## Friday, May 20

## Session III: STRATEGIES FOR IMPLEMENTATION OF THERAPEUTIC BIOMARKERS IN CLINICAL RADIATION ONCOLOGY

Chairs: Prof. Mechthild Krause, Prof. Wolfgang Dörr

**9:00-9:25** Clinical use of molecular biomarkers for predicting the response to radiotherapy (HNSCC, DKTK multi-institutional study (**Prof. Michael Baumann, Germany**)

9:25-9:50 Biomarkers of normal tissue toxicity (**Dr. Daniel Gomez, USA**)

9:50-10:15 Biomarkers of tumor control probability (**Prof.** Theodore Lawrence, USA)

**10:15-10:40** Radiomics for radiotherapy outcome prediction (**Prof. Philippe Lambin, Netherlands**)

10:40-11:00 Coffee break

**11:00-11:45** Round table discussion: Discovery of radiosensitizers and biomarkers for radiooncology: current status and translational challenges.

Chairs: Prof. Jürgen Debus, Germany, Prof. Esther Troost, Germany

Introduction: Prof. Jürgen Debus, Germany

Participants: Prof. Gilles McKenna, UK, Prof. Jens Overgaard, Denmark

Summary: Prof. Esther Troost, Germany

11:45-12:00 Conclusion remarks and departure





#### Venue

OncoRay – National Center for Radiation Research in Oncology (House 130) Händeallee 28, D-01309 Dresden.

## Workshop Office CONTAG

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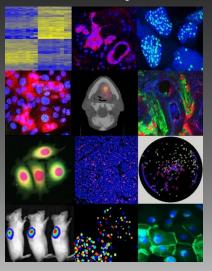


#### Language

The workshop language will be English. No simultaneous translation will be provided

# **Biomarkers for Radiation Oncology**

Dresden, Germany, 18. – 20. May 2016



## Organizers:

Prof. Dr. Anna Dubrovska, Conference chair Prof. Dr. Michael Baumann Prof. Dr. Mechthild Krause Prof. Dr. Leoni Kunz-Schughart Prof. Dr. Nils Cordes Prof. Dr. Esther Troost





Bundesministerium für Bildung und Forschung The discovery, exploration and validation of biomarkers becomes increasingly important in clinical research and practice in the era of targeted therapy. Identification of the multiple biological parameters that may contribute to the differential response of tumors to radiotherapy drives the concept of individualized therapy. The aim of this workshop is to bring together the most recent insights and viewpoints on the predictive biomarkers for radiation oncology, from their preclinical development to clinical studies, and to find common ground for future collaborative studies.

- Registration opens on February 1, 2016 via email or fax using a special form ready for download at www.oncoray.de.
- Registration deadline is May 1st, 2016
- The registration fee is 100 Euro, student fee is 80 Euro including: admittance to the workshop, the exhibition and catering (lunch and coffee) on both days.
- Confirmation of registration will be sent after receipt of registration form and fee.
- Posters are very welcome.

Supported by the German Federal Ministry of Education and Research (Grant-No. 03Z1NN11)



## **Scientific program**

## Wednesday, May 18

**19:00** Informal reception at OncoRay – National Center for Radiation Research in Oncology (House 130), Händelallee 26

## Thursday, May 19

**8:00-8:15** Opening and welcome address (Prof. Michael Baumann / Prof. Mechthild Krause / Prof. Anna Dubrovska)

Session I: DISCOVERY OF NEW BIOMARKERS AND DEVELOPMENT OF INNOVATIVE TARGETING STRATEGIES FOR RADIATION ONCOLOGY

Chair: Prof. Anna Dubrovska, Prof. Rob Coppes

**8:15-8:40** Cancer stem cells, models of study and implications of therapy resistance mechanisms (**Prof. Norman Maitland, UK**)

**8:40-9:05** Radiosensitization of glioblastoma stem cells (**Prof. Anthony J Chalmers, UK**)

**9:05-9:30** Prostate cancer stem cells and radiotherapy (**Prof. Anna Dubrovska, Germany**)

**9:30-9:55** Novel strategies to overcome tumor cell radioresistance (**Dr. Geoffrey Higgins, UK**)

9:55-10:15 Coffee break

**10:15-10:40** Noninvasive imaging and BsAb-based eradication of glioblastoma stem cells (**Prof. Gabriele Niedermann, Germany**)

**10:40-11:05** Targeting chromatin to improve radiation response (**Prof. Ester Hammond, UK**)

11:05-11:30 Integrin targeting (Prof. Nils Cordes, Germany)

## Proffered paper talks

11:30-11:45 – TBA 11:45 – 12:00 – TBA

12:00 – 13:00: Poster "Spotlight" presentations

13:00-14:00 Lunch break and Poster session

# Session II: PRECLINICAL AND CLINICAL STUDIES OF THE BIOMARKERS FOR RADIATION ONCOLOGY

Chair: Prof. Leoni Kunz-Schughart, Dr. Kai Rothkamm

14:00-14:25 - Tumor stromal signatures associated with therapy resistance and prognosis (**Prof. Catherine Park, USA**)

14:25-14:55 - Tumor genomic and microenvironmental heterogeneity as biomarkers for personalized prostate cancer medicine (**Prof. Robert G Bristow, Canada**)

14:55-15:20 - Specific biomarkers for particle therapy (**Prof. Amir Abdollahi, Germany**)

15:20-15:35 Coffee break

15:35-16:00 - Biomarkers for optimization of radiotherapy for brain tumor patients (**Prof. Susan Short, UK**)

16:00-16:25 - Prognostic gene expression signatures in HNSCC (**Dr. Monique De Jong, Netherlands**)

16:25-16:55 - Hypoxia-specific gene expression signature as prognostic and predictive markers (**Dr. Brita Sørensen, Denmark**)

16:55-17:20- Tumor microenvironment and radiation response (**Prof. Ruth J Muschel, UK**)

17:20-17:55 - Molecular profiles of circulating tumor cells as biomarkers to select the patients benefiting from radiotherapy and systemic therapy (**PD Dr. Ingeborg Tinhofer-Keilholz, Germany**)

### Proffered paper talks

17:55 - 18:10 - TBA 18:10 - 18:25 - TBA 18:25 - 18:45 – TBA

19:30 Social dinner