# Joint ICTP-IAEA ICTP Workshop on Dosimetry in Radionuclide Therapy and Diagnostic Nuclear Medicine

28 September - 2 October 2020 Trieste, Italy

In recent years there has been an increase of therapeutic applications using radiopharmaceuticals. This advanced workshop will provide the participants with a comprehensive review of the developments in the field of nuclear medicine image quantification and practical internal dosimetry. Further information: http://indico.ictp.it/event/9123/ smr3478@ictp.it

# **Director:**

P. KNOLL, IAEA

# **Description:**

The purpose of this workshop is to contribute to the development of clinically qualified medical physicists in nuclear medicine by providing theoretical and practical tools for internal dosimetry. Molecular radiotherapy has demonstrated unique therapeutic advantages in the treatment of an increasing number of cancer types. Such treatments can deliver high absorbed doses to specific targets (tumour lesions) and healthy organs (organs at risk) and, thus, require a patient specific dose assessment. These calculations help to optimize the amount of radioactivity to be administered and to reduce the risk of under- or overdosing patients, otherwise observed when using empirical approaches to activity determination. Practical sessions in a clinical setting will be included.

The workshop is under the umbrella of ICTP and IAEA and is expected to maintain professional competency and to keep knowledge and skills of medical physicists working in nuclear medicine up to date.

# **Topics:**

- Physics and technology of SPECT/CT and PET/CT
- Quantitative SPECT and PET imaging
- MIRD formalism
- Voxel-based methods
- Peptide receptor radionuclide therapy
- I-131 therapy
- Radiation safety

# Prerequisites:

The process of selection of participants might include a mandatory written examination.

# Local Organizer:

**R. PADOVANI, ICTP** 

# How to apply:

Online application: http://indico.ictp.it/event/9123/

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:**

# 15 June 2020

Trieste, Ital







The Abdus Salam International Centre for Theoretical Physics

