



# **Project RLA6091 “Enhancing Capacity Building of Medical Physicists to Improve Quality and Safety in Medical Practices”**

## **Regional Training Course on Good Practices in Diagnostic Radiology**

**Hosted by**

The Government of Guatemala

**through the**

Liga Nacional contra el Cancer

**3-7 March 2025**

**Ref. No.: RTC-RLA6091- EVT2402303**

### **Information Sheet**

#### **Purpose**

The purpose of the event is to train the participants on best practices and strategies to optimize diagnostic procedures focusing on computed tomography, mammography, and fluoroscopy.

#### **Working Language**

The working language of the event will be Spanish.

# Deadline for Nominations

Nominations received after 30 December 2024 will not be considered.

## Project Background

In recent years, significant technological advancements have been made in radiation medicine applications across Latin America and the Caribbean. Consequently, the education and training of medical physicists (MPs) have become crucial in these practices. This project aims to enhance the capacity building of MPs to improve quality and safety in medical practices by implementing international recommendations and increasing the number of qualified MPs. Training courses will be held to enable MPs to implement standardized quality assurance and quality control programs, standardized dose assessment, monitoring and dose management, optimization programs, individual clinical dosimetry methods for targeted radionuclide treatment, and the integration of artificial intelligence (AI) in medical imaging. The expected outcome of the project is the improvement of knowledge and skills of MPs, leading to enhanced quality and safety in medical imaging departments. The participating hospitals, which have accomplished the quality requirements, will form a network of reference centres to provide technical support to other hospitals, helping them continuously improve quality and safety and ensuring the sustainability of the project.

## Expected Outputs

By the end of the course, participants should:

1. Learn the equipment tools for optimization of procedures;
2. Understand the optimization process in everyday clinical practice;
3. Investigate the importance of QC in optimization;
4. Explore how processing algorithms and artificial intelligence can support the optimization process; and
5. Learn how DRL can help the optimization process.

## Scope and Nature

The Regional Training Course on Good Practices in Diagnostic Radiology is designed to train clinical medical physicists in the region on the general aspects (the course will consist of theoretical sessions, covering a total of 40 hours over five days).

The main topics of the course include:

1. Quality control: Instrumentation and methodologies
2. Optimization process in diagnostic radiology practices
3. Equipment optimization tools
4. Processing techniques in imaging
5. Quality image metrics and Quantitative image analysis
6. Optimization of protocols: Effect on patient dose and image quality
7. AI in the optimization process
8. DRL as an optimization tool

## **Participation**

As agreed in the Mid-Term Coordination Meeting, the course is open to all participating Member States of the project RLA6091 “Enhancing Capacity Building of Medical Physicists to Improve Quality and Safety in Medical Practices”: Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

Each country is invited to nominate **one (1)** participant.

The participants should meet the qualification and experience required in the section below.

## **Participants’ Qualifications and Experience**

Medical physicists who work or provide services in the [nuclear][radiation][diagnostic] imaging department are eligible for nomination by their respective countries. The nomination form should clearly and thoroughly describe the qualifications, relevant experience, and current clinical duties of the participants. Incomplete or unclear nominations will not be considered.

Participants should be fluent in Spanish with the corresponding language skill evidence provided in their applications.

This training course is not intended for participants working for regulatory authorities or as inspectors.

# Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below
2. On the InTouch + platform, the candidate must:
  - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
  - b. Download and complete the Designation of Beneficiary and Emergency Contact Form, and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
  - c. Search for the relevant technical cooperation event (**EVT2402303**) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

**NOTE:** Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to [InTouchPlus.Contact-Point@iaea.org](mailto:InTouchPlus.Contact-Point@iaea.org).

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

**NOTE:** A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

## **Administrative and Financial Arrangements**

Nominating authorities will be informed in due course of the names of the candidates who have been selected and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency AX Travel Management, or a travel allowance, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

### **Note for female participants**

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

### **Disclaimer of Liability**

The organizers of the event 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 approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

## IAEA Contacts

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