

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:

- 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 Reserch) (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 | TBC |
| 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) |



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| 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 |

