

PROGRAMME

Wednesday 17 March

Welcome Jean-Pierre Pouget - Institut de Recherche en Cancérologie de Montpellier, France

Chairs: Bart Cornelissen, Danny Feijtel

14:00 Invited live lecture:
MRT in neuroendocrine tumours: role of radiobiology (20+10 min)
Emmanuel Deshayes, ICM Montpellier, France

Live talks:

14:30 **Target heterogeneity in models for peptide receptor radionuclide therapy influences therapeutic response** (10min + 5min)
Danny Feijtel, Erasmus MC, Netherland

14:45 **Auger electrons for molecular radionuclide therapy: the potential of the radionuclide technetium-99m** (10min + 5min)
Inês Costa, King's College of London, United-Kingdom

15:00 **High-throughput screening and bioinformatics analysis of 2,000¹⁷⁷Lu-PSMA and Radiotherapy + drug combinations** (10min + 5min)
Tiffany Chan, University of Oxford, United-Kingdom

15:15 **α -Particle-induced DNA damage tracks in peripheral blood mononuclear cells of [²²³Ra]RaCl₂-treated prostate cancer patients** (10min + 5min)
Uta Eberlein, University of Wurzburg, Germany

15:30 **Break** (15min)

Chairs: Samantha Terry, Sophie Poty

15:45 Invited live lecture on the therapy of micrometastasis and residual disease:
Choice of the radionuclide and target in the therapy of metastatic and residual disease: needs in radiobiology (20+10 min)
Elif Hindie, CHU Bordeaux, France

16:15 **Presentation and discussion around the future work of the MRT Radiobiology working group** (30min)
Jean-Pierre Pouget, Bart Cornelissen, Julie Nonnekens, Samantha Terry and all attendees

16:45 **Surprising presentation of Montpellier's way of life!** (5min)

16:50 **Teaser for the Thursday's "for and against" debate** (1min)

16:51 **Summary of the day**
Jean-Pierre Pouget, Bart Cornelissen



Thursday 18 March

Chairs: Manuel Bardiès, Marta Cremonesi

10:00 Invited live lecture:
Dose-effect relationship in clinical MRT: a place for radiobiology? (20+10 min)
Mark W. Konijnenberg, Erasmus MC Rotterdam, Netherlands

Chair: Julie Nonnekens

10:30 **Entertaining and passionate debate followed by one final vote of participants (30min)**
This house believes that radiobiology is useful for improving MRT?
For: Frederik Verburg (*Nucl. Med. Physician, Erasmus MC Rotterdam Netherlands*)
Against: Christophe Badie (*Radiobiologist, Public Health England Oxfordshire, United-Kingdom*)

Chairs: Bart Cornelissen, Jean-Pierre Pouget

11:00 **Round tables: What are the immediate clinical questions in MRT? (45min)**
Participants: Emmanuel Deshayes (*ICM, Montpellier, France*), Elif Hindie (*CHU Bordeaux, France*), Katherine Vallis (*University of Oxford, United-Kingdom*), M. Gaze (*University College London Hospitals NHS Foundation Trust, United-Kingdom*)

11:45 **Break (15min)**

Chairs: Bart Cornelissen, Samantha Terry

12:00 **Round table about the future work of the MRT Radiobiology working group (45min)**
Participants: all
Expert view: Kevin Prise
Expert view: Simon Bouffler

12:45 **Lunchbreak**

13:15 **Sponsors' time**

- **Molecubes** - Katarzyna Desrocques
- **MILabs** - Freek Beekman
- **SCK CEN** - Geerts Joris

Chairs: Christophe Badie, Édouard Azzam

14:00 Invited live lecture:
Low dose and low dose rate radiobiology of MRT (20+10 min)
Eva Forssell-Aronsson, University of Gothenburg, Sweden

14:30 E-posters: 8 preselected abstracts (5 min) +Q/A at the end for all (5 min)

Therapeutic investigation of Auger electron emitter ^{67}Ga -DOTA-PSMA and ^{67}Ga (5 min)

Élise Verger, King's College London, London, United-Kingdom

Potential of targeted radionuclide therapy using gadolinium-based nanoparticles (5 min)

Clara Diaz Garcia-Prada, Institut de Recherche en Cancérologie de Montpellier, France

Extensive preclinical evaluation of Lutetium-177 labeled PSMA-specific tracers for prostate cancer radioligand therapy (5 min)

Eline Ruigrok, Erasmus MC, Rotterdam, The Netherlands

Multicellular prostate tumor spheroids for evaluation of the therapeutic potential of copper-64 (5 min)

Catarino Pinto, Instituto Superior Técnico, Universidade de Lisboa

DNA Damage response speed imaging predicts is survival following Lutetium-177 radionuclide therapy in vivo (5 min)

Edward O'Neill, University of Oxford, Oxford, United-Kingdom

Dosimetry at the cellular level: measuring reactive oxygen species induced by ionizing radiation (5 min)

Eero Hippeläinen, University of Helsinki and Helsinki University Hospital, Finland

Role of small extracellular vesicles in the non-targeted bystander effects of targeted radiotherapy (5 min)

Jihad Karam, Institut de Recherche en Cancérologie de Montpellier, France

Relating DNA damaging effects of radionuclides to those from external beam radiotherapy (5 min)

Elise Verger, King's College London, London, United-Kingdom

15:15 Break (15min)

Chairs: Sandra Heskamp, Julie Constanzo

Live talks:

15:30 Molecular response of head and neck squamous cell carcinoma (HNSCC) upon a combination treatment with molecular- and external radiotherapy (10 min + 5 min)

Treewut Rassamegevanon, National Center for Radiation Research in Oncology, Germany

15:45 P53-mediated radiosensitization of ^{177}Lu -DOTATATE treatment in neuroblastoma tumor spheroids (10 min + 5 min)

Sara Lundsten, Uppsala University, Sweden

16:00 Reversing cold tumor microenvironment with targeted alpha-therapy (10 min + 5 min)

Justine Perrin, Centre de Recherche en Cancérologie et Immunologie Nantes Angers, France

16:15 Cytosolic dsDNA and extracellular vesicles participate to antitumor immunity induced by external and targeted radiotherapy (10 min + 5 min)

Julie Constanzo, Institut de Recherche en Cancérologie de Montpellier, France

16:30 Invited live lecture

Radiation oncology and immunology (20 + 10 min)

Claire Vanpouille-Box, Weill Cornell Medicine, New-York, USA

17:00 Awards ceremony + summary

17:30 End of workshop by Jean-Pierre Pouget