

# Symposium

## Signaling through Chromatin

*from molecules to ecosystems*

October 2 - 4 2023

Grenoble, France

Shelley L. Berger *USA*  
Clara Bourbousse *France*  
Chris Bowler *France*  
Sandra Duharcourt *France*  
Olivier Espeli *France*  
Katharina Gapp *Switzerland*  
Anja Groth *Denmark*  
Petra Hajkova *United Kingdom*  
Janosch Hennig *Germany*  
Saadi Khochbin *France*

Rob Martienssen *USA*  
Christoph Müller *Germany*  
Magnus Nordborg *Austria*  
Dónal O'Carroll *United Kingdom*  
Marieke Oudelaar *Germany*  
Charlotte Proudhon *France*  
Claire Rougeulle *France*  
Céline Vallot *France*  
Jérémy Vidal-Dupiol *France*  
Jonathan Weitzman *France*  
Jan Żylicz *Denmark*

[epigenetics.fr/sympo/](http://epigenetics.fr/sympo/)

ACTIVE MOTIF

diagenoë

OXFORD  
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### Organization committee

Ana Boskovic (EMBL)  
Vincent Colot (IBENS)  
Julia Fuchs (CIRB)  
Jérôme Govin (IAB)

Jan Kadlec (IBS)  
Marco Marcia (EMBL)  
André Verdel (IAB)

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# Program

## Monday Oct 2<sup>nd</sup> afternoon. 1 pm – 10 pm

1:00 PM - 1:30 PM *Arrival and registration*

1:30 PM - 1:45 PM *Welcome address by Jérôme Govin*

### Keynote 1 Plenary lecture - Chaired by Jérôme Govin

1:45 PM - 2:30 PM **Shelley L. Berger (USA)**

*TBA(Talk 1)*

### Session 1 Structure biology of epigenetic complexes - Chaired by Jan Kadlec

2:30 PM - 2:55 PM **Christoph Müller (Germany)**

*Roles of RNA polymerase I and III transcription complexes in gene expression and genome organization*

2:55 PM - 3:10 PM **Camille Sayou (France)**

*Tale of a reader domain that preferred DNA over histone tails*

3:10 PM - 3:35 PM **Janosh Hennig (Germany)**

*Structural basis of RNA-induced autoregulation of the DExH-type RNA helicase maleless during Drosophila dosage compensation*

3:35 PM - 3:50 PM **Luisa Felgines (France)**

*Evolution of the CLASSY-RNA polymerase IV complex that silences transposons in plants through small RNA biogenesis*

3:50 PM - 4:05 PM **Michal Razew (France)**

*Integrative model of the fully assembled Integrator complex bound to a transcription factor*

4:05 PM - 4:30 PM *Coffee break*

### Session 2 Chromatin / nuclear structure and RNA - Chaired by Marco Marcia

4:30 PM - 4:55 PM **Dónal O'Carroll (UK)**

*Safeguarding immortality*

4:55 PM - 5:10 PM **Tristan Escure (France)**

*The HUSH-SETDB1-MORC2 epigenetic repressor complex controls heterochromatin marks associated to the silencing of a herpesvirus genome*

5:10 PM - 5:35 PM **Marieke Oudelaar (Germany)**

*In vitro reconstitution of chromatin domains*

5:35 PM - 5:50 PM **Auriane Rakitch (France)**

*Conserved Erh1 protein orchestrates Mmi1 YTH-guided multi-modal mRNA silencing*

5:50 PM - 6:10 PM *Mini break*

6:10 PM - 6:35 PM **Claire Rougeulle (France)**

*To be inactive or not: an eXISTential question*

6:35 PM - 6:50 PM **Antonia Hauth (Germany)**

*Escape from X inactivation and 3D chromosome topology: cause or consequence?*

6:50 PM - 7:05 PM **Vangeli Geshkovski (France)**

*Chromatin switches in plants: Molecular mechanisms of the ULTRAPETALA1 protein*

7:05 PM - 7:15 PM Sponsor Talk **Active Motif**

7:15 PM - 10:00 PM *Poster session*

Tuesday Oct 3rd morning. 9am - 1pm

**Session 3 Epigenetic mechanisms in model organisms - Chaired by Ramesh Pillai**

- 9:00 AM - 9:25 AM **Sandra Duharcourt (France)**  
*Epigenetics and genome dynamics in the ciliate Paramecium*
- 9:25 AM - 9:40 AM **Jeremy Berthelier (Japan)**  
*Epigenetic mechanisms regulate gene-transposon transcripts affecting stress responses in Arabidopsis thaliana*
- 9:40 AM - 10:05 AM **Olivier Espeli (France)**  
*The bacterial chromatin: chromosome and cell cycle organizer*
- 10:05 AM - 10:20 AM **Francesca Masoni (Switzerland)**  
*Systematic assessment of ISWI subunits reveals that NURF creates local accessibility for proper CTCF function*
- 10:20 AM - 10:35 AM **Martina Shahinas (France)**  
*In vitro production of cat-restricted Toxoplasma pre-sexual stages by epigenetic reprogramming*
- 10:35 AM - 10:45 AM Sponsor Talk **Diagenode**
- 10:45 AM - 11:15 AM Coffee break

**Session 4 Epigenetics in development - Chaired by Ana Boskovic**

- 11:15 AM - 11:40 AM **Petra Hajkova (UK)**  
*Passage of epigenetic information through the germline: the tales of erasure and long term maintenance*
- 11:40 AM - 11:55 AM **Antoine Molaro (France)**  
*(epi)Genetic Conflicts Shaping Mammalian Reproduction*
- 11:55 AM - 12:20 PM **Saadi Khochbin (France)**  
*NME1/2 mediate epigenetic reprogramming of liver cells in response to a high-fat diet*
- 12:20 PM - 12:35 PM **Julie Cocquet (France)**  
*The H3K79 methyltransferase DOT1L has pleiotropic regulatory effects during spermatogenesis*
- 12:35 PM - 12:50 PM **Guillermo Orsi (France)**  
*Liquid crystal-like chromatin to fit the cricket genome into the sperm nucleus*
- 12:50 PM - 2:00 PM Lunch

**Tuesday Oct 3rd afternoon. 2:00pm - 7pm**

**Keynote 2 Plenary lecture - Chaired by André Verdel**

2:00 PM - 2:45 PM **Rob Martienssen (USA)**

*Chromatin remodeling of histone H3 variants by DDM1 underlies epigenetic inheritance of DNA methylation*

**Session 5 Epigenetic deregulations in cancer - Chaired by Julia Fuchs**

2:45 PM - 3:10 PM **Céline Vallot (France)**

*TBA*

3:10 PM - 3:25 PM **Débora Parrine (Sweden)**

*A new HDAC regulator with a critical role in differentiation and development*

3:25 PM - 3:50 PM **Anja Groth (Denmark)**

*TBA*

3:50 PM - 4:05 PM **Jumana Alhaj Abed (USA)**

*Investigating how paired parental chromosome organization shapes gene function*

4:05 PM - 4:35 PM Coffee break

**Session 6 Systems epigenetics - Chaired by François Parcy**

4:35 PM - 5:00 PM **Jan Żylicz (Denmark)**

*TBA*

5:00 PM - 5:15 PM **José Antonio Sanchez Villanueva (France)**

*Modelling the role of EZH2 in Acute Promyelocytic Leukaemia resistance to Retinoic Acid therapy*

5:15 PM - 5:40 PM **Katharina Gapp (Switzerland)**

*Stress signalling signatures in sperm*

5:40 PM - 6:05 PM **Chris Bowler (France)**

*Epigenetics in the cold dark Arctic Ocean*

6:05 PM - 7:00 PM Gala Diner : walk & Bastille Telepherique

7:00 PM - 10:00 PM Gala Diner at 02 restaurant (scenic view)

Wednesday Oct 4th morning. 9am - 1pm

**Session 7 Population epigenetics and epidemiology - Chaired by André Verdel**

9:00 AM - 9:25 AM **Magnus Nordborg (Austria)**

*The genetics of epigenetics*

9:25 AM - 9:40 AM **Pierre Baduel (France)**

*Mechanisms, extent, and impact of natural epigenetic variation at transposable element sequences in Arabidopsis thaliana*

9:40 AM - 10:05 AM **Charlotte Proudhon (France)**

*Non-invasive multi-cancer diagnosis using DNA hypomethylation of LINE-1 retrotransposons*

10:05 AM - 10:35 AM Coffee break

**Session 8 Environmental epigenetics - Chaired by Vincent Colot**

10:35 AM - 11:00 AM **Jérémie Vidal-Dupiol (France)**

*Epigenetic variations are more substantial than genetic variations in rapid adaptation of oyster to Pacific Oyster Mortality Syndrome*

11:00 AM - 11:15 AM **Tatjana Lumpp (Germany)**

*Arsenite-mediated epigenetic disruption of histone acetylation in DNA repair genes within lung epithelial cells*

11:15 AM - 11:40 AM **Jonathan Weitzman (France)**

*Chromatin dynamics in host-parasite interactions*

11:40 AM - 11:55 AM **Fatema Zahra Rashid (Netherlands)**

*Regulation of proVWX transcription by local chromatin remodelling*

11:55 AM - 12:20 PM **Clara Bourbousse (France)**

TBA

12:20 PM - 12:30 PM Closing remarks by Vincent Colot

12:30 PM - 2:00 PM Lunch buffet, departure

# Thank you to all our sponsors !!

