



## Sunday, September 17, 2023

17:00	19:00	Registration, dinner (18:00-20:00) optional
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## Monday, September 18, 2023

### DeGBS Young Investigators Session

Chairs: Johann Matschke, Alexander Helm

10:00	11:45	<b>Martin Mynarek, Nina Struve</b> (UK Eppendorf) <i>Collaborating for a better Outcome in pediatric medulloblastoma - from preclinical testing to clinical trials</i>
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10:00	12:45	Registration, lunch (12:00 – 12:45)
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### Opening Ceremony

12:45	12:50	Michael Scholz, Claudia Fournier (Organizing Committee)
12:50	13:00	Verena Jendrossek (President, German Society of Biological Radiation Research)

Sponsored by:



## Monday, September 18, 2023 (continued)

<b>Session I:</b> <b>Basic mechanisms of radiation action of different radiation qualities</b> Track structure, DNA-damage clustering, DNA-damage response, cell death, senescence		
Chairs: Johanna Mirsch, Emil Mladenov		
13:00	13:30	<b>Keynote Lecture I</b> <b>Mark Hill</b> (MRC, Oxford) <i>Radiation track structure: how does their spatial and temporal properties drive the radiobiological response?</i>
13:30	14:45	<b>Proffered Papers I</b> <b>Oliver Mokross</b> (TU Darmstadt) <i>Impaired DSB repair after low doses of X-rays may be due to a regulatory interaction of PRDX2 and DNA-PK</i>
13:30		<b>Thomas Friedrich</b> (GSI Darmstadt) <i>Relevance of uncertainties in experimental radiobiological data base for the assessment of theoretic effect models</i>
13:45		<b>Michael Hausmann</b> (Univ. Heidelberg) <i>Topological changes of the whole chromatin of cell nuclei during DNA repair as a collective response to radiation induced damages</i>
14:00		<b>Razan Hessenow</b> (WP Essen) <i>Radiation quality-dependent sensitization of cancer cells: the role of DNA repair defects and metabolic activity</i>
14:15		<b>Michael Ensminger</b> (TU Darmstadt) <i>POL<math>\theta</math>-mediated end-joining is restricted by RAD52 and BRCA2 until the onset of mitosis</i>
14:30		
14:45	15:15	Coffee Break
15:15	16:45	<b>Poster Session I</b>

<b>Special Topic</b>		
Chair: Sebastian Zahnreich		
16:45	17:15	<b>Anna Friedl</b> (LMU München) <i>Scientific challenges of modern radiation protection research</i>
<b>DeGBS Awards Ceremony</b>		
Chairs: Verena Jendrossek, Udo Gaipl		
17:15	18:15	<b>Commemoration Gerhard Kraft</b> <b>Ulrich Hagen Award:</b> Horst Zitzelsberger (Helmholtz Zentrum München) Laudatio: Kirsten Lauber <b>Dieter Frankenberg Award:</b> Johanna Mirsch (TU Darmstadt)
18:15		Dinner

## Tuesday, September 19, 2023

08:25	08:30	Opening day 2: Michael Scholz, Claudia Fournier	
<b>Session II:</b> <b>Signaling – radiation impact on intra- and inter-cellular communication</b> Gene and protein expression, post-translational modifications, epigenetics, microenvironment, signal transduction, non-coding RNA			
<b>Chairs: Diana Klein, Martin Selmansberger</b>			
08:30	09:00	<b>Keynote Lecture II</b> <b>Alexander Löwer</b> (TU Darmstadt) <i>Keeping the guardian alert: how p53 differentiates between acute and sustained DNA damage in individual cells</i>	
09:00	10:15	<b>Proffered Papers II</b>	
09:00		<b>Ilaria Ghio</b> (TU Darmstadt) <i>Repair fidelity of radiation induced DNA double-strand breaks in G1-phase cells</i>	
09:15		<b>Tina Jost</b> (Univ. Erlangen) <i>Anti-tumor mechanisms of DNA damage repair inhibitors interfering with radiotherapy</i>	
09:30		<b>Gargi Tewary</b> (Univ. Homburg) <i>Immunomodulatory effects of histone variant H2A.J in ionizing radiation dermatitis</i>	
09:55		<b>Roman Hennel</b> (LMU München) <i>Cell fate decisions during the recovery of breast cancer cells upon fractionated radiotherapy</i>	
10:00		<b>Johann Matschke</b> (UK Essen) <i>Identification and preclinical validation of synthetic lethality approaches with radiotherapy and PARP1/2-targeting enabled by metabolic induction of HRness</i>	
10:15	10:30	Coffee Break	
10:30	12:00	<b>Poster Session II</b>	
12:00	13:15	Lunch Break	

## Tuesday, September 19, 2023 (continued)

<b>Session III:</b> <b>Systemic and extra-cellular factors affecting radiation response</b> Microbiome, metabolism, microenvironment, senescence, immune system, chemotherapy		
Chairs: Lisa Deloch, Nikko Brix		
13:15	13:45	<b>Keynote Lecture III</b> <b>Nadja Salomon</b> (TRON, Mainz) <i>The immunostimulatory side of radiotherapy – radiotherapy combinations with mRNA vaccines</i>
13:45	15:00	<b>Proffered Papers III</b> <b>Franz Rödel</b> (Uni Frankfurt) <i>Biomarker signatures as predictors for treatment response to chemoradiotherapy in anal carcinoma</i>
13:45		
14:00		<b>Cristina Totis</b> (GSI Darmstadt) <i>Molecular mechanisms of the increased immunogenicity of osteosarcoma cells after carbon ion exposure</i>
14:15		<b>Kristian Unger</b> (Helmholtz Zentrum München) <i>HNSCC ecotypes: tumor microenvironment subtypes of HPV-negative head and neck squamous cell carcinoma</i>
14:30		<b>Lia Mogge</b> (Univ. Erlangen) <i>Epithelia-neutrophil interactions after radiotherapy of head and neck squamous cells carcinoma</i>
14:45		<b>Benedek Dankó</b> (Helmholtz Zentrum München) <i>Metabolic pathway-based subtypes in HNSCC reveal an association between glycan biosynthesis and radiotherapy response</i>
15:00	15:15	Coffee Break
15:15	16:45	<b>Poster Session III</b>
16:45	18:00	<b>DeGBS General Assembly (members only)</b>
18:30	23:00	<b>DeGBS Conference Dinner</b>

## Wednesday, September 20 2023

08:25	08:30	Opening day 3: Claudia Fournier, Michael Scholz	
<b>Session IV: Joint Session DEGRO/ DeGBS</b> <b>Innovative approaches for radiotherapy – physics and radiobiology</b> Spatial and temporal fractionation (mini-beam and others), FLASH, radio-immunotherapy			
Chairs: Franziska Eckert, Elena Sperk			
08:30	09:00	<b>Keynote Lecture IV</b> <b>Jeannette Jansen</b> (Univ. Lausanne) <i>Innovative approaches for radiotherapy: Physics and radiobiology in the FLASH-effect</i>	
09:00	10:30	<b>Poster Session IV</b>	
10:30	10:45	Coffee Break	
10:45	12:00	<b>Proffered Papers IV</b> <b>Insa Schröder</b> (GSI Darmstadt) <i>Better chances for glioblastoma patients? Using human brain organoids to study CNS effects and tumor control after high- and low-LET radiation exposure</i> <b>10:45</b> <b>Nina Struve</b> (UK Eppendorf) <i>Inhibition of PARP results on highly effective radiosensitization of MYC-amplified medulloblastomas</i> <b>11:00</b> <b>Judith Reindl</b> (Univ. d. Bundeswehr München) <i>Planar proton minibeam irradiation elicits spatially confined DNA damage in a human epidermis model</i> <b>11:15</b> <b>Vladislav Sandul</b> (GSI Darmstadt) <i>Dosimetric blood flow model for dose calculation to blood lymphocytes and radiation induced lymphopenia risks assessment</i> <b>11:45</b> <b>Katharina Gehr</b> (LMU München) <i>Analysis of clonogenic growth in vitro: Head-to-head comparison of the colony formation assay (CFA) and the limiting dilution assay (LDA)</i> <b>12:00</b>	
12:00	12:30	<b>Awards Ceremony and Farewell</b>	
12:00		Best Posters Awards (tbd) and Welcome to jDeGBS 2024	
12:45		<b>End of the Conference</b>	
12:45	13:30	<b>Lunch</b>	