MEDICAL PROFESSIONALS

Refining Radiology

www.medical-professionals.com

CATALOGUE 2018

Live lectures calendar inside!

“Because learning is a never ending journey”

« Medical Professionals’ unique differentiator relies primarily on its comprehensive pedagogic educational tools and materials and on the expertise of its Clinical Education Specialists who deliver minor miracles every day throughout the Middle East, Africa and Western Europe (over a 1000 interventions per year). »

About Medical Professionals

With over 15 years of experience in the Radiology Services field, Medical Professionals’ aim remains to support Radiology Professionals and Hospital Management on optimizing their Medical Imaging department’s efficiency and improve their Patients’ outcome. And throughout our professional journey, we have delivered over 12000 interventions in 70 different countries within the Middle East, Africa, Central Asia and Western Europe and we have developed close ties with various stakeholder in this field including Original Equipment Manufacturers, Local and Regional Radiology Societies, University Hospitals and Consultants providing us a competitive edge that we deploy for the benefits of our customers and their patients.

Medical Professionals operating throughout its two headquarters, Lebanon and France, stands apart from other Radiology Services Providers due to:

- Our single focus on Medical Imaging
- Our talented and multilingual Clinical Education Specialists
- The pedagogic and graphics superiority of our training programs
- Our ability to tailor those educational programs to meet the customers’ needs and budgets

Customers & Partners:

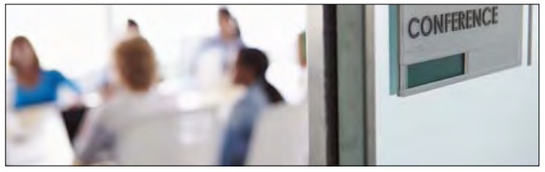
Our Services

Live Lectures

Relying on the technical and pedagogical expertise of our Clinical Education Specialists and Consultants, Medical Professionals' offers theoretical courses covering various topics responding to the Radiology Professionals needs. These courses can be delivered in Live Lecture format and typically combined with online access to the courses' materials.

E-learning

Most of our theoretical medical imaging courses are also available in a Self-Learning format on our website (www.medical-professionals.com). The Self-Learning format has been developed with innovative teaching techniques and state of the art graphics, simplifying the concepts and leaving very little for reasoning. The value of these e-learning courses relies on its personalized access allowing the user to follow the training online at his own pace, with an ability of self-assessment through the embedded quizzes and at a very cost-effective price.



Webinars / Web Conferences

Relying on a trustworthy technology and an interactive platform, Medical Professionals presents its courses through Webinars / Web Conferences providing the customers with a cost effective Live Lecture solution conducted by top notch speakers. Similar to Live Lectures, Webinars / Web Conferences are typically combined with online access to the courses' materials and its programs could be tailored based on customers' needs: the Webinar length could be at maximum 40 min for a specific module whereas Web Conferences can go up to two days session for full courses.

Subspecialty Program for Technologists

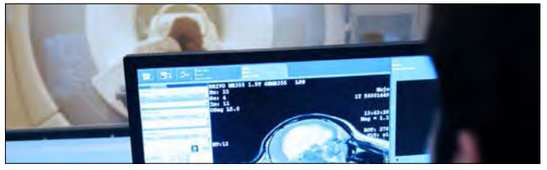
With a great appreciation of the Technologist's role and its importance throughout the diagnosis process, Medical Professionals has invested in the development of CT, MRI and X-ray subspecialty training programs with the intent to develop experts in those areas whom can be valuable assets to their peers, their hospital and patients. These training programs are delivered over 200 hours and composed of 100 hours of theory, 50 hours of post-processing and 50 hours of hands-on practice on the equipment.

Clinical Workshops

Medical Professionals regularly organizes a variety of workshops and events for its constituents and sponsors, featuring world renowned physicians delivering case study reviews and practical simulations for audiences. These clinical workshops are primarily designed to be interactive with the intent that attending physicians acquire specific vocations and skills which they could apply to their current practices.

Onsite Clinical Applications

Medical Professionals advises, accompanies and trains all Medical Imaging personnel within a radiology department, Radiologists, Technologists, and Secretaries, to optimize the usage of the equipment they have acquired and regardless of its brand. Our expertise in this area has been developed and is continuously refined throughout our close ties with various manufacturers whom have entrusted us to deliver applications on their behalf including Siemens, Toshiba, Samsung, GE Healthcare and Philips.

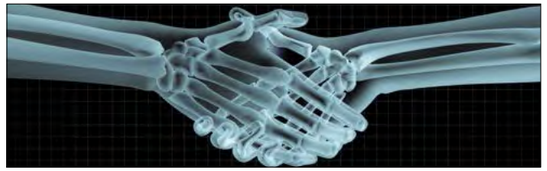


Offsite Training

Through its close ties with major Hospitals and University Hospitals in Lebanon, France and Tunisia, Medical Professionals organizes Hands-On trainings for Radiologists and Technologists creating the opportunity for the latter to share knowledge and experience by working directly with highly experienced counterparts. Such trainings are hosted at the hospitals' radiology departments and cover any and all aspects of radiology, from basic organization and exams to very advanced applications and are intended for visiting radiologists and technologists to acquire specific vocations and skills which they could apply to their current practices.

Radiology Operating Management Solutions

Relying on its personnel expertise and a wide network of specialized consultants and partners, Medical Professionals offers a complete consulting and operational service for diagnostic imaging departments providing its customers with an optimized effectiveness and efficiency of their facility. These services include: architectural planning, procurement, staffing, training and continual education as well as operations and processes Improvement.



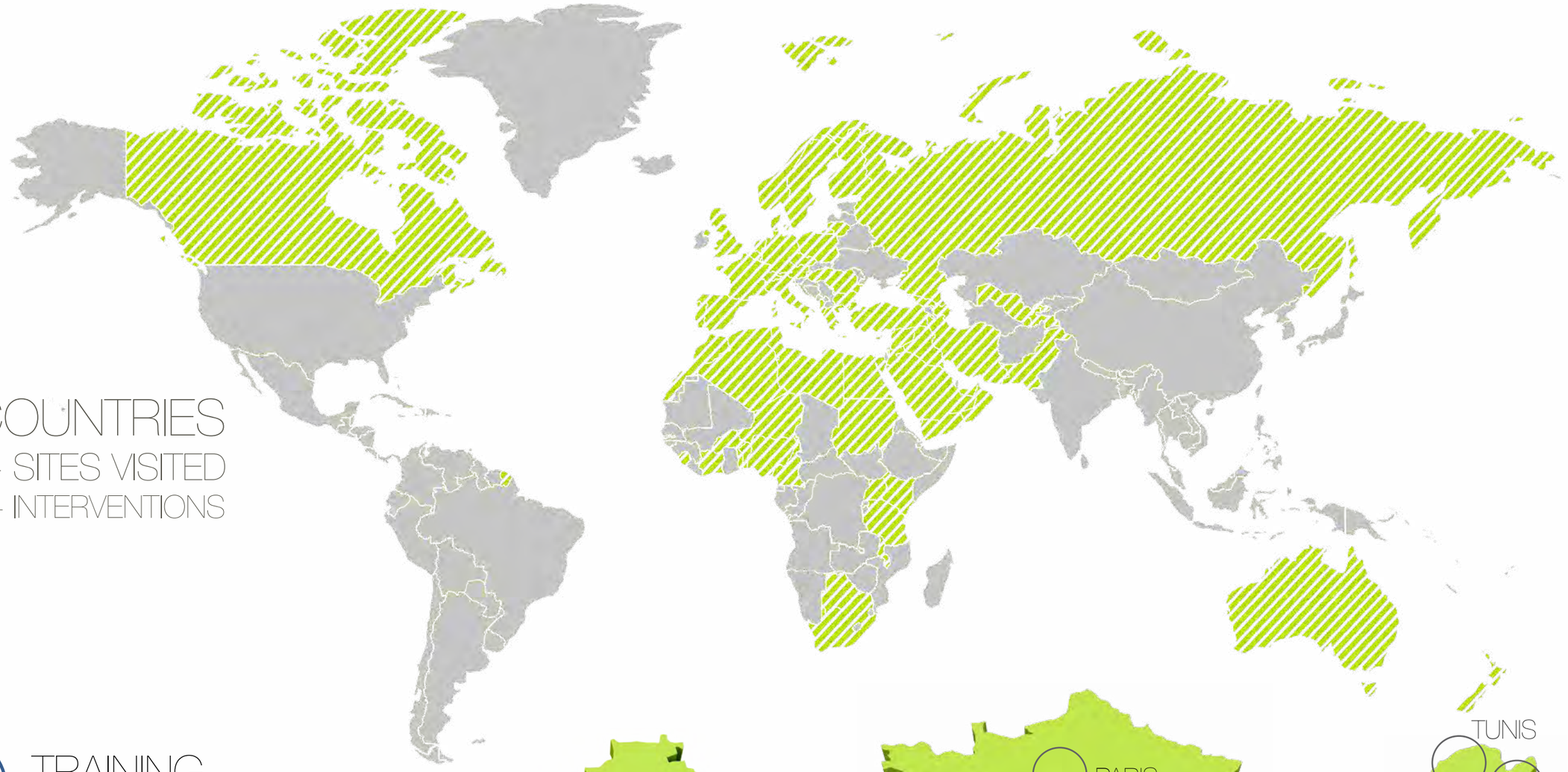
MPosium.com

MPosium is a free educational website by Medical Professionals dedicated to interventional radiology and beyond.
MPosium covers all specialties from the basics to the most advanced and up-to-date techniques. It offers a variety of procedures, in a didactic video format, supervised by world-renown physicians.
With its complete and exhaustive approach that takes you through the procedure from tools utilized to the tips and techniques deployed by the physicians, MPosium.com is now your trustworthy virtual Doctor to Doctor free educational platform.

70 COUNTRIES

1700+ SITES VISITED

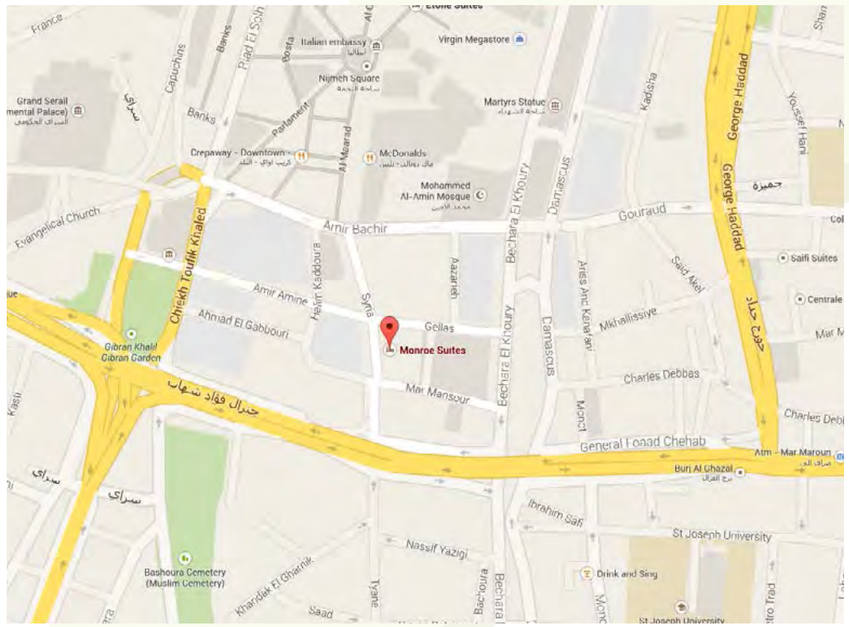
13000+ INTERVENTIONS



8 TRAINING CENTERS

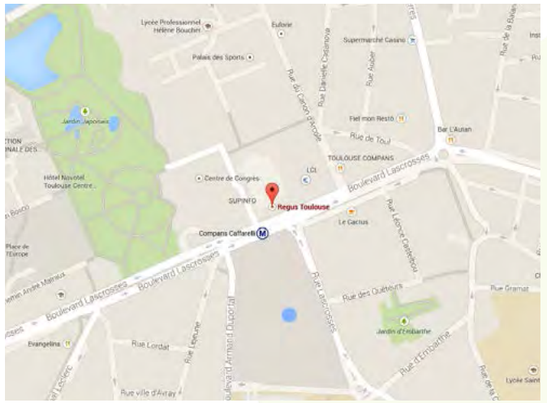
Our Training Centers

Beirut



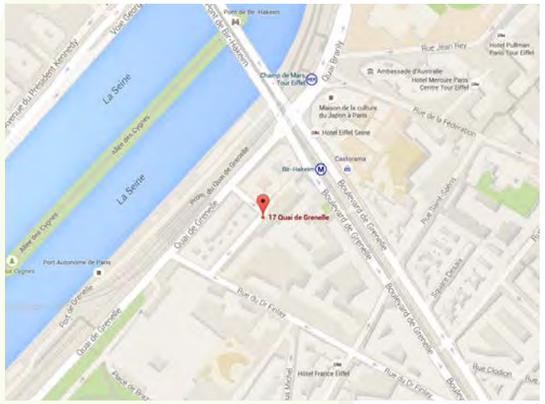
Beirut Training Center - Medical Professionals Premises :
2nd flr, Markazia bldg, Downtown, Beirut, Lebanon

Paris, Marseille, Toulouse and Lyon



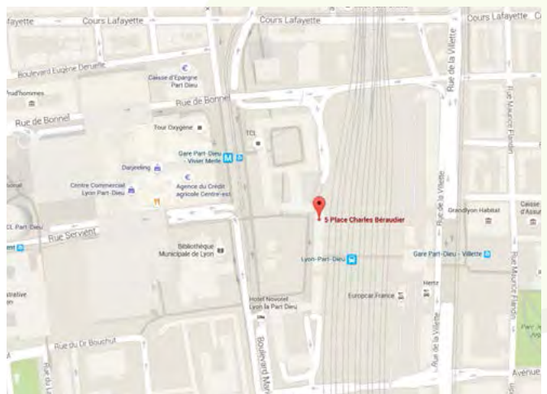
Centre de Formation Toulouse – Jean JAURES Buisness Center
78 Allée Jean Jaurès - Le Pré Catelan - Bât. F
31000 Toulouse

En métro : arrêt Marengo et Jean Jaures
Depuis la gare : à 5 min à pied



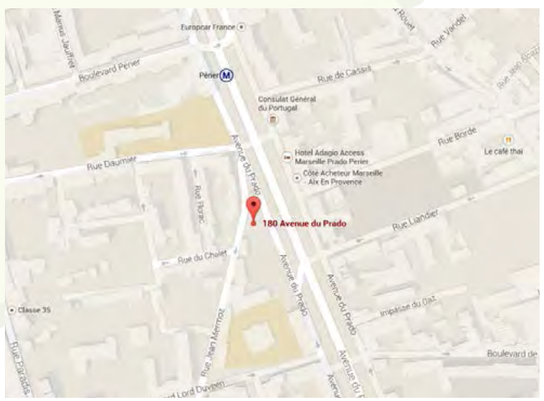
Centre de Formation Paris Grenelle :
17 Quai de Grenelle, 75015 Paris

Par les transports en commun :
RER C, Champ de Mars - Tour Eiffel
Métro : Ligne 6, Bir-Hakeim



Centre Regus Lyon Gare Part Dieu
5, place Charles Béraudier, cedex 03, 69428 Lyon

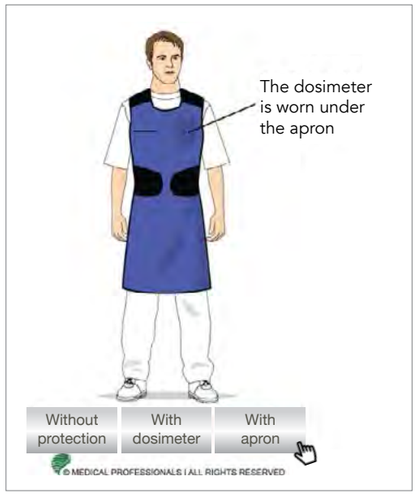
En métro : Ligne B
En Tram : Ligne 1

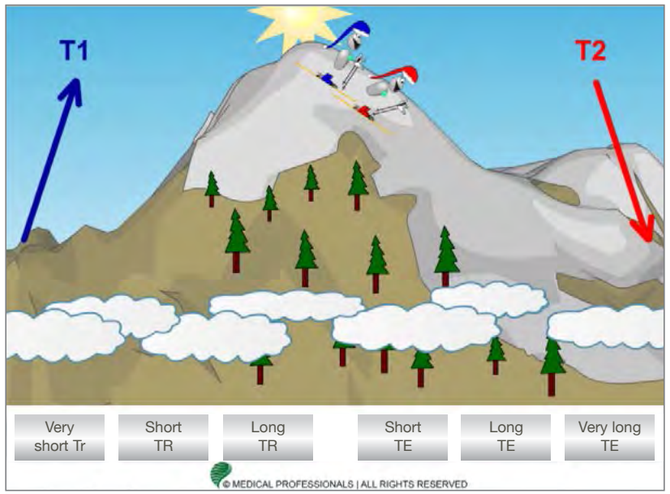


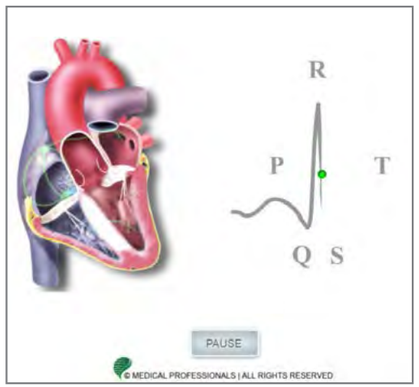
Centre de Formation Marseille - Prado :
180 Avenue Du Prado, 13008 Marseille
Depuis la gare de Marseille St Charles, prendre la ligne de métro 2 Direction Sainte-Marguerite et s'arrêter à la station Périer.

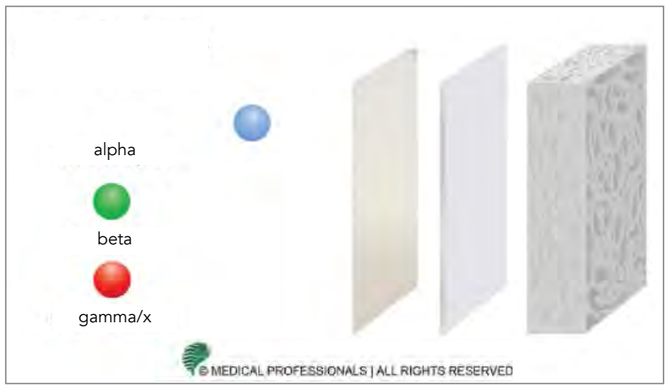
Interactivity

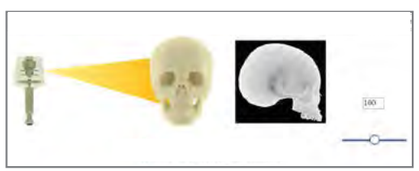
ANIMATIONS



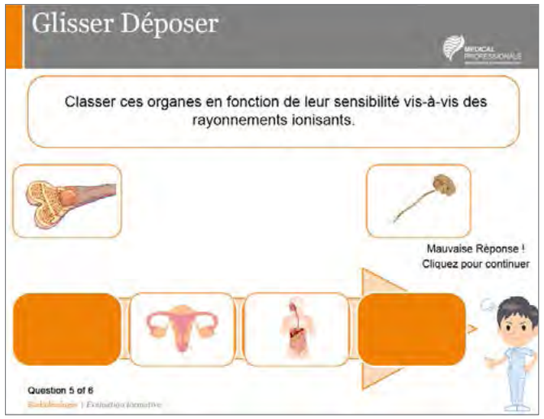








QUIZ



VIDEOS/SIMULATORS

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Medical Imaging Courses

Medical Professionals' courses are intended to guide radiology professionals through the theory and fundamental principles associated with each of the various imaging modalities and then allowing them to advance into specialized imaging procedures associated with each modality. Those courses are developed in compliance with rigorous quality standards by our clinical applications teams, consulting radiologists and our educational director. All of our courses are designed and animated in an easy to understand and conceptual manner and constructed with a well thought out pedagogic logic and accompanied by quizzes, allowing participants to test their understanding and retention of the content.

These courses are available in English and French and delivered either in Live Lecture format, Web-Conference setup or as E-Learning materials.

MRI

MRI Essential

Training Modes

Live Lecture
2 days
3 months E-learning access
15 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Web Conference
2 days
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Review of basic MRI physics
- Understand the basic MRI functionality
- Master the basic sequences
- Adjust scanning parameters to improve image quality

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

None

Topics Covered

Day 1

Introduction and equipment:
- Introduction
- Magnetic field
- The magnets
- Safety

Resonance and pulses:
- Resonance
- The magnetization vector
- A basic sequence
- The signal
- The Spin Echo sequence

MRI Weights:
- Adjusting the TE and the TR
- Contrasts
- Impact on the signal

Quality:
- Contrast
- Signal to noise ratio
- Spatial resolution

Day 2

The Gradients:
- Generalities
- Specificities for MRI
- The gradients in MRI

The Sequences:
- Spin Echo
- Fast/turbo Spin Echo
- Inversion-recovery
- Fat Sat & Pre Sat
- Gradient Echo
- TOF

Multi-slice Acquisition:
- Chronogram
- The maximum TE
- Blurring
- Chemical shift
- Receiver bandwidth
- Bandwidth and chemical shift
- The frequency matrix
- Reconstruction matrix

MRI Advanced

Training Modes

Live Lecture
2 days
3 months E-learning access
15 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Web Conference
2 days
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Adapt the system to your needs through a mastering of sequences
- Acquire the knowledge to master imaging techniques
- Identify MR artifacts and improve image quality

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

MRI Essential

Topics Covered

Day 1

Introduction and Materials:
- RF Shielding, types and isolation of the room
- Technical room
- Coils

Gradients:
- What is a gradient?
- Gradients basics
- Gradient types
- Spatial discrimination methods
- Gradient characteristics

K Space:
- What is the K SPACE?
- Fourier transform
- Spatial encoding
- K space properties
- Filling Modes
- How to accelerate the acquisition?

Day 2

Artifacts:
- Most common artifacts

Sequences:
- SE Sequences
- GE Sequences
- Inversion recovery
- Derived sequences

FAT SAT Techniques:
- General principle
- Techniques
- Spectral Fat saturation
- IR/STIR
- SPAIR
- Selective excitation of water
- 2 and 3 point techniques (DIXON)

Cardiac MRI

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Review the anatomy, physiology and heart disease specifically explored in MRI
- Master the cardiac acquisition techniques
- Acquire the knowledge for post processing techniques

Target Audience

- Technologist
- Radiology Resident
- Radiologist
- Cardiologist

Prerequisite

MRI Advanced

Topics Covered

Anatomy and Physiology:
- Heart anatomy
- Imaging planes
- Left ventricle segmentation
- Physiology

Patient's Health Care:
- Reception and preparation
- Positioning
- Special case: stress MRI

Acquisition Techniques:
- Gatings
- Sequences

Artifacts:
- Motion artifacts
- Aliasing
- Flow artifacts and Off Resonance
- Other artifacts

Protocols:
- Basic sequences
- Ischemia
- Viability
- Tumor
- Myocarditis
- ARVD
- Valvular pathologies
- Hemochromatosis

MRI 3Tesla

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Safety standards related to operating a very strong magnetic field
- Understand changes in terms of contrast and parameters when switching from a 1.5T to a 3T
- Optimize gains in “Signal to Noise Ratio” induced by the increase in magnetic field
- Recognize and minimize artifacts that specifically affect 3T image acquisitions

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

MRI Essential

Topics Covered

Introduction and safety:
- Introduction
- Magnetic field
- SAR
- Gradients

Contrast:
- Relaxation times
- The weightings
- Changes at 3T

Signal to Noise Ratio (SNR):
- The signal
- The noise
- Signal to noise ratio
- Changes at 3T
- Investment in spatial resolution
- Investment in acquisition time

Artifacts:
- Chemical shift
- Magnetic susceptibility
- The dielectric effect

Ultra-high field MRI - 7 Tesla:
- Introduction
- Benefits and safety
- Effect on the SNR
- Relaxation time
- RF energy deposition
- Chemical shift and magnetic susceptibility
- Homogeneity of the magnet
- Correction of B0 homogeneity
- Clinical applications and potential
- Cranial pathology

Breast MRI

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Master the physiology and radiological anatomy of the breast
- Develop a solid background for Breast MRI protocol
- Establish a basic level of knowledge concerning kinetic wash out curves

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

MRI Essential

Topics Covered

Breast Anatomy and Physiology:
- Skin and Parenchyma
- Human Milk
- Fibrous and fatty tissues
- Blood and nerve supply
- Breast changes during pregnancy
- Effect of progesterone and oestrogen on breast tissue
- Lymphatic Drainage

Breast Cancer Introduction:
- Breast Cancer Risk Factors
- BRCA Mutations
- Breast Cancer
- Cancer Physiology
- Breast Lymphatics
- Breast Ductal Tree Development
- Noncancerous versus Cancerous Conditions
- Breast Tumor Histology
- Breast Cancer Workup and biology
- Prognostic Markers for Breast Cancer

Imaging Modalities:
- Mammography
- BI-RADS Breast Density Types
- BI-RADS Categories and Management
- Ultrasound
- MRI
- Limitation and indications of Breast MRI
- Sensitivity and Specificity for Screening

Preparation and Patient Scheduling:
- Pertinent Information for interpretation Breast MRI examination
- Written Questionnaire
- Breast MRI Appointment

Sequences:
- Fast/Turbo Spin Echo
- Axial Diffusion
- Vibe
- Post-processing

Protocol:
- Standard Requirements
- Protocol
- MR Spectroscopy
- Breast Implant Facts
- Breast Implant Imaging
- Algorithm for Interpretation

Gadolinium Enhanced MR:
- Contrasts
- Contrast agents
- Indications-Contraindications
- Side effects
- Contrast administration
- Categories of Enhancing Lesions

Quality:
- Contrast
- Signal to noise ratio
- Spatial resolution

Common Pathologies:
- Benign Lesions
- High-Risk Lesions
- Malignant Lesions

MRI Spectroscopy

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Understanding the physics behind proton spectroscopy
- Advantages and constraints of spectroscopy
- Integrating spectroscopy into existing protocols

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

MRI Advanced

Topics Covered

Spectroscopy Principle:
- Introduction
- Basic principles
-

Characteristic of spectroscopy:
- Chemical shift
- J coupling
- Shimming

The Metabolites:
- The metabolism
- The metabolites

SpectroscopicMeasurements:
- Preparation
- Measurement
- Evaluation
- Water suppression methods
- RF sequences
- Localizationtechniques

Image Quality:
- Parameters
- Artifacts
- Reduction in acquisition time

Clinical Applications:
- Spectrum analysis and interpretation
- Main clinical applications
- Brain spectrum
- Skull, Prostate, Breasts, Liver, Heart and Muscle

MRI Musculoskeletal

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Create a basic level of knowledge concerning musculoskeletal MRI and related physical principles
- Develop a solid background for musculoskeletal MRI protocols
- Master the radiological anatomy for the spine and the joints

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

MRI Essential

Topics Covered

Introduction

Patient screening

Advantages of MSK MRI

Limitation of MSK MRI

Indications of MSK MRI

MSK Acquisition Sequences

MSK Artifacts

Upper Extremities (Shoulder, Elbow, Wrist, Hand)
- Indications
- Anatomy
- Positioning
- Coil selection
- Protocol
- Radiological anatomy
- Common pathologies

Lower Extremities (Hip, Knee, Ankle, Foot)
- Indications
- Anatomy
- Positioning
- Coil selection
- Protocol
- Radiological anatomy
- Common pathologies

Spine Studies (Cervical, Dorsal, Lumbar)
- Indications
- Anatomy
- Positioning
- Coil selection
- Protocol
- Radiological anatomy
- Common pathologies

Gadolinium Enhanced MRI
- Introduction
- Contrasts
- Contrast agents
- Indications
- Contraindications
- Side effects
- Contrast administration
- Keep in mind

Arthrography
- Definitions
- Indications
- Contraindications
- Complications
- Procedure
- Contrast Solution

Image Quality
- Enhancing Signal
- Enhancing Resolution
- Enhancing Contrast
- Time Reduction

Neurology MRI

Training Modes

Live Lecture
2 days
3 months E-learning access
15 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Web Conference
2 days
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Master the physiology and radiological anatomy for the brain and spine
- Develop a solid background for different brain MRI protocols
- Create a basic level of knowledge concerning Neuro MRI and related physical principles
- Tackle advanced Neuro MRI imaging such as Spectroscopy, Functional MRI, Brain Perfusion and Diffusion Tensor Imaging

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

MRI Advanced

Topics Covered

Day 1
Introduction
- General Information
- Patient Screening
- Advantages of Neuro-MRI
- Limitation of Neuro-MRI
- Indications for Neuro-MRI

Indications:
- Brain MRI
- Skull MRI
- Sella/Pituitary MRI
- Inner Ear MRI
- Orbits MRI
- Face and Paranasal Sinuses MRI
- Brain MRA/MRV
- Spine MRI

Sequences:
- Fast/Turbo Spin Echo
- FR-FSE, TSE-Restore, TSE-Drive
- FSE-IR/TSE-IR/STIR
- Diffusion Weighted Imaging
- FLAIR
- Gradient Echo
- Multi Echo Recombined Gradient Echo
- True Fisp, FIESTA, Balanced FFE, True-SSFP
- FAT SAT spectral
- 3 D time of flight (TOF)
- Maximum intensity projection (MIP)

Brain studies (Anatomy and physiology, Indications, Protocol, common pathologies):
- Routine brain
- Intra-cranial vessels
- Pituitary
- Orbits
- Internal Auditory Canal
- Epilepsy
- Multiple Sclerosis

Day 2
Spine studies (Anatomy and physiology, Indications, Protocol, common pathologies):
- Cervical Spine
- Dorsal spine
- Lumbar spine

Advanced Neuro (General concept, Indications, Procedure):
- Spectroscopy
- Diffusion Tensor Imaging
- Brain Perfusion

Gadolinium
- Purpose
- Doses and Flow Rates

Image Quality
- Enhancing Signal
- Enhancing Resolution
- Enhancing Contrast
- Time Reduction

MRI Safety

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Identify and assess risks at an MRI service
- Implement risk management process

Target Audience

- Technologist
- Radiology Resident
- Radiologist
- Internal medicine physician
- Biomedical engineer

Prerequisite

MRI Essential

Topics Covered

Introduction

Generality
- Definition
- Risk management process

Process set up
- History
- MRI physical basics
- Legislative

Risks associated with the MRI
- Magnetic field related risks
- Radiofrequency related risks
- Quench related risks
- Noise related risks
- Radio contrast medium related risks
- Biological effects
- Pregnancy and MRI

Practical safety set up:
- Magnet stop button

Conclusion

Virtual MRI Console Simulator

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Objectives

- Review the principle of multi-slice imaging with Fast Spin Echo sequence
- Master the acquisition parameters
- Understand and reduce the technical issues that might affect the MR image quality

Target Audience

- Technologist
- Radiology Resident
- Radiologist
- Biomedical engineer

Prerequisite

MRI Essential

Topics Covered

Resonance and Pulses:
- Resonance
- The magnetization vector
- A basic sequence
- The Spin Echo sequence

MRI Weights:
- Adjusting the TE and the TR
- Contrasts
- Impact on the signal

Quality:
- Contrast
- Signal to noise ratio
- Spatial resolution

Fourier Space:
- Specificities for MRI
- The gradients in MRI
- Properties of the Fourier Space
- Acquisition time

The Sequences:
- Spin Echo
- Fast/turbo Spin Echo

Multi-slice acquisition

MRI Console Simulator

This practical workshop relies on a virtual MRI interface allowing users to manipulate, in real time, image contrast, acquisition time, signal to noise ratio and spatial resolution as well as the number of slices allowed per acquisition.

MRI Workflow

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Understand theoretical and practical aspects of MRI workflow
- Identify the roles of technologist, radiologist, and secretary
- Improve patient education, reception and MRI examination scheduling

Target Audience

- Radiology department manager
- Secretary of an MRI or a radiology department

Prerequisite

None

Topics Covered

Introduction to MRI
- Review key concepts and daily practice
- Equipment review
- Safety

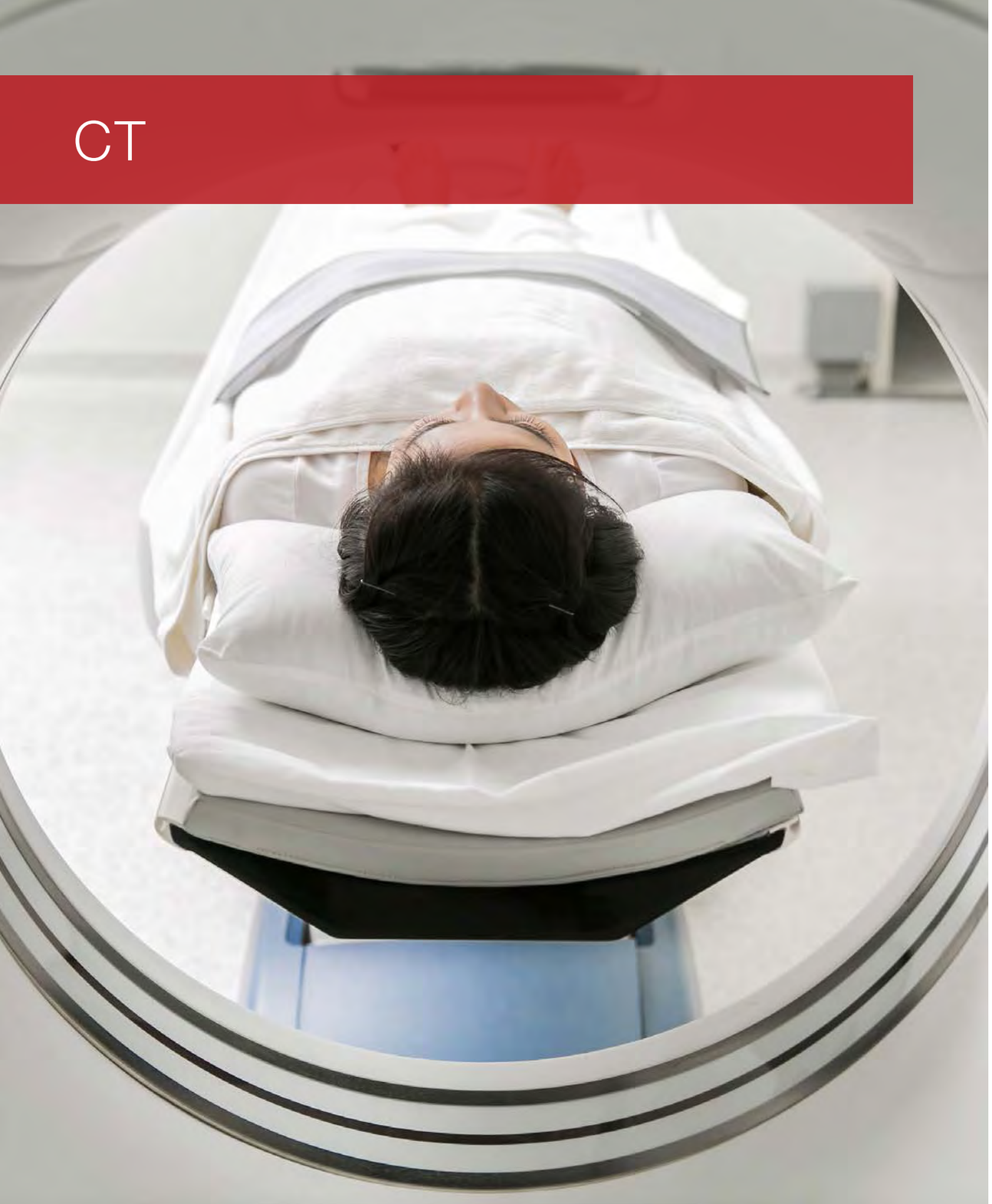
Appointment booking
- Understand the timeline of a patient in the departmental exam time frame
- Procedures
- Acquiring patient medical history

Exam classifications and specificities
- Definition and properties

Handling of in-patients and outpatients

Exam planning
- Chronology
- Time allocation
- Patient education

Ergonomics



CT

CT Essential

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Understand basic physics principles relating to the proper functioning of a CT Scanner
- Understand the criteria affecting the acquisition and post treatment of images
- Optimizing image quality and minimizing patient dose
- Develop a thorough appreciation of standard image acquisition options

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

None

Topics Covered

Basics physics:
- X-ray
- Definition of a CT
- Scanner components
- Scanner history
- 2D, 3D, 4D and 5D imaging

Patient's Care and Positioning:
- Identification of high-risk patient
- Special examinations
- Injection
- Patients questions
- Patient centering
- Positioning

Acquisition:
- Acquisition modes
- Acquisition parameters
- Dosimetric indexes
- Diagnostic Reference Levels

Contrast:
- Contrast media
- Contrast media dynamics
- Vascular enhancement

Image Processing:
- Definition of raw data
- Data processing
- Image reconstruction
- Image parameters
- Hounsfield units
- DICOM format
- PACS

Image Quality:
- Image quality and resolutions
- Image quality
- Artifacts

Post-processing:
- Rendering mode
- M.I.P.(Maximum Intensity Projection)
- Min.I.P.(Minimum Intensity Projection)
- Average
- Curved
- Stenosis measurement
- Endoprosthesis planning
- Volume rendering
- Volumetric reconstruction
- Endoscopy
- Image fusion
- Emphysema measurement
- The fundamental
- PACS storage

Pathologies:
- Guide to rational use
- Brain
- Chest
- Abdominal
- Bones
- Vascular

CT Advanced

Training Modes

Live Lecture
2 days
3 months E-learning access
15 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Web Conference
2 days
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Mastering image quality and related post processing of images
- Minimizing patient dose
- Appreciation of recent technological advances and imaging options

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

CT Essential

Topics Covered

Day 1

Acquisition:
- Main technical factors
- Acquisition modes
- Pitch
- Acquisition speed
- Image contrast

Image processing:
- Hounsfield units
- Image quality and resolutions
- Artifacts
- Post processing
- Protocol visualization

Contrast:
- Contrast media dynamics
- Vascular enhancement
- Patient support
- Extravasation and side effects of the CM
- Patients questions and patient care

Day 2

Image reconstruction:
- Principles of the IR method
- Filtered back projection FBP
- Iterative reconstruction
- In practice

Dual Energy:
- Principle
- Clinical application and advantages
- Dual Energy and dosimetry
- Clinical Examples

Pathologies
- Brain
- Chest
- Abdominal
- Pelvis
- Bone
- Vascular

CT Expert

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Mastering optimization of various parameters radiation dose and contrast media
- Reduce the risk of exposure and the side effects of contrast media
- Develop the expertise of senior technologists
- Ensure constant image quality

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

CT Advanced

Topics Covered

Image Quality Optimization/ Dosimetry:
- Important concepts
- Relationship between dose, parameters and image quality
- In practice
- Proposal

Dose Optimization in Angiography and Oncology:
- Why optimizing ?
- CT Angiography
- In Practice

Dual energy:
- Principle
- Clinical applications and advantages
- Dual energy and dosimetry
- Clinical examples

CT Vascular

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Understand CT scanner generation and evolution.
- Provide proper patient care and comfort
- Apply proper position and scanning protocols for vascular procedures
- Identify vascular anatomy
- Evaluate image quality

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

CT Essential

Topics Covered

Scanner Generations:
- First generation
- Second generation
- Third generation
- Fourth generation
- Dual energy
- Evolution

Patient preparation and positioning:
- Taking an appointment
- Patients questions
- Vascular positioning

Contrast:
- Contrast media
- Contrast media dynamics
- Vascular enhancement
- Extravasation

Acquisition:
- Prerequisite of acquisition
- Acquisition parameters

Vascular Injection:
- The cervicocerebral region
- The thoracoabdominal region
- Lower and upper extremities
- Acquisition parameters and image quality
- Injection parameters
- Acquisition protocols

CT Cardiac

Training Modes

Live Lecture
2 days
3 months E-learning access
15 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Web Conference
2 days
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Develop capabilities for cardiovascular imaging on CT scanner
- Review cardiac anatomy, physiology and cardiac pathologies
- Master specific acquisition techniques related to cardiac CT imaging
- Optimize image quality to dose ratio
- Master required skills for the efficient post treatment of images

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

CT Essential

Topics Covered

Day 1

Anatomy:
- Introduction
- Cavities
- Blood vessels around the heart
- Heart wall
- Valves
- Coronary arteries
- 2D and 3D anatomy
- Dominances
- Veins
- Various slice planes

Physiology:
- General introduction
- ECG signal
- β-blockers
- The ejection fraction (EF)
- Segmentation
- Abnormalities of cardiac contraction

Role of technologist:
- Introduction
- Anatomy
- Master the technology
- Taking care of the patient

Technology:
- Generalities
- Acquisition
- ECG
- Pitch
- Temporal resolution
- Acquisition collimation
- Image resolution
- Artifacts due to the increase of collimation
- Future of the scanner
- Flying focal spot
- Dual energy
- Dose and ECG

Day 2

Contrast Injection:
- Dose
- Dosimetric quantities
- CTDI
- Effective dose
- Decrease the radiation
- Acquisition protocols
- Contrast media dynamics
- Automatic detection
- Artifacts

Post-processing:
- Generalities
- Different techniques
- Curvilinear
- Volume rendering (VR)
- 2D, 3D, 4D, 5D imaging
- Phase shift selection
- Summary

Pathologies:
- Pathology images
- Definition of the coronary anatomy
- Manage Coronary Lesions
- Help an interventional procedure
- Identify coronary plaques at risk
- Control of a treated lesion
- Perfusion and cardiac function

CT Virtual Colonoscopy

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Develop virtual colonoscopy capability at your facility
- Master the art of virtual colonoscopy image acquisition with minimal dose
- Master related image post processing skills

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

CT Essential

Topics Covered

Anatomy & physiology of the colon:
- Anatomical divisions
- Vascularization
- Lymphatic system
- Physiology

Patient preparation and acquisition parameters:
- Epidemiology
- Examination
- Taking care of the patient
- Preparation of the patient
- Insufflation
- Acquisition

Post treatment of images:
- Review of pathologies
- Recognize images
- Reading images and their difficulties
- Common difficulties and pitfalls

CT Workflow

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Understand theoretical and practical aspects of CT workflow
- Identify the roles of technologist, radiologist, and secretary
- Improve patient education, reception and CT examination scheduling

Target Audience

- Radiology department managers
- Secretary of a CT or a radiology department

Prerequisite

CT Essential

Topics Covered

CT basics and operation

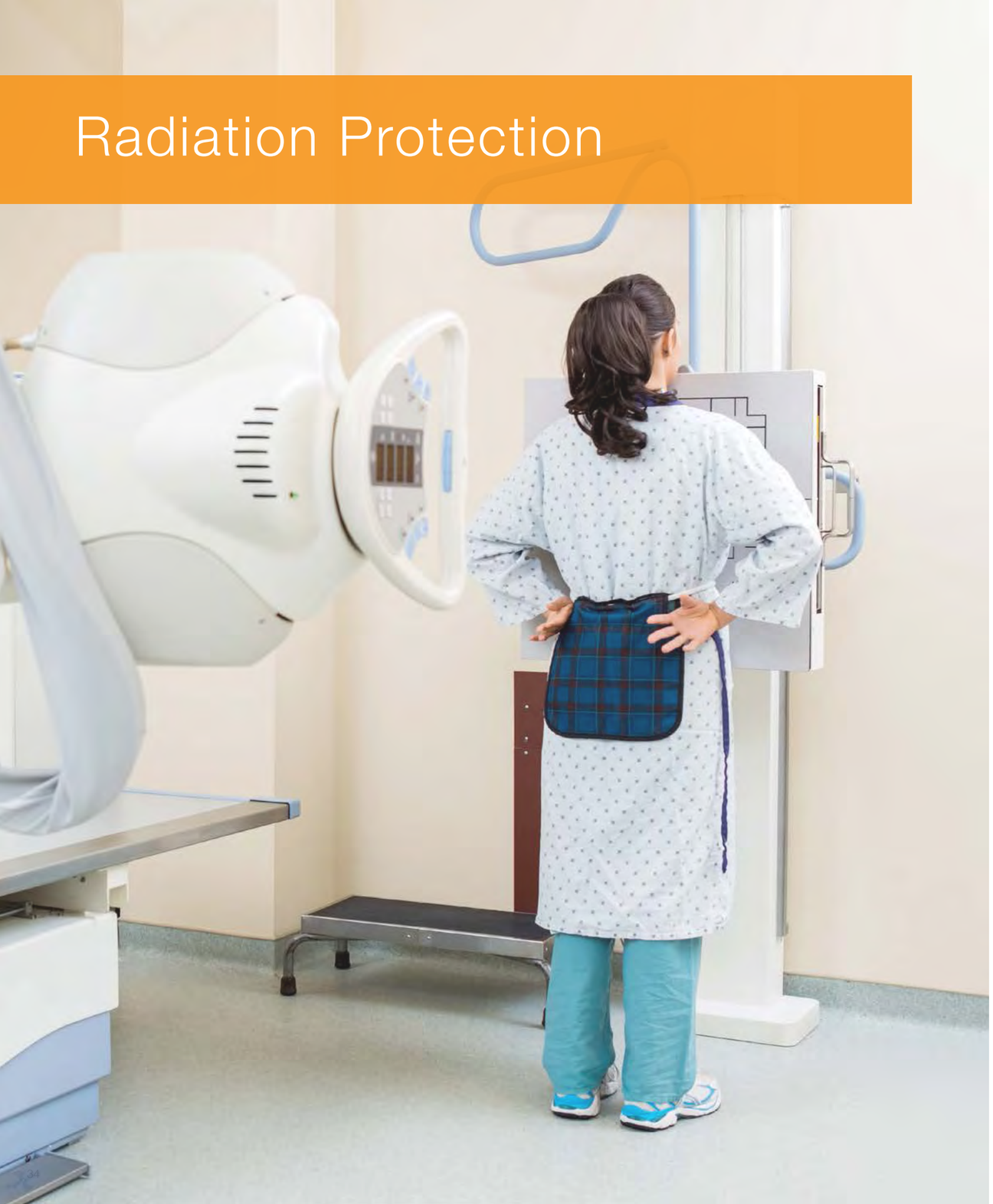
Equipment basic knowledge

Patient examination process:
- Reception
- Preparation and acquisition
- Duration of a typical exam
- Discharge

Particularity of the procedure:
- Questionnaire
- Safety
- Contraindications

Operation management:
- Make an appointment
- schedule
- Secretariat’s tasks

Introduction to anatomy and pathology



Radiation Protection

Radiation Protection in Radiology

Training Modes

Live Lecture
1 day
3 months E-learning access
25 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- To provide basic information related to radiation physics
- To train staff on issues related to patient protection against radiation
- To introduce international standards related to radiation
- To use standard and international radiation safety applications in radiology, radioscopy, and CT
- To use standard and international radiation safety applications related to pediatric radiology and pregnant women

Target Audience

- Health professional (medical and paramedical personnel)
- Radiologist and interventionist (cardiologist, surgeon…)
- Referring physician (general practitioner...)
- Superintendent and radiographer
- Nurse

Prerequisite

None

Topics Covered

Basic radiation physics:
- Radiation
- Production of X-ray
- Interactions with matter
- Law of attenuation

Radiation units:
- Exposure
- Various subjective units
- Relationship between subjective doses
- Measurement of the delivered dose

Radiobiology:
- Biological effects
- Effects of radiation
- Harmfulness & consequences
- Lesions over time

Radiation protection principles:
- Regulations
- The public
- Workers
- Radioprotection rules
- Dosimetry
- Risk assessment
- Exposure to radiation

Radiation protection in radiology:
- Acquisition
- Limiting scattered radiation
- Automatic exposure Control
- Digitization
- PACS
- Radiology room
- Fluoroscopy
- Zoning
- Quality control
- Risk reduction

Radiation protection in pregnancy:
- Dose magnitude in radiology
- Exposure of a pregnant woman
- Malformations

Radiation protection in pediatric:
- Effect of low doses
- Adjusting the dose to the individual benefit
- Principle of optimization
- Diagonostic reference levels

Radiation protection in CT:
- Absorbed dose
- Effective dose
- Measurement of CTDI
- Role of scattered radiation
- Dose profile
- Dose length product
- Advantages & disadvantages

Radiation Protection in Nuclear Medicine & Radiotherapy

Training Modes

Live Lecture
1 day
3 months E-learning access
25 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- To provide basic information related to radiation physics
- To train staff on issues related to patient protection against radiation
- To introduce international standards related to radiation
- To provide basic information related to Nuclear Medicine physics
- To use standard and international radiation safety applications in Nuclear Medicine
- To prevent radioactive contamination
- To learn about the proper procedures for decontamination
- To follow radiation safety precautions in Nuclear Medicine
- To apply radiation safety in radiotherapy and brachytherapy procedures

Target Audience

- Nuclear Medicine specialist and radiation oncologist
- Technologist and technician
- Nurse and supporting staff

Prerequisite

None

Topics Covered

Basic radiation physics:
- Radiation
- Production of X-ray
- Interactions with matter
- Law of attenuation

Radiation units:
- Exposure
- Various subjective units
- Relationship between subjective doses
- Measurement of the delivered dose

Radiobiology:
- Biological effects
- Effects of radiation
- Harmfulness & consequences
- Lesions over time

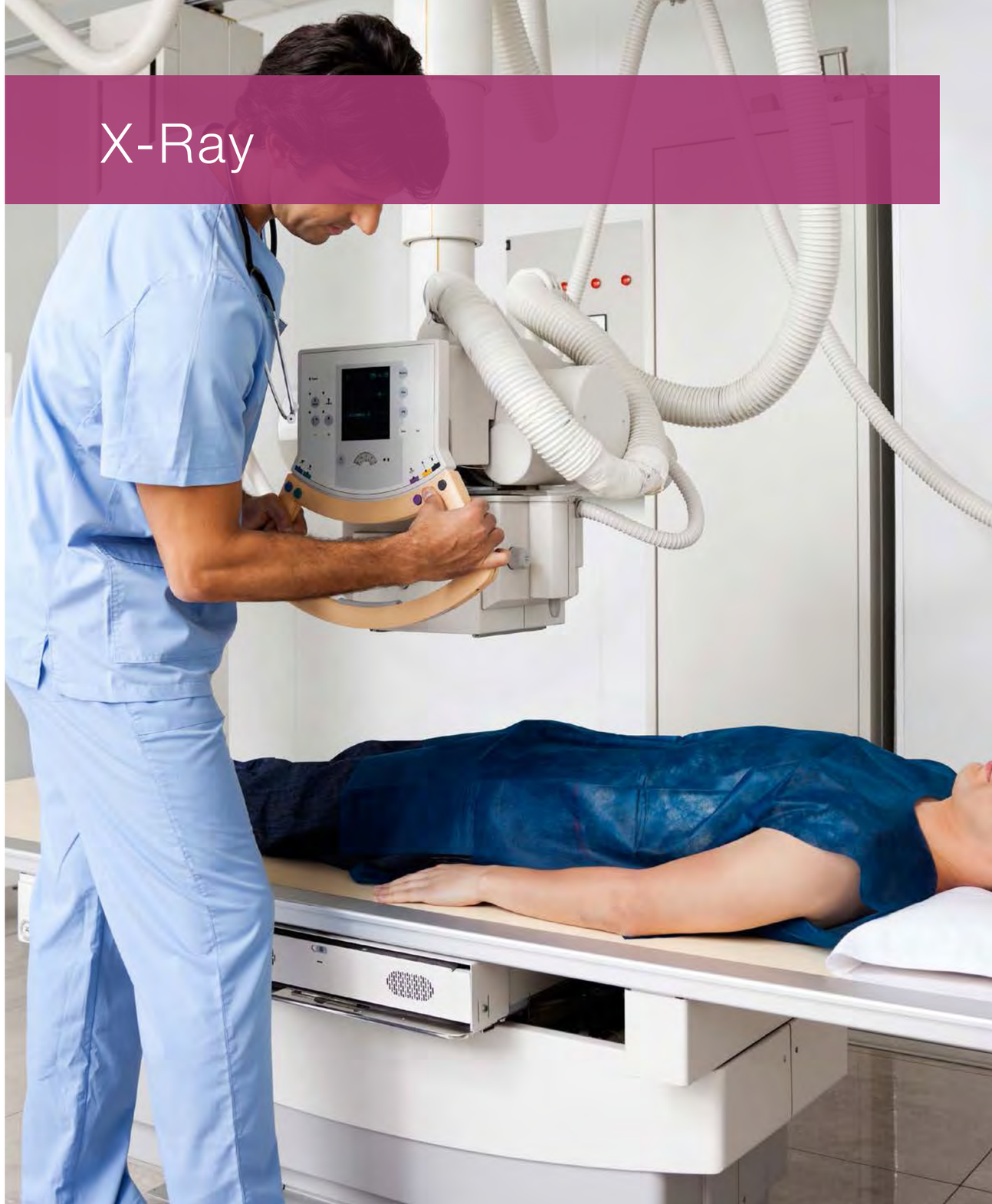
Radiation protection principles:
- Regulations
- The public
- Workers
- Radioprotection rules
- Dosimetry
- Risk assessment
- Exposure to radiation

Radiation protection in nuclear medicine:
- Radiation protection in nuclear medicine

Radiation protection In PET / CT:
- Radiation protection in PET / CT
- Patient and personnel radiation protection
- Radiation protection-local rules

Radiation protection in radiotherapy:
- Radiotherapy technology
- Radiation protection in radiotherapy

Radiation protection in brachytherapy:
- Various methods
- Review of medical envirnoment



Digital X-Ray Technology

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Optimize the transition from analog to digital
- Know the influence of different parameters in Digital Radiology
- Prevent abuses in handling new tools
- Know how to choose the right technology
- Skills evolution

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

None

Topics Covered

Introduction:
- Analog/ Digital image
- X rays

Physical principles:
- Imaging chain and X-ray tube
- Power of an X ray tube
- Acquisition parameters
- Radiation-Patient Interaction

Fields of applications:
- Department of radiology
- Some applications
- Activity sectors

Radiation Protection

Radiographic techniques

Image intensifier

Imaging plate

Flat Panel Detector

Image Resolution:
- Contrast Resolution
- Density Resolution
- Spatial Resolution
- Modulation Transfer Function
- Detective Quantum Efficiency

Digital X-Ray Applications

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Master specific applications and related post-processing
- Optimize dose to image quality
- Skills evolution

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

None

Topics Covered

Image quality:
- Acquisition parameters
- Exposure Index
- Signal to noise ratio
- Contrast to noise ratio
- Geometric factors
- Windowing
- Artifacts

Applications:
- Mammography
- Tomosynthesis or 3D mammography
- Dental radiography
- Le bilan long cone
- Cone beam CT
- Bone densitometry
- EOS imaging
- Dual energy
- Thoracic spine x ray
- Pangonogram
- Contrast agent
- Arthrography
- CT an MR arthrography
- Injections
- Angiography
- Li-Fi (Light Fidelity)

Practical Applications:
- Radiology room
- Medical exposure
- Guide to Rational Use
- Dose optimization
- Image quality optimization
- Optimization of the visualization
- Measurements
- Radiological signs
- Some pathologies

Mammography Basics

Training Modes

Live Lecture
2 days
3 months E-learning access
15 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Web Conference
2 days
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Optimize the transition from analog to digital
- Physical and psychological patient management through the various mammography examinations
- Understanding the different mammographic techniques, protocols and their advantages and limitations
- Anatomy, physiology and pathology of the breast
- Reading images, technical and post biological analysis

Target Audience

- Technologist
- Radiology Resident
- Radiologist

Prerequisite

None

Topics Covered

Anatomy and Physiology:
- Structure
- Histology
- Vascularization
- Physiology

Pathologies:
- Benign diseases
- Malignant diseases

Epidemiology:
- Incidence and mortality
- Screening campaign
- Risk factors

Mammary Classifications:
- « Le Gal » classification
- BI-RADS/ ACR classification
- TNM classification

Man's Breast:
- Normal breast
- Benign pathology
- Breast cancer

Treatment of Breast Cancer:
- Surgery
- Radiotherapy
- Brachytherapy
- Chemotherapy
- Hormone therapy

Technology:
- Mammography
- X-ray tube
- Acquisition parameters
- Image detectors

Quality Control:
- Generalities
- Analog mammograms
- Digital mammograms

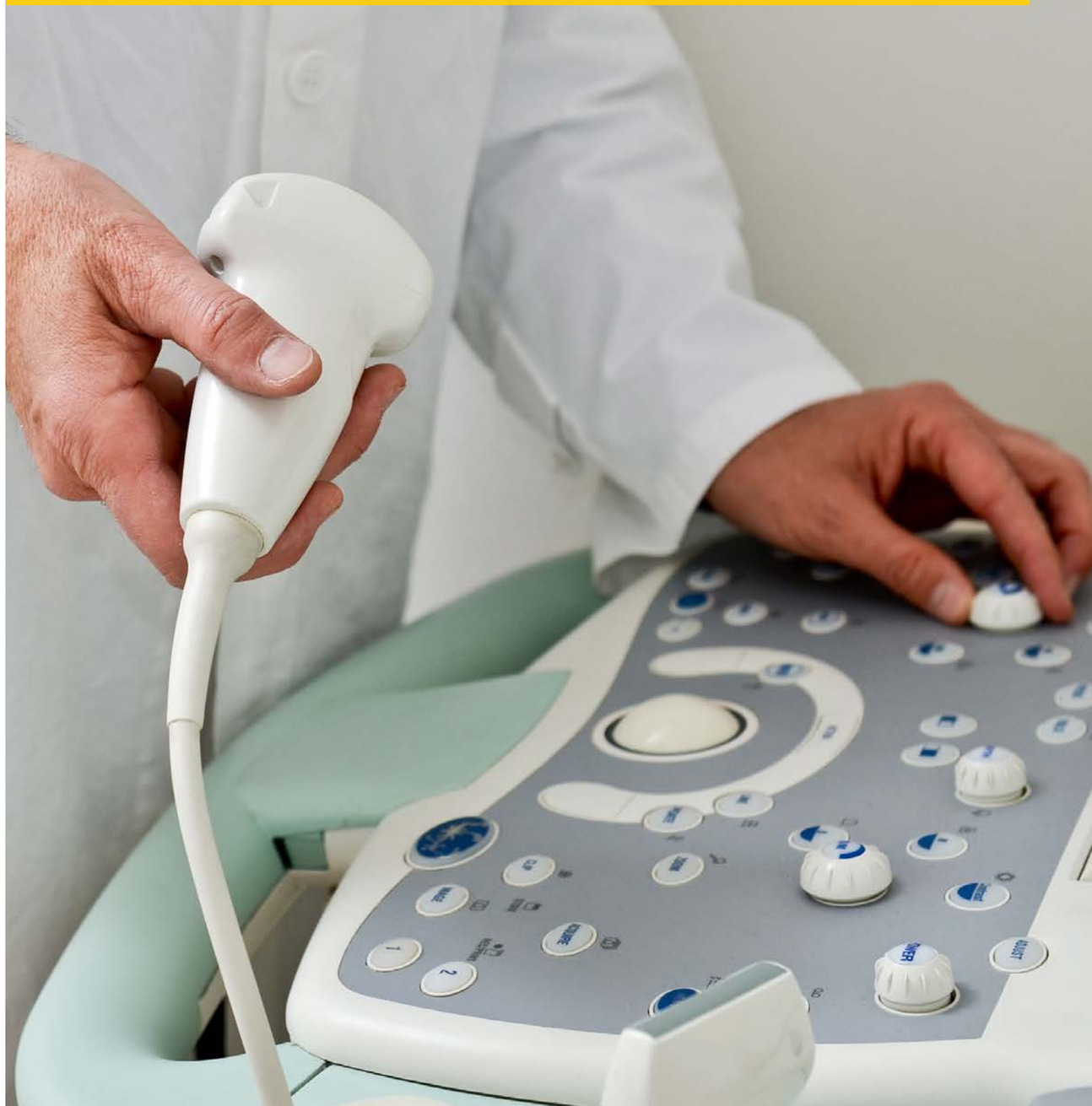
Mammography Images:
- Quality
- Standard images
- Complementary images
- Bad technical handling
- Technical artifacts
- Mammographic interpretation

Patients Care:
- Clinical diagnosis
- Psychological care

Complementary Examinations:
- Ultrasound
- Galactography
- MRI
- CT
- Interventional techniques

New Techniques:
- Tomosynthesis
- Elastography
- Angio-mammography
- CAD

Ultrasound



Physics of Ultrasound Imaging

Training Modes

Live Lecture
1 day
3 months E-learning access
15 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Web Conference
1 day
3 months E-learning access
15 participants max
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Introduce the basic physics principle
- Explain the principle of image formation
- Define the ultrasound image resolution
- List the major modes of ultrasound display
- Handling ultrasound image equipment
- Explain the major artifacts in ultrasound imaging
- Explain the doppler shift
- Differentiate between continuous wave and pulsed doppler
- Explain how color doppler is obtained
- Introduce the tissue harmonic imaging

Target Audience

- Sonographer
- Radiologist
- Radiology Resident
- Biomedical engineer
- Medical physicist

Prerequisite

None

Topics Covered

Introduction

Piezoelectric effect

Probes / transducers

Ultrasound propagation

Principle of image formation

Ultrasound attenuation

Ultrasound image resolution

Handling ultrasound imaging equipment

Artifacts in ultrasound imaging

Doppler effect

Ultrasound velocimetry

Tissue harmonic imaging

Abdominal and Pelvic Ultrasound Imaging

Training Modes

Live Lecture
2 days
3 months E-learning access
10 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Complete an efficient real-time scan of a complete abdominal ultrasound, incorporating doppler ultrasound analysis where appropriate
- Appropriately use standard terminology to describe scan planes, echogenicity, and structures appearance
- Differentiate normal organs appearance from suspected abnormal appearance, describing the impact of pathology on acquired image data
- Learn the complete set of protocols and patient procedures for abdomen and pelvis ultrasound
- Define scanning planes, and show how they divide the body, provide scanning method guidelines, explain how to take accurate measurements, describe patient positions
- Provide detailed scanning techniques to each anatomical structure in abdomen and pelvis

Target Audience

- Allied health professional
- Sonographer
- Physician
- Resident physician
- Radiology technologist

Prerequisite

Physics of Ultrasound Imaging

Topics Covered

General principles

Why ultrasound is the modality of choice for abdominal and pelvic region?

Examination techniques and equipment utilized in abdominal and pelvic ultrasound

Transducer selection in abdomen and pelvis scanning

Frequency and penetration

Transducers used in abdomen and pelvis ultrasound

Importance of understanding common artifacts

Common artifacts in abdominal & pelvic ultrasound

Anatomical structures covered:
- Gallbladder
- Biliary tree
- Pancreas
- Liver
- Spleen
- Kidneys
- Ureters, bladder, and prostate
- Uterus and ovaries
- Appendix
- Great abdominal vessels

Musculoskeletal Ultra-sound (Upper Extremity)

Training Modes

Live Lecture
2 days
3 months E-learning access
10 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Learn the basic skills of Musculoskeletal Ultrasound (MSUS)
- Learn how to perform musculoskeletal ultrasonography
- Gain familiarity with the anatomy and the lesions of the extremities
- Identify common sites of pathology
- Evaluate the muscles, tendons, ligaments, nerves, cortical and surrounding soft tissue
- Demonstrate the dynamic examinations of tendons and joints
- Gain experience with various ultrasound machines

Target Audience

- Radiologist / Resident
- Orthopedist / Rheumatologist
- Family medicine / Internal medicine physician
- Sports medicine physician

Prerequisite

Physics of Ultrasound Imaging

Topics Covered

Day 1

Basic physics of ultrasound:
- Introduction
- Probes/Transducers
- Ultrasound propagation
- Principle of image formation
- Ultrasound attenuation
- Ultrasound imaging modes
- Doppler effect
- Ultrasound velocimetry

Introduction to MSUS:
- Introduction
- Normal structures

Hands-on training

Shoulder:
- Shoulder ultrasound anatomy
- Shoulder ultrasound pathologies

Hands-on training

Day 2

Wrist:
- Wrist ultrasound anatomy
- Wrist ultrasound pathologies

Hands-on training

Elbow:
- Elbow ultrasound anatomy
- Elbow ultrasound pathologies

Hands-on training

Musculoskeletal Ultra-sound (Lower Extremity)

Training Modes

Live Lecture
2 days
3 months E-learning access
10 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Review the basic skills of Musculoskeletal Ultrasound (MSUS)
- Learn how to perform lower extremities musculoskeletal ultrasonography
- Gain familiarity with the anatomy and the lesions of the lower extremities
- Identify common sites of pathology
- Evaluate the muscles, tendons, ligaments, nerves, cortical and surrounding soft tissue
- Demonstrate the dynamic examinations of tendons and joints
- Gain experience with various ultrasound machines

Target Audience

- Radiologist
- Radiology Resident
- Orthopedist
- Rheumatologist
- Family medicine
- Internal medicine physician
- Sports medicine physician

Prerequisite

Physics of Ultrasound Imaging

Topics Covered

Day 1

Basic physics of ultrasound:
- Introduction
- Probes/Transducers
- Ultrasound propagation
- Principle of image formation
- Ultrasound attenuation
- Ultrasound imaging modes
- Doppler effect
- Ultrasound velocimetry

Introduction to MSUS:
- Introduction
- Normal structures

Hands-on training

Ankle Ultrasound:
- Anatomy
- Ultrasound techniques
- Pathologies

Hands-on training

Day 2

Hip Ultrasound:
- Anatomy
- Ultrasound techniques
- Pathologies

Hands-on training

Knee Ultrasound:
- Anatomy
- Ultrasound techniques
- Pathologies

Hands-on training

Transcranial Doppler and Sickle Cell Anemia

Training Modes

Live Lecture
1 day
3 months E-learning access
10 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Optimize screening for cerebral vasculopathy to detect Sickle Cell Anemia
- Mastering trans-cranial doppler examination protocols for the well-being of children stricken by sickle cell anemia

Target Audience

- Radiologist
- Pediatrician
- Technologist

Prerequisite

Physics of Ultrasound Imaging

Topics Covered

Theoretical:
- Introduction and anatomy
- Clinical features and genetics
- Technique of TCD for a child with sickle-cell anemia
- Basis for the use of TCD in children with sickle cell anemia
- Prevention protocol of stroke in children with sickle cell anemia
- Extracranial internal carotid artery stenosis

Hands-on workshop:
- Observation of screening methodology
- Practice on real patients

Mastering Breast Ultrasound

Training Modes

Live Lecture
2 days
3 months E-learning access
10 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Ability to perform diagnostic evaluations using a wide range of ultrasound findings and techniques
- Ability to confidently recognize sonographic findings as pathologic entities or not, and then predict whether identified lesions are benign or malignant
- Understanding of the increasingly important role of ultrasound in the detection and diagnosis of breast
- Greater competence in ultrasound-guided breast biopsy and an understanding of emerging ultrasound technologies
- Understanding of the increasingly important role of ultrasound in the detection and diagnosis of breast cancer

Target Audience

- General radiologist
- Gynecologist
- Senior mammography technologist
- Radiology Resident
- Sonographer
- Breast surgeon

Prerequisite

Breast Ultrasound Step by Step

Topics Covered

Day 1
Breast Ultrasound Technique:
- Breast Ultrasound Technique and Equipment Requirements
- Technical developments in Breast Ultrasound

Ultrasound Breast Anatomy:
- Morphology
- Echogenecity
- Accessory breast tissue
- Perimenarchal adolescents
- Fibrocystic changes and benign epithelial proliferation
- Pregnancy induced changes to the breast
- Involutional changes to the breast

Indications:
- Indications of breast US
- Palpable & Mammographic abnormalities
- Breast pain
- Nipple discharge
- Follow-up of multiple US detected lesions
- Extent of malignant disease
- Assessment of regional lymph nodes
- Breast US for screening purposes
- High risk patients
- Second-look US
- US-guided interventional procedures

BIRADS:
- Lexicon
- BI-RADS Assessment Categories

New US Technologies:
- Elastosonography
- Automated breast US
- US computer aided diagnosis

Evaluation of benign lesions:
- Breasts cysts
- Solid lesions

Hands-on training

Day 2

Evaluation of atypical, pre-malignant and malignant lesions :
- General pathology of breast malignancies
- Evaluation of atypical , high risk & premalignant lesions
- Distinguishing benign from malignant
- Multifocal/Multicentric/ Bilateral disease
- Invasive ductal & invasive lobular carcinomas
- Special type carcinomas
- Evaluation of lymph nodes

Evaluation of the iatrogenically altered breast:
- Seroma & Hematoma
- Lymphocele
- Fat necrosis
- Mammary Implants
- Complications of Mammary Implants
- Post – Therapy Alterations

Evaluation of the male breast:
- Gynecomastia
- Pseudogynecomastia
- Other Benign Lesions
- Carcinoma of the male breast

Infectious & Inflammatory diseases:
- Mastitis
- Inflammatory breast carcinoma

Ultrasound-guided needle procedures:
- Cyst aspiration
- Abscess drainage
- Needle localization
- Fine needle aspiration
- Technique & Pre-procedural considerations
- Automated core needle biopsy
- Vacuum- assisted Breast biopsy

Hands-on training

Ultrasound in Obstetrics

Training Modes

Live Lecture
2 days
3 months E-learning access
10 participants max
Certificate of completion

E-learning
14 Hrs
1 year E-learning access
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Get acquainted with basic principles of ultrasound biophysics
- Utilize the principles of instrumentation to set up ultrasound equipment for scanning
- Recognize and identify fetal anatomy and the gynecologic orientation of the female pelvis
- Perform a fetal well-being scan and growth
- Perform a satisfactory first trimester scan

Target Audience

- OBGYN physician with less than three years of experience
- Resident PGY 4 and 5
- Radiologist
- Midwive

Prerequisite

Physics of Ultrasound Imaging

Topics Covered

Day 1

Basic physics of ultrasound:
- What is ultrasound?
- Probes/Transducers
- Ultrasound propagation and attenuation
- Handling ultrasound imaging equipment

Introduction:
- Why ultrasound and fetal ultrasound?
- Steps to follow during an ultrasound exam
- Orientation
- Tips and tricks for a better image quality

Amniotic fluid assessment:
- Physiology
- Volume of amniotic fluid in normal pregnancy
- Function of amniotic fluid
- Aspect
- Measurement
- Oligohydramnios
- Polyhydramnios

Hands-on training

Day 2

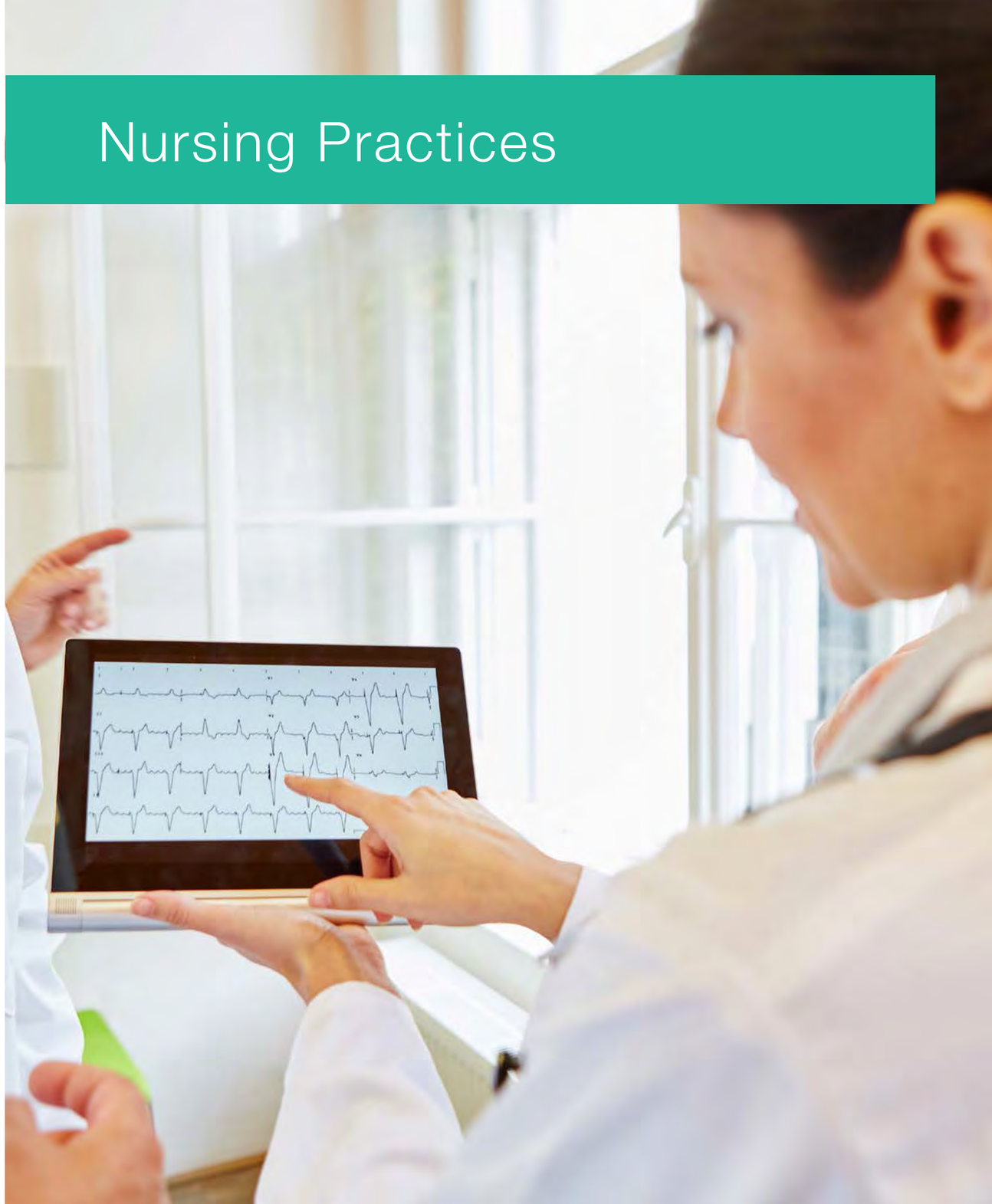
Placenta assessment:
- Embryology
- Classifications
- Grade
- Placenta thickness
- Location
- Accreta
- Hemangioma
- Cord insertion

Sonography early pregnancy:
- Introduction
- Normal early pregnancy ultrasound signs
- Ultrasound signs of unfavorable outcome
- Ectopic pregnancy

Fetal Biometry:
- Why biometry?
- Dating the pregnancy
- Routine biometry
- Estimation fetal weight
- We can measure everything

Second trimester anomaly scan:
- Why fetal ultrasound scan ?
- For whom ? When ?
- Who should perform this scan ?
- What equipment do we need ?
- Should we give something for the patient
- What about safety ?
- Is further evaluation needed ?
- Guidelines for examination
- Anatomical survey

Hands-on training



ECG Interpretation

Training Modes

Live Lecture
1 day
3 months E-learning access
10 participants max
Certificate of completion

E-learning
7 Hrs
1 year E-learning access
Certificate of completion

Accreditation
CE Credits awarded where applicable

Objectives

- Discuss the cardiac anatomy and physiology essential for understanding the basic principles of ECG interpretation
- Relate the electrophysiology of the cardiac electrical activity and current conduction to the surface electrocardiogram
- Understand and recognize the normal electrocardiogram and make basic measurements
- Recognize, identify, and understand basic abnormalities

Target Audience

- Telemetry Technicians
- Medical, Radiologic, Respiratory technologists working with cardiac monitors
- Cath Lab or EP Lab technicians
- Police, fire, rescue personnel involved in cardiac conditions
- Medical Students, Interns & Residents
- Nurses (CCU/ICU, Cardiac Cath Lab, EP Lab, Telemetry Unit, Emergency Department), Advanced Practice Nurses
- Physician Assistants
- EMTs / Paramedics
- ECG technologists

Prerequisite

None

Topics Covered

Introduction to ECG:
- History Of ECG
- Anatomy of the heart
- Physiology of the heart
- Electrophysiology of the heart
- ECG definition and principle

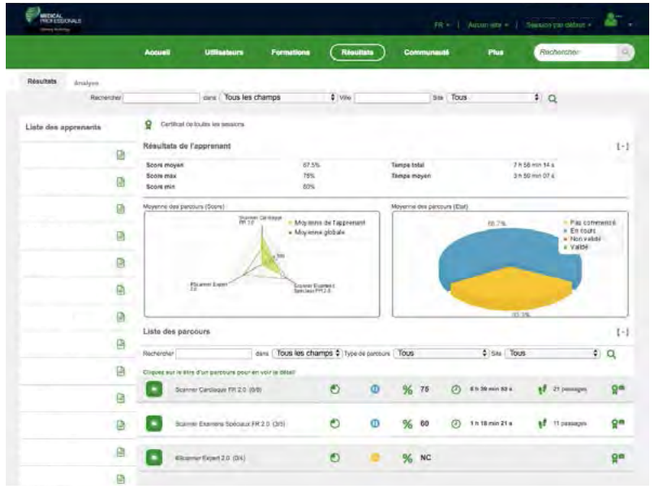
ECG Recording:
- ECG recording papers
- ECG leadwire connection
- Different configurations (Leads)
- Patient Preparation

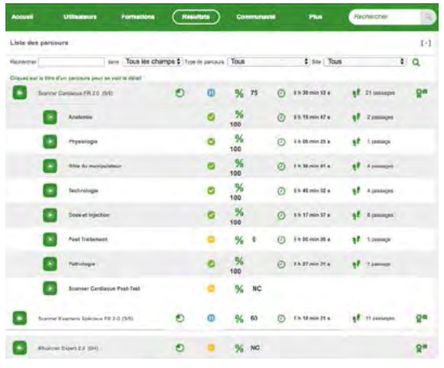
ECG Analysis:
- Step by step ECG analysis
- Sinus Rhythms
- Atrial Rhythms
- Junctional Rhythms
- Ventricular Rhythms
- Atrio-Ventricular Blocks

Learning Management System

All of our courses are accessible through our Learning Management System that allows you access to the following functionalities:

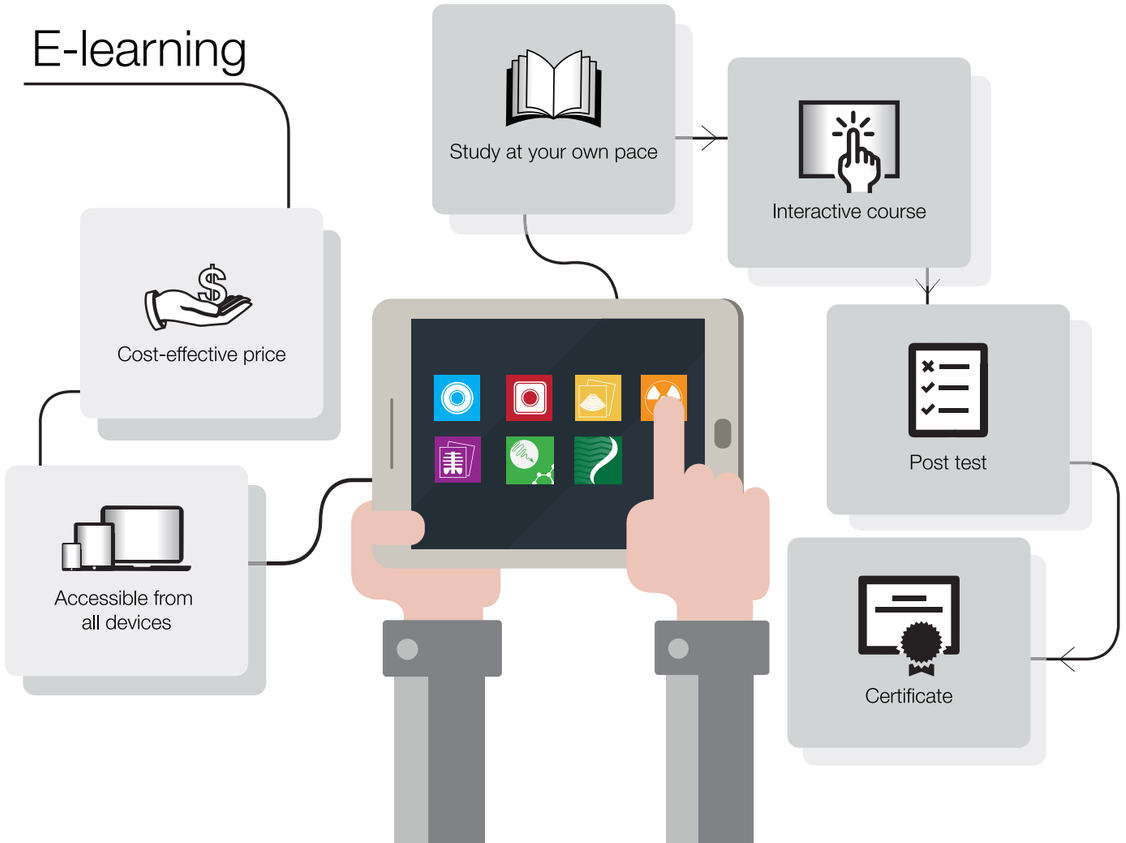
- Access your course anywhere, anytime as long as you are connected
- Pick up your course where you have logged out last time
- Track your own progress through the course(s)
- Chat and interact with your colleagues if you are part of a group
- Take and save your own notes all in one place
- Track the progress and extract useful reports if you are managing a group of learners.





E-learning

Our E-learning courses are designed to serve as self-learning educational support and have been developed with innovative teaching techniques and state of the art graphics.



E-learning Prices

MRI

MRI Essential	39 $ per user
MRI Advanced	59 $ per user
Cardiac MRI	59 $ per user
MRI 3Tesla	49 $ per user
MRI Breast	49 $ per user
MRI Spectroscopy	49 $ per user
MRI Musculoskeletal	49 $ per user
Neurology MRI	59 $ per user
MRI Safety	39 $ per user
MRI Virtual Console Simulator	69 $ per user

CT

CT Essential	39 $ per user
CT Advanced	49 $ per user
CT Expert	59 $ per user
CT Vascular	49 $ per user
CT Cardiac	59 $ per user
CT Virtual Colonoscopy	49 $ per user

Nursing Practices

ECG Interpretation	39 $ per user

Ultrasound

Physics of Ultrasound Imaging	49 $ per user
Abdominal and Pelvic Ultrasound Imaging	59 $ per user
Musculoskeletal Ultrasound (Upper Extremity)	59 $ per user
Musculoskeletal Ultrasound (Lower Extremity)	59 $ per user
Transcranial Doppler and Sickle Cell Anemia	49 $ per user
Mastering Breast Ultrasound	59 $ per user
Ultrasound in Obstetrics	59 $ per user

Radiation Protection

Radiation protection in Radiology	49 $ per user
Radiation protection in Nuclear Medicine & Radiotherapy	49 $ per user

X-Ray

Digital X-Ray Techonolgy	39 $ per user
Digital X-Ray Applications	49 $ per user
Mammography Basics	49 $ per user

LIVE LECTURES CALENDAR

2018

LEBANON

MRI Advanced

	SAT	SUN
February	17	18

CT Advanced

	SAT	SUN
February	24	25

Digital X-ray

	SAT	SUN
March	03	04

Radiation Protection

	SAT
March	10

Virtual MRI Console simulator

	SAT
March	17

CT Vascular

	SAT
April	28

Cardiovascular Workshop

	SAT	SUN
May	12	13

MRI Spectroscopy

	SAT
October	13

For Physicians

DUBAI

Cardiovascular Workshop

	SUN	MON
April	15	16

Mastering Breast Ultrasound

	SAT	SUN
April	14	15

Radiation Protection

	SUN
April	29

TUNISIA

TUNIS

Scanner Cardiaque

	SAT	SUN
January	06	07

Radioprotection

	SAT
June	30

IRM Osteo-articulaire

	SAT	SUN
September	29	30

HAMMAMET

Urgences en IRM

	SAT	SUN
March	10	11

Imagerie de la Femme en IRM

	SAT	SUN
October	27	28

Scanner Examens Spéciaux

	SAT	SUN
December	15	16

SFAX

Scanner Vasculaire

	SAT
February	03

HAMMAMET

JMR 2018
Journées des Manipulateurs en Radiologie

JOURNÉES DES MANIPULATEURS EN RADIOLOGIE

	SAT	SUN
February	17	18

Webinars & Webconferences

Webinar Features

Interactive virtual classroom:

- Video feeds
- Sharing side-by-side: speaker, presentation, markup tools and whiteboard
- Chat room
- Two ways communication: Questions and Answers

Live Lecture

VS

Webconference

Live Lecture	Webconference
In a classroom setup	In a virtual classroom setup - connected over your PC
Physical presence of the speaker	Remote lecturing format, through video streaming
Interactivity with speaker	Interactivity with speaker
Relocation required for you and the speaker reflecting additional cost	No travel/relocation required - accessible from your PC
CE credits provided	CE credits provided

Clinical Application

Our Clinical Application Training Programs rely primarily on a combination of **theoretical approach** along with **extensive hands-on practice** based on tailored programs intended to meet the customer's objectives.
Being the authorized training provider for **Siemens, Samsung, and Toshiba**, and having been the authorized training provider for **Philips** and **GE Healthcare** previously, **Medical Professionals** is very well positioned - through its Clinical Education Specialists Team and its wide network of collaborators - to help its customer use their medical imaging equipment in the optimal manner in order to ensure the highest level of patient satisfaction as well as the highest return on investment.

Those trainings can be delivered either **Onsite** at the customer facility or **Offsite** at a reference site recommended by Medical Professionals.

MRI Clinical Application Training

Duration

Can be tailored to specific department's need

Objectives

- Support technologists and radiologists by optimizing the use of equipment they have acquired
- Apply proper positioning and scanning protocols for all MRI procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international safety guidelines for the patients, self and others

Target Audience

- Technologist
- Radiologist
- Radiology resident
- Medical imaging student

Prerequisite

None

Topics Covered

Overview:
- System accessories
- Magnet controls and safety features
- Operation of the scanner interface
- How to build scan protocols and review scan parameters

Patient handling and safety:
- Patient education and preparation
- Injection protocols and manipulation
- Patient screening
- Lab values
- Safety guidelines and consent forms
- Ways to minimize scan time
- Patient monitoring and code procedures
- Vital signs
- Infection control

MRI scan procedures:
- Neuro, MSK and body imaging including but not limited to : routine brain, cervical, dorsal, lumbar, IAC, orbits and pituitary, knee, shoulder, elbow, wrist, ankle, foot, hips, pelvis, abdomen, liver, pancreas MRCP, prostate, long bones (femur or leg), epilepsy and MS protocols and breast
- Contrast enhanced and non-enhanced vascular Imaging : angio circle of Willis and brain MRV, MRA of carotids, renal arteries, pulmonary arteries, lower limb angio or distal run-off using the available options
- Advanced cases, i.e. : spectroscopy, diffusion tensor imaging, brachial plexus, enteroclysis, brain perfusion, and cardiac imaging

Workstation, reviewing skills:
- Basics functionality
- Reformat
- Tools
- 3D reconstruction
- Fibertrack
- Volume rendering
- DWI and ADC calculation
- Brain perfusion
- Spectroscopy single and multi-voxel
- Cardiac
- Breast graph of wash in wash out

CT Scan Clinical Application Training

Duration

Can be tailored to specific department's need

Objectives

- Support technologists and radiologists by optimizing the use of equipment they have acquired
- Apply proper positioning and scanning protocols for all CT procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international radiation protection norms for the patient, self and others

Target Audience

- Technologist
- Radiologist
- Radiology resident
- Medical imaging student

Prerequisite

None

Topics Covered

Overview:
- System accessories
- Gantry controls and safety features
- Operation of the scanner interface
- How to build scan protocols and review scan parameters

Patient handling and safety:
- Patient education and preparation
- Injection protocols and manipulation
- Patient screening
- Lab values
- Radiation safety and measuring radiation dose
- Ways to minimize patient dose
- Patient monitoring and code procedures
- Vital signs
- Infection control

CT scan procedures:
- Routine cases, i.e. : brain scan, high resolution chest, sinuses, standard chest and abdomen examinations
- Cases with contrast media injection, i.e.: brain, neck, chest, abdomen pelvis, triphases liver, pancreas
- Vascular cases, i.e. : circle of Willis, carotids, pulmonary embolism, aorta angiography, abdominal arteries, lower limbs
- CT cardiac
- CT colonography
- CT perfusion

Workstation, reviewing skills:
- Basics functionality
- Filmer, burn CD / DVD
- Reformat
- Tools
- Vessel analysis
- 3D reconstruction
- Cardiac
- Colonography
- Bronchography
- Perfusion
- Nodule detection
- CT image anatomy

X-Ray Clinical Application Training

Duration

Can be tailored to specific department's need

Objectives

- Support technologists and radiologists by optimizing the use of equipment they have acquired
- Apply proper positioning and examination protocols for all X-RAY procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international radiation protection norms for the patient, self and others

Target Audience

- Technologist
- Radiologist
- Radiology resident
- Medical imaging student

Prerequisite

None

Topics Covered

Overview:
- System accessories
- Identify system components and functionality
- Safety and emergency procedures.
- Image acquisition, customization and processing
- How to create a protocol data base for different body parts

Patient handling and safety:
- Patient education and preparation
- Special procedures protocols and manipulation
- Patient screening
- Radiation safety and measuring radiation dose
- Ways to minimize patient dose
- Proper parameters and protocol selection
- AEC / manual technique

X-ray procedures:
- Position for exposure out of table, wall stand and table in bucky exposures
- Routine cases, i.e. : brain, chest, abdomen, pelvis, upper and lower extremities examinations
- Advanced application

Workstation, reviewing skills:
- Basics functionality
- Adjust / reset window width and level settings
- Reprocessing images
- Tissue contrast, edge enhancement settings, noise reduction and tissue equalization
- Flip and rotate image
- Zoom image
- Apply / remove annotation
- Perform measurements

Nuclear Medicine Clinical Application Training

Duration

Can be tailored to specific department's need

Objectives

- Support technologists and radiologists by optimizing the use of equipment they have acquired
- Apply proper positioning and scanning protocols for all Nuclear Medicine procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international radiation protection norms for the patient, self and others

Target Audience

- Technologist
- Radiologist
- Radiology resident
- Nuclear medicine physician
- Medical imaging student

Prerequisite

None

Topics Covered

Overview:
- System accessories
- Gantry controls and safety features
- Operation of the scanner interface
- How to build scan protocols and review scan parameters

Patient handling and safety:
- Patient education and preparation
- Injection protocols and manipulation
- Patient screening
- Radiation safety and measuring radiation dose
- Radioactive preparation and manipulation
- Patient monitoring and code procedures

Nuclear Medicine procedures:
- Whole bone scan, 3 phase, bone scan
- Cardiac imaging, MUGA scan, etc...
- Renal imaging i.e : DTPA, MAG3, DMSA
- Lung imaging
- Abdominal studies i.e. : liver spleen, GI bleed etc...
- Brain imaging
- Oncology imaging

Workstation, reviewing skills:
- Cardiac processing
- Lung analysis
- Renal analysis
- SPECT processing
- Dynamic analysis

PET/CT Clinical Application Training

Duration

Can be tailored to specific department's need

Objectives

- Support technologists and radiologists by optimizing the use of equipment they have acquired
- Apply proper positioning and scanning protocols for all PET / CT procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international radiation protection norms for the patient, self and others

Target Audience

- Technologist
- Radiologist
- Radiology resident
- Nuclear medicine physician
- Medical imaging student

Prerequisite

None

Topics Covered

Overview:
- System accessories
- Gantry controls and safety features
- Operation of the scanner interface
- How to build scan protocols and review scan parameters

Patient handling and safety:
- Patient education and preparation
- Injection protocols and manipulation
- Patient screening
- Lab values
- Radiation safety and measuring radiation dose
- Radioactive preparation and manipulation
- Patient monitoring and code procedures

PET / CT procedures:
- Whole bone imaging
- Cardiac imaging
- Brain imaging

Workstation, reviewing skills:
- Cardiac post processing
- WB review skills
- Brain review skills

Cardio-Vascular Clinical Application Training

Duration

Can be tailored to specific department's need

Objectives

- Understand the vascular and cardiac anatomies
- Identify normal anatomy
- Apply proper positioning and protocols for all cardio-vascular procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international radiation protection norms for the patient, self and others
- Provide proper patient care and comfort
- Recognize emergency patient conditions and initiate life-saving first aid and basic life support procedures

Target Audience

- Technologist
- Radiologist
- Radiology resident
- Medical imaging student

Prerequisite

None

Topics Covered

Overview:
- System accessories
- Gantry controls and safety features
- Operation of the cath lab fixed c-arm interface
- How to differentiate protocols according to anatomies
- Both cardiac and vascular anatomies overview

Patient handling and safety:
- Patient education and preparation
- Injection protocols and manipulation
- Patient positioning
- Lab values
- Radiation safety and measuring radiation dose
- Ways to minimize patient dose
- Patient monitoring
- Vital signs
- Infection control

Vascular procedures :
- Daily cases using contrast media i.e. : cerebral angiography, carotids, upper limbs, aortic arch, abdominal aorta, renal arteriogram and lower limbs
- Embolization : liver
- Cerebral arteries coiling

Cardiac procedures:
- Cardiac cases
- Coronary angiography
- PCI
- Pacemakers
- Pediatric and congenital procedures

Workstation, post processing skills:
- Basics functionality
- Filmer, burn CD / DVD
- Tools
- Vessel analysis
- 3D and 3DCT reconstruction
- Cardiac post processing steps
- Advantage paste

Subspecialty Program for Technologists

The Medical Imaging has been a distinct medical specialty with unique technical challenges from its inception and its technology has evolved in an exponential manner. Nowadays, Medical Imaging is a key diagnostic tool for many diseases and has an important role in monitoring treatment and predicting outcome. However, this technology is operated by Human Resources and remains dependent on the qualification of the human capital.

In this connection, and with a great appreciation of the Technologist role throughout the diagnosis process, Medical Professionals has invested in the development of CT, MRI and X-ray subspecialty training programs with the intent to develop experts in those areas whom can serve as valuable asset to their peers, hospitals and patients.

Each one of those subspecialty training programs is delivered over 200 hours in total - broken-down as follows: 100 hours of theory, 50 hours of post-processing practice on the workstation and 50 hours of hands-on training on the equipment.
The complete program is scheduled to be delivered over 8 weeks and designed to accommodate a group of 12 participants maximum in order to maintain the desired level of interactivity and personal experience.

MRI Subspecialty Program

Learning Objectives

- Understand the basic physics and evolution of MRI scanner's generations
- Identify normal anatomy
- Apply proper positioning and scanning protocols for all MRI procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international safety guidelines for the patients, self and others
- Provide proper patient care and comfort
- Recognize emergency patient conditions and initiate life-saving first aid and basic life support procedures

Program

Overview: ***30 hours***
- System accessories
- Magnet controls and safety features
- Operation of the scanner interface
- How to build scan protocols and review scan parameters

Patient handling and safety: ***15 hours***
- Patient education and preparation
- Injection protocols and manipulation
- Patient screening
- Lab values
- Safety guidelines and consent forms
- Ways to minimize scan time
- Patient monitoring and code procedures
- Vital signs
- Infection control

MRI scan procedures, anatomy, image quality control: ***55 hours***
- Routine cases, i.e. : neuro, MSK and body imaging, routine brain, cervical, dorsal, lumbar, IAC, orbits and pituitary, knee, shoulder, elbow, wrist, ankle, foot, hips, pelvis, abdomen, liver, pancreas MRCP, prostate, long bones (femur or leg), epilepsy and MS protocols and breast
- Contrast enhanced and non-enhanced vascular imaging: angio circle of Willis and brain MRV, MRA of carotids, renal arteries, pulmonary arteries, lower limb angio or distal run-off
- Advanced cases, i.e. : spectroscopy, diffusion tensor imaging, brachial plexus, enteroclysis, brain perfusion, and cardiac imaging

Hands-on training: ***50 hours***
- Routine cases, i.e. : neuro, MSK and body imaging, routine brain, cervical, dorsal, lumbar, IAC, orbits and pituitary, knee, shoulder, elbow, wrist, ankle, foot, hips, pelvis, abdomen, liver, pancreas MRCP, prostate, long bones (femur or leg), epilepsy and MS protocols and breast
- Contrast enhanced and non-enhanced vascular imaging : angio circle of Willis and brain MRV, MRA of carotids, renal arteries, pulmonary arteries, lower limb angio or distal run-off using the available ptions.
- Advanced cases, i.e. : spectroscopy, diffusion tensor imaging, brachial plexus, enteroclysis, brain perfusion, and cardiac imaging.

Workstation Skills : Hands-on post processing: ***50 hours***
- Basics functionality
- Reformat tools
- 3D reconstruction
- Fibertrack
- Volume rendering
- DWI and ADC calculation
- Brain perfusion
- Spectroscopy single and multi-voxel
- Cardiac
- Breast graph of wash in wash out

CT Subspecialty Program

Learning Objectives

- Understand the basic physics and evolution of CT scanner's generations
- Identify normal anatomy
- Apply proper positioning and scanning protocols for all CT procedures
- Evaluate image quality and properly adjust the imaging parameters
- Apply international radiation protection norms for the patient, self and others
- Provide proper patient care and comfort
- Recognize emergency patient conditions and initiate life-saving first aid and basic life support procedures

Program

Overview: ***30 hours***
- System accessories
- Physics and evolution of the scanner
- Gantry controls and safety features
- Operation of the scanner interface
- How to build scan protocols and review scan parameters

Patient handling and safety: ***15 hours***
- Patient education and preparation
- Injection protocols and manipulation
- Patient screening
- Lab values
- Radiation safety and measuring radiation dose
- Ways to minimize patient dose
- Patient monitoring and code procedures
- Vital signs
- Infection control

CT scan procedures, anatomy, image quality control: ***55 hours***
- Routine cases, i.e. : brain scan, high resolution chest, sinuses, standard chest and abdomen examinations
- Cases with contrast media injection, i.e. : brain, neck, chest, abdomen pelvis, triphases liver, pancreas
- Vascular cases, i.e. : circle of Willis, carotids, pulmonary embolism, aorta angiography, abdominal arteries, lower limbs
- CT cardiac
- CT colonography
- CT perfusion

Hands-on training: ***50 hours***
- Routine cases, i.e. : brain scan, high resolution chest, sinuses, standard chest and abdomen examinations
- Cases with contrast media injection, i.e. : brain, neck, chest, abdomen pelvis, triphases liver, pancreas
- Vascular cases, i.e. : circle of Willis, carotids, pulmonary embolism, aorta angiography, abdominal arteries, lower limbs
- CT cardiac
- CT colonography
- CT perfusion

Workstation skills: Hands-on post processing: ***50 hours***
- Basics functionality
- Filmer, burn CD / DVD
- Reformat
- Tools
- Vessel analysis
- 3D reconstruction
- Cardiac
- Colonography
- Bronchography
- Perfusion
- Nodule detection
- CT image anatomy

X-Ray Subspecialty Program

Learning Objectives

- Understand the basic physics and mechanism of the production of x-ray
- Understand and demonstrate proper patient positioning for successful x-ray examinations and procedures
- Identify normal anatomy
- Effectively use of proper protocols
- Evaluate image quality
- Apply international radiation protection policies and procedures
- Provide proper patient care and comfort
- Recognize emergency patient conditions and initiate life-saving first aid and basic life support procedures

Program

Overview: ***25 hours***
- Radiology physics
- Introducing the x-ray systems
- Digital detectors
- Accessories including radiation protection devices
- Radiation protection overview

Anatomy for basic radiography: ***25 hours***
- Introduction of the whole body anatomy
- Definitions of the body general positions

Radiology technique: ***25 hours***
- Radiology techniques & positioning
- Radiology protocols and parameters

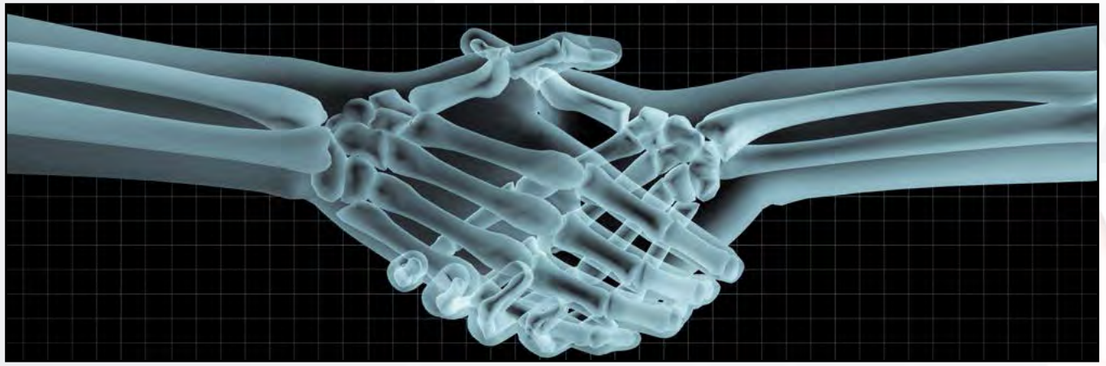
Radiology image customization: ***15 hours***
- Radiology image processing & post-processing
- Radiology image enhancements
- Archiving, networking, and printing

Radiology quality control procedures: ***10 hours***
- Quality control procedures
- Image quality

Radiology procedures (using fluoroscopic guidance): ***25 hours***
- Barium studies including : barium meals, upper GI barium studies, small intestines barium studies, barium enema studies for large colon…
- Other types of contrast media procedures : urethrograms, VCUGs, PTC, nephrostograms, hysterosalpangiograms, joints arthrograms, picc line insertions
- Gastro-endoscopy studies : ex: ERCP

Hands-on training: ***75 hours***
- Covering most cases indicated & all the routine cases & body part examinations.

Radiology Operating Management Solutions



Architectural Planning

Relying on its personnel expertise and a wide network of specialized consultants and partners, Medical Professionals is well positioned to assist in diagnostic imaging department's planning and design with the objective to enhance the effectiveness and efficiency of the facility. The planning of a diagnostic imaging department requires general knowledge of the appropriate synergy among the various modalities considering the facility functions, patient flow (in-patient, out-patient, insured patients,…), management ease, and hospital interdepartmental relationships.

In this connection, Medical Professionals deploys its vast experience in this field ensuring its customers that the defined conceptual plans will ultimately:

- Increase the operation's efficiency;
- Promote first-class practice and improve patient outcomes;
- Create an enabling working environment for staff and other health care providers;
- Minimize recurrent costs;
- Improve privacy, confidentiality and comfort;
- Minimize travel distances;
- Support a variety of good operational policy models;
- Accommodate future growth and expansion.

Procurement

With a deep understanding of the importance of an effective procurement practice, Medical Professionals manages the procurement process on behalf of the customer with the objective of providing healthcare facilities the opportunity to offer safe, equitable and quality radiology service.

The roadmap starts with defining the scope of work and the equipment to be purchased and ends up with coordinating the overall contract and the procurement timetables with manufacturers taking all actions into account: from planning and forecasting, identification of needs, sourcing and solicitation of offers, evaluation of offers, review and award of contracts, contracting and all phases of contract administration until delivery and installation of the goods, as well as staff training.

As an independent company, Medical Professionals has no manufacturer adherence and its service guarantees a lot of benefits for all involved stakeholders, where:

- Hospital/Radiology management, investors, would be satisfied with the right goods being procured at the right price;
- Radiology professionals would be pleased to have at their disposal quality equipment, materials and tools;
- Patients would receive appropriate and effective healthcare service.

Staffing

Medical Professionals' recruitment service focuses on manpower planning in accordance with the planned departmental and clinical portfolio. Our human resources team undertakes a critical evaluation of the manpower skills through a program of rigorous screening and assessment of candidates' clinical, personal, ethical and professional attributes. Accordingly, we develop a long-term strategy and plan of action to identify, recruit and train various levels of professionals where we aim to implement a minor number of expatriates experts with the intent to develop local-expertise and capabilities within the radiology department to ensure long-term quality radiology service.

Training and Continual Education

Medical Professionals offers its customers a complete solution that goes far beyond staffing and commits to providing hospital personnel with initial training and a combination of:

- Live Lecture, Web Conference and Webinars,
- On-site training,
- Off-site training,
- Clinical workshops,
- Self-learning continual education programs.

Operations and Processes Improvement

Driven by a patient focus attitude, Medical Professionals is capable of providing an objective look at the radiology department's operations and undertakes strategic exercises to review existing systems and operations with the purpose of optimizing the department's performance.

Our processes and operations improvement service is typically tailored to meet the Hospital and market need and applied through assessments of the actual operational system and identification of areas for improvement. Accordingly our team develops a detailed report outlining findings and recommendations along with a specific corrective and timely plan of actions aiming to:

- Establish and maintain operational and control systems in compliance with international norms and standards;
- Optimize effectiveness, efficiency and productivity;
- Improve health outcomes and quality of clinical services;
- Establish a healthy and safe environment;
- Establish and implement a comprehensive Human Resource development strategy;
- Ensure patient privacy, confidentiality and comfort.

Contact Us

Our team is at your disposal for any information.

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