

The 26th Pasteur-Weizmann meeting
Integrative biology to battle emerging diseases

November 21-22, 2018

Duclaux amphitheatre, Institut Pasteur

Wednesday, November 21

Welcome and opening remarks

8:30 - 9:10 Registration and coffee
9:10 - 9:30 Introduction by the organizers (N. Regev, T. Bourgeron, C. Zimmer)
Stewart Cole, Institut Pasteur, president
Andrès Alcover Pasteur-Weizmann Scientific Council

Session 1: Methods for integrative biology, genetics and omics (chaired by **Benno Schwikowski**)

09:30 - 09:50 **Yitzhak Pilpel**, Weizmann Institute of Science
Errors and edits in the Central Dogma
09:50 - 10:10 **Hugues Aschard**, Institut Pasteur
Balancing complexity in genetic studies of multifactorial diseases
10:10 - 10:30 **Olivier Gascuel**, Institut Pasteur
Reconstructing and predicting the evolution of drug resistances in HIV
10:30 - 11:00 Coffee break

Session 2: Signaling, organelle biology and development (chaired by **Nathalie Sauvonnet**)

11:00 - 11:20 **Neta Regev-Rudzki**, Weizmann Institute of Science
Malaria parasites regulate secretion of extracellular vesicles carrying distinct cargo
11:20 - 11:40 **Tim Wai**, Institut Pasteur
Mitochondrial form and function in health and disease
11:40 - 12:00 **Karina Yaniv**, Weizmann Institute of Science
Building blood and lymphatic vessels in health and disease
12:00 - 14:00 Lunch

Session 3: Molecular basis of diseases, environment and global health (chaired by **Moshe Yaniv**)

14:00 - 14:20 **Rony Dahan**, Weizmann Institute of Science
The role of Fc receptors in the therapeutic anti-tumor activity of checkpoint antibodies
14:20 - 14:40 **Thomas Bourgeron**, Institut Pasteur
The genetics of autism from risk to resilience
14:40 - 15:00 **Lluís Quintana-Murci**, Institut Pasteur
Population genetics and genomics of immunity to infection in humans
15:00 - 15:20 **Simon Cauchemez**, Institut Pasteur
Modelling the spread of pathogens in human populations
15:20- 16:10 Coffee break

Session 4: Social, behavioral and neuro sciences (chaired by **Andres Alcover**)

16:10- 16:30 **Michal Schwartz**, Weizmann Institute of Science
Targeting immune checkpoints to fight Alzheimer's disease and dementia
16:30- 16:50 **Meital Oren**, Weizmann Institute of Science
Insights into the mechanism of sexually dimorphic synaptic connectivity
16:50- 17:10 **Tamara Giles-Vernick**, Institut Pasteur
Interpreting human and great ape microbiome in the Congo River Basin

Keynote talk (introduced by **Lluís Quintana-Murci**)

17:10 - 18:00 **Tuuli Lappalainen**, New York Genome Center & Columbia University
Functional variation in the human genome: Lessons from the transcriptome

20:00 Dinner (for speakers and invited guests) at restaurant "chez Françoise",
Aérogare des invalides, 75007 Paris (metro station "Invalides") <http://chezfrancoise.com/>

Thursday, November 22

Session 1 (continued): Methods for integrative biology, genetics and omics (chaired by **Muriel Delepierre**)

- 10:00 - 10:20 **Yonatan Stelzer**, Weizmann Institute of Science
DNA methylation dynamics during embryogenesis at single-cell resolution
- 10:20 - 10:40 **Christophe Zimmer**, Institut Pasteur
Computational imaging and modeling approaches for cell biology
- 10:40 - 11:00 **Michael Nilges**, Institut Pasteur
Getting the most out of heterogenous data - Bayesian data analysis in molecular modeling

Session 2 (continued): Signaling, organelle biology and development (chaired by **Chiara Zurzolo**)

- 11:00 - 11:20 **Ori Avinoam**, Weizmann Institute of Science
Endocytosis as a paradigm for understanding membrane remodeling at the cell surface
- 11:20 - 11:40 **Sigolène Meilhac**, Institut Pasteur and Institut Imagine
The right loop in heart morphogenesis
- 12:00- 13:30 Lunch

Session 3 (continued): Molecular basis of diseases, environment and global health (chaired by **Geneviève Milon**)

- 13:30-13:50 **Ziv Shulman**, Weizmann Institute of Science
Cellular dynamics of antibody affinity maturation
- 13:50-14:10 **Arnaud Fontanet**, Institut Pasteur
Zika : Genesis of a pandemic
- 14:10-14:30 **Einat Segev**, Weizmann Institute of Science
Bacterial Effects on Algal Life and Death

Session 4 (continued): Social, behavioral and neurosciences (chaired by **David DiGregorio**)

- 14:30 - 14:50 **Michal Rivlin**, Weizmann Institute of Science
Unexpected computations in retinal circuits
- 14:50 - 15:10 **Lulla Opatowski**, Institut Pasteur
Assessing the transmission of antibiotic resistant bacteria on human contact networks
- 15:10 – 15:20 Closing remarks
- 15:20 – 16:00 Cocktail