

Radiobiology Pre-meeting course
Making the most of radiation therapy combination strategies
ESTRO 2023, 12-16 May 2023, Vienna, Austria

Friday, 12 May 2023, from 08:30 to 17:00

Course directors:

- Laure Marignol, Radiation Biologist, Trinity College Dublin (IE)
- Ludwig Dubois, Radiation Biologist, Maastricht University (NL)

Faculty:

- Karl Butterworth, Radiation Biologist, Queen's University Belfast (UK)
- Rob Coppes, Clinical Radiation Biologist, University Medical Center Groningen (NL)
- Anna Dubrovskaya, Radiation Biologist, ncoRay - National Center for Radiation Research in Oncology, Faculty of Medicine and University Hospital Carl Gustav Carus, Technische Universität Dresden (DE)
- Heiko Enderling, Mathematical Oncologist, Moffitt Cancer Center (US)
- Vincent Gregoire, Radiation Oncologist, Centre Leron Berard (FR)
- Steffen Löck, Physicist, OncoRay, Technische Universität Dresden (DE)
- Sandra Nuyts, Radiation Oncologist, University Hospitals Leuven (BE)
- Daniela Thorwarth, Medical Physicist, Section for Biomedical Physics, Department of Radiation Oncology, University Hospital Tübingen (DE)
- Ala Yaromina, Radiation Biologist, Maastricht University (NL)
- Cläre Von Neubeck, Radiation Biologist, University of Duisburg-Essen, Department of Particle Therapy, University Hospital Essen (DE)

Programme

Time slot	Title	Teacher
08:30 - 10:30	<i>The study of Radiation combinations</i>	
08:30 - 09:00	TL: Molecular profiling tumor (gene signature – tumor and liquid biopsies)	A. Dubrovskaya (DE)
09:00 - 09:30	TL: Imaging strategies	D. Thorwarth (DE)
09:30 - 10:00	TL: Normal tissue stratification	R. Coppes (NL)

10:00 - 10:30	TL: Testing models: from 2D over 3D to animals	K. Butterworth (UK)
10:30 - 11:00	<i>COFFEE BREAK</i>	
11.00 - 12.30	<i>Radiation dose optimization</i>	
11:00 - 11:30	TL: Dose-painting strategies	A. Yaromina (NL)
11:30 - 12:00	TL: Particle therapy	C. Von Neubeck (DE)
12:00 - 12:30	TL: Dose-response modelling	S. Löck (DE)
12:30 - 14:00	<i>LUNCH BREAK</i>	
14.00 - 15:30	<i>Lessons learnt from HPV</i>	
14:00 - 14:45	The example of HPV: what evidence is available for HPV+ to have better prognosis, what is still needed?	S. Nuyts (BE)
14:45 - 15:30	The example of HPV: strategies to de-escalate	V. Gregoire (FR)
15:30 - 16:00	<i>COFFEE BREAK</i>	
16.00 - 17:00	<i>What next? Discussion / Workshop</i>	
16:00 - 16:30	TL: How will modelling/ AI help us to identify new interactions	H. Enderling (US)
16:30 - 17:00	General discussion and closing remarks	Full Faculty