



JOINT ICTP-IAEA ADVANCED COURSE ON MAMMOGRAPHY

3 - 7 October 2011

Miramare, Trieste, Italy

The aim of this School is to contribute to the development of qualified and competent medical physicists and medical physics educators by:

- Disseminating information about the need and processes of quality assurance in mammographic services as described in the recently published Human Health Series No 2 'Quality Assurance for Screen Film Mammography' and the companion document 'Quality Assurance for Digital Mammography'. These documents give an international harmonised description of terms and processes in this field, forming a solid basis for image quality and dosimetry principles and practice that should be transferred to the mammography screening environment, particularly in developing countries,
- Facilitating a network for the exchange of information on screening implementation and quality control in mammography among clinical scientists in developing and developed Member States.

Breast cancer is a major cause of cancer deaths in women. It is well established that early diagnosis, primarily through the application of mammography, is required to improve the prognosis for those diagnosed with this disease by early detection, when cancers are smaller, more easily treated, and more curable. Such diagnosis requires a strong commitment to quality processes based on scientific principles to give an image that can be used for interpretation. The role of quality assurance in all factors of mammography is well documented and includes equipment and clinical components. With new advances in technology, equipment quality control can be complex, especially in digital image capture, display and distribution. This advanced school will take a comprehensive approach to the principles of quality assurance in both screen film and digital mammography and discuss important factors for the establishment of a mammography screening programme.

PARTICIPATION

The advanced school seeks to target medical physicists with responsibilities in diagnostic radiology, and teachers involved in medical physics education programmes, and especially those involved in the operation or setting up of mammography screening from all countries that are members of the United Nations, UNESCO or IAEA. As it will be conducted in English, participants should have an adequate working knowledge of this language. Although the main purpose of the Centre is to help research workers from developing countries, through a programme of training activities within a framework of international cooperation, students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants from developing countries, to be selected by the organizers. There is no registration fee.

HOW TO APPLY FOR PARTICIPATION

The application form can be accessed at the activity website

<http://agenda.ictp.it/smr.php?2266>

Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

ACTIVITY SECRETARIAT: Telephone: +39-040-2240-226
Fax: +39-040-2240-7226

E-mail: smr2266@ictp.it

ICTP Home Page: <http://www.ictp.it/>

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DIRECTORS

M. de Denaro (Trieste)

E. Hendrick (ACR)

D. McLean (IAEA, Vienna)

R. Padovani (EFOMP)

M. Yaffe (AAPM)

LOCAL ORGANIZER

L. Bertocchi (ICTP)

TOPICS

- Role of mammography in breast cancer detection
- Mammographic equipment design and function including specialised equipment, stereotactic breast biopsy, ultrasound, MRI, and digital breast tomosynthesis
- Screen-film mammography, processing and display
- Quality assurance
- Transition to digital mammography including PACS and RIS considerations
- Radiation dose and cancer risk in mammography and other breast imaging modalities
- Performance testing of screen-film and digital mammography

APPLICATION DEADLINE

June 30 2011