



# When epigenetics meet chromosomes - March 22–31, 2023

 common conferences **Wednesday March 22**

 keynote speakers

 common activities

 restricted to the students following the digital workshops

 restricted to the full and free attendees

IC : Institut Curie  
11–13 rue Pierre et Marie Curie  
75005 Paris  
BDD building, ground floor

ENS : Ecole Normale Supérieure  
46 rue d'Ulm  
75005 Paris  
Rooms 321, 313, 305: 3rd floor  
Room Favard: ground floor

1.30–2.00 pm Welcome desk  
IC, BDD hall

2.00–2.30 pm Introduction  
IC, amphi BDD

2.30–5.00 pm  
**Student presentations**  
IC, amphi BDD

5.00–5.30 pm coffee break – IC, hall BDD

5.30–7.30 pm  
**Student poster presentation part 1**  
IC, Annexe rooms BDD

**Thursday March 23**

8.45–9.00 am coffee break – IC, hall BDD

9.00–10.15 am **L Mirny**  
What can we see in Hi-C?  
IC, amphi BDD

10.15–10.45 am coffee break – IC, hall BDD

10.45–12.00 am **P Barbry**  
Single cell and spatial transcriptomics: the technologies and experimental approaches  
IC, amphi BDD

12.00–1.15 pm lunch  
ENS, room 305

1.15–5.00 pm  
Digital workshop  
What can we see in Hi-C?  
**L Mirny**  
**A Galitsyna**  
ENS, room 321

1.15–5.00 pm  
Digital workshop  
Spatial/single cell transcriptomics data analysis  
**P Barbry**  
**M Fierville**  
**A Collin**  
ENS, room 313

1.30–3.00 pm **C Molins**  
Understanding the language of DNA as a code. Encoding a Phygital DNA genome  
3.30–5.00 pm **F Garnier**  
Spatial media tools to interact with your data  
IC, Chez Marie

5.00–5.30 pm coffee break – IC, hall BDD

5.30–7.00 pm **Alumni presentations**  
**L Polit** PhD in Computational Biology and potential applications in industry  
**A Gabory** From epigenetic mechanisms to the Developmental Origins of Health : Maternal metabolism and the sex-specific response of the offspring  
**G Orsi** Sperm chromatin fastens its seatbelts for the ride  
IC, amphi BDD

**Friday March 24**

8.45–9.00 am coffee break – IC, hall BDD

9.00–9.45 am **D Gerlich**  
Chromosome reorganization during the cell cycle  
10.00–10.20 am **Article presentations**  
IC, amphi BDD

10.30–11.00 am coffee break – IC, hall BDD

11.00–11.45 am **A Coulon**  
Probing chromosome mechanics in the interphase nucleus  
12.00–12.20 am **Article presentations**  
IC, amphi BDD

12.30–2.00 pm lunch  
IC, Green cafe

2.00–2.45 pm **E Furlong**  
How do enhancers function within their 3D nuclear environment?  
3.00–3.20 pm **Article presentations**  
IC, amphi BDD

3.30–4.00 pm coffee break – IC, hall BDD

4.00–4.45 pm **S Aerts**  
Single-cell driven enhancer modelling and design  
5.00–5.20 pm **Article presentations**  
IC, amphi BDD

5.30–6.00 pm coffee break – IC, hall BDD

6.00–7.00 pm **E Heard**  
When Epigenetics meet X chromosomes  
IC, amphi BDD

**Saturday March 25**

11.00 am – 2.00 pm  
**Career development**  
IC, Green cafe

When epigenetics meet chromosomes - March 22–31, 2023

Monday March 27

8.45–9.00 am coffee break – ENS, room 305

9.00–10.15 am **J–B Masson & B Hajj**  
From experimental dynamics of single molecules to descriptive models  
ENS, room Favard

10.15–10.45 am coffee break – ENS, room 305

10.45 - 12.00 am **L Cantini**  
Multimodal integration from bulk to single-cell resolution  
ENS, room Favard

12.00–1.30 pm lunch  
ENS, room 305

1.30–5.00 pm Digital workshop  
Multimodal integration from bulk to single-cell resolution  
**L Cantini**  
**C Lansonneur**  
**J Samaran**  
ENS, room 313

1.30–5.00 pm Digital workshop  
Data analysis with the Genuage platform and graph neural networks  
**J–B Masson**  
**B Hajj**  
**T Blanc**  
ENS, room 316

1.30–5.00 pm Visit of imagery platform  
**P Le Baccon**  
IC

5.00–5.30pm coffee break – IC, hall BDD

5.30–6.30 pm **M–E Torres–Padilla**  
Epigenetic mechanisms of cellular plasticity  
IC, amphi BDD

6.30–8.30 pm **Student poster presentation part 2**  
IC, Annexe rooms BDD

Tuesday March 28

8.45–9.00 am coffee break – IC, hall BDD

9.00–9.45 am **G Legube**  
Chromosome and chromatin dynamics in response to Double Strand Breaks  
10.00–10.20 am **Article presentations**  
IC, amphi BDD

10.30–11.00 pm coffee break – IC, hall BDD

11.00–11.45 am **G Cavalli**  
Higher-order chromatin regulation and epigenetic inheritance  
12.00–12.20 am **Article presentations**  
IC, amphi BDD

12.00–1.30 pm lunch  
IC, Green cafe

2.00–2.45 pm **S Uphoff**  
Phenotypic heterogeneity and mutation dynamics during cellular stress adaptation  
3.00–3.20 pm **Article presentations**  
IC, amphi BDD

3.30–4.00 pm coffee break – IC, hall BDD

4.00–4.45 pm **I Drinnenberg**  
Evolution of centromeres : Conserved function, yet diverse architecture  
5.00–5.20 pm **Article presentations**  
IC, amphi BDD

5.30–6.00 pm coffee break – IC, hall BDD

6.00 pm **Cocktail**  
IC, hall BDD

Wednesday March 29

8.45–9.00 am coffee break – ENS room 305

9.00–10.15 am **T Mora & J Mine–Hattab**  
Tracking molecules one at a time  
ENS, room Favard

10.15–10.45 am coffee break – ENS room 305

10.45 - 12.00 am **V Pancaldi & D Jost**  
4D Epigenomics: using data analysis and modeling to infer functions  
ENS, room Favard

12.00–1.30 pm lunch  
ENS, room 305

1.30–5.00 pm Digital workshop  
Data analysis of single particle tracking  
**J Mine–Hattab**  
**T Mora**  
**F Garcia Fernandez**  
**X Chen**  
ENS, room 313

1.30–5.00 pm Digital workshop  
4D Epigenomics: using data analysis and modeling to infer functions  
**V Pancaldi**  
**D Jost**  
**F Reynal**  
**A. Abdulla**  
ENS, room 321

5.00–5.30 pm coffee break – ENS room 305

5.30–6.30 pm **N Barkai**  
How transcription factors locate their binding sites in true leather genome – a role for intrinsically disordered regions  
ENS, room Favard (online)

Thursday March 30

8.45–9.00 am coffee break – ENS room 305

9.00–10.15 am **B Audit & C Vaillant**  
Genomics of nucleosome positioning  
ENS, room Favard

10.15–10.45 am coffee break – ENS room 305

10.45 - 12.00 am **I Junier & O Espeli**  
Interplay between transcription and genome folding in bacteria  
ENS, room Favard

12.00–1.30 pm lunch  
ENS, room 305

1.30–5.00 pm Digital workshop  
Simulating nucleosome positioning  
**B Audit**  
**C Vaillant**  
**H Kharerin**  
ENS, room 321

1.30–5.00 pm Digital workshop  
Interplay between transcription and genome folding in bacteria  
**I Junier**  
**O Espeli**  
**E Ghobadpour**  
ENS, room 313

5.00–5.30 pm coffee break – ENS room 305

8.00 pm **speakers and TAs dinner**

Friday March 31

8.45–9.00 am coffee break – ENS room 305

9.00–10.15 am **M Nollmann**  
Multiplexed chromatin imaging reveals principles of cell-type specific chromosome organization  
ENS, room Favard

10.15–10.45 am coffee break – ENS room 305

10.45 - 12.00 am **C Vallot**  
Epigenomes at single cell resolution  
ENS, room Favard

12.00–1.15 pm lunch  
ENS, room 305

1.30–5.00 pm Digital workshop  
Analysis of multiplexed chromatin imaging data  
**M Nollmann**  
**X. Devos**  
ENS, room 313

1.30–5.00 pm Digital workshop  
Epigenomes at single cell resolution  
**C Vallot**  
**P Prompsy**  
ENS, room 321

5.00 - 5.30 pm **General conclusion**  
ENS, room Favard