

Outline: The EFRS, in collaboration with the Radiation Protection of Patients Unit of the International Atomic Energy Agency (IAEA) and EuroSafe Imaging, are pleased to announce our 2020 Webinar Series on Radiation Protection. The aim of the EFRS Radiation Protection Webinar Series is to act as an additional tool to improve the knowledge, skills, and competences of radiographers in this field. The Webinar Series will also serve as a continuing professional development (CPD) for radiographers.

The first two topics in the EFRS Radiation Protection Webinar Series will be on:

- Radiation Protection in Computed Tomography (5 episodes)
- Radiation Protection in Radiotherapy (5 episodes)

All Webinars will be delivered at 20:00 CET.

Certificates of participation will be issued for each webinar.

See: https://www.efrs.eu/education



Radiation Protection in Computed Tomography Series

CT Webinar Series Chair: Assoc. Prof. Shane Foley (University College Dublin/IE)

Episode 1: Radiation Protection in CT (31/03/2020 @ 20:00 CET)

Learning Objectives:

- 1. To reinforce the importance of radiation protection in CT given its current use
- 2. To consider current legal and professional duties for justification and optimisation
- 3. To consolidate radiation protection knowledge in CT
- 4. To learn about the current DRLs in CT

Speakers:

- Stephen McNulty, MSc, Senior Radiographer, Galway University Hospitals (IE)
- Bo Mussmann, PhD, Research Radiographer, Odense University Hospital (DK) and Associate Professor at Oslo Metropolitan University (NO)

Episode 2: Innovations in dose optimisation in CT: scanner-based tools (07/04/2020 @ 20:00 CET)

Learning Objectives:

- To become familiar with recent developments based on scanner design features and to be aware of the evidence base that supports these developments.
- 2. To understand different approaches to automated tube current modulation and their operation.
- 3. To learn more about the potential for future developments in the area.

Speakers:

- John Stowe, PhD, Assistant Professor, University College Dublin (IE)
- Dean Pekarovic, MSc, University Medical Centre Ljubljana (SI)



Episode 3: Practical steps in dose optimisation in CT (28/04/2020 @ 20:00 CET)

Learning Objectives:

- To understand the importance of employing patient specific examination protocols in CT.
- 2. To appreciate the potential impact of indication specific protocols on image quality and patient dose.
- 3. To become familiar with recent developments based on non-scanner-based approaches and to be aware of the evidence base that supports these approaches.

Speakers:

- Martin Weber Kusk, MSc, Clinical CT-specialist Hospital of Southwest Jutland (DK)
- Svea Moreup-Deppe, PhD Candidate, Senior Lecturer, University College Lillebaelt (DK)

Episode 4: Explaining radiation benefits and risk to patients in CT (12/05/2020 @ 20:00 CET)

Learning Objectives:

- 1. To review new statutory responsibilities regarding benefit risk communication
- 2. To appreciate the different radiation dose metrics in CT
- 3. To consider standardised and evidence-based approaches to benefit/risk communication

Speakers:

- Jonathan Portelli, PhD, Lecturer University of Malta (MT)
- Joana Santos, PhD, Adjunct Professor IPC, ESTES Coimbra (PT)

Episode 5: The importance of audit (and DRLs) in CT (02/06/2020 @ 20:00 CET)

Learning Objectives:

- 1. To understand the concept of clinical audit under the scope of the EU BSS
- 2. To consider appropriate QA program for CT
- To become familiar with the appropriate use of diagnostic reference levels and their role in dose optimisation.



4. To be able to initiate an investigation into errant radiation doses and consider how corrective actions can be taken

Speakers:

- Francis Zarb, PhD, Senior Lecturer, University of Malta (MT)
- Lee O'Hora, MSc, HIQA Medical Radiation Regulator (IE)

Radiation Protection in Radiotherapy Series

Radiotherapy Webinar Series Chair: Charlotte Beardmore (EFRS Vice-President / Director of Professional Policy, The Society of Radiographers/UK)

Episode 1: Radiotherapy Risk management and incident learning systems (30/04/2020 @ 20:00 CET)

Learning Objectives:

- 1. Understand how to set up a reporting system at local level
- 2. Knowing the main international systems
- 3. Be aware of the importance of dissemination of own experience

Speaker:

Gianfranco Brusadin, Quality & Risk Manager, Roussy Cancer Campus, Grand Paris (FR)

Episode 2: Errors/accidents in Radiotherapy: learning from a clinical case (20/05/2020 @ 20:00 CET)

Learning Objectives:

- 1. To understand how to analyse in practice a radiotherapy error
- 2. Be aware that several contributing factors and the failure of several barriers in the organisation could lead to an accident.
- 3. To understand how to draw up an action plan to share the learning and reduce the risk error



Speaker:

Gianfranco Brusadin, Quality & Risk Manager, Roussy Cancer Campus, Grand Paris (FR)

Episode 3: Image-Guided Radiotherapy: QA and QC (17/09/2020 @ 20:00 CET)

Learning Objectives:

- 1. Understand the concept of Quality Assurance and its rationale
- 2. Demonstrate how a QA program can be applied in a modern setting
- 3. Outline quality control procedures for equipment (imaging & therapy)

Speakers:

- Eric Sundqvist, Assistant Professor/Coordinator Radiotherapy, Oslo Metropolitan University (NO)
- Ainars Bajinskis, Associate Professor / Head of Radiography Studies, University of Latvia (LV)

Episode 4: Radiation dose reduction: VMAT and IMRT (06/10/2020 @ 20:00 CET)

Learning Objectives:

- Identify and demonstrate an awareness of the appropriate dose optimisation techniques
- 2. Outline the correct application of imaging method and technique in IGRT
- 3. Assess and optimise the concomitant doses in IGRT

Speakers:

- Eric Sundqvist, Assistant Professor/Coordinator Radiotherapy, Oslo Metropolitan University (NO)
- Ainars Bajinskis, Associate Professor / Head of Radiography Studies, University of Latvia (LV)



Episode 5: Quality assurance in external beam radiotherapy (17/11/2020 @ 20:00 CET)

Learning Objectives:

- 1. Demonstrate an awareness of the appropriate treatment method and respective low-dose bath exposure of healthy tissues
- 2. Optimise the radiation doses by applying an appropriate radiotherapy technique (e.g. objective & constraints to OAR and volumes for optimisation)
- 3. Understand and discuss the long-term risks from low-dose bath exposures of healthy tissues

Speakers:

- Anastasia Sarchosoglou, Radiotherapy Radiographer and Clinical Educator, General Oncological Hospital, Kiffisia (GR)
- Eric Sundqvist, Assistant Professor/Coordinator Radiotherapy, Oslo Metropolitan University (NO)