12th course on Epigenetics - April 6-13, 2016

A Training Unit International Course - Open conferences in blue or orange

Wednesday, April 6th			Chairs: Geneviève Almouzni & Nathalie Dostatni
08:45 09:45	**Training Unit** Institut Curie, FR	Welcome: practical aspects & coffee	**Amphithéâtre BDD** **11-13 rue Pierre & Marie Curie** **75005 Paris**
	Geneviève Almouzni & Nathalie Dostatni Institut Curie, FR	Presentation of the module by the organizers & scientific committee	
	Brunch Committee	Presentation of the brunch	
09:45	**Students presentation & personal work**	Short presentation of background and research interest (1 mn each) orchestrated by David Sitbon	
10:15 11:00	**Geneviève Almouzni** Institut Curie, FR	**Chromatin assembly and histone chaperones**	
11:15	ALUMNI session		
11:15 11:35	**Pierre Therizols** Hôpital St. Louis, FR	**Nuclear reorganisation during embryonic stem cell differentiation**	
11:45 12:05	**Angelika Feldmann** Oxford University, UK	**Regulating the regulators: Mechanisms by which chromatin and its modifications affect regulatory elements in the genome**	
12:15 12:55	**Film projection: *"la Saga des Nobel"***		
13:00	LUNCH		**Green Cafe**
14:00 14:45	**Tetsuji Kakutani** University of Tokyo, JP	**Silencing and anti-silencing of genes and transposons in Arabidopsis**	**Amphithéâtre BDD** **11-13 rue Pierre & Marie Curie** **75005 Paris**
15:00 17:00	**POSTER SESSION 1**		**BDD HALL & annexes**
17:00	Departure to the Collège de France		
17:30 19:00	**Kristian Helin - KEYNOTE lecture** BRIC, DK	**Epigenetic targets in cancer**	**Collège de France, salle Hallwachs**
19:30	**WELCOME RECEPTION**		**Green Cafe**

Thursday, April 7th		Chairs: Jean Gautier & Guillermo Orsi
09:30 10:15	**Daniele Fachinetti** Institut Curie, FR	**The centromere paradox: Genetic *vs.* epigenetic identity**
10:30 10:50	Article presentation by Sheldon Decombe and Alberto García Nieto	**Polo-like Kinase 1 Licenses CENP-A Deposition at Centromeres.** McKinley *et al.* (2014) Cell 158, 397-411 & **Cdk Activity Couples Epigenetic Centromere Inheritance to Cell Cycle Progression**. Silva *et al.* (2012) Dev. Cell 22, 52-63
11:00	BREAK and GROUP PHOTO	
11:30 12:00	**Guided visit of Institut Curie museum**	
12:00 12:45	**Ines Anna Drinnenberg** Institut Curie, FR	**Evolution of centromeres: Diverse architectures yet conserved function**
13:00	LUNCH and POSTER SET-UP	**Green Cafe**
14:00 14:20	Article presentation by Rostyslav Makarenko and Gianluca Teano	**Centromere Strength Provides the Cell Biological Basis for Meiotic Drive and Karyotype Evolution in Mice.** Chmatal *et al.* (2014) Current Biology 24, 2295-2300
14:30 15:15	**Dirk Schübeler** FMI, CH	**Reading and writing DNA methylation**
15:30 15:50	Article presentation by Andrea Argüeso Lleida and Monika Licaj	**Decoding the regulatory landscape of medulloblastoma using DNA methylation sequencing**. Hovestadt *et al.* (2014) Nature 510, 537-541
16:00	BREAK	
16:30 17:15	**Morgane Thomas-Chollier** ENS, FR	**Analyses of ChIP-seq data to study histone modifications**
17:30 17:50	Article presentation by Andrew Johnston and Robin Van Der Weide	**Integrative annotation of chromatin elements from ENCODE data.** Hoffman *et al.* (2012) Nucleic Acid Res 41, 827-841
18:00 18:45	**Bernd Pulverer** The EMBO Journal, DE	**Reproducibility and scientific integrity: Much ado about nothing?**

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Friday, April 8th		Chairs: Sebastien Bloyer & Angela Taddei	
09:30 10:15	**Edith Heard** Institut Curie, FR	**X-chromosome inactivation: Epigenetic and chromosome dynamics in development and disease**	**Amphithéâtre BDD** **11-13 rue Pierre & Marie Curie** **75005 Paris**
10:30 10:50	Article presentation by Dafne Andrea Ibarra Morales and Sofiane Safi-Stibler	**The Xist lncRNA interacts directly with SHARP to silence transcription through HDAC3.** McHugh *et al.* (2015) Nature 521, 232-236	
11:00	BREAK		
11:30 12:15	**Wouter De Laat** Hubrecht Institute, NL	**3C technologies to understand gene regulation in the 3D genome**	
12:30 12:50	Article presentation by Farida Abderahmane and Constance Humblot	**Reactivation of Developmentally Silenced Globin Genes by Forced Chromatin Looping.** Deng *et al.* (2014) Cell 158, 849-860	
13:00	SPECIAL LUNCH		**BDD Hall**
14:00 14:45	**Maria-Elena Torres-Padilla** IGBMC, Strasbourg, FR	**Epigenetic mechanisms in early mammalian development**	**Amphithéâtre BDD** **11-13 rue Pierre & Marie Curie** **75005 Paris**
15:00 15:30	Article presentation by David Aziz Alaoui and Paul Bardot	**Embryonic Development following Somatic Cell Nuclear Transfer Impeded by Persisting Histone Methylation.** Matoba *et al.* (2014) Cell 159, 884-895	
15:30	BREAK		
16:00 16:45	**Simone Bateman** CNRS-CERMES3, FR	**Scientific inquiry and ethical controversy - When research involves human embryos**	
17:00 17:30	Article presentation by Iris Müller and Renaud Pourpre	**CRISPR germline engineering—the community speaks.** Bosley *et al.* (2015) Nature Biotechnology 33, 478-486	
17:30 19:30	**POSTER SESSION 2**		**BDD HALL & annexes**

Saturday, April 9th			
11:00	**CAREER DEVELOPMENT WORKSHOP**		
	President - Camille Clément		**Cafeteria Institut Curie** **25 rue d'Ulm, 1st floor** **75005 Paris**
	Invited speakers	**Edition & Media** **Gerlind Wallon, EMBO, Germany** **Catarina Vicente, the Node, UK** **Private companies & Biotechnologies** **François-Xavier Dutrieux, BioXchange, France** **Samy Sakr, Hybrigenics, France** **Roberta Sarno, Alcimed, France** **Academics** **Bruno Amati, Italian Institute of Technology, Italy** **Jean Gautier, Columbia University, USA** **Gwénaële Guigon, Institut Curie, France**	
13:00	**FREE AFTERNOON**		

Monday, April 11th		Chairs: Daniele Fachinetti & Arnaud De Muyt
09:30 10:15	**Jean Gautier** Columbia University, USA	**DNA repair during the cell cycle**
10:30 10:50	Article presentation by Rachel Fellows and Anne Tuberfield	**CDK targets Sae2 to control DNA-end resection and homologous recombination.** Huertas *et al.* (2008) Nature 455, 689-692 & **DNA end resection, homologous recombination and DNA damage checkpoint activation require CDK1.** Ira *et al.* (2004) Nature 431, 1011-1017
11:00	BREAK	
11:30 12:15	**Bernard De Massy** IGH, FR	**The programmed induction of DNA double strand breaks during meiosis: A key and dangerous step for sexual reproduction**
12:30 12:50	Article presentation by Philipp Bammer and Alexandra Vargas	**Genetic recombination is directed away from functional genomic elements in mice.** Brick *et al.* (2012) Nature 485, 642-645
13:00	LUNCH	**Green Cafe**
14:00 14:45	**Valérie Borde** Institut Curie, FR	**Histone modifications and meiotic recombination**
15:00 15:20	Article presentation by Lyuba Chechik and Nassim Ledoux	**Re-engineering the zinc fingers of PRDM9 reverses hybrid sterility in mice.** Davies *et al.* (2016) Nature 530, 171-176
15:30	BREAK	
16:00 16:45	**Vincent Colot** ENS, FR	**Demystifying transgenerational epigenetics**
17:00 17:20	Article presentation by Samuele Amante and Theresa Schoenherr	**Sperm tsRNAs contribute to intergenerational inheritance of an acquired metabolic disorder.** Chen *et al.* (2016) Science 351, 397-400
17:30 19:30	**POSTER SESSION 3**	**BDD HALL & annexes**

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Tuesday, April 12th		Chairs: Bruno Amati & Ines Anna Drinnenberg	
09:30 10:15	**Angela Taddei** Institut Curie, FR	**Compartmentalization and dynamics of nuclear function: Lessons from yeast**	**Amphithéâtre BDD 11-13 rue Pierre & Marie Curie 75005 Paris**
10:30 10:50	Article presentation by Lucas Robinson and Júlia Torné	**Genome-wide Maps of Nuclear Lamina Interactions in Single Human Cells.** Jop Kind *et al.* (2015) Cell 163, 134-147	
11:00	BREAK		
11:30 12:15	**Romain Koszul** Institut Pasteur, FR	**Organizational principles of unicellular genomes**	
12:30 12:50	Article presentation by Giulia Caglio and Carien Hilvering	**Comprehensive Mapping of Long-Range Interactions Reveals Folding Principles of the Human Genome.** Lieberman-Aiden *et al.* (2009) Science 326, 289-293	
13:00	LUNCH		**Green Cafe**
14:00 14:45	**Antoine Coulon** Institut Curie, FR	**Spatiotemporal kinetics of transcription in single living cells**	**Amphithéâtre BDD 11-13 rue Pierre & Marie Curie 75005 Paris**
15:00 15:20	Article presentation by Laura Sposito and Salvina Tammaccaro	**Mammalian Genes Are Transcribed with Widely Different Bursting Kinetics.** Suter *et al.* (2011) Science 332, 472-474	
15:30	BREAK		
16:00 16:45	**Nathalie Dostatni** Institut Curie, FR	**Imaging transcription in living Drosophila embryos**	
17:00 17:20	Article presentation by Quentin Deletang and Vincent Loubière	**Gene bookmarking accelerates the kinetics of post-mitotic transcriptional re-activation.** Zhao *et al.* (2011) Nature Cell Biology 13, 1295-1306	
17:30 18:15	**Patricia Le Baccon & Tristan Piolot** Institut Curie, FR	**Microscopy, high resolution microscopy and epigenetics**	
18:30	**NIKON IMAGING CENTER VISIT**		**NIKON Imaging Center**
19:30	**FAREWELL COCKTAIL & POSTER PRIZE CELEBRATION - BUFFET DINNER**		**Chez Marie**

Wednesday, April 13th		Chairs: Geneviève Almouzni & Valérie Borde
09:30	**Debriefing of the course**	**Amphithéâtre BDD 11-13 rue Pierre & Marie Curie 75005 Paris**
10:00 10:45	**Luciano Di Croce** CRG, SP	**Transcriptional complexity in stem cells**
11:00	BREAK	
11:30 12:30	**Robert Kingston - KEYNOTE lecture & Marie Curie Seminar** Harvard Med School, USA	**The nucleosome as a direct epigenetic regulator**	**Amphithéâtre Burg 12 rue Lhomond 75005 Paris**
13:00	LUNCH	**Green Cafe**
	FAREWELL & DEPARTURE	