IN CANADIAN FUNDS)****SUBTOTAL****SHIPPING AND HANDLING PER COURSE:**

US Residents	\$30	\$30
International Residents	\$120	\$120
International EXAM ONLY	\$80	\$80
International Quick Self Study	\$80	\$80

**(ALL PRICES ARE IN CANADIAN FUNDS)****TOTAL**

PLEASE ALLOW UP TO 20 BUSINESS DAYS BEFORE RECEIPT  
OF COURSE MATERIALS. FOLLOWING PROCESSING OF PAYMENT  
INCOMPLETE OR INCORRECT INFORMATION WILL DELAY THE APPLICATION PROCESS.

MAIL TO: CAMRT, 1000, 85 ALBERT STREET, OTTAWA, ONTARIO, K1P 6A4 TEL: (613) 234-0012 OR 1-800-463-9729 FAX: (613) 234-1097

## MAMMOGRAPHY 2

### CATEGORY "A" CREDIT: 55

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Builds on the groundwork established with Mammography 1. This course focuses on quality control, film processing and troubleshooting, interventional diagnostic procedures, radiation dose considerations, and the principles of mammography interpretation and alternate imaging modalities.

The quality control component of this course has recently been updated and expanded to include current standards and requirements. Additionally, a completely new component relating to the "PATIENT - TECHNOLOGIST INTERACTION" has been incorporated. This pertinent and very useful information outlines the groundwork for a successful and mutually rewarding experience for the mammographer and the patient. This important topic is seldom addressed in current mammography literature.

**TEXTBOOK:** Same as Mammography 1  
Send your order for the Handbook to: Mammography Consulting Services Ltd.  
1024 82<sup>nd</sup> St NW, Edmonton AB T6K 1X6. Students paying by Visa can call (780) 462-2615. Please contact the University of Toronto bookstore to obtain the Breast Imaging Companion (see page 3 for details).

\* Students wishing to register in the Specialty Certificate in Breast Imaging must achieve 75% or above on both of the final examinations for Mammography 1 and Mammography 2.

## SPECIALTY CERTIFICATE IN BREAST IMAGING (CBI)

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**To apply for this Specialty Certificate you must be a CAMRT full practice member and a practicing mammographer.**

The purpose of the Specialty Certificate in Breast Imaging Program (CBI) is to provide recognition in the specialty field of breast imaging.

**The Specialty Certificate in Breast Imaging has 4 eligibility requirements:**

*i)* Candidates must achieve a minimum of 75% on the final exams in Mammography I and II, or an equivalent course of study. In the event that 75% is not achieved, candidates can apply to rewrite or challenge the final exams. A maximum of two rewrites is allowed within a two-year time frame from the original write. In the event of a third failure, the candidate must wait one year to reapply.

*ii)* Candidates must be full practice members of the CAMRT.

*iii)* Candidates must submit image cases that fulfill specific characteristics, as described in the CBI Candidate Handbook. For more detailed information, please refer to the **CBI Candidate Handbook**, available at [www.camrt.ca/english/professional/breast\\_imaging.asp](http://www.camrt.ca/english/professional/breast_imaging.asp) or contact the CAMRT Education Department, Specialty Certificates.

*iv)* Verification of practice as a mammographer.



All CBI graduates are eligible to wear a distinctive designer pin co-sponsored by CAMRT and Pink Ribbon Voices to visibly demonstrate this special achievement. The cost of the pin is \$15.00 + applicable taxes with proceeds going to breast cancer research.

**It is the responsibility of the candidates to maintain familiarity with all of the program eligibility requirements and conditions.**

## **MULTIDISCIPLINARY COURSE**

**CATEGORY "A" CREDIT: 60**

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This core multidisciplinary course is designed to provide insight into various aspects of medical imaging and radiation therapy. The course will promote an appreciation for the diverse and changing roles within our professional community.

**NOTE:** The Multidisciplinary course satisfies Component I for the Advanced Certification Program.

All candidates are required to complete all 8 chapters and assignments of the multidisciplinary course over a period of two terms. The term schedule for this course only will differ from the rest although the exam dates will remain the same. See below.

**NOTE:** This course can be taken over any two consecutive terms.

### **KEY DATES FOR THE FALL 2008 TERM FOR MULTIDISCIPLINARY COURSE**

Deadline for Registration	August 1, 2008
Assignment # 1	September 5, 2008
Assignment # 2	September 26, 2008
Assignment # 3	October 17, 2008
Assignment # 4	November 7, 2008
<b>Final Exam</b>	<b>November 21, 2008</b>
<b>Final Exam for Hong Kong*</b>	<b>November 23, 2008</b>

### **KEY DATES FOR WINTER 2009 TERM FOR MULTIDISCIPLINARY COURSE**

Deadline for Registration	January 9, 2009
Assignment # 1	February 13, 2009
Assignment # 2	March 6, 2009
Assignment # 3	March 27, 2009
Assignment # 4	April 17, 2009
<b>Final Exam</b>	<b>May 8, 2009</b>
<b>Final Exam for Hong Kong*</b>	<b>May 10, 2009</b>

(\* ) – HK students will receive official notification from the HKRA prior to this date.

**PLEASE NOTE:** This course is not available as a Challenge Exam.

**TEXTBOOK:** A Book of Reference Articles is included on CD with this course.

## PATHOLOGY COURSES

The two courses are designed to build on the foundational knowledge of the basic principles of pathophysiology in biological disturbances of structure and function and the relating healing processes. These courses will take the student through the etiology of each disorder along with relative signs and symptoms, possible complications and current treatment options. Upon completion of this series, the student will be able to apply the principles of the specific pathologies to various body systems and recognize significant examples of the various disorders on medical images.

### PATHOLOGY 1 – REVISED 2007

CATEGORY "A" CREDIT: 40

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Focuses on specific disorders of the skeletal, gastrointestinal, biliary and urinary systems.

**TEXTBOOK:** Eisenberg, Ronald L.; Comprehensive Radiographic Pathology, 4<sup>th</sup> edition, Mosby, 2007 (\$83.95).

### PATHOLOGY 2 – REVISED 2008

CATEGORY "A" CREDIT: 40

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Focuses on specific disorders of the Respiratory, Cardiovascular, Endocrine, Reproductive, Hematopoietic and Central Nervous Systems. Will also include a narrow investigation to some Nutritional Disorders, Melanoma and Sarcoidosis.

**TEXTBOOK:** Eisenberg, Ronald L.; Comprehensive Radiographic Pathology, 4<sup>th</sup> edition, Mosby, 2007 (\$83.95).

### PEDIATRIC IMAGING

CATEGORY "A" CREDIT: 40

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Provides a comprehensive study of embryological development as well as the anatomy and physiology of 5 different body systems. Based on this framework, this challenging course proceeds to examine common pathological processes. Interwoven throughout the entire manual are pediatric considerations that will provide a better understanding of young individuals. Once put into practice, these considerations will assist in optimizing the pediatric radiological examination.

**TEXTBOOK:** No textbook required.

## **RADIOBIOLOGY: THE EFFECTS OF RADIATION ON LIFE**

**CATEGORY "A" CREDIT: 40**

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This course is designed for all individuals working with ionizing radiation and for those with an interest in this subject area. Provides an opportunity to better understand radiation and its effects on human life. It includes topics from sub-cellular chemistry and clinical radiobiology to anatomy and genetics, and provides a comprehensive learning experience to fully appreciate the "risk-benefit" equation in working with ionizing radiation.

**TEXTBOOK:** LaTorre Travis, Elizabeth. Primer of Medical Radiobiology, 2<sup>nd</sup> edition, Year-Book Medical Publishers Inc., (\$63.95)

## **SECTIONAL ANATOMY COURSES**

**APPLICABLE TO ALL DISCIPLINES WHERE SECTIONAL IMAGING IS PERFORMED.**

The three sectional anatomy courses are designed to capture all of the essential anatomical regions required for medical imaging technologists and radiation therapists using planar anatomical references. Upon completion, the student will be able to apply the anatomical relationships to recognize structures and identify anatomical detail with Computed Tomography & Magnetic Resonance scans presented in coronal, sagittal and axial planes. Aspiring Ultrasonographers will also benefit from this series.

### **SECTIONAL ANATOMY 1**

**CATEGORY "A" CREDIT: 40**

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#### **Abdomen, Male & Female Pelvis**

Focuses to abdominopelvic structures including the cavity and musculature, peritoneum and gastrointestinal tract, vascular elements, hepatobiliary structures, Upper abdominal organs and male and female pelvic structures.

**TEXTBOOK:** Kelly – Petersen, Sectional Anatomy for Imaging Professionals, 2<sup>nd</sup> edition, 2007 (\$91.95) AND Clemente, Carmine L., Anatomy: A Regional Atlas of the Human Body, 5<sup>th</sup> edition, Urban & Schwazenberg Publishers, 2006 (\$72.50)

### **SECTIONAL ANATOMY 2**

**CATEGORY "A" CREDIT: 40**

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#### **Neck, Thorax, Upper and Lower Extremities**

Focuses on muskoloskeletal structures of the neck and thorax, glands and vasculature of the neck; as well as the diaphragm, vasculature, lungs, and mediastinal structures of the thorax; and then goes onto the upper extremity and lower extremity with attention to the shoulder, elbow, wrist, hip, knee and ankle joints.

**TEXTBOOK:** Same as Sectional Anatomy 1

## SECTIONAL ANATOMY 3

CATEGORY "A" CREDIT: 40

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### Spinal Cord and Brain

Focuses on details of spinal cord, brain embryology, commissures, forebrain, midbrain, hindbrain, ventricles and vasculature of the head.

**TEXTBOOK:** Kelly – Petersen, Sectional Anatomy for Imaging Professionals, 2<sup>nd</sup> edition, 2007 (\$91.95)

## THE CHEST IMAGE

CATEGORY "A" CREDIT: 40

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This course is designed to provide the practicing medical radiation technologist with the knowledge to critically evaluate the chest image. Students will review the anatomical and technical aspects of the normal chest image and learn to evaluate the typical chest image, localize lesions, and recognize commonly seen pulmonary and cardiac disease processes.

**TEXTBOOK:** Corne J, Carroll M, Brown I, & Delany D, Chest X-Ray Made Easy, 2<sup>nd</sup> edition, Churchill Livingstone Press, 2002 (\$39.95).

## **AUTO-FORMATIONS RAPIDES EN FRANÇAIS**

**AVIS: DÈS SEPTEMBRE 2008, LA SÉRIE MAMMOGRAPHIE,  
OFFERTE EN FRANÇAIS PAR L'ACTRM, NE SERA PLUS OFFERTE.**

### **SIMULATION DE TDM: UN APERÇU**

**CRÉDITS CATÉGORIE « A » : 2**

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Introduction au simulateur de TDM et aux modalités de simulation de TDM. Présente les composantes d'un simulateur de TDM, le positionnement des patients, les techniques de balayage, les différentes méthodes de détermination de l'isocentre, la simulation virtuelle, la fusion et des questions-réponses sur le simulateur de TDM. Utilisation d'études de cas pour illustrer le maniement des simulateurs de TDM et pour familiariser le technologue avec cette nouvelle technologie en expansion.

### **RADIOGRAPHIE NUMÉRIQUE AVEC ÉCRANS À PHOTOSTIMULATION – ÉLÉMENTS DE BASE**

**CRÉDITS CATÉGORIE « A » : 1.5**

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Une vue d'ensemble du fonctionnement de la radiographie numérique avec écrans de photostimulation. Le module examine notamment les composantes d'un système de radiographie numérique avec écrans de photostimulation, les avantages et les désavantages de la radiographie numérique avec écrans de photostimulation, compréhension et l'importance des algorithmes en radiographie numérique avec écrans de photostimulation et l'évaluation de la qualité de l'image en fonction de la radioexposition.

### **LES ARTÉFACTS EN RADIOGRAPHIE NUMÉRIQUE AVEC ÉCRANS DE PHOTOSTIMULATION – CAUSES ET SOLUTIONS**

**CRÉDIT CATÉGORIE « A » : 1**

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Introduction à quelques artéfacts courants ou occasionnels en radiographie numérique avec écrans de photostimulation. Explication de la cause des artéfacts et détermination des mesures correctrices à mettre en place pour les réduire. Autre thèmes abordés : évaluation de la qualité de l'image en fonction des artéfacts, détermination des causes d'erreurs et conseils pour la mise en place d'un système de radiographie numérique avec écrans de photostimulation.

## QUICK SELF STUDIES

Quick Self Studies are short courses that can be completed according to your personal schedule. They are designed for technologists who want to earn professional development credits but who do not have the time for full-length courses. Submission of the self-assessed quiz for Category “A” credit is optional however must be returned within 12 months of purchase to be considered for marking and credit. Candidates not obtaining the required minimum pass mark are entitled to one complimentary rewrite.

Quick Self Studies are of interest to all disciplines and/or other health care professionals. Each quick self-study is a self-contained, self-study module, complete with self-administered quiz. The cost is \$50 for CAMRT members and \$60 for non-members. Please use the application form in this booklet to order.

*In order to receive credit for quick self study courses, students must:*

- \_ return the answer sheet within a year of purchase
- \_ obtain a minimum of 75% on the quiz

### **BASIC MICROBIOLOGY FOR THE MRT**

**CATEGORY “A” CREDIT: 2**

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This multidisciplinary course introduces the student to the various infectious diseases encountered by health care professionals. Emphasis is placed on habitat, transmission and prevention of infection. Bacterial, viral and parasitic species common to North America are discussed.

### **CONTRAST MEDIA**

**(SPONSORED BY GE HEALTHCARE)**

**CATEGORY “A” CREDIT: 2**

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GE Healthcare



Designed to introduce the student to the various contrast agents used in Diagnostic Imaging. It will cover indications for use, contraindications and adverse reactions. The goal of this Quick Self-Study is to provide a greater appreciation of the contrast media used in the student’s area of expertise as well as to provide insight into other areas of imaging.

## **COMPUTED RADIOGRAPHY: THE BASICS**

**CATEGORY "A" CREDIT: 1.5**

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An overview on how a CR system operates. Areas discussed in this module include the components of a CR system, the advantages and disadvantages of CR, understanding algorithms and their importance in CR and assessing image quality in relation to radiation exposure.

## **COMPUTED RADIOGRAPHY ARTIFACTS: CAUSE & REMEDY**

**CATEGORY "A" CREDIT: 1**

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An introduction to some common and not so common artifacts encountered in a CR environment. Also explains how CR artifacts are caused and offers assistance in determining corrective action required to lessen the origin of the artifacts. Other topics include assessing image quality in relation to artifacts, recognizing causes of CR failures and understanding helpful tips to use when implementing a CR system.

## **NEW**

### **CT COLONOGRAPHY/CARDIAC CT**

**CATEGORY "A" CREDIT: 2**

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This Quick Self Study provides comprehensive learning of two advanced procedures in Diagnostic CT. Discussed in detail are the theory, anatomy, pathology and protocols required for CT Colonography which is fast replacing the Barium Enema and has become an important adjunct to Colonoscopy. Also discussed in detail are the theory, anatomy, pathology and protocols required for Cardiac CT, which has provided a quick, effective and relatively non-invasive approach to diagnosis of coronary artery disease.

## **CT LEARNING MODULES**

**(EACH VOLUME IS ONE QUICK SELF-STUDY)**

**(SPONSORED BY BRACCO DIAGNOSTICS CANADA INC.)**

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**VOLUME 1: Introduction to Computed Tomography (CATEGORY "A" CREDIT: 1.5)**

**VOLUME 2: Technological Advances in CT (CATEGORY "A" CREDIT: 1.5)**

**VOLUME 3: Using Intravenous Contrast Media in CT (CATEGORY "A" CREDIT: 0.5)**

**VOLUME 4: Radiation Safety (CATEGORY "A" CREDIT: 0.5)**

**VOLUME 5: CT Angiography (CATEGORY "A" CREDIT: 0.5)**

## **CT SIMULATION: AN OVERVIEW**

**CATEGORY "A" CREDIT: 2**

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An introduction to the CT Simulator and the process of CT Simulation. Covers the components of a CT Simulator, patient positioning, scanning procedures, different methods of determining the isocentre, virtual simulation, fusion and QA procedures for a CT Simulator. Case studies are used to illustrate the use of the CT Simulator and to allow the MRT to become more familiar with this new and developing technology.

## **CULTURE AND HEALTH CARE**

**CATEGORY "A" CREDIT: 2**

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This short course will help the student develop an understanding of the complexity of culture and appreciate the implications culture has on the provision of health care services.

## **MELANOMA: AN OVERVIEW**

**CATEGORY "A" CREDIT: 3**

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Introduces the student to the management of malignant melanoma and is applicable to all health care professionals. Areas of focus and understanding include UV radiation exposure, etiology and epidemiological factors, staging, treatment options, treatment side effects, Canadian 2000 statistics and clinical trials of melanoma.

## **MRI LEARNING MODULES**

**(EACH VOLUME IS ONE QUICK SELF-STUDY)**

**(SPONSORED BY BRACCO DIAGNOSTICS CANADA INC.)**

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**VOLUME 1: MRI Contrast and Contrast Agents (CATEGORY "A" CREDIT: 2)**

**VOLUME 2: MRI Perfusion and Diffusion Imaging (CATEGORY "A" CREDIT: 3)**

**VOLUME 3: MRI Functional and Interventional Imaging (CATEGORY "A" CREDIT: 3)**

**VOLUME 4: MRI Breast Disease Imaging (CATEGORY "A" CREDIT: 1.5)**

**VOLUME 5: MRI and MRA of the Chest and Abdomen (CATEGORY "A" CREDIT: 3)**

## **PALLIATIVE CARE**

**CATEGORY "A" CREDIT: 2**

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Designed to identify key issues in palliative radiation therapy and to provide specific knowledge on the subject. Topics covered include definitions of palliative treatment and its appropriate usage, associated supportive and adjuvant treatments as well as recent studies and ethical issues associated with palliation.



## **NEW**

### **PET THEORY, PET/CT AND SPECT/CT IMAGING**

**CATEGORY "A" CREDIT: 2**

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Computed Tomography has joined with Positron Emission Tomography (PET) and SPECT in augmenting the practice of nuclear medicine. This supplemental module gives an in depth look at the theory and practicality of PET and how the field of CT is incorporated into nuclear medicine through PET/CT and SPECT/CT hybrid systems.

### **PROSTATE CANCER: AN OVERVIEW FOR HEALTH PROFESSIONALS**

**CATEGORY "A" CREDIT: 1**

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Designed as an overview of prostate cancer for professionals working in the health care field.

### **SKIN CANCER: AN OVERVIEW**

**CATEGORY "A" CREDIT: 2**

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Introduces the different types of skin cancer, including prevention, treatment and prognosis. As skin cancer is the most common form of all cancers, this course is appropriate for all health care professionals as well as the general public.

#### **GROUP PACKAGE PRICING FOR CT & MR LEARNING MODULES**

FOR GROUPS OF 5 OR MORE TECHNOLOGISTS, THE CT AND MR LEARNING MODULES CAN BE PURCHASED FOR A DISCOUNTED PRICE BY A DEPARTMENT SUPERVISOR/MANAGER. REQUESTS MUST BE FROM A CANADIAN FACILITY AND A PO NUMBER MUST ACCOMPANY THE REQUEST. PLEASE REFER TO [WWW.CAMRT.CA](http://WWW.CAMRT.CA) UNDER QUICK SELF STUDIES FOR MORE INFORMATION ON THESE PACKAGES AND THEIR REQUIREMENTS OR CONTACT CAMRT'S CONTINUING PROFESSIONAL DEVELOPMENT DEPARTMENT.



## **QUICK SELF STUDIES**

**SPONSORED BY BRACCO DIAGNOSTICS CANADA INC.**

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### **Take advantage of this opportunity to build your own CE library!**

Quick Self Studies are available in CD-Rom only. The cost is \$50 for members and \$60 for non-members.

For institutions / facilities who wish to host an educational group activity, additional copies of the self-assessed quiz for Quick Self Studies can be purchased for an additional fee at the time of purchase (this is limited to the QSS listed below). Once the application is received, the sponsoring organization will be asked to complete a form regarding their activity for CAMRT's administrative purposes.

## **CLINICAL APPLICATIONS OF MRI THE BRAIN**

**CATEGORY "A" CREDIT: 1.0**

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## **CLINICAL APPLICATIONS OF MRI THE SPINE**

**CATEGORY "A" CREDIT: 1.0**

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## **RECOGNIZE AND RESPOND TO SEVERE REACTIONS TO CONTRAST MEDIA**

**CATEGORY "A" CREDIT: 0.5**

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## **UNIVERSAL PRECAUTIONS AGAINST BLOOD BORNE DISEASES**

**CATEGORY "A" CREDIT: 0.5**

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## FELLOWSHIP PROGRAM

### FELLOWSHIP

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The Fellow of the CAMRT (FCAMRT) is the highest professional designation of the Association. Fellows, through their initiative and leadership above and beyond the usual vocational expectations, demonstrate superior education, service to the profession and professional growth. The Fellowship provides a tangible mechanism to recognize this exceptional contribution and achievement beyond other programs offered by the CAMRT.

For more information, please go to our website at [www.camrt.ca/english/professional/fellow\\_prog.asp](http://www.camrt.ca/english/professional/fellow_prog.asp) or contact CAMRT Continuing Professional Development Department, Fellowship.

### WHY BECOME A FELLOW OF THE CAMRT?

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Fellowship represents the pinnacle of achievement within the CAMRT. It is an honour bestowed upon a group of medical radiation technologists/therapists (MRTs).

The pursuit of Fellowship is not for everyone and it should not be seen as a need for every member to achieve this goal. However the people who aspire to obtain a Fellowship designation usually demonstrate the following characteristics:

- \_ Self motivated.
- \_ Strive for excellence.
- \_ Committed to personal growth and self-actualisation.
- \_ Demonstrate professional development through the pursuit of higher learning.
- \_ Contribute to their profession and their professional association at a local and national level.

Fellows of the CAMRT are well-rounded individuals who consistently advocate within their profession and within the healthcare community as a whole. Fellows are a source of encouragement, support and advice to the membership of the CAMRT, and the other members of the health care system with whom they interact. They are often seen as role models and mentors. These qualities demonstrated by your FCAMRT achievement will help you achieve recognition in today's busy, competitive and challenging workplace.

## IN DEVELOPMENT

### COURSES AND SPECIALTY CERTIFICATES IN DEVELOPMENT

#### FUNDAMENTALS OF QUALITY MANAGEMENT

– EXPECTED RELEASE: FALL 2009

CATEGORY "A" CREDIT: TBD

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This course is an excellent introduction to the basic fundamentals of management for the technologist/therapist who knows very little about management skills and is becoming a first time supervisor/manager.

This quality management introductory course will provide medical radiation technologists with a foundation of contemporary quality management principles, systems, and methodologies and develop essential skills to assume leadership roles within healthcare organizations. Knowledge and skills acquired in this course will be of critical importance in leading teams, engaging stakeholders and strengthening organizational strategic focus on quality of care, customer satisfaction, patient safety, process improvement, and promotion of clinical, academic or research excellence. The course will provide a number of relevant examples, practical tools, techniques, and templates in the areas of strategic planning, project management, business planning, performance measurements, problem solving, and continual quality improvement.

**TEXTBOOK:** No textbook required.

#### INTERVENTIONAL RADIOLOGY SPECIALTY CERTIFICATE

Work has begun on a Specialty Certificate in Interventional Radiology. It will be composed of four components - didactic, clinical, research and maintenance of competence. The workgroup has cross Canada regional representation. It is chaired by an educator and is composed of five technologists who work in areas of interventional radiology. Their mandate is to develop a Specialty Certificate that is reflective of practice needs for safe and effective practice in interventional radiology.

Please watch for expected date of release in future CAMRT communication.

## CREDIT APPROVAL PROGRAM

### CONTINUING EDUCATION CREDIT APPROVAL PROGRAM

Continuing Education provides a mechanism for technologists to fulfill their responsibility to maintain competence and prevent professional obsolescence. Participation in CE demonstrates accountability to peers, physicians, health care facilities and the public.

The **Continuing Education Credit Approval Program** (CECAP) was established to recognize, evaluate and approve continuing education activities that are held, or are available, in Canada. CECAP is a process that ensures provision of high quality activities that contribute to the ongoing competence and personal/professional development of medical radiation technologists in Canada.

One aspect of CECAP is to act as a “Recognized Continuing Education Evaluation Mechanism” (RCEEM) for the American Registry of Radiological Technologists (ARRT). A RCEEM is defined as a group or organization that evaluates the content and quality of continuing education activities. As a RCEEM the CAMRT’s Continuing Education Credit Approval program evaluates educational activities for the purpose of assigning category “A” RCEEM credit. This category A credit which outlines the number of “learning” hours involved can be used by individuals for credit towards ARRT license renewals. It can also be used to fulfill any CE requirements established by a provincial association or regulatory body as well as for your own personal professional portfolio.

**If you are sponsoring an educational activity and would like to get credit approval, please contact the CAMRT, Professional Development Department for guidelines on how to proceed. You can also visit our website at [http://www.camrt.ca/english/professional/continuing\\_cap.asp](http://www.camrt.ca/english/professional/continuing_cap.asp).**

**\_ PLEASE NOTE THAT THERE IS RECIPROCITY AMONGST ALL RCEEMS IN NORTH AMERICA.  
\_ ALL CAMRT DISTANCE EDUCATION COURSES HAVE BEEN ASSIGNED CATEGORY “A” CREDIT.**

## COURSE DEVELOPMENT OPPORTUNITIES

### COURSE DEVELOPMENT OPPORTUNITIES

In an attempt to provide the most contemporary professional development opportunities to our members, we are constantly looking for new course development projects. If you have a special area of expertise and would like to develop a full length or Quick Self-Study course, the CAMRT is interested in hearing from you. **We welcome both English and French course developers.**

Full-length courses should be a minimum of 40 contact hours. Each course is comprised of six chapters, six assignments and one final examination. Reference textbooks may also be recommended. We offer remuneration for course development. Additional revenue opportunity exists as a course instructor.

Quick Self Studies should be no longer than 10 contact hours to complete and include a multiple-choice self-administered quiz.

Development fees are paid upon contract completion.

#### NEW COURSE TOPIC SUGGESTIONS:

- \_ Trauma Imaging
- \_ Tomodensitométrie (CT Imaging) en français
- \_ QSS on interesting and relevant topics
- \_ Contrast Safety Issues

**Enquiries and course development ideas should be sent to the Coordinator, Continuing Professional Development. Course proposals, background information/resume should be submitted to:**

**CAMRT**  
CONTINUING PROFESSIONAL DEVELOPMENT DEPARTMENT  
1000 – 85 ALBERT STREET  
OTTAWA ON K1P 6A4  
(800) 463-9729 EXTENSION 226

**BCAMRT  
(BRITISH COLUMBIA)**

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102-211 Columbia Street  
Vancouver BC V6A 2R5  
TELEPHONE: 604-682-8171  
or 800-990-7090 (BC ONLY)  
EMAIL: [office@bcamrt.bc.ca](mailto:office@bcamrt.bc.ca)  
WEB: [www.bcamrt.bc.ca](http://www.bcamrt.bc.ca)

**ACMDTT  
(ALBERTA)**

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600-5241 Calgary Trail NW  
Edmonton AB T6H 5G8  
TELEPHONE: 780-487-6130  
EMAIL: [rviray@acmdtt.com](mailto:rviray@acmdtt.com)  
WEB: [www.acmdtt.com](http://www.acmdtt.com)

**SAMRT  
(SASKATCHEWAN)**

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PO Box 1312 Stan Main  
Weyburn, SK S4H 3J9  
TELEPHONE: 306-766-3556  
EMAIL: [registrar@samrtonline.ca](mailto:registrar@samrtonline.ca)  
WEB: [www.samrtonline.ca](http://www.samrtonline.ca)

**MAMRT  
(MANITOBA)**

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202 - 819 Sargent Ave  
Winnipeg MB R3E 0B9  
TELEPHONE: 204-774-5346  
EMAIL: [mamrt@mts.net](mailto:mamrt@mts.net)  
WEB: [www.mamrt.ca](http://www.mamrt.ca)

**OAMRT  
(ONTARIO)**

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PO Box 1054 Stn Main  
(101-233 Colborne St N3T 2H4)  
Brantford ON N3T 5S7  
TELEPHONE: 519-753-6037  
EMAIL: [officemanager@oamrt.on.ca](mailto:officemanager@oamrt.on.ca)  
WEB: [www.oamrt.on.ca](http://www.oamrt.on.ca)

**CMRTO  
(ONTARIO)**

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170 Bloor Street West  
Toronto ON M5S 1T9  
TELEPHONE: 416-975-4353  
WEB: [www.cmrto.org/registration](http://www.cmrto.org/registration)

**OTRQ  
(QUEBEC)**

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401-6455 Jean-Talon e  
Montréal, QC H1S 3E8  
TELEPHONE: 514-351-0050  
EMAIL: [jprheault@ortq.qc.ca](mailto:jprheault@ortq.qc.ca)  
WEB: [www.otrq.qc.ca](http://www.otrq.qc.ca)

**NBAMRT  
(NEW BRUNSWICK)**

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19 Cortland Place  
Rothesay, NB E2E 5C4  
TELEPHONE: 506-848-0919  
EMAIL: [mcod@rogers.com](mailto:mcod@rogers.com)  
WEB: [www.nbamrt.ca](http://www.nbamrt.ca)

## **PROVINCIAL REGISTRARS**

(CONTINUED)

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### **PEIAMRT (PRINCE EDWARD ISLAND)**

142 Balcom Dr  
Summerside PE C1N 5M7  
TELEPHONE: 902-436-7733  
EMAIL: [mjripley@pei.sympatico.ca](mailto:mjripley@pei.sympatico.ca)  
WEB: [www.peiamrt.ca](http://www.peiamrt.ca)

### **NSAMRT (NOVA SCOTIA)**

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5 Lawson Ave  
Dartmouth NS B2W 2Y9  
EMAIL: [karena@accesswave.ca](mailto:karena@accesswave.ca)  
WEB: [www.newedge.locals.ca/nsamrt](http://www.newedge.locals.ca/nsamrt)

### **NAMRT (NEWFOUNDLAND)**

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PO Box 29141 RPO Torbay Road  
St. John's NF A1A 5B5  
TELEPHONE: 709-777-6036  
EMAIL: [Arlene.collins@warp.nfld.net](mailto:Arlene.collins@warp.nfld.net)  
WEB: [www.nlnamrt.ca](http://www.nlnamrt.ca)



# CAMRT DIRECTORY

**1000, 85 Albert Street  
Ottawa ON K1P 6E2  
(800) 463-9729 (Canada only)  
(613) 234-0012**

## **EDUCATION DEPARTMENT**

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- Elaine Dever, Director of Education  
[edevery@camrt.ca](mailto:edevery@camrt.ca) .....extension 227
- Mélanie Bérubé, Coordinator Continuing Professional Development  
[mberube@camrt.ca](mailto:mberube@camrt.ca) .....extension 226
- Tabitha Martel, Administrative Assistant Specialty Certificates and Quick Self Studies  
[tmartel@camrt.ca](mailto:tmartel@camrt.ca) .....extension 237
- Fanny Fortier, Coordinator Certification  
[ffortier@camrt.ca](mailto:ffortier@camrt.ca) .....extension 245

## **OTHER DEPARTMENTS**

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- EXECUTIVE DIRECTOR .....extension 229
- EXECUTIVE OFFICE .....extension 228
- MEMBERSHIP SERVICES .....extension 223
- COMMUNICATIONS .....extension 230
- FINANCE .....extension 246
- PROFESSIONAL PRACTICE .....extension 236

**[www.camrt.ca](http://www.camrt.ca)**

**Complete office contact list available on our website:  
<http://www.camrt.ca/english/contact.htm>**







Canadian Association of  
Medical Radiation Technologists

Association canadienne des  
technologues en radiation médicale

**1000 - 85 rue Albert Street, Ottawa, ON K1P 6A4**

