

## Programme



### Conference "Proteção Radiológica na Saúde 2017" September 27-29, 2017 - Lisbon, Portugal

Wednesday, Sep 27		
08:00-08:45	Registration	
08:45-09:15	Opening and Welcome (Auditorium)	
09:15-10:55	PLENARY 1 – JUSTIFICATION of medical exposures (Auditorium)	
10:55-11:15	Coffee break / Poster Session	
11:15-12:45	Paediatric Exposures (Room 2.1.)	Nuclear Medicine and Molecular Imaging 1 (Auditorium)
12:45-13:15	Tribute to the late Professor J.J. Pedroso de Lima (Auditorium)	
13:15-14:00	Lunch break	
14:00-15:20	Sponsored Presentations (Auditorium)	Nuclear Medicine and Molecular Imaging 2 (Room 2.1.)
	Interventional image guided procedures (Auditorium)	
15:20-15:45	Coffee break / Poster Session	
15:45 -17:00	Break-out session 1 - Education, training, qualification and certification in radiological protection (Auditorium)	
17:00-18:30	Panel 1 - Bonn Call for Action - where do we stand in Portugal? (Auditorium)	

Thursday, Sep 28			
08:30-09:15	Refresher course 1 Individual monitoring (Room 2.1.)	Refresher course 2 Internal Dosimetry (Room 1.1.)	Refresher course 3 Patient dose reporting, recording and tracking (Room 2.2.)
	PLENARY 2 – OPTIMIZATION (Auditorium)		
09:15-10:45	Coffee break / Poster Session		
10:45-11:15	Coffee break / Poster Session		
11:15-12:45	Radon and Public Health (Room 2.2.)	Optimization 1 (Auditorium)	
12:45-14:00	Lunch break		
14:00-15:30	Break-out session 2 - Implementation of DRLs - examples of their use and usefulness (Auditorium)		
15:30-15:50	Coffee break / Poster Session		
15:50-17:10	External Radiotherapy & Brachytherapy (Auditorium)	Computational applications in radiological protection and dosimetry (Room 2.1.)	
	Panel 2 - Directive 2013/59/EURATOM contents, impact and consequences - where do we stand in Portugal? (Auditorium)		

Friday, Sep 29			
08:30-09:15	Refresher course 4 Micro- and Nanodosimetry (Room 2.3.)	Refresher course 5 Communicating radiation risks in medical setting (Room 2.1.)	Refresher course 6 Dosimetry audits in radiotherapy (Room 1.1.)
	Diagnostic Radiology (Room 2.1.)		Radiobiology and low doses of ionizing radiation (Auditorium)
09:15-10:45	Coffee break / Poster Session		
10:45-11:15	Coffee break / Poster Session		
11:15-12:45	Optimization 2 (Room 2.1.)	Nuclear Medicine and Molecular Imaging 3 (Auditorium)	
12:45-14:00	Lunch break		
14:00-15:30	Panel 3 - Radiation Safety Culture, accidents and near misses in medical uses of radiation (Auditorium)		
15:30-16:30	Radiation Safety Culture (Auditorium)	Methodologies and systems of dose assessment (patient and personnel) (Room 2.1.)	
16:30-17:00	Closing Session (Auditorium)		

**CONFERENCE DINNER – Thursday, Sep 28 (only for Regular 3 days fee)**

# Conference "Proteção Radiológica na Saúde 2017"

Wednesday, September 27, 2017

08:00-08:45	Registration	
08:45-09:15	<b>Opening and Welcome</b> <b>Chair: Pedro Vaz</b> <i>Invited guests: Adalberto Campos Fernandes (Portuguese Minister of Health; tbc), Luís Castro (Vice-President of IST), Manuel Heitor (Portuguese Minister of Science, Technology and Higher Education)</i>	
09:15-10:55	<b>PLENARY – JUSTIFICATION of medical exposures</b> <b>Chairs: Maria Perez and José Venâncio</b>	
	<b>Justification of medical exposures: first do not net harm</b> <i>Maria Perez (20 min)</i>	
	<b>Justification of medical exposures: a clinical perspective</b> <i>José Venâncio (20 min)</i>	
	<b>Justification of individual medical exposures – a regulators views on the process and responsibilities</b> <i>Steve Ebdon-Jackson (20 min)</i>	
	<b>Justification of health protection measures in a nuclear emergency</b> <i>Wolfgang Weiss (20 min)</i>	
	<b>Justification of Precision Medicine</b> <i>José Rueff (20 min)</i>	
10:55-11:15	Coffee break / Poster Session	
11:15-12:45	<b>Paediatric Exposures</b> <b>Chairs: Carla Conceição, João Casimiro</b>	<b>Nuclear Medicine and Molecular Imaging 1</b> <b>Chairs: Durval Costa, João Pedroso de Lima</b>
	<b>ALARA - a concept to maintain or to abandon? Recent controversies</b> <i>Carla Conceição (20 min)</i>	<b>Radionuclide Therapy Dosimetry Under The New EU BSS</b> <i>João Santos (20 min)</i>
	<b>Cancer incidence after low dose radiation exposure: the Portuguese tinea capitis X-irradiated cohort</b> <i>Paula Boaventura (20 min)</i>	<b>Acridine-Orange derivates as DNA-targeted radiopharmaceuticals for Auger therapy</b> <i>Ana Belchior (20 min)</i>
	<b>Non-Accidental Injury (NAI) Paediatric Radiography – an optimisation study</b> <i>Ana Pascoal (20 min)</i>	<b>Patient-personalized Voxel-based Dosimetry Planning for Liver Tumor Radioembolization</b> <i>Paulo Ferreira (20 min)</i>
	<b>Clinical Diagnostic Reference Levels in Pediatric CT</b> <i>João Casimiro (20 min)</i>	<b>Deposited energies distribution comparison between <sup>125</sup>I, <sup>99m</sup>Tc, <sup>161</sup>Tb, <sup>111</sup>In and <sup>177</sup>Lu at micro and nano-scale</b> <i>Salvatore di Maria (20 min)</i>
	<b>Tribute to the late Professor J.J. Pedroso de Lima</b> <i>Fernando Godinho</i>	
12:45-13:15		
13:15-14:00	Lunch break	
14:00-15:20	<b>Sponsored Presentations</b>	<b>Nuclear Medicine and Molecular Imaging 2</b> <b>Chairs: Pedro Almeida, Lurdes Gano</b>
	<b>Bayer: Radiometrics</b> <i>(20 min)</i>	<sup>131</sup> I therapy in Thyroid Cancer and Benign Thyroid Diseases: Personal Dose Equivalent H <sub>p</sub> (10) Assessment in Patient's Close Family Members <i>Maria João Carapinha (20 min)</i>
	<b>Philips: Take control of Dose Management across your organization: The current situation on Dose Management</b> <i>Rodolfo del Moral (20 min)</i>	<b>Relationship between cervical/abdomino-pelvic activity and effective dose at 1 meter (ED1M) in patients with differentiated thyroid carcinoma submitted to Iodine-131 therapy</b> <i>Manuel Rio Carvalho (20 min)</i>
	<b>Interventional image guided procedures</b> <b>Chairs: Nuno Teixeira, Luis Pedro Ribeiro</b>	
	<b>Occupational radiation exposure from C-Arm Fluoroscopy during hip surgeries</b> <i>Oksana Lesyuk (20 min)</i>	<b>Assessment of Iodine-131 in the Urine of the Patient's Family Members after Differentiated Thyroid Carcinoma Therapy</b> <i>Maria João Carapinha (20 min)</i>
	<b>Feasibility for Implantation of a Patient Dosage Management System for Patients Submitted to Procedures in Interventional Cardiology</b> <i>Luciana Rodrigues (20 min)</i>	<b>Validation and Functional Characterization of Biomarkers for Cancer Theranostics with <sup>64</sup>CuCl<sub>2</sub></b> <i>Joana Guerreiro (20 min)</i>
15:20-15:45	Coffee break / Poster Session	
15:45 -17:00	<b>Break-out session 1 - Education, training, qualification and certification in radiological protection</b> <b>Chairs: Graciano Paulo, Rita Figueira</b>	
	<b>MEDRAPET: An Overview of a European Commission DG ENER Project</b> <i>Graciano Paulo (15 min)</i>	
	<b>Preliminary results from the 2016 "Inquérito Nacional sobre Educação e Formação em Proteção Radiológica na Saúde"</b> <i>Rita Figueira (15 min)</i>	
	<b>Radiation Protection in the Healthcare Field in Spain. A General Outlook</b> <i>Lorenzo Carretero (15 min)</i>	
	<b>Open discussion (30 min)</b>	
17:00-18:30	<b>Panel 1 - Bonn Call for Action - where do we stand in Portugal?</b> <b>Chair: Wolfgang Weiss, Pedro Vaz</b> <b>Panelists: Jenia Vassileva, Maria Perez, José Venâncio, Rita Figueira, Graciano Paulo, Pedro Vaz</b>	

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Thursday, September 28, 2017

08:30-09:15	Refresher course 1 Individual monitoring <i>João Schiappa</i>	Refresher course 2 Internal Dosimetry <i>Pedro Teles</i>	Refresher course 3 Patient dose reporting, recording and tracking <i>Jenia Vassileva</i>
09:15-10:45	PLENARY – OPTIMIZATION Chairs: Chris Clement, Jenia Vassileva		
	ICRP Recommendations on Radiological Protection in Medicine: Recent Achievements and Priorities for the 2017-2021 Term <i>Chris Clement (20 min)</i>		
	Practical steps for optimizing diagnostic radiological procedures <i>Jenia Vassileva (20 min)</i>		
	Optimisation of protection in medical imaging according to the BSS Directive 2013/59/Euratom: DRLs, MPE, team work <i>Georgi Simeonov (20 min)</i>		
	Optimization in medical imaging. Practical examples in Interventional Radiology <i>Eliseo Vaño (20 min)</i>		
10:45-11:15	Coffee break / Poster Session		
11:15-12:45	Radon and Health Public Chairs: Mário Reis, Sandra Soares	Optimization 1 Chairs: Ana Pascoal, Hugo Trindade	
	The exposure to radon gas – causes and effects in human health <i>Maria de Lurdes Dinis (30 min)</i>	Dose values in interventional computed tomography procedures: a multicenter study <i>Joana Santos (20 min)</i>	
	Geogenic radon in Portugal: summary and contribution for the conception of risk maps <i>Alcides Pereira (30 min)</i>	A Portuguese approach regarding dose assessment and image quality in intraoral radiology <i>Guilherme Coutinho (20 min)</i>	
	Temporal variability of gamma radiation at the Eastern North Atlantic (ENA) site (Azores) <i>Susana Barbosa (15 min)</i>	Image quality in digital mammography- evaluation of protocols and guides for routine quality control <i>Hugo Trindade (20 min)</i>	
	Radon Concentration Assessment in Water Sources of Public Drinking of Covilhã’s County, Portugal <i>Margarida Inácio (15 min)</i>		
12:45-14:00	Lunch break		
14:00-15:30	Break-out session 2 - Implementation of DRLs - examples of their use and usefulness Chairs: Eliseo Vaño, Jenia Vassileva, Joana Santos		
	The ICRP recommendation on establishing and using DRLs <i>Eliseo Vaño (15 min)</i>		
	Experiences of IAEA Member States with setting and using DRLs <i>Jenia Vassileva (15 min)</i>		
	Spanish experience with DRLs and optimization in interventional cardiology and radiology <i>Eliseo Vaño (15 min)</i>		
	Portuguese DRLs approaches. Promoting a new national survey <i>Joana Santos (15 min)</i>		
	The impact of optimization program on DRLs <i>Graciano Paulo (15 min)</i>		
	Open discussion (15 min)		
15:30-15:50	Coffee break / Poster Session		
15:50-17:10	External Radiotherapy & Brachytherapy Chairs: Sandra Vieira, Maria do Carmo Lopes	Computational applications in radiological protection and dosimetry Chairs: Ana Belchior, Salvatore di Maria	
	Target Definition: the Weakest Link in (Single dose) RT? <i>Sandra Vieira (20 min)</i>	Dose conversion factors for the kidney of paediatric patients from Monte Carlo calculations - a new paradigm <i>Pedro Teles (20 min)</i>	
	Iodine-125 Brachytherapy in chroidal melanoma <i>Paulo César Simões (20 min)</i>	Clinical issues arising from patients’ organ dose and risk assessment in interventional cardiology procedures <i>Ana Belchior (20 min)</i>	
	The HESE Radiotherapy Methods for Pretreatment Patient Quality Assurance (QA) using Intensity Modulated Techniques <i>Carlos Marcelino (20 min)</i>	Organ Dose Estimates in Thorax CT through CAD: Voxel Phantom Organ Matching With Individual Patient Anatomy <i>Jorge Borbinha (20 min)</i>	
	From Image-Guided to Adaptive Radiotherapy in Helical Tomotherapy <i>Josefina Mateus (20 min)</i>	Monte Carlo evaluation at a sub-cellular scale of targeted $\alpha$ -particle therapy <i>Francisco Liberal (20 min)</i>	
17:10-18:30	Panel 2 - Directive 2013/59/EURATOM contents, impact and consequences - where do we stand in Portugal? Chair: Pedro Rosário, João Oliveira Martins Panelists: Georgi Simeonov, Steve Ebdon-Jackson, Rita Figueira, Anabela Januário, Graciano Paulo, Lucília Salgado		
	Overview of the current status of transposition of the BSS Directive in Member States <i>Georgy Simeonov (10 min)</i>		
	The transposition in Portugal – a status report <i>Members of the Interministerial Working Group on the BSS Directive (20 min)</i>		
	Commentary by panelists (5 min each)		
	Open discussion (15 min)		

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Friday, September 29, 2017

08:30-09:15	Refresher course 4 Micro- and Nanodosimetry Ana Belchior	Refresher course 5 Communicating radiation risks in medical setting Maria Perez, Steve Ebdon-Jackson	Refresher course 6 Dosimetry audits in radiotherapy Maria do Carmo Lopes
09:15-10:45	Diagnostic Radiology Chairs: José Afonso, Joana Santos		Radiobiology and low doses of ionizing radiation Chairs: Sebastião Rodrigues, Octávia Monteiro Gil
	Dose and reconstruction algorithm optimization in simultaneous breast/lung CT imaging Débora Ant3nio (20 min)		Genotoxicity Biomarkers: applications and challenges in Radiobiology Nuno Oliveira (20 min)
	Dosimetric link between Computed Dose Tomography Dose index (CTDI) and Cone Beam CT organ doses: case study for thorax scan protocol Mariana Baptista (20 min)		Low doses of ionizing radiation induce angiogenesis: benefits, concerns and challenges to health and science Susana Constantino (20 min)
	CT Radiation Dose Optimization – Clinical Practice Approach Filipa Borlinhas (20 min)		Radiopharmacy – Radiobiological concerns regarding radiopharmaceuticals applications Lurdes Gano (20 min)
			Low doses of ionizing radiation induce angiogenesis: therapeutic implications Filipa Marques (10 min)
			Genetic damage induced in exfoliated buccal cells after orthopantomography Octávia Monteiro Gil (10 min)
			Low-dose ionizing radiation induces therapeutic neovascularization in a pre-clinical model of hindlimb ischemia Paula de Oliveira (10 min)
10:45-11:15	Coffee break / Poster Session		
11:15-12:45	Optimization 2 Chairs: Paula Madeira, Mariana Baptista		Nuclear Medicine and Molecular Imaging 3 Chairs: João Santos, Pedro Teles
	Influence of the axial scan orientation angle and gantry tilt in Head CT dose exposure Rui Pereira (20 min)		Online monitoring of Nuclear Medicine services Maria do Carmo Baptista (20 min)
	Effective dose to patients from PET/CT procedures Sara Russo (20 min)		Skin Contamination Survey on the Daily Practice of Nuclear Medicine Staff N3lio Fernandes (20 min)
	Dose and Image Quality in Computed Tomography: an overview of Portuguese Data Ana Margarida Coutinho (20 min)		Minimisation of acquisition time in a TOF PET/CT scanner without compromising image quality Joana Oliveira (20 min)
		Radionuclides in Waste Discharges from Health Establishments N3lia Soares (20 min)	
12:45-14:00	Lunch break		
14:00-15:30	Panel 3 - Radiation Safety Culture, accidents and near misses in medical uses of radiation Chairs: Steve Ebdon-Jackson, Georgi Simeonov Panelists: Wolfgang Weiss, Jenia Vassileva, Lu3s Neves, Maria do Carmo Lopes, Ana Pascoal, Jorge Isidoro		
	Managing Radiation Incidents in Radiology in a Busy Hospital Ana Pascoal (15 min)		
15:30-16:30	Radiation Safety Culture Chairs: Paula Sim3ozinho, Maria Carmen de Sousa		Methodologies and systems of dose assessment (patient and personnel) Chairs: Luis Peralta, Yuriy Romanets
	Working with ionization radiation: what do you know about it? Risk perception when working with radiation Ana Sofia Pinheiro (15 min)		Metrological comparison of two thermoluminescent dosimeters (TLD) types using a linear accelerator and a new methodology for beam heterogeneity correction in the clinical dose range Andreia Oliveira (20 min)
	Preliminary Results of a Multidisciplinary Approach for Clinical Auditing in Radiology Departments – The Primary Care Experience in the Algarve Margarida Faria (15 min)		Dosimetry of kV Cone Beam CT with scintillation dosimeter Lu3s Peralta (20 min)
	Radiation Protection and Safety at Portuguese Institute of Oncology of Coimbra: 15 years of experience Maria Carmen de Sousa (15 min)		Development of home-made primary standards for ionizing radiation: a cavity chamber for the measurement of air-kerma Margarida Caldeira (20 min)
	Hospital Survey on Patient Safety Culture – The Radiology Department Kevin Azevedo (15 min)		
16:30-17:00	Closing Session		