

Monday, September 2nd

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 Biomics, 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 - 12:20 **Role of chromatin in a pro-inflammatory transcriptional cascade**
Stephen T. Smale
UCLA, Los Angeles
United States of America
- 12:30 Lunch Buffet**

Wednesday, September 4th

DNA DAMAGE AND GENOME STABILITY**Chair: Thomas Braun**

- 13:30 - 13:50 **Chromatin assembly from nucleosome to heterochromatin:
The issue of DNA damage**
Genevieve Almouzni
UMR218, CNRS/UPMC, Institut Curie
France
- 13:55 – 14:15 **Localising single DNA repair molecules inside double strand break
foci**
Adriaan Houtsmuller
Erasmus MC
Netherlands
- 14:20 - 14:40 **Chromatin regulation of genome stability**
Gary Karpen
University of California & Berkeley
United States of America

CONCLUDING TALK**Chair: Frank Grosveld**

- 14:45 – 15:05 **Chromatin and alternative pre-mRNA splicing**
Tom Misteli
National Cancer Institute
United States of America
- 15:30 *End of Chromatin Symposium 2013*