

PEPR Cell-ID

2nd ANNUAL SCIENTIFIC MEETING

11 & 12 september 2025

Institut Jacques Monod 15 rue Hélène Brion 75013 Paris



International network for <u>PhDs</u> & <u>Postdocs</u>

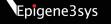
PROGRAM













ORGANIZERS

G.LEGUBE, S.NEDELEC, G.ALMOUZNI Cell-ID COORDINATION TEAM

Next-ID 4Y PRE-EVENT (only for PhDs and Postdocs)

10 WEDNESDAY september

1	12:30 - 1:30 PM	WELCOME LUNCH Institut Jacques Monod, 15 rue Hélène Brion, 75013 Paris - François Jacob Room
	1:30 - 2:00 PM	OPENING REMARKS Introduction to Cell-ID, Cell-Next, and the Training Advisory Board (TAB) Geneviève Almouzni, Sophie Jarriault, Susana Ribeiro & TAB
	2:00 - 3:00 PM	MEET THE Cell-ID COMMUNITY Intro round: One-slide presentations from each participant
	3:00 - 4:00 PM	TRAINING JOURNEYS FOR PhD & POSTDOCS Jonas Krebs, Coordinator Strategic Projects & Damjana Kastelic, Head of Training and Academic Office Center for Genomic Regulation, Barcelona
	4:00 - 4:30 PM	EXPLORING EPIGENETICS & CHROMATIN BIOLOGY WITH CUT&Tag Anne-Sophie Berthomieu, Field Application Scientist, Active Motif, Waterloo
	4:30 - 5:00 PM	COFFEE BREAK
	5:00 - 7:00 PM	WORKSHOP: CREATIVE WAYS TO COMMUNICATE Cell-ID Carla Molins Pitarch, Researcher on data vizualisation, UPC Barcelona Ana Debiès & Marie Origas, Cell-ID Communication officers, Paris
	7:30 PM	GROUP DINNER PANGO, 1 Rue Marie-Andrée Lagroua Weill-Hallé, 75013 Paris

11 THURSDAY september

8:30 - 9:00 AM WELCOME COFFEE Institut Jacques Monod, 15 rue Hélène Brion, 75013 Paris - Buffon Amphitheater

TRAINING ADVISORY BOARD (TAB) VISION

9:00 - 9:30 AM

9:30 - 10:30 AM

- Ana Boranijasevic, Institut Curie, Paris
- Cristina Fracassi, Institut de Génétique Humaine, Montpellier
- Iris Unterweger, Institut Pasteur, Paris

FLASH TALKS - EPIGENE3SYS PERSPECTIVES

Short talks from PhD/Postdocs from EpiGene3ys labs

- Jonathan Blickenberg, Josep Carreras Leukaemia Research Institute, Barcelona
- Hortense Bouvier, Institut de Biologie Paris-Seine
- Mireia Codina Tobias, Biozentrum, University of Basel
- Jeisimhan Diwakar Shunmugapriya, Helmholtz Munich
 Jialin Liu, Biozentrum, University of Basel
- Sophia Lipattsev, University of Edinburgh
- Maria Mazina, Max Planck Institute of Immunobiology and Epigenetics, Freiburg
- Pau Pascual, Centre for Genomic Regulation, Barcelona
- Paula Roquero Mendiola, Josep Carreras Leukemia Research Institute, Barcelona
- Aleksandra Sparavier, Centre for Genomic Regulation, Barcelona

10:30 - 11:00 AM BREAK & GROUP PICTURE

11:00 - 12:00 PM

PARTICIPATORY SCIENCE

Leila Périé, Single Cell Initiative, Institut Curie, Paris

11 THURSDAY september

12:00 - 1:00 PM WELCOME LUNCH Institut Jacques Monod, 15 rue Hélène Brion, 75013 Paris - Buffon Amphitheater

INTRODUCTION

1:00 - 1:15 PM Acknowlegment, presentation of the meeting schedule

& welcoming of new members and introduction of the Scientific Advisory Board

SESSION 1 - RESEARCH PROGRAM OVERVIEW

1:15 - 1:45 PM Geneviève Almouzni, Cell-ID Scientific Coordinator

Program goals, current status, progress, milestones, and challenges ahead

SESSION 2 - RESEARCH PRESENTATIONS

PC1 Cell Context (scientific leaders Giacomo Cavalli, Institut Génétique Humaine, Montpellier & Marcelo Nollmann, Centre de Biologie Structurale, Montpellier)

Scientific talk by **Céline Vallot**, Institut Curie, Paris (20 min)

PC2 Cell Exp (scientific leaders Gaëlle Legube, Centre de Biologie Intégrative de Toulouse

& Stéphane Nedelec, Institut Jacques Monod, Paris)

Scientific talk by Alain Chedotal, Institut de la Vision, Paris (20 min)

Short break (10 min)

1:45 - 3:35 PM PC3_Data (scientific leaders Daniel Jost, ENS Lyon & Thomas Walter, Mines Paris)

Scientific talk by Thomas Walter, Mines Paris (20 min)

PC3 Med (scientific leaders Laure Bally-Cuif, Institut Pasteur, Paris

& David Castel, Institut Gustave Roussy, Villejuif)

Scientific talk by Cédric Maurange, Institut de Biologie du Développement de Marseille (20 min)

PC4 Cell Next (scientific leaders Geneviève Almouzni, Institut Curie, Paris

& Sophie Jarriault, Institut de génétique, biologie moléculaire et cellulaire, Strasbourg)

- Flash talks (Training Advisory Board + Cell-ID PhD students)
- Scientific talk by Davide Normanno, Institut de Génétique Humaine, Montpellier
 Rocio Nunez-Vazquez, Institut Curie, Paris (20 min)

3:35 - 4:00 PM COFFEE BREAK & GROUP PICTURE

4:00 - 5:00 PM SESSION 3 - ETHICAL ASPECTS OF Cell-ID RESEARCH + ETHICS PANEL DISCUSSION

Keynote Speaker Hervé Chneiweiss, Scientific Advisory Board Member, Sorbonne Université Paris

SESSION 4 - INTER-PEPR

5:00 - 5:30 PM • Stéphanie Descroix, CNRS Research Director, PEPR MED-OOC

Franck Simon, Postdoc, PEPR Santé numérique

SESSION 5 - BREAKOUT GROUP DISCUSSIONS

5:30 - 6:30 PM Mixing people across PCs discussing: Hindbrain Taskforce;

Barcoding & Multilabelling; Computational Challenges.

6:30 - 8:00 PM POSTER SESSION, NETWORKING & DRINKS

8:00 - 9:30 PM COCKTAIL RECEPTION

12 FRIDAY september

9:00 - 9:30 AM WELCOME COFFEE Institut Jacques Monod, 15 rue Hélène Brion, 75013 Paris - Buffon Amphitheater

9:30 - 10:30 AM SESSION 6 - CELLS, TISSUES & ORGANS: ASSEMBLING THE HUMAN CELL ATLAS

Remote Keynote Speaker Sarah Teichmann, Scientific Advisory Board Member, Cambridge Stem Cell Institute

10:30 - 11:30 AM SESSION 7 - BREAKOUT GROUP CONCLUSION

Breakout group leaders share their plans

11:30 - 12:00 PM CLOSING SESSION + POSTER AWARDS

Final remarks for consortium lead & outline of next steps

12:00 - 1:00 PM LUNCH Lunch bag provided by Cell-ID

KEYNOTES SPEAKERS

Scientific Advisory Board



Hervé Chneiweiss, Scientific Advisory Board Member, Sorbonne Université Paris

Ethics of research on human organoids: lessons from the HYBRIDA project Thursday, September 11, from 4:00 - 5:00 PM

To illustrate how research in ethics would be beneficial to the success of Cell-ID, we will present results from the BYBRIDA project on organoids (laboratory-grown three-dimensional structures derived from stem cells) that raise distinctive ethical, regulatory, and societal challenges. In example, since organoids do not replicate the full functions of organs, they are not "mini-organs"; misnaming risks misleading the public and undermining trust. They are hybrid entities, living biological material shaped by human technological intervention. Their uncertain status may create regulatory gaps, either through insufficient oversight or over-regulation across jurisdictions. Responsible organoid research requires clear guidelines to safeguard integrity, transparency, and trust.

The HYBRIDA project proposes practical tools, including minimal reporting standards (MIAOU), evaluator checklists (EChOES), and guidance for ethics committees (RICOCheck). Key ethical concerns include informed consent, privacy, commercialization, and equity of access. Sensitive cases (such as embryonic or neural organoids) demand particular scrutiny due to potential moral status and societal impact. Informed consent for cell donation faces unique challenges, given unpredictable future uses and difficulties in withdrawal. Innovative models such governance-based approaches (TRUSTED) may better protect donor rights. Ultimately, organoid research calls for accuracy in communication, robust regulation, and participatory governance to ensure innovation proceeds responsibly and equitably.



Sarah Teichmann, Scientific Advisory Board Member, Cambridge Stem Cell Institute

Cells, Tissues & Organs: assembling the Human Cell Atlas Friday, September 12, from 9:30 - 10:30 AM

The 37 trillion cells of the human body have a remarkable array of specialised functions, and must cooperate and collaborate in time and space to construct a functioning human. Harnessing cutting-edge single cell genomics and spatial technologies, my lab has been attempting to understand this cellular diversity, how it is generated during development and how it goes wrong in disease. My talk will illustrate how cell atlasing in three spatial dimensions and across developmental time can accelerate our understanding of how functioning tissues and organs are formed in the body.

The other members of the Cell-ID Scientific Advisory Board



Wendy Bickmore - Chair University of Edinburgh



Denis Duboule EPFL Lausanne



Stefan Pfister DKFZ Heidelberg



Maria-Elena Torres Padilla Helmhotz Munich



Marc Marti-Renom
Center for Genomic Regulation
Barcelona

POSTERS SESSION

1. Anna Schwager, Institut Curie, Paris

OneCell CUT&Tag maps chromatin modifications together with transcriptome and phenotype starting from a single cell

2. Ludovica Brunetti, Institut Curie, Paris

Identifying lineage derailments in Group3/4 Medulloblastoma: insights from cerebellar organoids and fetal tissue

3. Sarah Collins, Centre de Biologie Intégrative, Toulouse

Endogenous DNA Double Strand Breaks define a new class of transcription regulatory elements

4. Naomie Pont, Institut Pasteur, Paris

Visium HD single cell spatial transcriptomics identifies heterogeneity of craniofacial muscles in human embryos

5. Sophia Lipattsev, University of Edinburgh

RIF1-dependent regulation of dephosphorylation at heterochromatin in space and time

6. Nicole Weiss, Institut Curie, Paris

Functional interrogation of histone H3.3 serine 31 phosphorylation in human cells

7. Emna Chabaane, Institut Curie, Paris

Building a robust data management framework for Cell-ID

8. Cristina Fracassi, Institut de Génétique

Humaine, Montpellier

Define the molecular underpinnings of Posterior fossa ependymoma A

9. Frédéric Causeret, Institut Imagine, Paris

Cell survival is encoded within the fate specification program of Cajal-Retzius neurons

10. Benoît Aliaga, Centre de Recherches en Cancérologie de Toulouse

Global chromatin reorganization and regulation of genes with specific evolutionary ages during differentiation and cancer

11. Kenza Cheriet, Institut Jacques Monod, Paris

Characterization of the transforming effects of RAS variants associated to Rhabdomyosarcoma in chick embryos

12. Camille Bacquié, Institut de Génétique Humaine, Montpellier

Real-time visualization of the single-cell transcriptome to understand human diseases.

13. Iris Unterweger, Institut Pasteur, Paris

Developing single-cell retrospective transcriptomics to understand the transcriptomic trajectories of individual adult neural stem cells in vivo

14. Ajit Roy, Centre de Biologie Structural, Montpellier

Development of an advanced high throughput light-sheet microscope for multiplexed deep-tissue imaging

15. Christophe Heinrich, Stem Cell and Brain Research Institute, Lyon

Dissecting the transcriptional programs underlying lineage reprogramming of glial cells into neurons

16. Hortense Bouvier, Institut de Biologie Paris-Seine

Influence of Antisense Transcription on Alternative Splicing Transcriptome

17. Sarra Bellanger, Gustave Roussy, Villejuif

Development of a syngeneic mouse model to decipher early stages of oncogenesis of pediatric diffuse midline gliomas

18. Theaud Hezez, Institut Jacques Monod, Paris

Activating and repressive switching of PAX3 and PAX7 transcriptional activity regulates cell fate

19. Aurélien Bore, Institut Curie, Paris

CRISPR'it: A Core Facility to help you carry-out your pooled CRISPR screens and perturb-seqs

20. Alice Davy, Centre de Biologie Intégrative, Toulouse

Role of 1 carbon metabolism in brain development and brain tumors: establishing in vitro and in vivo models

21. Berivan Temiz, Institut de génétique, biologie moléculaire et cellulaire, Strasbourg

Analysis of the cellular steps in between two successive IDs in C. elegans embryo using sc-RNA-seq

22. Shubhamay Das, Institut Curie, Paris

Assessing the impacts of the Histone variant H3.3 on gene network at Xenopus Gastrulation

23. Kyra Borgman, Institut Curie, Paris

Imaging-based spatial transcriptomics and FISH technologies @ Institut Curie

SPEAKERS Next-ID 4Y





Jonas Krebs, Coordinator Strategic Projects & Damjana Kastelic, Head of Training and Academic Office Center for Genomic Regulation, Barcelona

Training Journeys for PhDs and postdocs Wednesday, September 10, from 3:00 - 4:00 PM

This session invites participants to rethink how training can accompany the real highs and lows of a research career. At CRG, training is shaped by listening closely to the needs of students, for example through annual surveys, and by offering flexible programs that provide the right skills at the right time. The focus is not only on technical expertise but also on building confidence, leadership, and peer support, helping researchers grow both as scientists and as people.

Experiences from European training networks will be shared to show how international collaborations can act as laboratories for new ideas. These projects have opened doors to unexpected formats, from working with designers to using gamification, which turned courses and workshops into spaces of creativity and community. Such approaches show how training can go beyond standard lectures to spark curiosity, encourage teamwork, and strengthen communication.

The session will highlight what can be learned from these experiences and how creative, well-timed, and collaborative training journeys can make a real difference for early career researchers and their future paths. It will conclude with an overview of CRG's efforts to implement GenAl tools institutionally and the related training now being organised.



Carla Molins Pitarch, PhD Creative Technologist, Experience Designer, and Science Communication Researcher, UPC Barcelona

Workshop: Creative ways to communicate Cell-ID Wednesday, September 10, from 5:00 - 7:00 PM

The power of design and design research communicating science using different mediums

This workshop invites Cell-ID researchers to explore creative approaches to communicating their science. Using simple tools from design and storytelling, the session will offer various ways to reflect on how we share our research with different audiences.

The workshop will begin with a short talk on the role of design in science communication, followed by a series of short, practical exercises. Participants will experiment with formats such as metaphors, haikus, and visual storytelling, leading into a hands-on session focused on building narratives and imagining exhibition ideas in groups.

The goal is not to produce finished communication materials, but to try different things, encourage discussion, and offer inspiration for future outreach, collaboration, or internal communication efforts. All in all, the workshop offers simple tools to help researchers strengthen their science communication and develop valuable soft skills for collaboration, outreach, and interdisciplinary work.

No creative or sci-comm experience is needed, bring curiosity and a willingness to try something new.



Leila Périé, Single Cell Initiative, Institut Curie, Paris

Participatory science

Thursday, September 11, from 11:00 - 12:00 PM

Trained as an engineer, Leïla Perié did a PhD in experimental immunology at Institut Cochin in France. She then did a postdoc in the Netherlands in the lab of Ton Schumacher at the Netherland Cancer Institute and the lab of Rob de Boer at Utrecht University. She studied hematopoiesis and T-cell at the single cell level, mixing experimental and theoretical work. Since 2015, Leïla Perié head a group the Curie Institute in France.

Her lab is interested in understanding the hematopoietic tree at the single cell level and combines different experimental and mathematical/computational approaches of single cell lineage tracing to study blood cells production. Leïla is, among other, the head of the single cell core facility of Institut Curie. She also spends quite some time thinking about how we do research and why, being involved in programs developing participatory research.

FLASH TALKS

EpiGene3Sys perpectives

Thursday September 11 9:30 - 10:30 AM

Jonathan Blickenberg, Josep Carreras Leukaemia Research Institute

Elucidating the role of the histone variant macroH2A2 in Ewing sarcoma

Hortense Bouvier, Institut de Biologie Paris-Seine

Investigating the interplay between antisense transcription and alternative splicing regulation

Mireia Codina Tobias, Biozentrum, University of Basel

The cis-regulatory code of Nodal morphogen interpretation

Jeisimhan Diwakar Shunmugapriya, Helmholtz Munich

Developing novel single-cell multiomics methods to study epigenetic regulation in the brain

Jialin Liu

Biozentrum, University of Basel

Decoding Gene Regulation in Zebrafish Development with Single-Cell Multiomics and Deep Learning

Sophia Lipattsev

University of Edinburgh

RIF1-dependent regulation of dephosphorylation at heterochromatin in space and time

Maria Mazina

Max Planck Institute of Immunobiology and Epigenetics, Freiburg

Chromatin landscape at cis-regulatory elements orchestrates cell fate decisions in early embryogenesis

Pau Pascual

Center for Genomic Regulation, Barcelona

Unraveling vulnerabilities of oncohistones in pediatric high-grade gliomas

Paula Roquero Mendiola

Josep Carreras Leukemia Research Institute, Barcelona TBD

Aleksandra Sparavier

Centre for Genomic Regulation, Barcelona

The translocation effect: going beyond the fusion protein expression in MLL-AF9 leukemia