

# 15<sup>th</sup> Workshop Epigenetics@DKFZ

Monday, 13 January 2025, DKFZ Lecture Hall

Organizers: Christoph Plass, Karsten Rippe, Angelika Feldmann, Karol Nowicki-Osuch  
Please register at <https://indico.dkfz.de/event/1187/> if you want to attend.

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9:00 – 9:20 **Welcome: Christoph Plass, Karsten Rippe & Angelika Feldmann:**  
Epigenetics@DKFZ 2024

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**Presentations 15 min + 5 min discussion**

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**SESSION 1: Epigenetic mechanisms of transcription regulation (Chair: Karsten Rippe)**

9:20 – 9:40 **Afroditi Sotiriou** (B380): Alternative transcriptional activation mechanisms in synovial sarcoma

9:40 – 10:00 **Katherine Kelly** (B370): Quantify epigenomic heterogeneity in single-cell data with EpiCHAOS

10:00 – 10:20 **Ralph Grand** (ZMBH): Essential genes are predominantly controlled by single transcription factors

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10:30 – 11:00 **Coffee break**

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11:00 – 12:00 **Keynote lecture (Chair: Thomas Höfer)**  
**Anjana Rao** (La Jolla Institute for Immunology, USA): The TET-DNMT-ASXL1-OGT axis: regulation of DNA and histone methylation, clonal haematopoiesis, and cancer

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12:00 – 13:30 **Lunch break (individual)**

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**SESSION 2: Chromatin features and their function (Chair: Christoph Plass)**

13:30 – 13:50 **Jan Fabio Nickels** (B066): The disruptive effect of an oncohistone on epigenetic memory formation in mammalian cells

13:50 – 14:10 **Timothy En Haw Chan** (FR02-DKTK): MLL4/KMT2D histone methyltransferase and JUNB cooperatively regulate AP-1 dependent TGF- $\beta$  signalling in a feed-forward loop

14:10 – 14:30 **Abigail Suwala** (B300): Epigenetic Dynamics in IDH-Mutant Glioma Progression

14:30 - 14:50 **Stefania Del Prete** (B270): CTCF binding sites evolve through DNA methylation erosion

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15:00 – 15:30 **Coffee break**

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**SESSION 3: Exploiting epigenetics for prevention and early detection of cancer (Chair: Karol Nowicki-Osuch & Angelika Feldmann)**

15:30 – 15:50 **Karol Nowicki-Osuch** (C150): Epigenetic regulation of transcriptional programs preceding cancer development

15:50 – 16:10 **Maximilian Schönung** (B340) DNA methylation-based classifier for leukemia

16:10 – 16:30 **Zoe Saßmannshausen** (A130): Modular deconstruction of epigenetic clocks for skin cancer prevention

16:30 - 16:50 **Gianluca Sigismondo** (UKHD): Isolation of proteins on chromatin (iPOC) reveals signaling pathway-dependent alterations in the DNA-bound proteome.

16:50 **Closing remarks: Karol Nowicki-Osuch**

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17:00

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