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الوكالة الدولية للطاقة الذرية  
国际原子能机构  
International Atomic Energy Agency  
Agence Internationale de l'énergie atomique  
Международное агентство по атомной энергии  
Organismo Internacional de Energía Atómica

National Liaison Officer

Vienna International Centre, PO Box 100, 1400 Vienna, Austria  
Phone: (+43 1) 2600 • Fax: (+43 1) 26007  
Email: [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org) • Internet: <http://www.iaea.org>

In reply please refer to: C7 - RER/6/026/025  
Dial directly to extension: (+431) 2600- 26306

2014-08-19

**Subject:** Invitation to a Regional Training Course on Basics of Clinical PET/CT, Hungary, Debrecen, 26 - 30 January 2015

Dear National Liaison Officer,

I am pleased to invite you to send nominations of suitable candidates to participate in the above-mentioned training course under the framework of TC Project RER/6/026 – Strengthening SPECT/CT and PET/CT applications for diagnostics of chronic diseases. The purpose of the training course and related information are outlined in the attached Prospectus.

For candidates who are selected by the IAEA, the Agency will cover the cost of return international travel from the home country to Debrecen, Hungary and provide a stipend for the duration of the training course in line with Agency rules and procedures.

Please submit nominations to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Only if this is not possible, nominations may be submitted on the Nomination Form for Training Courses available on the IAEA website: <http://www.iaea.org/technicalcooperation/How-to-take-part/In-meetings-WS/index.html>. Completed forms should be endorsed by relevant national authorities and sent to the Programme Management Officer for this project, Ms Mayumi Yamamoto (IAEA Official Fax: +43-1-26007 or E-Mail [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org)), through the official channels, i.e. the designated National Liaison Office for IAEA matters, not later than 17 October 2014.

Yours sincerely,

Manase Peter Salema  
Director  
Division for Europe  
Department of Technical Cooperation

Enclosures: Prospectus

# International Atomic Energy Agency

## Regional Training Course on Basics of Clinical PET/CT

### PROSPECTUS

- Project Number & Title:** RER/6/026: Strengthening SPECT/CT and PET/CT applications for diagnostics of chronic diseases
- Place(City, Country):** Debrecen, Hungary
- Dates:** 26-30 January 2015
- Deadline for Nominations:** 17 October 2014
- Organizers:** The International Atomic Energy Agency (IAEA) in cooperation with the Government of Hungary through the Nuclear Medicine Centre, Debrecen, Hungary
- Host Country Organizer:** Mr Ildikó Garai, MD  
Scanomed Ltd.  
Nagyerdei 98  
4032 Debrecen, Hungary
- Tel: +36 52 502 523  
E-Mail: garai@belklinika.com
- Language:** English
- Purpose:** The Regional Training Course is to provide medical practitioners with introductory theoretical and practical training in state of the art of hybrid imaging using PET/CT.
- Expected Output(s):** Participants' level of knowledge upgraded. Training material in the form of DVDs will be provided at the end of the course.
- Scope and Nature:** The Regional Training Course consists of practical sessions and basic didactic lectures on topics most relevant to the purposes of the course; role of PET/CT and SPECT/CT in specific disease states; clinical cases discussions; reporting sessions and read-with-the-expert sessions.

**Background Information:**

Since the 1990's, hybrid imaging by means of software and hardware image fusion alike allows the intrinsic combination of functional and anatomical image information. The introduction of hybrid imaging is predated by the invention and subsequent realization of various imaging technologies: the discovery of X-rays by Wilhelm Conrad Roentgen in 1895, tomographic imaging with radionuclides in 1963, the introduction of the first X-ray computed tomography (CT) system in the early 1970's, the first human tomographic images with positron-emitting isotopes were presented in 1972 and the appearance of clinical magnetic resonance (MR) in the 1980's, to name a few milestones.

Various ways of imaging have become available over the past century that made patient observation, disease diagnosis and therapy follow-up feasible, and above all non-invasive. We know that disease originates from physical distress as well as from changes on the molecular and physiological level. In most cases of deadly diseases early diagnosis is a key and, therefore, imaging the anatomy of a patient may not suffice in making a correct and timely diagnosis. Therefore, medical doctors typically employ a combination of imaging techniques during the course of diagnosis and subsequent treatment to monitor their patients. In other words, both functional and anatomical information are essential in state-of-the-art patient management.

The advantages of integrated, anato-metabolic, or hybrid imaging are manifold. First, a single examination would provide comprehensive information on the state of a disease. Here, functional, and thus, less anatomically accurate information would be gathered and displayed in a widely appreciated anatomical context. Second, patients would be invited for only one, instead of two or multiple exams. Third, while engineering costs for combined imaging devices may initially be high, customers would benefit from purchasing a single rather than two independent devices. Fourth, the combination of complementary imaging modalities can yield synergy effects for the acquisition and processing of image data. Fifth, integrated reports on the patient can be generated based on joint expert reading from radiology and nuclear medicine physicians.

Following its introduction into the clinic in the late 1990's combined PET/CT and SPECT/CT imaging is now playing an increasingly important role in the diagnosis and staging of human disease.

**Participation:**

The programme is opened to up to 10 participants from countries that participate in the RER/6/026 project and need assistance in training staff for hybrid imaging methodology.

The target countries are: Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Georgia, Greece, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malta, 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. Candidates should be working currently in nuclear medicine departments, with strong commitment to provide hybrid imaging services. Nominations of oncologists who wish to have exposure to nuclear medicine applications with a view of implementing in their practices are also acceptable.
- 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 **17 October 2014**. 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 Debrecen, Hungary, 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.