



REPROLAM WEBINAR - BIOLOGICAL DOSIMETRY

WEBINAR: INDIVIDUAL RADIOSENSITIVITY: PREDICTIVE ASSAYS AND THEIR APPLICABILITY IN CASES OF EXPOSURE TO IONIZING RADIATION

DATE: OCTOBER 17, 2023,

TIME: 10:00 AM ARGENTINA/URUGUAY TIME (GMT-3)

DOCENTES



LIC. MARINA DI GIORGIO

FIRST VICE PRESIDENT,
NUCLEAR REGULATORY
AUTHORITY - ARGENTINA



DR. WILNER MARTÍNEZ LÓPEZ

"DEPARTMENT OF
GENETICS AND
BIODOSIMETRY SERVICE,
IIBCE - URUGUAY

Objective:

To promote knowledge about the primary biological mechanisms contributing to hypersensitivity to ionizing radiation and the applicability of predictive assays for assessing individual radiosensitivity in the field of Radiological Protection.

Topics:

- Introductory Concepts of Individual Radiosensitivity.
- Key Cellular Pathways Determining Radiation Sensitivity.
- Predictive Assays Based on Cellular Response to Damage and Oxidative Stress.
- Techniques Developed for Assessing Individual Radiosensitivity.
- Radioprotective Agents: Potential Uses in Accidental, Occupational, and Clinical Exposures.
- Interpreting Results for Decision-Making in the Occupational Radiological Protection Context.

REGISTRATION:

[HTTPS://FORMS.GLE/OQ5GEQPIFI3XCDOI7](https://forms.gle/OQ5GEQPIFI3XCDOI7)



REPROLAM - DIRECTORIES

REGIONAL DIRECTORY OF LATIN AMERICAN INTERNAL DOSIMETRY LABORATORIES (LDI-REPROLAM)

A regional survey was conducted, promoted by REPROLAM with the support of the IAEA, under Project RLA9088, aimed at strengthening the regional capacities of end users and technical support organizations in the field of radiological protection, as well as emergency preparedness and response.

The purpose of this survey was to assess the current situation regarding the monitoring of internal contamination of workers in the region, gather information on aspects related to technical infrastructure and human resources dedicated to Internal Dosimetry (direct and indirect), and identify strengths, main gaps, and issues related to the monitoring of internal contamination of workers in Latin America and the Caribbean.

Upon the completion of the collected information, the "Regional Directory of Internal Dosimetry Laboratories" was created to showcase regional capabilities.

The objective is for the Directory to contain all the information about the characteristics and capacities of External Dosimetry Laboratories or Services used in the Latin American region. Having this Regional Directory will facilitate cooperation and exchange among the laboratories in the region, as well as the organization of intercomparisons and other required technical activities.



GENERAL INFORMATION AND TYPES OF ASSESSMENTS.

- Registry of Centers Providing Internal Dosimetry Services Registered in the LDI-REPROLAM Directory.
- Types of internal dose assessments conducted by each Internal Dosimetry Laboratory and the number of workers monitored annually.
- IAEA support in Internal Dosimetry and participation in projects related to this topic in the last 10 years.
- Basis of the radiological protection system used.

LABORATORIES – DIRECT MEASUREMENTS.

- Characteristics of the facilities where direct measurements are conducted and details about shielding, if applicable.
- Types of routine measurements performed with direct measurements.
- Characteristics of detectors and calibration procedures in laboratories conducting direct measurements.
- Detection limits, measurement times, calculation methodologies, and codes used in laboratories conducting direct measurements.
- Participation of laboratories in direct measurement intercomparison exercises.

LABORATORIES – INDIRECT MEASUREMENTS.

- Types of routine measurements performed with indirect measurements.
- Participation of laboratories in intercomparison exercises for indirect measurements.

DOSAGE ASSESSMENT. TRAINING. QUALITY ASSURANCE PROGRAM.

- Internal Dosimetry Laboratory conducting dose assessments and biokinetic models.
- Software for dose calculations and dose coefficients used by the Internal Dosimetry Laboratories registered in the LDI-REPROLAM Directory.
- Status of Training and Education (T&E) in the field of internal dosimetry in the Internal Dosimetry Laboratories registered in the LDI-REPROLAM Directory.
- Implementation of the Quality Assurance Program (QAP) in the Internal Dosimetry Laboratories registered in the LDI-REPROLAM Directory.

To view the full directory, please visit: http://www.reprolam.com/?page_id=4614

EURADOS YOUNG SCIENTIST AWARD AND GRANT 2023



EURADOS has established in 2014 the rules and requirements for the selection of young scientists to receive Awards that will be offered annually during the EURADOS General Assembly. The research work carried out within EURADOS working groups will be the frame of the Award to be assigned every year. Priority will be given to proposals directly linked with activities mentioned in the EURADOS Strategic Research Agenda (SRA). The EURADOS Award will consist of 500 € (amount to be confirmed annually by the EURADOS Council). It is expected that the final outcome of the research work has resulted in a peer reviewed publication and/or a presentation in international conference or workshop. The award includes an official certificate signed by the EURADOS Executive Board and an invitation to the next EURADOS Annual Meeting.

The application deadline is 14 October 2023.

The objective of the Grant is to support the exchange of young scientists between Voting Members. The research work has to be carried out within the activities of the EURADOS working groups. Priority will be given to proposals directly linked with activities mentioned in the EURADOS Strategic Research Agenda (SRA).

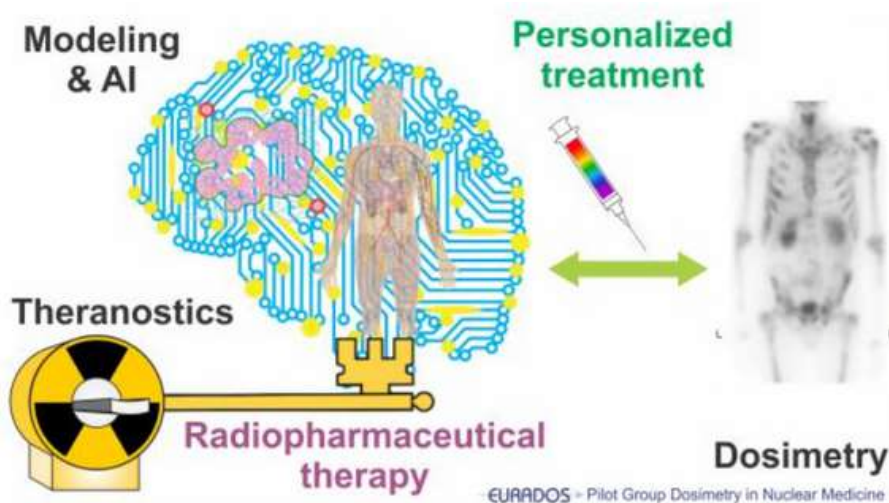
The EURADOS 2023 Grant will consist of 4000 €. It includes an official certificate signed by the EURADOS Executive board and an invitation to the next EURADOS Annual Meeting.

<https://eurados.sckcen.be/news-overview/eurados-young-scientist-award-and-grant-2023>



22ND EURADOS WEBINAR: DOSIMETRY FOR RADIOPHARMACEUTICALS IN THERAPY AND AI APPLICATIONS

OCTOBER 20TH, 2023 · 15:00 CEST



Nuclear medicine is a specialized discipline of medicine administering radionuclides and compounds to diagnose and treat various diseases and cancers. There are about 35 million patients worldwide, of which 9 million in Europe, receiving nuclear medical procedures every year. Advanced molecular imaging technologies, such as PET and SPECT, together with CT and MRI are able to detect tumors and diseases online for further treatment. In addition to the benefit of the treatments, the radiation dose is a fundamental quantity for radiation protection, risk assessment and treatment planning to the patients, medical staff and the public, and the environment. EURADOS has many years of experience about the radiation protection in medicine; and EURADOS has embarked on several projects with other nuclear medicine associations since its establishment in the 1980s'.

As a result of the EURADOS strategic research agenda 2020, the nuclear medicine dosimetry was identified and put as a solid and independent challenge parallel to the radiation therapy and medical imaging dosimetry for the next decades. Concurrently, radiopharmaceutical therapy in nuclear medicine is undergoing a renaissance and the EC Directive 2013/59/Euratom states in article 56 that exposures of target volumes in nuclear medicine treatments shall be individually planned.

The new established EURADOS pilot group aims to develop patient dosimetry methods and monitoring radiation exposure and engage in radiation protection in the nuclear medicine research field together with international and European associations. Based on the EURADOS strengths in radiation dosimetry, this group invited four esteemed professors in the medical physician, medical physical and computer scientific field to guide us in the direction of dosimetry of radiopharmaceutical therapy and application of artificial intelligence in the quickly developed nuclear medicine field.

AGENDA



WEIBO LI: INTRODUCTION OF THE PILOT GROUP AND THE WEBINAR



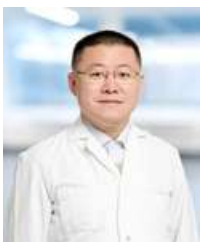
WOLFGANG WEBER: DOSIMETRY – A VIEW FROM A PHYSICIAN



GEORGE SGOUROS: THE RATIONALE FOR DOSIMETRY IN
RADIOPHARMACEUTICAL THERAPY



HABIB ZAIDI: THE PROMISE OF AI IN NUCLEAR MEDICINE IMAGING



KUANGYU SHI: AI FOR DOSIMETRY-GUIDED PERSONALIZED
RADIOPHARMACEUTICAL THERAPY

For more information: <https://eurados.sckcen.be/news-overview/22nd-eurados-webinar-dosimetry-radiopharmaceuticals-therapy-and-ai-applications>



Red de Optimización de la Protección Radiológica
Ocupacional en Latinoamérica y el Caribe

NEWSLETTER

NUMBER 9, OCTOBER 2023.

The Network for the Optimization of Occupational Radiological Protection in Latin America and the Caribbean (REPROLAM) is a scientific and cultural society, non-profit, political, religious or racial, of unlimited duration, whose objective is to promote the optimization of occupational radiological protection. REPROLAM seeks to expand academic and scientific cooperation among its members, with the aim of promoting adequate radiological protection for workers.

Visit our website for more information: <http://www.reprolam.com/>

How to contact: reprolam2020@gmail.com