

**FACULTY OF RADIOLOGISTS**

**TRAINING PROGRAMME IN DIAGNOSTIC RADIOLOGY**

**PART I TUTORIAL SCHEDULE**

**2018/2019**

**Lectures will commence at 2.00pm unless otherwise stated**  
**Anatomy lectures will be in the Department of Anatomy Lecture Theatre,**  
**Main College, RCSI**

<b><u>DATE</u></b>	<b><u>TUTOR</u></b>	<b><u>SUBJECT</u></b>
<b><u>August 2018</u></b>		
Monday 27th 2.00pm 3.00pm	Anatomy Staff	CHEST: Anatomy
28 <sup>th</sup> & 29 <sup>th</sup> August 2018	Ultrasound Course	<b>Attendance on one day only - Please see which day you are listed to attend</b>
Thursday 30th August 2.00pm 3.00pm 4pm	Anatomy Staff Dr J. Masterson  Training Programme Coordinator	ABDOMEN: Anatomy (foregut, midgut)  CHEST: Basic principles of chest imaging / basic anatomy /Vascular Anatomy, CT Anatomy  Introduction
<b><u>September 2018</u></b>		
Monday 3rd Sept VENUE: Room 321 No. 26 2.00pm 3.00pm 4.00pm	Dr Geraldine O'Reilly  Dr. Jennie Cooke	Introduction to Physics Programme Overview  Introduction to EM Spectrum, Matter & Energy Levels; band structure in solids
Thursday 6 <sup>th</sup> September 2.00pm 3.00pm 4.00pm	Mr. Dara Murphy  Mr. Dara Murphy  Dr Pat Kenny	Interaction of Radiation with Matter (1): Main mechanisms at diagnostic energies  Interaction of Radiation with Matter (2): Beer's Law, Exponential Attenuation, Absorption/HVL/TVL .Interaction of Radiation with Matter: Factors affecting Attenuation & Scatter  Digital Images: Part 1

<b>Monday 10<sup>th</sup> September</b>  2:00pm  3:00pm  4:00pm	Dr Geraldine O'Reilly  Dr. Geraldine O'Reilly  Dr Pat Kenny	X-ray Image formation. Concepts & Detectors (incl. Fluorescence, Phosphoresence)  Interaction of Radiation with Matter: Optimisation of Contrast 1  Digital Images: Part 2
<b>Thursday 13<sup>th</sup> September</b> <b>Venue: Room 422 No. 26</b> 2:00pm  3:00pm  4:00pm	Dr Geraldine O'Reilly (Additional Slot)   Dr Pat Kenny (completion of lecture from Monday 10th Sept)	Optimisation   Digital Images: Part 2 – completion of lecture from 10 <sup>th</sup> Sept
<b>Monday 17<sup>th</sup> September</b> <b>Venue: TR1</b> 2:00pm  3:00pm  4:00pm	Mr Pat Cooney  Mr Pat Cooney  Mr. Pat Cooney	Production & Properties of X-Rays Part 1  Production & Properties of X-Rays Part 2  X-Ray Tubes/special features/Focal Spot/Rating/X-ray tubes for Special Applications (incl. Angiography, CT, Mammography etc.); Special filters; X-ray generators
<b>Thurs 20<sup>th</sup> September</b>  2:00pm  3:00pm  4:00pm	Anatomy Staff  Mr. Niall Phelan  Mr Niall Phelan	ABDOMEN: Anatomy (hindgut, kidneys, post abd wall)  Mammographic Physics & Equipment 1  Mammographic Physics & Equipment 2
<b>Monday 24<sup>th</sup> September</b>	<b>Lecture from Visiting SAR</b>	
<b>Thursday 27<sup>th</sup> September</b>	<b>NO Lectures - ASM</b>	

<b><u>October 2018</u></b>		
<b>Monday 1<sup>st</sup> October</b> <b>Should be SJH at all times</b> 2:00pm  3:00pm  4.00pm	Mr Colin Walsh  Mr Dermot Gorman  Mr. Colin Walsh/Mr. Dermot Gorman/ Dr Jennie Cooke	Geometrical Factors and Unsharpness in Radiography  Overview of Equipment  Demonstration of X-Ray Equipment
<b>Thursday 4<sup>th</sup> October</b>  2:00pm  3.00 pm  4.00pm	Dr. Lynn Gaynor (D Costello giving lecture instead)  Dr. Lynn Gaynor(D Costello giving lecture instead)  Dr. Lesley Malone	Digital Acquisition Systems 1: Computed Radiography  Digital Acquisition Systems 2: Direct digital systems  Image Intensifier – TV Systems
<b>Monday 8<sup>th</sup> October</b> 2:00pm  3.00 pm  4.00pm	Dr Pat Kenny  Dr Pat Kenny  Dr.Ronan Faulkner	Image Quality 1: Spatial Resolution, Contrast Resolution & Artefacts (Analogue)  Image Quality 2: Spatial Resolution, Contrast Resolution, Artefacts etc (Digital)  AEC
<b>Thursday 11<sup>th</sup> October</b> 2:00pm  3.00pm  4.00pm	Dr. Pat Kenny  Dr. Brian Daragh Murphy	Optimisation of Contrast: Selection of radiographic parameters  ABDOMEN: Ultrasound Anatomy/Technique
<b>Monday 15<sup>th</sup> October</b>  2:00pm  3.00pm  4pm	Dr Lesley Malone  Dr Lesley Malone  Ms.Aoife Gallagher	Image Intensifier – TV Systems 2 including full fluoroscopy systems  Digital Acquisition Systems 3: Technology for DSA and Digital Fluorography  Tomography (excl. CT) – Introduction to CT

<b>Thursday &amp; Friday 18<sup>th</sup> &amp; 19<sup>th</sup> October</b> All Day	Physics	Radiation Protection Seminar
<b>Monday 22<sup>nd</sup> October</b>  Tutorial Room in Use	<b>NO Lectures</b> <b>Train the Trainers</b>	<b>NO Lectures</b> <b>Train the Trainers</b>
<b>Thursday 25<sup>th</sup> October</b> <b>Venue: see below</b> 2:00pm (Harold Browne LT)  3.30pm (TR4)	Anatomy Staff  Dr Ronan McDermott	PELVIS: Anatomy (Male & Female)  ABDOMEN: Anatomy 1 - GI/Liver/Pancreas/Barium/CT/MRI GI radiology
<b>Monday 29<sup>th</sup> October</b>	<b>Bank Holiday</b>	
<b><u>November 2017</u></b>		
<b>Thursday 1<sup>st</sup> November</b>  2.00pm  3:30pm	Dr David McInerney  Dr Robin Gibney	MSK Foot and Ankle: Anatomy & Techniques  ABDOMEN: Liver and biliary anatomy
<b>Monday 5<sup>th</sup> November</b>  2:00pm  3:00pm  4:00pm	Dr Lesley Malone  Dr. Louise Bowden  Dr. Louise Bowden	Flat panel fluoroscopy systems  Theory of gas detectors, scintillation detectors, PMTs solid state detectors: use in radiology  Radiation detectors for nuclear medicine and general purposes
<b>Thursday 8<sup>th</sup> November</b> <b>Venue: see below</b> 2:00pm (Harold Browne LT)  3.00 pm ( <b>Room 321 No. 26</b> )  4.00pm	Anatomy Staff  Dr Martin Shelly	MSK – Upper Limb  ABDOMEN: Anatomy - Vascular and CT, GI/Liver/Pancreas/Barium/CT/MRI

<b>Monday 12<sup>th</sup> November</b>		
2:00pm	Ms Aoife Gallagher	Artefacts in CT
3:00pm	Ms.Aoife Gallagher	Helical & Multi Slice Scanners
4.00pm	Ms.Aoife Gallagher	CT Scanners: reconstruction of images from projections
<b>Thursday 15<sup>th</sup> November</b>		
2:00pm (Harold Browne LT)	Anatomy Staff	MSK: Lower limb
3.30 pm	Dr Ronan Browne	ABDOMEN: GI/GU Interventional Techniques
<b>Monday 19<sup>th</sup> November</b>		
2:00pm	Ms. Jackie McCavana	Generators, common radiopharmaceuticals Kits & techniques; radiopharmacy design
<b>3.00pm</b>	Dr Jennie Cooke	Gamma cameras and data processing systems
<b>4:00pm</b>	Dr Jennie Cooke	SPECT CT Systems
<b>Thursday 22<sup>nd</sup> November</b>		
2:00pm	Mr.Don Carey	Modes of Radioactive Decay - Radiation Units
3.00pm	Dr Geraldine O'Reilly	Interaction of Radiation with Matter: Subject Contrast; Scatter Radiation
4.00pm		
<b>Monday 26<sup>th</sup> November</b>		
2:00pm	Dr. Louise Bowden	DXA Scanners
3.00 pm	Dr. Louise Bowden	Display Technologies
4.00pm	Mr.Don Carey	QA Nuclear Medicine
<b>Thursday 29<sup>th</sup> November</b>	<b>RSNA Week</b>	<b>NO LECTURE TODAY</b>
<b><u>December 2017</u></b>		

<b>Monday 3<sup>rd</sup> December</b> <b>Venue: VC Room, 123 SSG</b> 2:00pm  3.00pm  4.00pm	Dr. Geraldine O'Reilly  Dr. Geraldine O'Reilly  Dr. Lesley Malone	New Applications in CT (Part 1)  New Applications in CT (Part 2)  Radionuclide Dosimetry
<b>Thursday 6<sup>th</sup> December</b> <b>All Day</b>	<b>IR Skills Course</b>	<b>Faculty Tutorial Room &amp; Surgical Skills Lab</b>
<b>Monday 10<sup>th</sup> December</b>  2:00pm  3.00pm  4.00pm	Dr. Pat Kenny  Ms Anita Dowling  Ms. Colin Walsh	Mock Physics MCQ  QA: in general radiography & fluoroscopy  Iterative Reconstruction
<b>Thursday 13<sup>th</sup> December</b> <b>1.30pm</b>  <b>2.00pm</b>  <b>3.00pm</b>  <b>4.00pm</b>	<b>National Training Coordinator</b>  Dr Patricia Cunningham  Dr Joan Heneghan  Dr. Brian Hogan	<b>MCQ</b>  MSK: Upper limb: Anatomy and Techniques  PELVIS: Anatomy/Technique (Female and MSK)  MSK: Upper limb: Anatomy and Techniques –
<b>Monday 17<sup>th</sup> December</b>  2:00pm  3.00pm  4.15pm	Dr. Geraldine O'Reilly  Ms. Jackie McCavana  Dr Neasa Ni Mhuirheartaigh	Radionuclide Therapy in a Diagnostic Imaging Department  Tutorial: radiation protection & technical and practical aspects of nuclear medicine  CHEST: CT thorax. Technique and Anatomy
<b>Thursday 21<sup>st</sup> December</b>	<b>Christmas Holidays</b>	
<b><u>January 2019</u></b>		
<b>Tuesday 1<sup>st</sup> January</b>	<b>Bank Holiday</b>	

<b>Thursday 3<sup>rd</sup> January</b>  2:00pm (Harold Browne LT)  3.30 pm (Faculty Tutorial Room)	Anatomy Staff  Dr Stephanie Ryan	NEURO: Anatomy – Brain & Spine  PAEDIATRICS: Anatomy and Techniques
<b>Monday 7<sup>th</sup> January</b>  2:00pm  3.00pm  4:15pm	Dr Julie Lucey  Dr Julie Lucey  Dr. Pat Kenny	PET 1  PET 2  3D Images, planar reformatting, 3D rendering, MIP, surface rendering, volume rendering
<b>Thursday &amp; Friday 10<sup>th</sup> &amp; 11<sup>th</sup> January</b> <b>Venue: Faculty Tutorial Room</b>	<b>Ultrasound Seminar (Physics)</b>	<b>Ultrasound Seminar</b>
<b>Monday 14<sup>th</sup> January</b>  2:00pm  3.00pm  4:00pm	Dr. Gerard Boyle  Dr. Gerard Boyle  Dr. Gerard Boyle	T1, T2 relaxation mechanisms  Basic Physics of MRI  MRI equipment
<b>Thursday 17<sup>th</sup> January</b> <b>Venue: TR1</b> 2:00pm  3:00pm  4:00pm	Dr. S. Looby  Dr. S. Looby  Dr Anthony Ryan	NEURO: Skull and Skull Base – Part I  NEURO: Skull and Skull Base Part II  INTERVENTION: Arterial Anatomy/Techniques
<b>Monday 21<sup>st</sup> January</b>  2:00pm  3.00pm  4:00pm	Dr. Gerard Boyle  Dr. Gerard Boyle  Dr. Gerard Boyle	MRI Advanced sequences  Pulse sequences and contrast 1  MRI Pulse Sequences & Contrast 2



<b>Thursday 24<sup>th</sup> January</b>  <b>2:00pm</b> (Harold Browne LT)  <b>3:30pm</b> <b>Venue: Faculty Tutorial Room</b>	Anatomy Staff  Dr. Sarah Power	NEURO: Anatomy – Head & Neck  NEURO: Cerebral & Spinal Angiography Anatomy & Techniques
<b>Monday 28<sup>th</sup> January</b>  2:00pm  3.00 pm  4:00pm	Dr.Pat Kenny  Mr. Dermot Gorman  Dr.Lynn Gaynor	Revision Tutorial 3: Contrast.  Revision Tutorial 4: X-Ray Tubes &Equipment.  Revision Tutorial 1: Interaction of Radiation with matter.
<b>Thursday 31<sup>st</sup> January</b>  2.30pm  3.45 / 4:00pm	Faculty Tutorial Room in Use	Faculty Tutorial Room in Use

<b><u>February 2019</u></b>		
<b>Monday 4<sup>th</sup> February</b>		
2:00pm	Dr. James Griffin	HEAD & NECK: Anatomy/Radiology Part I
3.00 pm	<b>Diagnostic Lecture</b>	<b>TBC</b>
4:00pm	Dr David Murphy	CHEST: High Resolution CT, Thoracic Intervention
<b>Thursday 7<sup>th</sup> February</b>		
2:00 pm (Harold Browne LT)	Anatomy Staff	Anatomy – ENT
3.30 pm (Faculty Tutorial Rm)	Dr. S. Skehan	NUCLEAR MEDICINE: Cardiac and Lung Scintigraphy
<b>Monday 11<sup>th</sup> February</b>		
2:00pm	Mr.Colin Walsh	Revision Tutorial 6: II/TV/ Fluoroscopic Systems
3.00 pm	Mr Colin Walsh	Revision Tutorial 5: CT
4:00pm	Ms. Una O'Connor	Equipment specification, purchase and commissioning
<b>Thursday 14<sup>th</sup> February</b> <b>All Day</b> <b>Venue:</b> TR8 & Faculty Training Room	<b>Mock Exams</b>	RCSI (TR8, Main College and Faculty Tutorial Room)
<b>Monday 18<sup>th</sup> February</b>		
2:00pm	Dr. Gerard Boyle	MRI Image Formation
3.00 pm	Dr. Gerard Boyle	MRI gradient echo
4.15pm	Dr Gerard Boyle	MRI – Flow / Angiography
<b>Thursday 21<sup>st</sup> February</b>		
2:00pm	Dr Martin O'Connell	NUCLEAR MEDICINE: Positron Emission Tomography
3.30 pm	Dr. John Feeney	NUCLEAR MEDICINE: Equipment and Techniques

<b>Monday 25<sup>th</sup> February</b> 2:00pm  3.00 pm  4.15pm	Dr. Lesley Malone  Dr. Lesley Malone  Mr Pat Cooney	MRI Safety 1  MRI Safety 2  Revision Tutorial 2: Radiographic and Fluoroscopic Technology.
<b>Thursday 28<sup>th</sup> Feb</b> <b>Venue: SVUH</b> <b>2.00pm</b>  <b>3.00pm</b>  <b>4.00pm</b>	Dr D. Brophy	INTERVENTION: Vascular anatomy - neck, chest, abdomen and pelvis
<b><u>March 2019</u></b>		
<b>Monday 4<sup>th</sup> March</b>  2:00pm  3:00pm  4:00pm	Dr. Gerard Boyle  Dr. Gerard Boyle  Mr. David Costello	MRI  MRI  MRI – Artifacts
<b>Thursday 7<sup>th</sup> March</b> <b>Venue: SJH</b> 2.00pm  3:00pm  4.00pm	Dr. James Meaney  Dr. James Meaney  Dr Niall McEniff	MRI: Applied MRI 1  MRI: Applied MRI 2  INTERVENTION: Non-vascular Interventions
<b>Monday 11<sup>th</sup> March</b>  2.00pm  3.00pm  4.00pm	Dr. Geraldine O'Reilly  Dr Pat Kenny  Dr. Lesley Malone	Revision Tutorial 7: Radiation Protection (incl. units)  Revision Tutorial 11 MRI  Revision Tutorial 12 Digital Imaging
<b>Thursday 14<sup>th</sup> March</b> <b>Venue: TR4</b> 2.00 pm  3:00pm	Prof. Jonathan Dodd  Prof. Jonathan Dodd	CHEST: Cardiac Anatomy/Techniques 1  CHEST: Cardiac Anatomy/Techniques 2

<b>Monday 18<sup>th</sup> March</b>	<b>Bank Holiday</b>	
<b>Thursday 21st March</b> <b>Venue: TR1</b> 2:00pm	Dr. Brendan Hogan	NUCLEAR MEDICINE: Bone/Endocrine/Hepatobiliary/Other
3:00pm	Dr Patricia Cunningham	MSK: Lower limb: Anatomy and Techniques
4:00pm	Dr. Eilish Twomey	PAEDIATRICS: Anatomy & Techniques
<b>Monday 25<sup>th</sup> March</b> 2:00pm	Mr.Dara Murphy	Revision Tutorial 9: Nuclear Medicine (Physics & Pharmacy).
3:00pm	Mr. Dara Murphy	Revision Tutorial 10 Nuclear Medicine Equipment
4:00pm	Ms Anita Dowling	Revision Tutorial 8: QA in Radiology/Fluoroscopy
<b>Thursday 28<sup>th</sup> March</b> 2:00pm	Dr David Rea	PAEDIATRICS: Anatomy and Techniques
3:30pm	Dr Seamus Looby	NEURO: Cortical and Sulcal Anatomy  NEURO: ENT Radiological Anatomy
<b><u>April 2019</u></b>		
<b>Monday 1st April</b> 2:00pm	Dr Sean Cournane	Revision Tutorial 13: Ultrasound (Physics)
3:00pm	Dr. Neil O'Hare	PACS 1
4:00pm	Dr. Neil O'Hare	PACS 2

<b>Thursday 4<sup>th</sup> April</b> 2.00pm  3.00pm  4.00pm	Dr Conor Shortt  Dr Conor Shortt	MSK – Shoulder  MSK - Knee
<b>Monday 8<sup>th</sup> April</b> Faculty Tutorial Room not available	Part II Exams (Final FFR)	Part II Exams (Final FFR)
<b>Thursday 11<sup>th</sup> April</b> 2.00pm  3.30pm	Dr James Griffin  Dr Frank McGrath	Anatomy – Head & Neck Radiology Part II  MSK: Lower limb: Anatomy and Techniques
<b>Monday 15<sup>th</sup> April</b> 2.00pm  3.00pm  4.00pm	Dr. Gerard Boyle  Dr. Gerard Boyle  Dr. Gerard Boyle	MRI  MRI  MRI

<b>Thursday 18<sup>th</sup> April</b> 2.00pm  3.00pm  4.00pm	Dr. Sebastian McWilliams  Dr. Sebastian McWilliams	NEURO: Spine Part I  NEURO: Spine Part II
<b>Sunday 21 April</b>	<h1>Easter Break</h1>	
<b>Monday 22<sup>nd</sup> April</b>	<b>Bank Holiday</b>	
<b>Thursday 25<sup>th</sup> April 2018</b> 2.00 pm  3.00 pm  4.00 pm	Dr. Gerard Boyle <b>Prof. Jonathon Dodd</b> <b>Diagnostic Lecture</b>	MRI Cardiac MRI <b>TBC</b>
<b>Monday 29<sup>th</sup> April</b> <b>Nightingale Lecture</b> <b>Theatre</b> 2.00pm  3.00pm  4.00pm	Prof M. McNicholas  Prof M. McNicholas  Dr. Ronan McDermott	PELVIS: Anatomy (Male)  ABDOMEN: Cross-sectional interventional techniques  ABDOMEN: CT/MR Techniques
<b><u>May 2019</u></b>		
<b>Thursday 2nd May</b> 2.00pm  3.00pm  4.00pm	Prof Max F. Ryan  Dr Carmel Cronin <b>TBC</b>	Mammographic techniques, breast ultrasound and intervention  Retroperitoneum and renal anatomy  MSK: Intervention

Monday 6 <sup>th</sup> May TO BE CONFIRMED	Bank	
Thursday 9 <sup>th</sup> May/Friday 10 <sup>th</sup> May TO BE CONFIRMED	FFR Primary Exams	RCSI College & Faculty Tutorial Room
	FFR Primary Exams	RCSI College & Faculty Tutorial Room
Thursday 17 <sup>th</sup> & Friday 18 <sup>th</sup> May TO BE CONFIRMED	Final FFR Radiotherapy	RCSI College & Faculty Tutorial Room
24 <sup>th</sup> May 2018 Brookfield, UCC	Emergency Medicine Course	Cork
6 <sup>th</sup> June 12 <sup>th</sup> June Proposed Dates – Subject to Change	SpR Assessments	Faculty Tutorial Room (All Dublin)

Yellow Highlighted items

TO BE CONFIRMED

Text in Pink

To be changed to another date