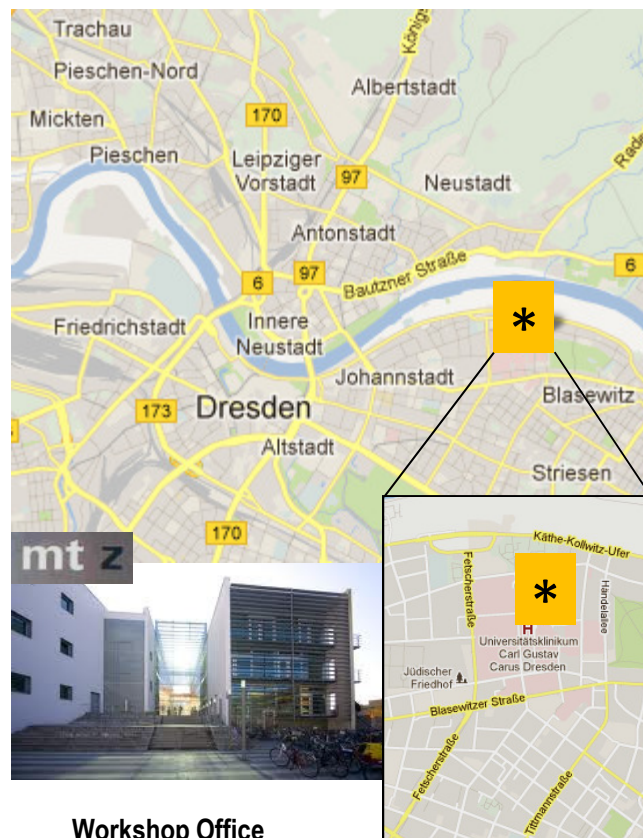


- 11.00-11.30 **Nils Cordes (GER)**
Integrin/RTK interactions and their impact on cancer cell therapy resistance
- 11.30-12.00 **Ruth J. Muschel (UK)**
Altering the tumour microenvironment to improve the radiation response
- 12.00-12.30 **Laure Bouchez (CH)**
Small molecules with "big impact" for cancer stem cells research
- 12.30-13.00 **Andreas Androutsellis-Theotakis (GER)**
Novel signaling pathways and biomarkers in cancer stem cells from gliomas
- 13:00-14:00 *Lunch*



Frauenkirche

- **Registration** opens on April 2, 2013 via email or online registration www.oncoray.de.
- **Registration deadline is August 31, 2013**
- **The registration fee is 100 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.**
- The workshop will be limited to 100 participants.
- **Posters** are very welcome.
- In addition to invited speakers, selected poster presenters will be given the opportunity to prepare a manuscript for a peer-reviewed, special issue of the **International Journal of Radiation Biology**, which will be dedicated to this workshop.



Workshop Office

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Organizer

OncoRay

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Language

The workshop language will be English.

No simultaneous translation will be provided.

Venue

* Medizinisch Theoretisches Zentrum
Fiedlerstraße 42, D-01307 Dresden.

CANCER STEM CELLS: THE MECHANISMS OF RADIORESISTANCE AND BIOMARKER DISCOVERY

Dresden, Germany,
23. – 24. September 2013



Organizer:

Anna Dubrovka

OncoRay, Medical Faculty, University of Technology,
Dresden, Germany



Most current therapies cannot cure advanced cancer. Resistance to chemo- and radiotherapy has been reported to be a defining characteristic of cancer stem cells (CSCs) and CSC markers were linked to the poor clinical outcome. Many intrinsic determinants were attributed to the radioresistance of CSCs. However, we are still far from complete understanding of the molecular mechanisms regulating tumor radiocurability.

Emerging genomics, proteomics and high throughput screening technologies expand our knowledge regarding the role of specific genes and proteins in the regulation of CSC properties. New therapeutic strategies that selectively target CSC population, coupled with using of CSC biomarkers as predictors of therapeutic response, should confer a significant clinical benefit over conventional treatments.

The aim of this workshop is to bring together the most recent viewpoints and insights about (i) the molecular characterization and regulation of CSCs, (ii) the mechanisms of CSC radioresistance, (iii) the discovery of new CSC targeting therapeutics and biomarkers, and to work on advancing the field.

Invited speakers

Amir Abdollahi (GER)
 Andreas Androutsellis-Theotokis (GER)
 Michael Bachmann (GER)
 Michael Baumann (GER)
 Laure Bouchez (CH)
 Frank Buchholz (GER)
 Nils Cordes (GER)
 Peter Friedl (NL)
 Richard P. Hill (CA)
 Leoni A. Kunz-Schughart (GER)
 Hai-Kun Liu (GER)
 Michael Muders (GER)
 Ruth J. Muschel (UK)
 Ira-Ida Skvortsova (AT)
 Serhiy Souchelnytskyi (SE)
 Dean G. Tang (USA)
 Ingeborg Tinhofer-Keilholz (GER)
 Heiko Wurdak (UK)
 Daniel Zips (GER)

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

Sunday, September 22

19.00 Informal reception

Monday, September 23

08.50-09.00 Introduction and Opening

Session 1 MOLECULAR CHARACTERIZATION AND REGULATION OF CANCER STEM CELLS

Chair: Dean G. Tang (USA), Michael Muders (GER)

09.00-09.30 **Dean G. Tang (USA)**
 Cancer stem cell heterogeneity and plasticity: prostate cancer as a model

09.30-10.00 **Heiko Wurdak (UK)**
 Plasticity of the stem cell phenotype in high-grade brain tumours

10.00-10.30 **Hai-Kun Liu (GER)**
 Genetic dissection of self-renewal and differentiation in normal and malignant brain stem cells

10.30-11.00 *Coffee / Poster session*

11.00-11.30 **Michael Muders (GER)**
 Autophagy: its regulation and its role in therapy response

11.30-12.00 **Leoni A. Kunz-Schughart (GER)**
 Tumor microenvironment: Ambiguous modulator of phenotype switching and cancer stem cell-like behavior

12.00-12.30 **Ingeborg Tinhofer-Keilholz (GER)**
 Cancer stem cell characteristics of circulating tumor cells

12.30-13.30 Lunch



Semper Opera

Session 2 CANCER STEM CELLS AND RADIORESISTANCE

Chair: Leoni A. Kunz-Schughart (GER), Ingeborg Tinhofer-Keilholz (GER)

13.30-14.00 **Michael Baumann (GER)**
 Cancer stem cells and radiation oncology: myths and facts

14.30-15.00 **Richard P. Hill (CA)**
 Studies of hypoxia and stemness

15.00-15.30 **Amir Abdollahi (GER)**
 Erradicating glioma stem cells via next generation radiation oncology

15.30-16.00 *Coffee / Poster session*

16.00-16.30 **Daniel Zips (GER)**
 CSC: implications for translational and clinical research

16.30-17.00 **Peter Friedl (NL)**
 Cell migration-associated radioresistance

17.00-17.30 **Ira-Ida Skvortsova (AT)**
 Proteomics of cancer stem cells

17:30-18.00 **Anna Dubrovskaja (GER)**
 Cancer stem cells in development of novel predictive biomarkers for cancer radiotherapy

20.00 *Social dinner*

Tuesday, September 24

Session 3 DISCOVERY OF NEW BIOMARKERS AND THERAPEUTIC APPROACHES

Chair: Anna Dubrovskaja (GER), Laure Bouchez (CH)

09.00-09.30 **Frank Buchholz (GER)**
 Functional profiling of cancer stem cells

09.30-10.00 **Michael Bachmann (GER)**
 Intracellular antigens as inducible surface targets for redirecting of T- cells

10.00-10.30 **Serhiy Souchelnytskyi (SE)**
 Personalization of cancer treatment with functional molecular diagnostics

10.30-11.00 *Coffee / Poster*