



**Collaborative Research Centre 992
Medical Epigenetics**

CRC 992 Symposium on Medical Epigenetics 2024

Monday, March 18th – Wednesday, March 20th

Agenda

Lecture Hall Otto-Krayer-Haus
Albertstr. 25
79104 Freiburg, Germany

Day 1 **Monday, March 18th 2024, 14:30 - 19:30**

13:00 Registration

14:30 Welcome remarks by Roland Schüle and Stefan Kass

Session 1 **Epigenetic Mechanisms (Chairs: Asifa Akhtar and Thomas Jenuwein)**

14:35 – 15:05 **Thomas Jenuwein** (Freiburg)
DNA/RNA-based logic for heterochromatin formation in the mouse epigenome

15:05 – 15:20 **Maria Stefanova** (Berlin; selected from abstracts)
Multiscale structural role of TOP2 in chromatin organization

15:20 – 15:50 **Sebastian Arnold** (Freiburg)
Chromatin dynamics during pluripotency exit

15:50 – 16:30 **Coffee Break**

16:30 – 17:00 **Ibrahim Cissé** (Freiburg)
Super-resolution imaging of transcription in living cells

17:00 – 17:30 **Dirk Schübeler** (Basel, CH)
Finding your place: Transcription factors as sensors and modifiers of chromatin

17:30 – 18:00 **Tugce Aktas** (Berlin)
Genome Streamlining by Nuclear Speckles

18:00 – 18:30 **Coffee Break**

18:30 – 19:00 **Elisabeth Binder** (Munich)
The impact of glucocorticoids on brain development:
insights from human cerebral organoid studies

19:00 – 19:30 **Asifa Akhtar** (Freiburg)
The epigenetic regulatory MSL complex fine tunes gene expression
on X chromosome and autosomes

19:30 **Reception**

Day 2 Tuesday, March 19th 2024, 9:00 – 17:00

Session 2 Epigenetics in Hematology (Chairs: Heike Pahl and Michael Lübbert)

- 09:00 – 09:30 **Ken Figueroa** (Miami, FL)
Age-related changes in BRD9 regulate human granulocytic progenitor cell fate through chromatin remodeling
- 09:30 – 10:00 **Marcus Buschbeck** (Barcelona, ES)
MacroH2A histone variants link chromatin structure and metabolism
- 10:00 – 10:30 **Michael Lübbert** (Freiburg)
When Less Is More: Will the Deescalation Approach of DNA Hypomethylating Agent-Based Treatment Replace Intensive Polychemotherapy of Acute Myeloid Leukemia?
- 10:30 – 11:00 **Coffee Break**
- 11:00 – 11:30 **Scott Armstrong** (Boston, MA)
Mechanisms of response and resistance to chromatin-targeted therapies in cancer
- 11:30 – 11:45 **Elena Grossi** (New York, NY; selected from abstracts)
The SWI/SNF chromatin remodeler PBAF facilitates REST occupancy at inactive chromatin in the melanocytic lineage
- 11:45 – 12:15 **Christian Flotho** (Freiburg)
Is epigenetics the key to understanding JMML?
- 12:15 – 12:30 **Camila Fullio** (Freiburg; selected from abstracts)
DOT1L-Mediated Basal Progenitor to Interneuron Signaling and Its Impact on Cerebral Cortex Development
- 12:30 – 14:00 **Lunch Break and Poster Session**

Session 3 Epigenetic Drug Discovery (Chair: Manfred Jung)

- 14:00 – 14:30 **Jian Jin** (New York, NY)
Novel Approaches to Target Undruggable Proteins
- 14:30 – 15:00 **Manfred Jung** (Freiburg)
Inhibitors of the NAD⁺ dependent histone deacetylase Sirtuin2 (Sirt2) block prostate cancer cell migration
- 15:00 – 15:15 **Sven Beyes** (Freiburg; selected from abstracts)
Metastatic cell identity is maintained by SOX9 function during mitosis in triple negative breast cancer
- 15:15 – 15:45 **Coffee Break**
- 15:45 – 16:00 **Thomas Ekstrom** (Stuttgart; selected from abstracts)
Lineage defining transcription factors regulate PDAC subtype specificity through distinct regulatory mechanisms
- 16:00 – 16:30 **Jolanta Grembecka** (Ann Arbor, MI)
Pharmacologic inhibition of chromatin-associated protein complexes in leukemia
- 16:30 – 17:00 **Alessio Ciulli** (Dundee, UK)
How PROTAC degraders work: Molecular recognition and design principles

Day 3 Wednesday, March 20th 2024, 9:00 - 17:30

**Session 4 Chromatin Modifications and Transcriptional Consequences
(Chairs: Sebastian Arnold and Marc Timmers)**

- 09:00 – 09:30 **Yonathan Stelzer** (Rehovot, IL)
Impact of dynamic DNA methylation on gene expression and cell specification during mouse gastrulation
- 09:30 – 10:00 **Nicola Iovino** (Freiburg)
Epigenetic Inheritance
- 10:00 – 10:30 **Nadine Vastenhouw** (Lausanne, CH)
The organization of transcription in nuclear space
- 10:30 – 11:00 **Coffee Break**
- 11:00 – 11:30 **Marc Timmers** (Freiburg)
Basal transcription factor TFIID in neurodevelopment and neurodegeneration
- 11:30 – 12:00 **Mark Bedford** (Houston, TX)
Characterizing Methylarginine Effector Proteins
- 12:00 – 12:30 **Christoph Plass** (Heidelberg)
Enhancer-hijacking in acute myeloid leukemia
- 12:30 – 13:30 **Lunch Break and Poster Session**

Session 5 Epigenetics in Development and Disease (Chair: Roland Schüle)

- 13:30 – 14:00 **Sebastian Preissl** (Freiburg)
Decoding cell-type-specific gene regulation using single cell multiomics
- 14:00 – 14:30 **Katherine Chiappinelli** (Washington DC)
Epigenetic regulation of transposable elements to reverse cancer immune evasion
- 14:30 – 15:00 **Anne Schaefer** (Cologne)
Epigenetic mechanisms of microglia plasticity
- 15:00 – 15:30 **Isabelle Mansuy** (Zurich, CH)
Epigenetic inheritance: How traumatic experiences in early life can affect descendants via the germline
- 15:30 – 15:55 **Coffee Break**
- 15:55 – 16:00 Award for the Best Poster
- 16:00 – 16:30 **Roland Schüle** (Freiburg)
KMT9 inhibitors target cancer cells
- 16:30 – 17:30 **Keynote Lecture** by **Adrian Bird** (Edinburgh, UK)
The Genetics and Epigenetics of Rett syndrome
- 17:30 Adjourn – Roland Schüle