

ESTRO 2024 - Radiobiology Pre-meeting course

Radio-metabolomics: how does radiotherapy affect cancer cell metabolism, and vice versa?

Friday, 3 May 2024, from 08:30 to 17:00

Course directors:

- Anthony Chalmers, Radiation Oncologist, University of Glasgow (UK)
- Julie Schwarz, Radiation Oncologist, Washington University (US)
- Conchita Vens, Radiation Biologist, University of Glasgow (UK)

Faculty:

- Yuanyuan (Faith) Zhang, Radiation Oncologist, University of Texas Southwestern Medical Center (US)
- Dan Wahl, Radiation Oncologist, University of Michigan (US)
- Natividad Gomez-Roman, Radiation Biologist, University of Strathclyde (UK)
- Johann Matchke, Radiation Biologist, Institute of Cell Biology (Cancer Research), University Hospital Essen (DE)
- Marianne Koritzinsky, Radiation Biologist, University of Toronto (CA)
- David Lewis, Radiation Biologist, Cancer Research UK - Scotland Institute and University of Glasgow (UK)
- Daniela Thorwarth, Medical Physicists, University Hospital Tübingen (DE)
- Adam Peters, Clinical Oncologist, CRUK Scotland Institute (UK)

Programme

Time slot	Title	Teacher
08:30 - 09:00	Welcome and introduction	Course directors
09:00 - 09:45	The cancer metabolome	F. Zhang (US)
09:45 - 10:30	Molecular Biology and Translation in Cancer Metabolism	J. Schwarz (US)
10:30 - 11:00	<i>COFFEE BREAK</i>	
11:00 - 11:30	How does metabolism affect radiation response?	D. Wahl (US)



11:30 - 12:00	How does radiotherapy affect metabolism?	N. Gomez-Roman (UK)
12:00 - 12:30	How to target metabolism?	J. Matschke (DE)
12:30 - 14:00	<i>LUNCH BREAK</i>	
14:00 - 14:30	Metabolism and the tumour microenvironment	M. Koritzinsky (CA)
14:30 - 15:00	Preclinical imaging of metabolism for radiotherapy response prediction	D. Lewis (UK)
15:00 - 15:30	Imaging metabolism for radiotherapy and novel targeting approaches	D. Thorwarth (DE)
15:30 - 16:00	<i>COFFEE BREAK</i>	
16:00 - 16:30	Overview of clinical trials involving radiotherapy in combination with agents targeting metabolism	A. Peters (UK)
16:30 - 17:00	Summary and discussion	Course directors