

IONIZING RADIATION AND FIGHT AGAINST CANCER: WHAT IS THE CONTRIBUTION OF RESEARCH?

Maison Irène et Frédéric Joliot-Curie
100, rue du Trône, Brussels

Thursday, February 2, 2023
9:30 – 17:00

Techniques using IR are essential in the fight against cancer (imaging, Radiotherapy, radiopharmaceuticals...) and have shown, through the significant increase in life expectancy of treated patients, their effectiveness in both diagnosis and treatment. The rapid evolution of these techniques in connection with technological progress raises the question of the safety of patients and caregivers as well as the occurrence of long-term effects. In this context, it is of the utmost importance to carry out R&D actions to improve safety, evaluate risks (benefit/risk balance), anticipate, move towards personalized medicine and take advantage of AI techniques.

A few days before World Cancer Day, IRSN and its partners INSERM, CNRS and CEA at the "Maison Irène and Frederic Joliot Curie" wanted to bring together the organizations and institutions involved in these research activities in France and Europe to share and discuss the issues at stake and to learn more about current and future initiatives at both levels.

Agenda

9:30 - Welcome of participants

10:00 - Opening address

Dr. Jean-Christophe Niel, Director General, Institut de radioprotection et de sûreté nucléaire (IRSN)

FRENCH STRATEGY AND ROADMAP

10:10 - Presentation of the French 10-year strategy against cancer with a focus on research activities

Marianne Duperray, Director of Recommendations and Medicines – Institut national du cancer (INCA)

10:25 - What progress and what perspectives in the field of imaging (particularly that using IR) used in the diagnosis of cancer

Pr. Hubert Ducou Le Pointe, Hôpital Armand Trousseau - APHP, Société Française de Radiologie (SFR)

10:40 - Roadmap of the national network in the field of pre-clinical research in radiotherapy (RadioTransNet)

Pr. Philippe Maingon, Hôpital La Pitié Salpêtrière - APHP, Société Française de radiothérapie Oncologique (SFRO)

10:55 - Discussion with the panel

Facilitator : Prof. **Robert Barouki**, Université de Paris, Hôpital Necker Enfants Malades, President of the IRSN Scientific Council

11:10 - Coffee Break

STATE-OF-THE-ART RESEARCH

11:25 – Nuclear and health at Inserm

François Paris, Director of research, Institut national de la santé et de la recherche médicale (INSERM)

11:40 - The challenges of new nuclear techniques in the medical field

Denis Dauvergne, Director of research, Centre national de la recherche scientifique (CNRS - IN2P3)

11:55 - Therapeutic innovations applied to tumor irradiation: combined treatment and personalized approach

Pr. Eric Deutsch, Institut Gustave Roussy, Société Française de radiothérapie Oncologique (SFRO)

12:10 - Precision imaging & theranostics, the challenges of nuclear medicine

Pr. Vincent Lebon, Commissariat à l'énergie atomique et aux énergies alternatives (CEA) - Université Paris-Saclay

EUROPEAN AND INTERNATIONAL ACTIONS

14:00 - The EU Mission on Cancer

Jan Van de Loo, Scientific lead for the mission on cancer, European Commission, DG-RTD

14:15 - SAMIRA action plan (strategic program for applications using ionizing radiation for medical purposes)

Georgi Simeonov, European Commission, DG ENER

14:30 - EU research on radioprotection and medical applications

Dr. Domenico Rossetti di Valdalbero, Deputy Head of Unit EURATOM Research, European Commission, DG RTD

14:45 JRC contribution to medical applications of nuclear science

Margarida Goulart, Head of the Euratom coordination unit of the Joint Research Center (JRC)

15:00- IAEA's Rays of Hope initiative for equitable access to radiological medicine: what is at stake for European research?

Pr. Francesco Giammarile, Technical Officer, International Atomic Energy Agency (IAEA)

12:25 - Limiting adverse events and improving patient quality of life

Marc Benderitter, Institut de Radioprotection et de Sûreté Nucléaire (IRSN)

12:40 - Discussion with the panel

Facilitator : Robert Barouki, Université de Paris, Hôpital Necker Enfants Malades, President of the IRSN Scientific Council

12:55 - LUNCH

15:15 - The Rocc-N-Roll project H2020/EURATOM: an integrated and coordinated european approach for innovation and research in the field of medical applications using ionizing radiations

Pr. Christoph Hoeschen, scientific coordinator

15:30 - EURATOM PIANOFORTE partnership with a focus on medical applications

Dr. Jean-Christophe Gariel, coordinator, Deputy Director General, Institut de radioprotection et de sûreté Nucléaire (IRSN)

15:45 - Discussion with the panel

Facilitator : Hildegard Vandenhove, Institute Director SKC-CEN

16:00 - Coffee Break

16:15 - New radiation technologies and clinical protocols: Anticipating new risks and improving patients' quality of life

Round table chaired by Pr. Marie-France Bellin, President of the board, Institut de radioprotection et de sûreté nucléaire, with Pr. Philippe Maingon (ESTRO), Pr. Christoph HOESCHEN (ESR), Dr. Evgeniya Ostroumova (WHO), Georgi Simeonov (EC - DG ENER), Dr. Francesco Giammarile (IAEA), Michel Koole (EANM).

16:45 - Conclusion

Pr. Marie-France Bellin, President of the board, Institut de radioprotection et de sûreté nucléaire (IRSN)

Practical details



2 February 2023
10:00 CET (doors open at 09:30)



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