Challenges of Radiological Protection in Research and Society referring to Medical Field

October 3/2024

Milan, Italy

Sala Napoleonica/Via Sant'Antonio, 12

Università di Milano
The International System of Radiological Protection is developed by ICRP based on the understanding of the science, the effects of radiation exposures, expert experience, and on value judgements. ICRP C3 addresses protection of patients when ionising radiation is used in medical diagnosis, therapy.

In the perspective of the evolution of the System, this event is a special moment of direct contact with ICRP C3 for the interested Italian organizations and associations, with the opportunity for the professionals to elaborate more about the addressing in science and society referring to the medical field. Specifically, the workshop focuses on areas of practice and research to support radiological protection, considering the evolution of the System and aiming to complement research priorities promoted also by other international organisations.

Program

09:00 Opening and welcome address
   Kimberly Applegate, Marie Claire Cantone

**SESSION 1 / Co-Chairs: Applegate Kimberly (ICRP), Marie Claire Cantone (UNIMI)**

09:10 Current status of revision of ICRP System
   Kimberly Applegate (ICRP)

09:25 ISS activities on Radiation and Health
   Elena Solfaroli Camillocci (ISS)

09:40 The evolving role of the medical physicist in the field of Radiological Protection
   Lorenzo Nicola Mazzoni (AIFM)

09:55 Lights & Shadows of ICRP’s recommendation on medical exposure in Italy
   Gloria Addeo (SNR)

10:10-10:30 Open discussion / Co-Chairs: Mika Kortesniemi (ICRP), Fabrizio Gobba (AIRM)

10:30-10:50 Coffee break

**SESSION 2 / Co-Chairs: Ivan Williams (ICRP), Marco Krengli (AIRO)**

10:50 TG 116: Radiation protection issues for imaging in radiotherapy
   Colin Martin (ICRP)

11:05 Radiological basis of hypofractionation (SBRT/Radiosurgery) and impact on patient Radiation Protection
   Monica Mangoni (AIRB)

11:20 Adaptive Radiotherapy in patient Radiation Protection
   Michela Buglione (AIRO)

11:35-11:50 Open discussion / Co-Chairs: Andrea Magistrelli (ICRP), Marta Scorsetti (AIRB)

13:15-14:30 Lunch
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12:55-13:15 Open discussion / Co-Chairs: John Damilakis (ICRP), Ivan Veronese (UNIMI)

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**SESSION 3**

Co-Chairs:
Colin Martin (ICRP), Carlo Cavedon (AIFM)

TG 117: Radiological protection for PET imaging
Josep Climent (ICRP)

11:55  Old problems, new problems and opportunities in Medical Field of Radiation Protection
Paolo Ferrari (AIRP)

12:10  Fitness-to-work and occupational exposure to ionizing radiation: criteria for the evaluation in workers with neoplastic diseases
Giuseppe Taino (UniPV, AIRM)

12:25  TG 124, Application of the Principle of Justification
Sergio Salerno (UNIPA)

12:55-13:15 Open discussion / Co-Chairs: John Damilakis (ICRP), Ivan Veronese (UNIMI)

13:15-14:30 Lunch

**SESSION 4**

Co-Chairs:
Makoto Hosono (ICRP), Mariagabriella Pugliese (AIRP)

14:30 Presentation on C3 WP on AI in imaging
J. Damilakis (ICRP)

14:40 AI can help optimize CT scan X-ray radiation dose
Sandra Doria (CNR-ICCOM)

14:50 Research updates on radiobiology and carcinogenic risk assessment: potential application of gene expression profiles to predict biological effects of low dose ionising radiation exposure
Vincenzo Camisa (IRCCS Ospedale Pediatrico Bambino Gesù)

15:05-15:25 Open discussion / Co-Chairs: David Sutton (ICRP), Marie Claire Cantone (UNIMI)

15:25-15:45 Coffee break

**SESSION 5**

Co-Chairs: Jin ChulPaeng (ICRP), Francesco Bochicchio (ISS)

15:45 WP on New Radiotherapies
Aurelie Isambert (ICRP)

16:00 TG 126: RP for human biomedical research
Isabelle T-Chef (ICRP)

16:15 TG 36: dose coefficients for radiopharmaceuticals
Makoto Hosono (ICRP)

16:30 TG 113: dose coefficients in radiology
David Sutton (ICRP)

16:45 TG 108: Optimisation in digital radiology
Mika Kortesniemi (ICRP)

17:00-17:20 Open discussion / Co-Chairs: M.Mahesh (ICRP), Gabriele Gasparini (SNR)

17:20 Concluding remarks
Kimberly Applegate, Francesco Bochicchio, Marie Claire Cantone
SCIENTIFIC COMMITTEE
Kimberly Applegate
(ICRP Chair C3)
Colin Martin
(ICRP Vice Chair C3)
David Sutton
(ICRP Secretary C3)

Marie Claire Cantone
(UNIMI and ICRP C3)
Francesco Bochicchio
(ISS Director of Radiation Protection and Computational Physics)

ORGANIZING COMMITTEE
Aldo Bruno Gianni
(UNIMI Dean Medical Faculty)
Ivan Veronese
(UNIMI)

Olga German
(ICRP Deputy Scientific Secretary)
Kelsey Cloutier
(ICRP Head of Stakeholder Engagement and Communications)

GENERAL INFORMATION
Participation in the conference requires the pre-registration, and the cost is 40 Euro which includes two coffee breaks and lunch. Booking and payment must be by 10 September using the registration form.

LINK:
https://forms.gle/ydog4EeHaeznUBU36