# COLLEGE ON MEDICAL PHYSICS (CTP) Medical Imaging Physics and Technology - Capacity Building in Developing Countries

7 September - 25 September 2020 Trieste, italy

Further information: http://indico.ictp.it/event/9118/ smr3473@ictp.it

The College will provide students with high-level education and training on the physics of contemporary medical imaging technology, associated principles of optimization and safety, education development and equipment management principles to allow capacity building in developing countries.

## **Description:**

The ICTP College on Medical Physics exists now 30 years and has educated young medical physicists from over 100 developing countries. Many College graduates have created further activities in their countries. The College will be oriented towards medical physicists from low-and-middle-income countries, and the digital imaging technology widely used there. The College faculty include highly experienced specialists with international reputation in the field. The 3-week intense program will include classroom presentations, supported with clinical practicums, e-learning and computer simulations. Students will be provided with reference and lecturing materials.

### **Topics:**

- X-ray sources of radiation
- Medical Image Characteristics and Quality
   Factors
- Digital Imaging detectors and Clinical Procedure Optimization
- Digital mammography, fluoroscopy, dental and others
- Computed Tomography Physics and Procedure Optimization
- Radionuclide Imaging, SPECT and PET Tomography
- Magnetic Resonance Imaging Applications and safety
- Hybrid Imaging systems
- Quality Control and Radiation Dose
- Medical Imaging: Dose Management and Radiation Protection
- Implementation of Bonn Call for Action
- Evaluation and analysis of Medical Images
- Clinical Imaging Protocols: typical parameters, problems, solutions
- Digital Image Networks
- Management and Specification in Medical Imaging
- Safety and Risk Management in Medical Imaging
- Resources and Methods for Effective/Efficient Learning
- Enhancing the Role of Medical Physicists in Clinical Medical Imaging
- Capacity Building Principles in developing countries

# How to apply:

Online application: http://indico.ictp.it/event/9118/

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.

### **Directors:**

Dr. Anna Benini, Copengahen University Hospital

Dr. Mario De Denaro, Azienda Sanitaria Universitaria Giuliano Isontina

Prof. Franco Milano, University of Florence

Prof. Perry Sprawls, Sprawls Educational Foundation

Prof. Slavik Tabakov, King's College London and IUPESM

# **Local Organizer:**

Prof. Luciano Bertocchi, ICTP

# **Speakers:**

Dr Paola Bregant, Italy
Dr John Oshinski, USA
Prof. Renato Padovani, Italy
Prof. Anthony Seibert, USA
Prof. Magdalena Stoeva, Bulgaria
Prof. Sameer Tipnis, USA

### **Deadline:**

15 May 2020







