

UPDATED PROGRAM

"Repair meets Replication" Program DGDR 2010 Jena

Tuesday 07. Sept. 2010

12:00 *Registration*

Meeting starts 14.00

14:00 **Opening remarks:** Frank Große

Keynote Lecture Chair: Frank Große

14:15 **Larry Loeb**, Seattle, USA *"Lethal Mutagenesis of HIV and Cancer: Experiments and Hypotheses"*

S1 Checkpoint Control Chair: Alexander Bürkle

15:00 **Boris Pfander**, London, UK *"Mechanism and Regulation of DNA Replication during the Cell Cycle and in Response to DNA Damage"*

15:30 **Alessandro Sartori**, Zürich, CH *"CtIP-EXO1 interaction controls DNA end resection in human cells."*

15:45 **Harald Krenzlin**, Berlin, Germany *"New insights into pathomechanisms in the human DNA-repair deficiency Nijmegen breakage syndrome"*

16:00 **Coffee Break and Poster Session (90')** **Poster Session I**

17:30 **Stephen Meyn**, Toronto, Canada *"The Fanconi anemia pathway regulates BLM-dependent telomeric recombination and telomere DNA synthesis in ALT human cells"*

18:00 **Sabrina Koecher**, Hamburg, Germany *"Homologous recombination is differentially affected by ATM and Artemis in S- and G2-phase"*

18:15 **Christian Mielke**, Düsseldorf, Germany *"Spatio-temporal regulation of the human licensing factor Cdc6 in replication, mitosis and repair"*

18:30 **Welcome Reception** (Foyer of the FSU Lecture Hall)

Wednesday 08. Sept. 2010

S2 Animal Models Chair: Martin Digweed

- 8:30 **Zhao Qi Wang**, Jena, Germany "*Homeostasis of poly(ADP-ribosyl)ation regulates the S-phase checkpoint*"
- 9:00 **Susanne Gatz**, Sussex, UK "*Role of DNA damage responses during embryonic brain development*"
- 9:15 **Ralph Gruber**, Jena, Germany "*DNA damage response molecule MCPH1 regulates the division mode of neuronal progenitor cells*"
- 9:30 **Oscar Fernandez-Capetillo**, Madrid, Spain "*Mms21 is haploinsufficient for the suppression of cancer and mitotic recombination*"
EMBO Young Investigator lecture
- 10:00 **Coffee Break and Poster Session (90')** **Poster Session II**
- 11:30 **Francoise Dantzer**, Illkirch, France "*Role of Poly(ADP-ribose) polymerase-3 (PARP-3) in genome integrity and mitotic segregation: cellular and animal models*"
- 11:45 **Sascha Beneke**, Konstanz, Germany "*Correlation of cellular poly(ADP-ribose) formation capacity and mammalian life span is reflected in recombinant poly(ADP-ribose) polymerase 1 activity*"
- 12:00 **Lunch**

13:00 **DGDR-General assembly**

S3 Helicases/Enzymes Chair: Jochen Dahm-Daphi

- 14:00 **Jochen Kuper**, Würzburg, Germany "*XPanDing archaeal XPD structures to get a grip on human DNA repair*"
- 14:30 **Nadine Mathieu**, Zürich, CH "*Strand-selective and site-specific DNA lesion demarcation by the XPD helicase*"
- 14:45 **Christian Schiller**, München, Germany "*Insights into DNA double-strand break signaling and ataxia-telangiectasia like disease from the structure of a Mre11-Nbs1 complex*"
- 15:00 **Valérie Schreiber**, Illkirch, France "*PARP-9: a new incomer in the cell response to DNA damage*"
- 15:30 **Christina Bauerschmidt**, London, UK "*Radiation-induced recruitment and phosphorylation of cohesin in human cells*"
- 15:45 **Elise Fouquerel**, Illkirch, France "*PAR- and PCNA-dependent recruitment of PARG to DNA damage sites*"
- 16:00 **Coffee Break and Poster Session (90')** **Poster Session III**

Public Lecture Chair: Karl Otto Greulich

- 17:30 **Lisa Wiesmüller**, University of Ulm "*New approaches to predict breast cancer risk and therapeutic responsiveness.*"

Thursday 09. Sept. 2010

S4 Translesion Synthesis / MMR Chair: Bernd Kaina

- 8:30 **Christian Speck**, London, UK *"Stepwise assembly of a double-hexameric MCM2-7 complex during licensing of eukaryotic DNA replication"*
- 9:00 **Mariya Sukhanova**, Novosibirsk, Russia *"DNA damage checkpoint protein 1 (Ddc1) and DNA polymerase epsilon interact with nick-containing DNA repair intermediate in cell extracts of *Saccharomyces cerevisiae*"*
- 9:15 **Ulrich Hübscher**, Universität Zürich-Irchel, CH *"Oxygen as a friend and enemy: How to combat the mutational potential of 8-Oxo-Guanine"*
- 9:45 **Coffee Break and Poster Session (90')** **Poster Session IV**
- 11:15 **Lorena Beese**, Durham, USA *"Genesis and fate of biosynthetic errors in DNA replication and human mismatch repair"*
- 11:45 **Andriy Khobta**, Mainz, Germany *"Strand-specific effects of oxidative DNA base lesions on transcription: what is the nature of the transcription-blocking lesion?"*
- 12:00 **Lunch**
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S5 Ubiquitylation/Signaling Chair: Jürgen Thomale

- 14:00 **Thomas Hofmann**, Heidelberg, Germany *"Mechanisms of DNA-damage-induced cell death signaling"*
- 14:30 **Meta Volcic**, Ulm, Germany *"Role of the apoptosis-modulatory molecule NF- κ B in DNA repair"*
- 14:45 **Wynard Roos**, Mainz, Germany *"Polymerase-zeta causes cells to tolerate DNA damage induced by the chemotherapeutics temozolomide and fotemustine"*
- 15:00 **Helle Ulrich**, London, UK *"Timing and Spacing of Ubiquitin-Dependent DNA Damage Bypass"*
- 15:30 **Jerome Wagner**, Illkirch, France *"Role of the ubiquitin-binding domain of Pol eta in Rad18-independent translesion DNA synthesis in human cell extracts"*
- 15:45 **Paulius Grigaravicius**, Heidelberg, Germany *"Unprecedented temporal resolution for recruitment studies of DNA repair proteins: avoiding disadvantages of the technique by extrapolation to zero laser power"*
- 16:00 **Coffee Break and Poster Session (60')** **Poster Session V**

Exploring Jena *Late afternoon for social and cultural activities*

- 20:00 **Music & Buffet** *Social Evening at the "Volksbad"*

Friday 10. Sept. 2010

S6 Fidelity of Replication Chair: Andrea Hartwig

- 9:00 **Thomas Kunkel**, Triangle Park, NC, USA *"A Genome Wide Model for the Normal Eukaryotic DNA Replication Fork"*
- 9:30 **Mary Bakhanashvili**, Tel-Hashomer, Israel *"Functional interaction between DNA polymerase gamma and tumor suppressor protein p53 in mitochondria"*
- 9:45 **Berit Jungnickel**, Jena, Germany *"Regulation of DNA repair fidelity during somatic hypermutation"*
- 10:15 **Myun-Hwa Dunlop**, New Haven, USA *"Molecular Mechanism of RAD51AP1 in Homologous Recombination"*
- 10:30 **0Coffee Break** (30')
- 11:00 **Tanja Schwerdtle**, Münster, Germany *"DNA repair inhibition by metals: new insights into the molecular mechanisms of metals induced carcinogenicity and neurotoxicity"*
- 11:30 **Yvonne Lorat**, Homburg, Germany *"DNA repair in the context of chromatin: New molecular insights by the nanoscale detection of DNA repair complexes using transmission electron microscopy"*
- 11:45 **Prize giving**
- Closing remarks
- 12:30 **Coffee, Snack, Farewell** (90')

Meeting ends 14:00