

AC41 HIV Host-virus interactions

Work In Progress (WIP) meeting
26th of March 2026

François Jacob Auditorium, Institut Pasteur, Paris

Preliminary program

9h00 OPENING COFFEE

9h20-9h30 **Introduction:** Michaela Müller-Trutwin (AC41 Chair)

Session 1 – Keynote lecture I

Chair: Asier Saez Cirion

9h30-10h00 **Rachel Rutishauser** (*Division of Experimental Medicine, University of California, San Francisco*)
Immunotherapies toward HIV cure

Session 2 – Structural Biology and Nuclear Entry of HIV-1

Chairs : Vincent Parissi & Sarah Gallois-Montbrun

10h00-10h15 **Michel Autin** (*MFP Lab., CNRS UMR 5234, Univ. Bordeaux*)
Disassembly of the HIV-1 integration complex: a role for TAR RNA

10h15-10h30 **Thierry Mourer** (*Advanced Molecular Virology Unit, Institut Pasteur Paris*)
Decoding lenacapavir: insights into HIV capsid ultrastructure and vDNA release from nuclear MLOs

10h30-10h45 **Yury Zgadzay** (*IGBMC - Institute of Genetics, Molecular and Cellular Biology, Strasbourg*)
High-resolution cryo-EM structure of the HIV-1 integrase–LEDGF complex

10h45-11h10 **Flash Talks (7×2min)**

11h10-11h40 BREAK

Session 3 – Innate Immunity, Myeloid Cells and Tissue Niches

Chairs : Fabien Blanchet & Delphine Muriaux

11h40- 11h55 **Jim Zoladek** (*CNRS UMR 9004, INSERM, IRIM Univ. Montpellier*)
MITD1, a microglia-specific interferon effector, restricts HIV-1 budding through ESCRT-III sequestration

11h55-12h10 **Dylan Juckel** (*CIIL, CNRS UMR 9017, INSERM U1019, Institut Pasteur de Lille*)
HIV-1 infection of human bone marrow organoids reveals viral targeting of myeloid progenitors and disruption of myelopoiesis

12h10-12h25 **Mehdi Khelfa** (*Institut Cochin, Université Paris Cité, CNRS, Inserm, Paris*)
Plasmacytoid DC stimulated by HIV-1 or HIV-2-infected T cells *in vitro*: IFN-producing or antigen-presenting cells?

12h25-12h45 **Flash Talks (7×2min)**

12h45 – 14h30 Lunch + Posters in the Atrium

Dominique Dormont PhD Awards (ANRS MIE and SFV)

Chair: Anne-Sophie Beignon

- 14h30-14h40 **Presentation of the awards by Françoise Barré-Sinoussi**
- 14h40-14h55 **Mael Gourvès (Institut Pasteur, Paris)**
Reprogramming HIV-1-specific CD8+ :towards a prospect of infection remission
- 14h55-15h10 **Vincent Guiraud (Laboratoire de Virologie, APHP GHU Pitié-Salpêtrière, Paris)**
Characteristics and dynamics of HIV and retroviral vector integration sites

Session 4 – Host–Virus Interactions and HIV-1 Regulation

Chairs: Alessia Zamborlini & Serge Benichou

- 15h10 - 15h25 **Emiliano Ricci (LBMC, ENS Lyon, CNRS UMR 5239, Inserm U1293, Univ. Lyon 1)**
Non-AUG HIV-1 uORF translation elicits specific T cell immune response and regulates viral transcript expression
- 15h25-15h40 **Juliette Desforges (Institut Cochin, Université Paris Cité, Inserm, CNRS, Paris)**
HnRNPC-dependant nuclear assemblies and HIV-1 RNA fate control at the transcription-splicing interface
- 15h40- 15h55 **Juliette Allain (Université Paris-Saclay, Inserm, CEA, Paris-Saclay)**
Inhibition of VCP/p97 potentiates HIV-1 restriction by SAMHD1 in macrophages

15h55-16h30 BREAK

Session 5 –Translational Strategies: Vaccines, Entry & Persistence

Chairs: Victor Appay & Caroline Charre

- 16h30-16h45 **Margaux Bilay (Dynamics of Host-Pathogen Interaction, CNRS UMR 3691, Institut Pasteur Paris)**
Deciphering the organization of CCR5 at the cell surface by high-resolution microscopy: towards a new targeting of CCR5
- 16h45-17h00 **Kendall Carrasco (IBS, Univ. Grenoble Alpes, CEA, CNRS, Grenoble)**
Characterization of *de novo* designed MPER-FP vaccine candidates

Session 6 – Keynote lecture II

Chair: Philippe Benaroch

- 17h00-17h30 **Vincent Allain (Immunology–Histocompatibility Department, Hôpital Saint-Louis, Paris)**
Gene editing strategies for immune cell engineering: Leveraging the NK cell platform
- 17h30 **End of the meeting**

17h30-18h30 Wine and cheese

Scientific and Organizing Committee:

Victor Appay; Nathalie Arhel; Philippe Benaroch, Stéphane Emiliani; Fernando Real; Michaela Müller-Trutwin (chair).

ANRS MIE Basic research department: Guia Carrara, Dahlia Chebbah, Nathalie Alazard (Institut Pasteur),

Cyrine Bentaleb (*University of Lille, Institut Pasteur de Lille, France*)

HIV-1-reprogrammed myeloid progenitors enhance hepatocyte susceptibility to hepatitis virus infection

Cécile Boscheron (*University of Grenoble Alpes, IBS, France*)

Freezing the viral exit: inducible stabilization of ESCRT-III filaments to visualize HIV-1 budding intermediates

Jason Decotter (*University of Strasbourg, IBMC-CNRS, France*)

Uncovering the RNA-binding activity of HIV-1 Vif in host-virus interactions

Gilles Darcis (*University of Liège, Belgium*)

Impact of abacavir withdrawal from a triple ART regimen on HIV blood and tissue reservoirs and systemic inflammation: a phase 3 randomized controlled trial

Alexia Karl (*University of Strasbourg, Inserm, France*)

Tenascin-C, a component of the extracellular matrix, decreases T cell activation and HIV replication

Felipe Leon-Diaz (*Institut Cochin, Paris, France*)

Host mRNA isoform switching during productive and latent HIV-1 infection revealed by long-read sequencing

Mathieu Long (*University of Strasbourg, IBMC-CNRS, France*)

Integrative biophysical and cryo-EM analysis of lentiviral Gag-genomic RNA complexes

Mona Meyer (*Institut Cochin, Paris, France*)

A transcription-independent role of Tat in shaping the HIV-1 transcriptome

Titouan Robin (*Institut Cochin, Paris, France*)

Exploring the role of RUSC3 in the functions of HIV-1 Nef protein

Marc Ruff (*University of Strasbourg, IGBMC, France*)

Structural and functional characterization of HIV-1 protein complexes involved in liquid-liquid phase separation during uncoating and integration

Franck Sanchez (*University of Bordeaux, France*)

HIV-1 promoter bursting in T lymphocytes and its implication in latency regulation

Léa Tantet (*Université Paris-Saclay, I2BC, France*)

Role of selective autophagy receptors and impact of HTLV-1 Tax in endogenous antigen presentation

Daniel Wikar (*Institut Pasteur, Paris, France*)

Paraspeckle protein NONO binds to HIV-1 LTR G-quadruplexes to control viral promoter activity

Sen Yan (*Institut Cochin, Paris, France*)

Cellular and virological characterization of HIV-1 cell-to-cell dissemination to macrophages from infected T cells