Joint ICTP-IAEA Advanced School on Quality Assurance Requirements in the Digital Era of Diagnostic Radiology

11 - 15 November 2019 Trieste, Italy

Further information: http://indico.ictp.it/event/8730/ smr3334@ictp.it

Until recently, the vast majority of medical imaging examinations used film as a medium for image capture, display and storage. Currently, fully digital medical imaging is the preferred method for imaging, however, implementation of relevant quality assurance remains a non-trivial exercise.

Description:

The digital image revolution in medical diagnostic imaging began as early as the 1970s with the invention of the computed tomography (CT) scanner. This was followed by magnetic resonance imaging (MRI) in the 1980s and digital X ray acquisition systems (such as computed radiography (CR) and digital radiography (DX)) in the 1990s.

Since then, the momentum of digital medical imaging has grown to the extent that digital image management is currently the preferred method for medical imaging. The reasons for this include the efficiencies inherent in digital capture, storage and display and the competitive cost structures of such systems when compared to alternatives involving film.

Quality assurance and quality control activities are of paramount importance in this digital era to ensure that the equipment installed is safe and efficient. This is especially true for the components of the imaging chain that were not present in the traditional screen film technologies, such as the digital acquisition systems (either CR or DR) and the display systems.

Topics:

- Physics of digital imaging,
- Quantitative image analysis,
- Adapting QC protocols for digital imaging modalities,
- Structured DICOM images and their use,
- Images printing and display,
- Image processing and analysis tools (imageJ).

Director:

Virginia TSAPAKI, IAEA

Local Organizer:

R. Padovani, ICTP

Workshop Speakers:

Paola BREGANT (Trieste Hospital)
Mario DE DENARO (Trieste Hospital)
Harry DELIS (Greece)
Paddy GILLIGAN (Ireland)
Renato PADOVANI (ICTP)
Ehsan SAMEI (AAPM)
Annalisa TRIANNI (Udine Hospital)

How to apply:

Online application: http://indico.ictp.it/event/8730/

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Deadline:

11 August 2019









