

Program of the 9th DNA-Repair Meeting September 12 – 15, 2006, in Hamburg

Tuesday 12.9.

12.00 Registration

14.00 Opening

Session I Excision Repair

14.15 Keynote lecture Chair: B. Kaina

Errol C. Friedberg (Dallas, TX)
DNA damage tolerance by translesion DNA synthesis

Invited lectures I Chair: A. Bürkle

15.00 IL I/1 **Matthias Ziegler** (Bergen)
Nuclear NAD⁺ synthesis: Linking Bioenergetics to DNA Repair

15.35 **Coffee-break and Poster Session I**
(Posters Session I and II, odd numbers)

16.45 IL I/2 **Bernd Kaina** (Mainz)
The O6-alkylguanine response: mechanisms and implications

Proffered papers I Chair J. Thomale

17.20 PP I/1 **Bernd Epe** (Mainz)
Role of CSB and PARP1 in the global repair of oxidative DNA base modifications

17.40 PP I/2 **Agnieszka Gembka** (Zürich)
The checkpoint clamp, Rad9-Rad1-Hus1 complex, preferentially stimulates the activity of apurinic/apyrimidinic endonuclease 1 and DNA polymerase β in long patch base excision repair

18.00 PP I/3 **Markus Christmann** (Mainz)
A role for c-Fos in the regulation of NER and protection against apoptosis induced by UV-C light

18.20 PP I/4 **Simone Siehler** (Ulm)
Mismatch repair MutL complexes in double strand break repair

18.40 **Wellcome reception**

Wednesday 13.9.

Session II Cell Cycle & Carcinogenesis

Invited lectures Chair : M. Digweed

9.00 IL II/1 **Jiri Bartek** (Copenhagen)
DNA damage checkpoints: Mechanisms and relevance for human cancer

9.35 IL II/2 **Irene Dornreiter** (Hamburg)
Role of $\Delta p53$ in the stress-induced intra-S-phase checkpoint

10.10 **Coffee-break and Poster Session II**
(Posters: Session I and II, even numbers)

Proffered papers II Chair: B. Köberle

11.30 PP II/1 **Raafat A. El-Awady** (Kairo)
XRCC3-dependent S-phase checkpoint activation and homology-directed repair of DNA breaks resulting from topoisomerase-I inhibition

11.50 PP II/2 **Rüdiger Greinert** (Buxtehude)
UVA induces DNA-dsb (H2AX-phosphorylation) replication-independently in human primary skin fibroblasts

12.10 PP II/3 **Veronika Polakova** (Prag)
Relationship between DNA repair polymorphisms in XRCC1 gene and the repair rates induced by gamma-irradiation

12.30 Lunch

Session III Repair Proteins, Structure and Modification

Invited lectures

Chair: F. Grosse

14.00 IL III/1

Stefan Jentsch (Munich)
Role of ubiquitin and SUMO in DNA transactions

14.35 PP III/1

Katja Wenig (Munich)
Structural basis for transcription-coupled repair: the N-terminus of Mfd resembles UvrB with degenerated ATPase motifs

14.55 PP III/2

Martin Digweed (Berlin)
Nijmegen Breakage Syndrome: hypomorphic mutation, protein expression and carcinogenesis

Proffered Papers III

Chair: G. Fritz

15. 15 PP III/3

Friederike Eckart-Schupp (Neuherberg)
NBS1 regulates CD95-mediated apoptosis after gamma-irradiation

Invited lecture

15:35 IIL III/2

Thomas Carell (Martinsried)
DNA Repair and mutagenesis at atomic resolution

16.10

Coffee break and Poster session III
(Posters: Session III and IV, odd numbers)

Public lecture

18.00

Errol C. Friedberg
The Writing Life of James D. Watson: *The Double Helix*

Thursday 11.9.

Session IV Homologous Recombination

Invited lectures

Chair: F. Eckart-Schupp

9.00 IL IV/1

Bernard Lopez (Paris)

Regulation of double-strand break repair by cell signaling; consequences on breast cancer

9.35 IL IV/2

Lisa Wiesmüller (Ulm)

Dissecting inhibitory and stimulatory functions of p53 in recombination

10.10

Coffee-break and Poster Session II

(Posters: Session III and IV, even numbers)

Proffered papers IV

Chair: J. Dahm-Daphi

11.20 PP IV/1

Anke Schürer (Jena)

The Fanconi Anaemia group gene FancM & its homologues from yeast

11.40 PP IV/2

Andrea Beucher (Homburg)

Components of DNA double strand break repair and their relationship to the ATM-dependent repair pathway in different cell cycle phases

12.00 PP IV/3

Wael Y. Mansour (Hamburg)

Ku80 has little impact on non-homologous endjoining but suppresses homologous recombination and single-strand annealing

12.20 PP IV/4

Horst-Werner Stürzbecher (Lübeck)

Analysis of a dominant negative variant of the DNA repair and recombination factor Rad51.

12.40

Lunch

Session V Modulation of DNA-Repair

Invited lectures

Chair E. Dikomey

- 14.00 IL V/1 **Andrea Hartwig** (Berlin)
Impact of toxic metals and essential trace elements on p53 structure, function and redox control
- 14.35 IL V/2 **H. Peter Rodemann** (Tübingen)
EGFR signaling and modulation of DNA repair
- 15.10 **Coffee break and Poster session V**
(Posters: Session V and VI, odd numbers)

Proffered papers

Chair U. Kasten-Pisula

- 16.20 PP V/1 **Claudia Keil** (Berlin)
Interactions between PARP-1 Poly (ADP-Ribose) glycohydrolase and XRCC1 control MNNG-induced cell death.
- 16.30 PP V/2 **Anja Rockstroh** (Jena)
Topoisomerase I, a common factor in DNA repair and apoptosis?
- 16.50 PP V/3 **Mahmoud Toulany** (Tübingen)
Influence of EGFR signaling through RAS and PI3K-AKT pathways on XRCC1 expression
- 17.10 PP V/4 **Tanja Schwerdtle** (Berlin)
Effects of arsenic and cadmium on the assembly of nucleotides excision repair factors in human fibroblasts
- 17.30 General assembly of the German Society of DNA-Repair Research (DGDR)
- 20.00 Conference dinner at the Museum of the History of Hamburg

Friday 12.9.

Session VI Non-Homologous Endjoining and Cancer Therapy

Invited lectures

Chair: M. Löbrich

9.00 IL VI/1

Georg Iliakis (Essen)

A Ku-independent back-up pathway of non-homologous end-joinings

9.35 IL VI/2

Bernard Salles (Toulouse)

Recruitment of DNA repair proteins to double-strand breaks

10.10

Coffee-break and Poster Session VI

(Posters: Session V and VI, even numbers)

Proffered Papers

Chair: H. Puchta

11.20 PP VI/1

Kirsten Dahm (Brighton)

BRCA1 and MDC1 are involved in the Artemis dependent subpathway of NHEJ and facilitate the IR induced hyperphosphorylation of Artemis

11.40 PP VI/2

Johannes H. Schulte (Essen)

Expression of the TrkA or TrkB receptor tyrosine kinase alters the capacity of nonhomologous DNA end joining of SY5Y neuroblastoma cells

12.00 PP VI/3

Kerstin Borgmann (Hamburg)

Impact of SNP's in risk genes on fibrosis after radiotherapy

12.20 PP VI/4

Sabine Karl (Ulm)

NF-kappaB at the crossroad of DNA damage/repair and apoptosis in glioblastoma

12.50

Poster awards and closing