

International Atomic Energy Agency

Regional Training Course in Nuclear Medicine: New Developments in Molecular Imaging and Targeted Radionuclide Therapy

PROSPECTUS

Project Number & Title: RER/6/035 Strengthening Single Photon Emission Computed Tomography/Computed Tomography (SPECT/CT) and Positron Emission Tomography (PET/CT) Hybrid Imaging Applications for Diagnosis of Chronic Diseases, including Cancer.

Place (City, Country): Vienna, Austria

Dates: 21-25 October 2017

Deadline for Nominations: 14 July 2017

Organizers: The International Atomic Energy Agency (IAEA) in cooperation with the Government of Austria.

Host Country Organizer: Mr Rodolfo Núñez Miller
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Language: English

Purpose: The training course will provide theoretical training in state of the art of diagnosis and therapy in Nuclear Medicine, specially focused in continuing medical education including an overview of new developments in the fields of molecular imaging and targeted radionuclide therapy.

Expected Output(s): Participants trained, level of knowledge upgraded.

Scope and Nature: This regional training course will be organized in conjunction with the 30th Annual Congress of the European Association of Nuclear Medicine. Therefore, selected participants will be expected to attend the whole EANM'17 Annual Congress. This will be followed – on the last day– by an afternoon course on different multidisciplinary topics on molecular imaging and therapy at the IAEA Headquarters in Vienna (Austria).
<http://eanm17.eanm.org/>

The training course will provide participants with the multiple opportunities in continuing education and overview the new developments in a very diverse range of topics in the fields of Nuclear Medicine and Targeted Radionuclide Therapy.

Background Information:

Chronic diseases like cardiovascular diseases and cancer account for more than 40% of causes of death worldwide (source: WHO World Health Report 2007). Nuclear medicine/molecular imaging has a strong role to play as molecular imaging is emerging as a new approach for the non-invasive detection of molecular and cellular processes that can identify disease before the manifestation of gross anatomic features or physiologic consequences. Application of molecular imaging for early detection of the initiating events associated with disease will be critical for improved understanding of the underlying mechanisms of disease, primary prevention of disease, risk stratification of patients with disease, and promotion of individualized medical treatment based on the unique characteristics of a disease in any given patient. SPECT/CT and PET/CT are new imaging technologies which couple the metabolic information provided by SPECT and PET with the exquisite anatomical resolution of X-ray CT. Both procedures have already found a number of clinical applications in oncologic imaging, particularly PET/CT, and in cardiac disease management. Widespread introduction into clinical practice started approximately 17 years ago and is increasing steadily. It can already be stated that the synthesis of structural and metabolic information improves the accuracy of primary staging and the detection of recurrent disease and has the realistic potential to change patient management in 10 to 20% of cases. PET/CT fusion images can directly guide biopsies or surgical interventions.

Participation:

The training course is open to a maximum of **25** participants from countries that participate in the RER/6/035 project and need assistance in training staff on new developments in Nuclear Medicine and Targeted Radionuclide Therapy.

The target countries are: Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Estonia, Georgia, Greece, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Montenegro, Poland, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Tajikistan, The former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan.

Participants' Qualification:

The nominees should be qualified Nuclear Medicine Physicians, Nuclear Medicine technologists, Radiologists, radio-pharmacists and medical physicists. Candidates should be currently working in nuclear medicine and/or radiology departments.

Nomination Procedure:

Nominations should be submitted to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Should this not be possible, nominations may be submitted on the standard IAEA Nomination Form for Training Courses (available from the IAEA website: <http://www.iaea.org/>).

Completed forms should be endorsed by the relevant national authorities and returned to the Agency through the normal official channels, i.e. the designated National Liaison Office for IAEA matters.

The completed nomination forms should be sent to the Programme Management Officer for this project, Ms Mayumi Yamamoto, through IAEA Official Fax (+43-1-26007) or E-Mail (Official.Mail@iaea.org), not later than **14 July 2017**. Nominations received after this date or which have not been routed through the established official channels cannot be considered.

**Administrative
and Financial
Arrangements:**

Nominating Governments will be informed in due course of the names of the candidates who have been selected and will, at that time, be given full details of the procedures to be followed with regard to administrative and financial matters.

Selected participants from countries eligible to receive technical assistance will be provided with a round trip economy class air ticket from their home countries to Vienna (AUSTRIA), and a stipend sufficient to cover the cost of their accommodation, food and minor incidentals. Shipment of accumulated training course materials to the participants' home countries is not the responsibility of the IAEA.

The organizers of the training course do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.