

Monday, September 2rd

15:00 Arrival time, check in - Hotel, Registration

16:00 **Welcome, Introduction**
Rainer Renkawitz
Justus-Liebig-University Giessen
Germany

HISTONE METHYLATION**Chair: Uta-Maria Bauer**

16:15 - 16:35 **Enhancer marking and regulation during development and in disease**
Ali Shilatifard
Stowers Institute for Medical Research
United States of America

16:40 - 17:00 **Regulation of heterochromatin by histone methyltransferases**
Gunnar Schotta
Adolf-Butenandt-Institute-Molecular Biology
Germany

17:05 – 17:25 **Novel modifications - novel players in chromatin function**
Robert Schneider
Institut de Génétique ET de Biologie Moléculaire ET Cellulaire
France

17:30 **Coffee Break**

EPIGENETIC INHERITANCE**Chair: Raymond Poot**

18:00 - 18:20 **Chromatin replication and epigenome maintenance**
Anja Groth
BRIC, University of Copenhagen
Denmark

18:25 - 18:45 **Epigenetic memory in regeneration and cancer**
Renato Paro
Department of Biosystems Science and Engineering (D-BSSE)
Switzerland

18:50 - 19:10 **Investigating the molecular mechanisms of transgenerational epigenetic inheritance**
Yang Shi
Stowers Institute for Medical Research
United States of America

19:30 **Dinner Buffet**

21:00 **Poster session – open end**

Tuesday, September 3rd

NUCLEOSOME RECOGNITION: MECHANISMS AND STRUCTURES**Chair: Alexander Brehm****09:00 - 09:20 Recruitment mechanisms of Drosophila Polycomb group complex***Christoph Müller*Joint Head of Structural and Computational Biology Unit
Germany**09:25 - 09:45 Molecular recognition of the nucleosome by chromatin enzymes and factors***Song Tan*Center for Eukaryotic Gene Regulation
United States of America**09:50 - 10:10 Molecular mechanisms of histone methylation readout***Wolfgang Fischle*Max Planck Institute for Biophysical Chemistry
Germany**EARLY DEVELOPMENT AND IMPRINTING****Chair: Sjaak Philipsen****10:15 – 10:35 Intergenerational epigenetic inheritance in a mouse model of undernutrition***Anne Ferguson-Smith*Department of Physiology Development and Neuroscience
United Kingdom**10:40 Coffee Break****11:00 - 11:20 Establishment of pericentromeric heterochromatin in development***Maria-Elena Torres-Padilla*Institut de Genetique et de Biologie Moleculaire et Cellulaire (IGBMC)
France**11:25 - 11:45 A library of endogenously tagged fluorescent proteins in embryonic stem cells reveals a linker histone chaperone involved in pluripotency and differentiation***Eran Meshorer*Hebrew University of Jerusalem
Israel**DNA METHYLATION****Chair: Reinhard Dammann****11:50 - 12:10 Methyl-lysine switch enables PHF20L1 to shield DNMT1***Sriharsa Pradhan*New England Biolabs
United States of America**12:15 Lunch Buffet**

Tuesday, September 3rd

14:00 - 14:20 DNA-methylation reprogramming - a new twist in the tale*Jörn Walter*Laboratory of EpiGenetics, Saarland University
Germany**14:25 - 14:45 Roles of oxidative DNA demethylation in development and reprogramming***Guo-Liang Xu*Shanghai Institutes for Biological Sciences
China**GENOME-WIDE REGULATION OF CHROMATIN****Chair: Guntram Suske****14:50 - 15:10 Nucleosome positioning by ATP-dependent chromatin remodelers***Yuri Moshkin*Erasmus MC
Netherlands**15:15 Coffee Break****15:45 - 16:05 Structural and functional studies of chromatin organising enzymes***Tom Owen-Hughes*University of Dundee
Scotland**16:10 - 16:30 The roles of cohesin and CTCF for shaping the chromatin fiber***Kerstin Wendt*Center for Biomix, Erasmus Medical Center, Rotterdam
Netherlands**ORGANISING CHROMATIN IN THE NUCLEAR SPACE****Chair: Niels Galjart****16:35 – 16:55 A temporal view of three-dimensional enhancer interactions during embryonic development***Eileen Furlong*EMBL Heidelberg
Germany**17:00 – 17:20 Nuclear lamina - genome interactions in single cells***Bas van Steensel*Division of Gene Regulation, Cancer Institute
The Netherlands**17:00 – 17:20 Chromatin insulation: Beyond chromatin looping***Rainer Renkawitz*Institute for Genetics, Justus-Liebig-University
Germany**18:15 Dinner Buffet**

Wednesday, September 4th

CHROMATIN REGULATION OF SEX CHROMOSOMES AND GAMETES**Chair: Willy Baarends**

- 09:00 - 09:20 **Regulation of biogenesis and homeostasis of the male-specific-lethal complex in *Drosophila melanogaster***
Peter B. Becker
Adolf-Butenandt-Institute of Molecular Biology
Germany
- 09:25 - 09:45 **Activation of X inactivation**
Joost Gribnau
Erasmus MC
Netherlands
- 09:50 – 10:10 **From histones to protamines to fertile sperm: conserved histone modifications are required for histone depletion and protamine deposition at a stage sensitive to bacterial infections in mammals**
Renate Renkawitz-Pohl
Philipps-University-Marburg
Germany
- 10:15 **Coffee Break**
- 10:45 - 11:05 **Genome-wide re-organizers of the male genome guided by histone post-translational modifications**
Sophie Rousseaux
University Joseph Fourier Grenoble
France
- CELL-TYPE SPECIFIC CHROMATIN REGULATION**
Chair: Lienhard Schmitz
- 11:10 - 11:30 **The TFIID subunit TAF4 is essential for postnatal hepatocyte development by regulating preinitiation complex formation, RNA polymerase II pausing, and promoting HNF4a occupancy of functional sites**
Irwin Davidson
University of Strasbourg
France
- 11:35 - 11:55 **Regulation of inflammatory genes by nuclear signaling networks**
Michael Kracht
Justus-Liebig-University
Germany
- 12:00 **Lunch Buffet**
- 13:15 – 13:35 **Role of chromatin in a pro-inflammatory transcriptional cascade**
Stephen T. Smale
UCLA, Los Angeles
United States of America

Wednesday, September 4th

DNA DAMAGE AND GENOME STABILITY

Chair: Thomas Braun

13:40 – 14:00 **Localising single DNA repair molecules inside double strand break foci**
Adriaan Houtsmuller
Erasmus MC
Netherlands

14:05 - 14:25 **Chromatin regulation of genome stability**
Gary Karpen
University of California & Berkeley
United States of America

CONCLUDING TALK

Chair: Frank Grosveld

14:30 – 14:50 **Chromatin and alternative pre-mRNA splicing**
Tom Misteli
National Cancer Institute
United States of America

15:00 *End of Chromatin Symposium 2013*