

9TH EDITION DECEMBER 10-13, 2019
**HIV PERSISTENCE
DURING THERAPY**
Reservoirs & Eradication Strategies Workshop

FINAL
PROGRAM

M FLORIDA
MIAMI USA
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10TH EDITION

DECEMBER 2021

HIV PERSISTENCE DURING THERAPY™

Reservoirs & Eradication Strategies Workshop



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9TH EDITION DECEMBER 10-13, 2019
**HIV PERSISTENCE
DURING THERAPY**
Reservoirs & Eradication Strategies Workshop

Steering Committee

Alain Lafeuillade, MD
Infectious disease private practice, La Valette du Var – FRA

David Margolis, PhD
University of North Carolina, Chapel Hill – USA

Karl Salzwedel, PhD
National Institute of Allergy and Infectious Diseases, Bethesda – USA

Mario Stevenson, PhD
University of Miami Leonard M. Miller School of Medicine, Miami – USA

Scientific Committee

José Alcami, Madrid – ESP

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Nicolas Chomont, Montreal – CAN

Tae-Wook Chun, Bethesda – USA

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John Coffin, Boston – USA

Steven Deeks, San Francisco – USA

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Warner Greene, San Francisco – USA

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Daria Hazuda, West Point – USA

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Rowena Johnston, New York City – USA

Jonathan Karn, Cleveland – USA

Richard Koup, Bethesda – USA

Guenter Kraus, Beerse – BEL

Sharon Lewin, Melbourne – AUS

Javier Martinez-Picado, Badalona – ESP

John W. Mellors, Pittsburgh – USA

Sarah Palmer, Sydney – AUS

Vicente Planelles, Salt Lake City – USA

Guido Poli, Milan – ITA

Christina Psomas, Montpellier – FRA

Douglas Richman, La Jolla – USA

Jean-Pierre Routy, Montreal – CAN

Andrea Savarino, Rome – ITA

Robert Siliciano, Baltimore – USA

Carine Van Lint, Gosselies – BEL

Jan Van Luzen, London – UK

WELCOME ADDRESS

Dear Colleagues,

Welcome to the ninth International Workshop on HIV Persistence during Therapy. Since the first edition of this workshop in 2003 in St Maarten, the issues of HIV Persistence and reservoirs have become increasingly more relevant, not only for the biologist but also for the clinician facing the problem of the long-term control of this persistent retroviral infection.

Several meetings have now included reviews on these topics in their program, but this biennial workshop is unanimously recognised as the reference workshop on HIV reservoirs and eradication strategies.

Our main objective is to keep it driven by science and new data. To this end, abstracts have undergone a rigorous selection procedure by the Scientific Committee.

This year's Workshop has focused on improving participation by young investigators, in particular through submitting oral or poster abstracts, but also through receiving grants for attendance. These scholarships have been made possible by both the National Institutes of Health and the Steering Committee involvement. We all are all very grateful for this development that we hope will bring new energy, thinking and ideas to the field.

The program format will continue to follow the past successes and include presentations of new, unpublished data and a panel of experts to sum up the current advances in the field.

Lastly, we thank all the participants who have chosen to present their work here: the excellence of the abstracts we have received undoubtedly guarantees and interesting and thought-provoking workshop.

We wish you all an enjoyable and fruitful workshop.



*Alain Lafeuillade, MD, Chairman,
On behalf of the Steering Committee*

PROGRAM

Time	TUESDAY, DECEMBER 10	WEDNESDAY, DECEMBER 11
8:00 9:00 AM		SESSION 1: Basic Science of HIV Latency
9:00 10:00 AM	NIMH Satellite Symposium: CNS and Myeloid Cell Reservoirs	Meeting of the Martin Delaney Collaboratories Community Advisory Board HIBISCUS ISLAND ROOM
10:00 10:30 AM		
10:30 AM 12:30 PM		SESSION 2: In Vitro and Animal Model Studies of HIV Persistence
12:30 2:00 PM	Lunch on your own	Lunch
	Lunch on your own	
2:00 3:30 PM	NIAID satellite symposium: Martin Delaney Collaboratories research highlights (SESSION 1)	
3:30 4:00 PM	Coffee Break	
4:00 5:30 PM	NIAID satellite symposium: Martin Delaney Collaboratories research highlights (SESSION 2)	
5:30 7:30 PM	Opening Lecture	
7:30 PM	Welcome Dinner	Dinner on your own

AT A GLANCE

THURSDAY, DECEMBER 12	FRIDAY, DECEMBER 13
<p>SESSION 4: Immunology of HIV Persistence</p>	<p>SESSION 7: Human studies and drug development II</p>
<p>Coffee Break</p>	
<p>SESSION 5: Human studies and drug development I</p>	<p>SESSION 8: New Therapeutic Approaches II</p>
<p>Lunch</p>	<p>Closing Ceremony</p>
<p>SESSION 6: New Therapeutic Approaches I</p>	<p>ALL THE SESSIONS WILL BE IN THE MAIN PLENARY SESSION ROOM (SALON A TO E).</p>
<p>with wine and cheese tasting</p>	
<p>Dinner on your own</p>	

09:00
12:00

NIMH SATELLITE SYMPOSIUM: CNS AND MYELOID CELL RESERVOIRS

Chairs: Jeymohan JOSEPH, Division of AIDS Research, NIMH - USA
Mario STEVENSON, University of Miami - USA

09:00
09:15

Session Goals and NIMH Research Priorities in CNS and Myeloid Reservoirs

Jeymohan JOSEPH, AIDS Research, NIMH - USA

09:15
09:30

Unexpected Outcomes in the Rebound Zone: Utilizing Correlative PET/CT and Multi-Scale Imaging to Define SIV Rebound After ART Cessation

Thomas HOPE, Northwestern University - USA

09:30
09:45

Macrophage-tropic HIV-1 variants populate plasma viremia in chronic and acute subjects undergoing analytic treatment interruption

Viviane MACHADO, University of Miami - USA

09:45
10:00

Evidence of HIV Persistence in Circulating Myeloid Cells: Implications for HIV-associated Complications and Remission

Brooks MITCHELL, University of Hawaii at Manoa - USA

10:00
10:15

Genetic and functional differences in the CNS vs systemic HIV-1 reservoirs

Maria GONZALEZ PAZ, University of Massachusetts Medical School - USA

10:15
10:30

HIV-infected macrophages evade NK cell-mediated killing while driving inflammation

Kiera CLAYTON, Ragon Institute - USA

 10:30 - 11:00 AM Break

11:00
11:15

Targeting lncRNA SAF to induce apoptosis in HIV-1 infected macrophages

Tsaikat BOLIAR, Cornell University - USA

11:15
11:30

Low-level Persistent/Latent HIV-1 Infection of Macrophages Corresponds to Decreased NF- κ B Activity

Tim HANLEY, University of Utah Health Sciences Center - USA

11:30
11:45

Effects of Blocking NOX Signaling on HIV Persistence and HIV-associated Neurocognitive Dysfunction in a Murine HAND Model

Christina GAVEGNANO, Emory University - USA

11:45
12:00

Detection and modulation of HIV reservoirs in HIV infected patients on ART

Avi NATH, NIH - USA

TUESDAY, DECEMBER 10, 2019

09:00 **MEETING OF THE MARTIN DELANEY COLLABORATORIES COMMUNITY ADVISORY BOARD**
01:30 **HIBISCUS ISLAND ROOM**

02:00 **NIAID SATELLITE SYMPOSIUM: MARTIN DELANEY COLLABORATORIES RESEARCH HIGHLIGHTS (SESSION 1)**
03:30

02:00 **DARE Collaboratory**
02:30

Introduction

Steven DEEKS, University of California, San Francisco - USA

Engaging CD8+ T cell responses in SIV Reservoir Reduction or Reactivation Control

Afam OKOYE, Oregon Health & Science University - USA

02:30 **BEAT-HIV Collaboratory**
03:00

Introduction

Luis MONTANER, The Wistar Institute - USA

Peripheral Blood SIV/HIV Originates from Infected Cells in Tissues

Leticia KURI-CERVANTES, University of Pennsylvania - USA

Contribution of Antigenic Exposure to the Persistence of HIV-Infected CD4+ T Cells In Vivo

Francesco R. SIMONETTI, Johns Hopkins University - USA

03:00 **BELIEVE Collaboratory**
03:30

Introduction

R. Brad JONES, Weill Cornell Medicine - USA

Combination IL-15 Therapy in a SHIV NHP Model

James B. WHITNEY, Beth Israel Deaconess Medical Center - USA

 3:30 - 4:00 PM Coffee Break

04:00 **NIAID SATELLITE SYMPOSIUM: MARTIN DELANEY COLLABORATORIES RESEARCH HIGHLIGHTS (SESSION 2)**
05:30

04:00 **I4C Collaboratory**
04:30

Introduction

Dan BAROUCH, Beth Israel Deaconess Medical Center - USA

Origin of Rebound Virus in Chronically SIV-Infected Monkeys Following Treatment Discontinuation

Po-Ting LIU, Beth Israel Deaconess Medical Center - USA

HIV-1 Diversity Considerations for Clinical Studies of Passively Transferred Broadly Neutralizing Antibodies

Kshiti WAGH, Los Alamos National Laboratory - USA

04:30
05:00

DefeatHIV Collaboratory

Introduction

Hans-Peter KIEM, Fred Hutchinson Cancer Research Center - USA

CAR T Cell-Treated Rhesus Macaques Suppress SHIV Viremia Following ART Treatment Interruption

Christopher PETERSON, Fred Hutchinson Cancer Research Center - USA

05:00
05:30

CARE Collaboratory

Introduction

David MARGOLIS, University of North Carolina at Chapel Hill - USA

Novel Bivalent Chemical Degraders to Reverse HIV Latency

Anne-Marie TURNER, UNC HIV Cure Center, University of North Carolina, Chapel Hill - USA

Improved Killing of HIV-infected Cells by a Combination of Three Antibodies: Implications for Clearing Persistent Infection

Marina TUYISHIME, Department of Surgery, Duke University Medical Center, Durham, NC - USA

05:30
05:45

CanCURE Overview

Eric COHEN, IRCM, Human Retrovirology research unit, Montréal - CAN

 5:45 - 6:00 PM Break

06:00

WELCOME

Alain LAFEUILLADE, Infectious disease private practice, La Valette du Var - FRA

06:05
07:30

Opening Lecture

Introduction

Chairs:

Karl SALZWEDEL, National Institute of Allergy and Infectious Diseases, Bethesda - USA

Alain LAFEUILLADE, Infectious disease private practice, La Valette du Var - FRA

Ending the HIV Pandemic: Follow the Science

Anthony S. FAUCI, National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, WA - USA

Bringing curative interventions for HIV to resource-limited parts of the world

Mike McCUNE, HIV Frontiers, Global Health Innovative Technology Solutions, Bill & Melinda Gates Foundation - USA

07:30

WELCOME DINNER

SESSION 1: BASIC SCIENCE OF HIV LATENCY

Chairs: Jonathan KARN, Professor and Chair, Department of Molecular Biology and Microbiology, School of Medicine, Director, Case Center for AIDS Research, Cleveland/Akron, OH - USA

Una O'DOHERTY, Associate Professor Department of Pathology and Laboratory Medicine, Perelman School of Medicine, University of Pennsylvania, PA - USA

Christina PSOMAS, Clinical and Translational Research in the Department of Infectious Diseases of Montpellier University Hospital - FRA

► OP 1.0: Cellular Mechanisms that Establish and Maintain HIV Latency

Lecturer: Andrew HENDERSON, Professor of Medicine, Assistant Dean Graduate Medical Sciences Department of Medicine and Microbiology, Section of Infectious Diseases Boston University School of Medicine, Boston, MA - USA

► OP 1.1: Expression Profiling of HIV Latently-Infected Cells Using Nanostring And Mass Cytometry

Author(s): H. Sperber^{1,2,*}, T. Ma³, N.R. Roan³, S.K. Pillai¹

¹Vitalant Research Institute - San Francisco (USA)

²Free University of Berlin - Berlin (GER)

³Gladstone Institutes - San Francisco (USA)

► OP 1.2: A quantitative single cell, single molecule RNA-FISH + IF and single cell RNA-seq analysis reveals stochasticity of reactivation of latent provirus.

Author(s): G. Kalpana^{1,*}, R. Pathak¹, A. La Porte¹, E. Bock¹, C. Eliscovich¹, L. Martins², A. Spivak², U. Dixit¹, V. Planelles², R. Singer¹

¹Albert Einstein College of Medicine - New York (USA)

²University of Utah School of Medicine - Salt Lake City (USA)

► OP 1.3 : Single-cell transcriptome sequencing of latently-infected cells ex vivo using PCR-activated cell sorting (PACS).

Author(s): I. Clark^{1,2,*}, A. Abate¹, F. Quintana², S. Deeks¹, D. Douek³, E. Boritz^{3,*}

¹UCSF - San Francisco (USA)

²Harvard - Boston (USA)

³NIH - Bethesda (USA)

► OP 1.4 : Single cell analysis of in vivo HIV reservoir uncovers novel markers of latent cells

Author(s): N. Roan^{1,*}, Jason Neidleman^{1,8}, Xiaoyu Luo¹, Julie Frouard^{1,8}, Feng Hsiao^{1,8}, Guorui Xie^{1,8}, Vincent Morcilla², Katherine Sholtis James³, Rebecca Hoh⁴, Ma Somsouk⁵, Peter Hunt⁶, Steve Deeks⁴, Nancie Archin³, Sarah Palmer², Warner C. Greene^{1,7}

¹Gladstone Institute of Virology and Immunology, San Francisco, CA (USA)

²Centre for Virus Research, the Westmead Institute for Medical Research, The University of Sydney, Sydney, NSW 2145 (AUS)

³Division of Infectious Diseases, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC (USA)

⁴Division of HIV, Infectious Diseases and Global Medicine, University of California San Francisco, San Francisco, CA (USA)

⁵Department of Medicine, Division of Gastroenterology, San Francisco General Hospital and University of California, San Francisco, CA (USA)

⁶Division of Experimental Medicine, University of California San Francisco, San Francisco, CA (USA)

⁷Department of Medicine, University of California, San Francisco, CA (USA)

⁸Department of Urology, University of California, San Francisco, CA (USA)

OP 1.5 : Quantifying the contribution of cellular proliferation to maintaining the HIV reservoir

Author(s): A. Hill^{1,*}, G. Andrei¹, J. Gerold¹

Harvard University - Cambridge, Ma (USA)

OP 1.6 : Tyrosine Kinase Inhibition: the new Front in HIV Cure Efforts.

Author(s): V. Planelles^{1,*}, M. Szaniawski¹, E. Williams¹, E. Innis¹, L. Martins¹, A. Spivak¹, J. Alcamí², M. Coiras²

SESSION 2: IN VITRO AND ANIMAL MODEL STUDIES OF HIV PERSISTENCE

Chairs:

Ann CHAHROUDI, Associate Professor of Pediatrics, Division of Pediatric Infectious Diseases, Emory University School of Medicine, Atlanta, GA - USA

Afam OKOYE, Research Associate Professor Vaccine & Gene Therapy Institute, and Division of Pathobiology and Immunology, Oregon National Primate Research Center, Oregon Health & Science University, Beaverton - USA

▶ **OP 2.0 : In vivo platforms for the evaluation of novel approaches to HIV persistence and eradication**

Lecturer: J. Victor GARCIA MARTINEZ, Professor of Medicine, Center for AIDS Research, Division of Infectious Diseases, Chapel Hill - USA

▶ **OP 2.1: Understanding the establishment and persistence of the rebound competent reservoir using barcoded viruses**

Lecturer: Brandon F. KEELE, AIDS and Cancer Virus Program, Leidos Biomedical Research, Frederick National Laboratory, Frederick - USA

▶ **OP 2.2 : Barcoded viruses facilitate tracking changes to the composition of the rebound-competent reservoir**

Author(s): T. Immonen ^{1,*}, C. Fennessey ¹, J. Lifson ¹, B. Keele ^{1,*}

AIDS and Cancer Virus Program, Frederick National Laboratory for Cancer Research - Frederick (USA)

▶ **OP 2.3 : Delay in Viral Rebound with TLR7 Agonist, N6-LS and PGT121 in SHIV-infected Macaques**

Author(s): D. Hsu ^{1,*}, D. Silsorn ², R. Imerbsin ², A. Pegu ³, J. Mascola ³, R. Geleziunas ⁴, R. Koup ³, D. Barouch ⁵, N. Michael ⁶, S. Vasan ⁶

¹MHRP - Bangkok (THA)

²AFRIMS - Bangkok (THA)

³NIH - Bethesda (USA)

⁴Gilead Sciences - Foster City (USA)

⁵BIDMC - Boston (USA)

⁶MHRP - Silver Spring (USA)

▶ **OP 2.4: Chimeric Antigen Receptor T-Cells and Stem Cells Control and Protect Against SHIV Replication in Nonhuman Primates**

Author(s): C. Peterson ^{1,*}, B. Rust ¹, A. Zhen ², K. Brandenstein ¹, N. Poole ¹, C. Maldini ³, G. Ellis ³, S. Kitchen ², J. Riley ³, H.P. Kiem ¹

¹Fred Hutchinson Cancer Research Center - Seattle (USA)

²University of California, Los Angeles - Los Angeles (USA)

³University of Pennsylvania - Philadelphia (USA)

▶ **OP 2.5: The latency reversal activity of the SMAC mimetic AZD5582 in ART-suppressed SIV-infected rhesus macaques is potentiated by CD8a cell depletion**

Author(s): M. Mavigner ^{1,*}, A. Brooks ¹, C. Mattingly ¹, T. Vanderford ¹, B. Keele ², J. Lifson ², R. Dunham ³, D. Margolis ³, G. Silvestri ¹, A. Chahroudi ¹

¹Emory University - Atlanta (USA)

²Frederick National Laboratory for Cancer Research - Frederick (USA)

³UNC Chapel Hill - Chapel Hill (USA)

▶ **OP 2.6 : Utilizing correlative PET/CT and multiscale imaging to define the dynamics of SIV infected cells from early ART initiation to the rebound after analytic treatment interruption**

Author(s): T. Hope ^{1,*}, M.S. Arif ¹, Y. Thomas ¹, I. Clerc ¹, A. Carias ¹, E. Allen ¹, M. Mcraven ¹, M. Ramirez ², P. Santangelo ³, F. Villinger ²

¹Northwestern - Chicago (USA)

²New Iberia Research Center - New Iberia (USA)

³Georgia Tech - Atlanta (USA)

02:00
03:30

SESSION 3: VIROLOGY OF HIV PERSISTENCE

Chairs :

Katherine BAR, Associate professor of medicine, Perelman School of Medicine, University of Pennsylvania, USA

Zabrina BRUMME, Director, Laboratory Program, BC Centre for Excellence in HIV/AIDS, Saint Paul Hospital, Vancouver - CAN

▶ OP 3.0 : CD4-MBL-CAR/CXCR5 T cell immunotherapy shows promise at reducing SIV replication post-ART release

Lecturer: Pamela SKINNER, Professor Department of Veterinary and Biomedical Sciences Microbiology, Immunology and Cancer Biology (MICaB) Ph.D. Graduate Program, University of Minnesota, MN - USA

▶ OP 3.1: Differential decay of intact and defective proviral DNA in HIV-1-infected individuals on suppressive antiretroviral therapy

Author(s): M. Peluso^{1,*}, P. Bacchetti¹, K. Ritter², S. Beg³, P. Hunt¹, T. Henrich¹, J. Siliciano³, R. Siliciano³, G. Laird², S. Deeks¹

¹University of California, San Francisco - San Francisco (USA)

²Accelevir Diagnostics - Baltimore (USA)

³Johns Hopkins School of Medicine - Baltimore (USA)

▶ OP 3.2: Women undergoing reproductive aging show increased reservoir sizes associated with removal of hormonal control of HIV-1 latency by estrogen

Author(s): J. Kam^{1,*}, C. Dobrowolski^{1,*}, E. Scully², K.M. Weber³, A.L. Landay⁴

¹Department of Molecular Biology and Microbiology, Case Western Reserve University School of Medicine - Cleveland (USA)

²Johns Hopkins University, Department of Medicine, Division of Infectious Diseases - Baltimore (USA)

³WIHS/CORE Center of Cook County Health - Chicago (USA)

⁴Rush University Medical Center, Department Internal Medicine - Chicago (USA)

▶ OP 3.3: Contribution of Antigenic Exposure to the Persistence of HIV-infected CD4+ T-cells in vivo

Author(s): F. Simonetti^{1,*}, H. Zhang¹, G. Soroosh¹, S. Beg¹, H. Raymond², K. McCormick², S. Deeks³, F. Bushman², J. Siliciano⁴, R. Siliciano¹

¹Johns Hopkins University - Baltimore (USA)

²University of Pennsylvania - Philadelphia (USA)

³University of California San Francisco - San Francisco (USA)

⁴Johns Hopkins University - Baltimore (USA)

▶ OP 3.4: Multiplexed RNA flow cytometric FISH allows single-cell viral transcriptional profiling and phenotypic characterization of translation-incompetent HIV reservoirs

Author(s): M. Dubé^{1,*}, D. Kaufmann^{1,*}, G. Sannier¹, N. Brassard¹, G.G. Delgado¹, A. Baxter¹, J.P. Routy², N. Chomont¹

¹Research Centre of the Centre Hospitalier de l'Université de Montréal (CRCHUM) and Université de Montréal, Montreal, Quebec, Canada - Montréal (CAN)

²Chronic Viral Illnesses Service and Division of Hematology, McGill University Health Centre - Montréal (CAN)

▶ OP 3.5: Low Viral Reservoir Treated Individuals Show Unusual HIV Latency Distribution

Author(s): C. Gálvez^{1,*}, V. Urrea¹, S. Benet¹, B. Mothe¹, L. Bailón², J. Dalmau¹, L. Leal³, F. García³, J. Martínez-Picado¹, M. Salgado¹

¹AIDS Research Institute IrsiCaixa - Badalona (SPA)

²Infectious Diseases Department, University Hospital "Germans Trias i Pujol" - Badalona (SPA)

³Infectious Diseases Department, Hospital Clínic, University of Barcelona - Barcelona (SPA)

 3:30 - 4:00 PM Coffee Break

04:00
07:00

POSTER VIEWING SESSION WITH WINE AND CHEESE TASTING

07:00

DINNER ON YOUR OWN

SESSION 4: IMMUNOLOGY OF HIV PERSISTENCE

Chairs :

Lydie TRAUTMANN, Associate Professor, OHSU, Vaccine & Gene Therapy Institute, Beaverton - USA
R. Brad JONES, Assistant Professor, Department of Medicine, Weill Cornell Medicine, New York, NY - USA

► **OP 4.0: CellulaT Cells and The Cure Agenda**

Lecturer: Bruce WALKER, Founding Director of the Ragon Institute of MGH, MIT and Harvard and the Director of the Harvard University Center for AIDS Research, Cambridge, MA - USA

► **OP 4.1: HIV persistence during ART: Keeping memory, keeping HIV**

Lecturer: Nicolas CHOMONT, Associate Professor in the Department of Microbiology and Immunology at the Université de Montréal – CHUM Research Center, Montreal - CAN

► **OP 4.2: Characterizing “exceptional” control among HIV elite controllers**

Author(s): M. Peluso^{1,*}, P. Burbelo², S. Kumar¹, S. Munter¹, R. Hoh¹, S. Lee¹, P. Hunt¹, R. Rutishauser¹, T. Henrich¹, S. Deeks¹

¹University of California, San Francisco - San Francisco (USA)

²National Institutes of Health - Bethesda (USA)

► **OP 4.3: Single-cell TCR sequencing reveals that clonally expanded cells highly contribute to the inducible HIV reservoir during ART**

Author(s): P. Gantner^{1,*}, A. Pagliuzza², M. Pardons¹, M. Ramgopal³, J.P. Routy³, R. Fromentin², N. Chomont¹

¹Université de Montréal - Montréal (CAN)

²CRCHUM - Montréal (CAN)

³Midway Immunology & Research Center - Fort Pierce (USA)

► **OP 4.4: Single-cell phenotyping of HIV-infected expanded clones in ART-suppressed individuals**

Author(s): C. Dufour^{1,*}, M. Pardons¹, R. Fromentin¹, M. Massanella¹, S. Palmer², S. Deeks³, B. Murrell⁴, J.P. Routy⁵, N. Chomont¹

¹Centre de Recherche du CHUM and Department of Microbiology, Infectiology and Immunology, Université de Montréal - Montreal (CAN)

²Centre for Virus Research, The Westmead Institute of Medical Research, The University of Sydney - Sydney (AUS)

³Department of Medicine, University of California San Francisco - California (USA)

⁴Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet - Stockholm (SWE)

⁵Division of Hematology & Chronic Viral Illness Service, McGill University Health Centre - Montreal (CAN)

► **OP 4.5: The IciStem consortium: T-cell immunology in HIV-1 infected individuals after allogeneic stem cell transplantation**

Author(s): J. Martinez-Picado^{3,*}, J. Eberhard^{1,*}, M. Angin², C. Passaes², M. Salgado³, J.L. Díez Martín⁴, M. Nijhuis⁵, A. Wensing⁵, J. Schulze Zur Wiesch¹, A. Sáez-Cirión²

¹Department of Medicine, Infectious Diseases Unit, University Medical Center Hamburg-Eppendorf - Hamburg (GER)

²Institut Pasteur, HIV, Inflammation and Persistence - Paris (FRA)

³AIDS Research Institute IrsiCaixa - Barcelona (SPA)

⁴Hospital Universitario Gregorio Marañón, Instituto de Investigación Sanitarias Gregorio Marañón, Universidad Complutense - Madrid (SPA)

⁵University Medical Center - Utrecht (NET)

► **OP 4.6: Dynamics of HIV-Specific T-Cells on Long-Term ART Differ by Antigen Recognized and by Sex**

Author(s): Eva M. Stevenson¹, Adam R. Ward^{1,2,3}, Thomas R. Dilling¹, John K. Bui¹, John Mellors⁴, Rajesh Gandhi⁵, Deborah McMahon⁴, Joseph Eron⁶, Ronald Bosch⁷, Christina Lalama⁷, Joshua Cyktor⁴, and Brad Jones^{1,2}, for the A5321 Team

¹Division of Infectious Diseases, Weill Cornell Medicine, New York, NY (USA)

²Department of Microbiology, Immunology, and Tropical Medicine, George Washington University, Washington, DC (USA)

³PhD program in Epidemiology, George Washington University, Washington, DC (USA)

⁴University of Pittsburgh, Pittsburgh, PA (USA)

⁵Massachusetts General Hospital, Boston, MA (USA)

⁶University of North Carolina, Chapel Hill, NC (USA)

⁷Harvard University, Boston, MA (USA)

SESSION 5: HUMAN STUDIES AND DRUG DEVELOPMENT I

Chairs :

Bonnie HOWELL, Executive Director, Infectious Disease and Vaccines Merck, West Point, Pennsylvania, PE - USA

Javier MARTINEZ PICADO, ICREA Research Professor at Institut de Recerca de la Sida - IrsiCaixa, Barcelona – SPA

► **OP 5.0: Discovery and development of novel latency reversing agents**

Lecturer: Richard DUNHAM, Scientific Leader and Fellow at ViiV Healthcare; Adj Asst Professor at UNC-CH Région de Raleigh-Durham, NC - USA

► **OP 5.1: Virologic Outcomes of Vesatolimod Administration in People Living with HIV on ART**

Lecturer: Joseph HESSELGESSER, Research scientist, Gilead, Foster city, CA - USA

► **OP 5.2: HIV Post-Treatment Control Despite Plasma Viral Evolution and Dual Infection**

Author(s): J. Li ^{1*}, B. Etemad ¹, G. Namazi ¹, Y. Wen ², N. Jilg ³, E. Esmaeilzadeh ¹, X. Zhang ⁴, R. Sharaf ¹, Z. Brumme ⁵, M. Kearney ⁶

¹Brigham and Women's Hospital, Harvard Medical School - Boston (USA)

²China Medical University - Shenyang (CHI)

³Massachusetts General Hospital, Harvard Medical School - Boston (USA)

⁴Beijing Friendship Hospital - Beijing (CHI)

⁵Simon Fraser University - Burnaby (CAN), ⁶Frederick National Laboratory for Cancer Research - Frederick (USA)

► **OP 5.3: Optimization of Smac Mimetics as HIV-1 Latency Reversing Agents**

Author(s): L. Pache ^{1,*}, P. Teriete ¹, M.D. Marsden ², A.M. Spivak ³, D. Heimann ¹, A.J. Portillo ¹, V. Planelles ³, J.A. Zack ², N.D.P. Cosford ¹, S.K. Chanda ¹

¹Sanford Burnham Prebys Medical Discovery Institute - La Jolla (USA)

²University of California, Los Angeles - Los Angeles (USA)

³University of Utah School of Medicine - Salt Lake City (USA)

► **OP 5.4: HIV Particles Expressed in Semen under INSTI-based Suppressive Therapy are Largely Myeloid Cell-Derived and Exhibit Widely Diverse Genotypes**

Author(s): J. Johnson ^{1,*}, D. Anderson ², J.F. Li ¹, A. Santos Tino ³, J. Politch ², J. Lipscomb ¹, J. Defelice ⁴, M. Gelman ⁴, K. Mayer ⁴

¹CDC, Atlanta (USA)

²BU School of Medicine, Boston (USA)

³The DESA Group, Atlanta, USA ⁴The Fenway Institute, Boston (USA)

► **OP 5.5: Impact of anti-PD-1 and anti-CTLA-4 on the HIV reservoir in vivo: The AMC-095 Study**

Author(s): Thomas A Rasmussen¹, Laskhmi Rajdev², Ajantha Rhodes¹, Ashanti Dantanarayana¹, Surekha Tennakoon¹, Socheata Chea¹, Danielle Rigau³, Shelly Lensing⁴, Rachel Rutishauser⁵, Sonia Bakkour⁶, Michael Busch⁶, Dirk P Dittmer⁷, Steven Deeks⁵, Christine Durand³, Sharon R Lewin^{1, 8, 3}

¹The Peter Doherty Institute for Infection and Immunity, The University of Melbourne and Royal Melbourne Hospital, Melbourne, (AUS)

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⁸Department of Infectious Diseases, Alfred Hospital and Monash University, Melbourne (AUS)

► **OP 5.6: Intact Proviral DNA Levels Decline in People with HIV on Antiretroviral Therapy (ART)**

Author(s): J. Cyktor ^{2,*}, R. Gandhi ^{1,*}, R. Bosch ³, H. Mar ³, G. Laird ⁴, B. Macatangay ², J. Eron ⁵, R. Siliciano ⁶, D. McMahon², J. Mellors²

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²University of Pittsburgh - Pittsburgh (USA),

³Harvard TH Chan School of Public Health - Boston (USA),

⁴Accelevir Diagnostics - Baltimore (USA),

⁵University of North Carolina - Chapel Hill (USA),

02:00
03:30

SESSION 6: NEW THERAPEUTIC APPROACHES I

Chairs :

Ya-Chi HO, Assistant Professor of Microbial Pathogenesis and Medicine; Investigator, HIV Reservoirs and Viral Eradication Transformative Science Group (Cure TSG) New Haven, CT - USA

Alberto BOSQUE, Assistant Professor, Department of Microbiology, Immunology and Tropical Medicine, George Washington University, Washington, WA - USA

▶ OP 6.0 Genome editing against HIV

Lecturer: Paula CANNON, Professor of Molecular Microbiology & Immunology; Associate Director of Cross School Programs for the MESH Academy Molecular Microbiology and Immunology, Los Angeles, CA - USA

▶ OP 6.1: Multispecific anti-HIV duoCAR-T cell therapy mediates robust HIV suppression and elimination of HIV-infected cells in humanized mice

Author(s): K. Anthony-Gonda^{1,*}, A. Bardhi², A. Ray², W. Krueger¹, D. Schneider¹, Z. Zhu¹, R. Orentas¹, D. Dimitrov³, H. Goldstein², B. Dropulic¹

¹Lentigen, a Miltenyi Biotec Company - Gaithersburg (USA)

²Albert Einstein College of Medicine - Bronx (USA)

³University of Pittsburgh - Pittsburgh (USA)

▶ OP 6.2: Location, abundance and persistence of CAR/CXCR5 transduced T cells within lymphoid tissues of SIV-infected rhesus macaques

Author(s): H. Abdelaal^{1,*}, M. Pampusch¹, P. Skinner¹, E. Berger²

¹University of Minnesota - Minneapolis (USA)

²University of Minnesota - The National Institutes of Health, Bethesda, Md (USA)

▶ OP 6.3: Combinatorial latency reversal activity of Inhibitor of Apoptosis antagonists (IAPs) with mechanistically distinct classes of HIV latency reversal agents

Author(s): S. D. Falcinelli^{1,3}, D. M. Irlbeck^{1,5}, A.-M. Turner¹, J. Peterson^{1,3}, F. Potjewyd², L. I. James^{1,2}, D. Margolis^{1,3,4}, N. Archin^{1,4}, R. Dunham^{1,5}

¹UNC HIV Cure Center (USA)

²Center for Integrative Chemical Biology and Drug Discovery (USA)

³Dept. of Microbiology and Immunology (USA)

⁴Dept. of Medicine University of North Carolina, Chapel Hill, NC (USA)

⁵HIV Drug Discovery, ViiV Healthcare, Research Triangle Park, NC (USA)

▶ OP 6.4: $\alpha 4\alpha 7$ -blockade delays viral rebound in SHIV infected macaques treated with a combination of HIV bNAbs

Author(s): E. Martinelli^{1,*}

CBR, Population Council - New York (USA)

▶ OP 6.5: Replacing daily cART with AAV-expressed eCD4-Ig

Author(s): M. Gardner^{1,*}, M. Davis-Gardner¹, M. Farzan¹

¹The Scripps Research Institute - Jupiter (USA)

 3:30 - 4:00 PM Coffee Break

04:00
07:00

POSTER VIEWING SESSION WITH WINE AND CHEESE TASTING

07:00

DINNER ON YOUR OWN

SESSION 7: HUMAN STUDIES AND DRUG DEVELOPMENT II

Chairs:

David SMITH, University of California, San Diego School of Medicine, La Jolla - USA

▶ **OP 7.0 Main challenges of human studies in the HIV eradication field**

Lecturer: Beatriz MOTHE PUJADAS, MD, PhD. Associate Investigator. HIV Unit & IrsiCaixa AIDS Research Institute. Hospital Germans Trias i Pujol. UVic-UC, Barcelona - SPA

▶ **OP 7.1 : Whole Body Imaging of HIV Persistence, Viral Biomarkers and Immune Activation**

Lecturer: Timothy HENRICH, Associate Professor of Medicine at University of California, San Francisco, CA - USA

▶ **OP 7.2: Plasma and Antibody Glycomic Biomarkers of Time to HIV Rebound and Viral Setpoint**

Author(s): L. Giron^{1,*}, E. Papisavvas¹, L. Azzoni¹, K. Mounzer², J. Kostman², I. Sanne³, C. Firnhaber⁴, Q. Liu¹, L. Montaner¹, M. Abdel-Mohsen^{1,*}

¹The Wistar Institute - Philadelphia (USA)

²Philadelphia FIGHT - Philadelphia (USA)

³University of the Witwatersrand - Johannesburg (ZAF)

⁴University of Colorado School of Medicine - Aurora (USA)

▶ **OP7.3: Single cell RNA-seq identifies host genes that correlate with HIV-1 reservoir size**

Author(s): R. Thomas^{1,*}, A. Waickman², P. Ehrenberg¹, A. Geretz¹, M. Eller¹, S. Tovnanubutra¹, J. Ananworanich¹, N. Chomont³, J. Currier², N. Michael¹

¹U.S. Military HIV Research Program, Walter Reed Army Institute of Research - Silver Spring (USA)

²Viral Diseases Branch, Walter Reed Army Institute of Research - Silver Spring (USA)

³Université de Montréal, Faculty of Medicine - Montreal (CAN)

▶ **OP 7.4: Sex differences in the latent reservoir of virally suppressed HIV-1 infected individuals living in Rakai, Uganda**

Author(s): T.C. Quinn^{3,*}, J. Prodder^{1,*}, A.M. Capoferri², K. Yu¹, S.J. Reynolds³, J. Kasule⁴, D. Serwadda⁴, E. Scully², K.J. Kwon², A.D. Redd³

¹Western University - London (CAN)

²Johns Hopkins School of Medicine - Baltimore (USA)

³National Institutes of Health - Baltimore (USA)

⁴Rakai Health Sciences Program - Kalisizo (UGA)

▶ **OP 7.5: Clones Of HIV Infected Cells Are Widely Distributed In T Cell Subsets In Blood And In Anatomic Tissues**

Author(s): F. Maldarelli^{1,*}, M. Gozoulis¹, X. Wu², L. Perez³, R. Gorelick⁴, C. Lange¹, S. Hill¹, J. Virga¹, T. Uldrick⁵, R. Yarchoan⁶, S. Hughes¹

¹CCR/NCI - Frederick (USA)

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³VRC/NIAID - Bethesda (USA)

⁴Leidos, INC - Peoria (USA)

⁵CCR/NCI - U Washington (USA)

⁶CCR/NCI - Bethesda (USA)

▶ **OP 7.6: Tissue-specific differences in the mechanisms that govern HIV latency in blood, liver, gut and genital tract in ART-suppressed women**

Author(s): S. Moron-Lopez^{1,*}, G. Xie², P. Kim³, J. Wong¹, J. Price⁴, N. Elnachef⁴, R. Greenblatt⁴, P. Tien¹, N. Roan², S. Yukl¹

¹University of California San Francisco - SFVAMC - San Francisco (USA)

²University of California San Francisco - Gladstone Institutes - San Francisco (USA)

³San Francisco VA Medical Center (SFVAMC) - San Francisco (USA)

⁴University of California San Francisco - San Francisco (USA)

SESSION 8: NEW THERAPEUTIC APPROACHES II

Chairs:

Susanna VALENTE, Associate Professor Department of Immunology and Microbiology 130 Scripps Way, 3C1, Jupiter, FL - USA

Lesley de ARMAS, Department of Immunology and Microbiology, University of Miami Miller School of Medicine, Miami - USA

Guido POLI, Division of Immunology, Transplantation and Infectious Diseases, San Raffaele Scientific Institute - ITA

▶ **OP 8.0: A viable pathway to HIV-1 remission**

Lecturer: Michael FARZAN, Professor and co-chair of the Department of Immunology and Microbiology on the Florida campus of The Scripps Research Institute, FL - USA

▶ **OP 8.1: The Human IL-15 Superagonist N803 Does Not Reverse Latency in ART-suppressed, SHIV-infected macaques**

Author(s): G. Webb^{1*}, J. Berrocal², K. Busman-Sahay¹, S. Abdulhagq¹, J. Smedley¹, J. Safrit³, J. Estes¹, P. Skinner², J. Sacha¹

¹Oregon Health and Science University - Portland (USA)

²University of Minnesota - St. Paul (USA)

³NantKWest - Culver City (USA)

▶ **OP 8.2: How Long is Long-term? Delivery of anti-HIV Antibodies Using AAV Vector**

Author(s): J. Martinez-Navio^{1*}, R. Desrosiers^{1,2*}, S. Fuchs¹, D. Mendes¹, E. Rakasz², G. Gao³, J. Lifson⁴,

¹University of Miami - Miami (USA)

²Wisconsin National Primate Research Center UW - Madison (USA)

³Gene Therapy Center UMass - Worcester (USA)

⁴Frederick National Laboratory for Cancer Research - Frederick (USA)

▶ **OP 8.3: Intensification of ART with ABX464 decreases the total HIV reservoir and HIV transcription initiation in CD4+ T cells from HIV-infected ART-suppressed individuals**

Author(s): S. Bernal^{1*}, S. Moron-Lopez^{2,*}, S. Bernal^{1,2*}, J.M. Steens³, J.K. Wong⁴, J. Martinez-Picado¹, S.A. Yukl⁴

¹IrsiCaixa AIDS Research Institute - Badalona (SPA)

²University of California San Francisco - San Francisco (USA)

³ABIVAX - Paris (FRA)

⁴San Francisco VA Medical Center - San Francisco (USA)

▶ **OP 8.4: HIV persistence despite reservoir decay during combinatorial immunotherapy including therapeutic conserved elements (CE) DNA vaccination, IPD-1 therapy, GS-986 TLR7-agonism, and CCR5 gene-edited CD4+ T cell infusion in rhesus macaques**

Author(s): S. Dross^{1*}, C. Peterson², M. O'Connor¹, H. Tunggal¹, J. Li¹, K. Jerome², H.P. Kiem², B. Felber³, J. Mullins¹, D. Fuller¹

¹Department of Microbiology, University of Washington - Seattle (USA)

²Fred Hutchinson Cancer Research Center - Seattle (USA)

³Human Retrovirus Pathogenesis Section, Vaccine Branch, Center for Cancer Research, National Cancer Institute - Frederick (USA)

▶ **OP 8.5: PD-1 Blockade boost Vaccine-Induced anti-HIV responses in the absence of HIV reactivation**

Author(s): M. Marin Lopez^{1*}, J.-G. Prado, M. Marin Lopez^{1*}, E. Jimenez-Moyano¹, D. Ouchi¹, O.

Blanch-Lombarte¹, D. Gorman², T. Hanke³, C. Brander¹, B. Howell⁴, B. Mothe¹

¹IrsiCaixa - Badalona (Barcelona) (SPA)

²Merck & Co. Inc. - Palo Alto, California (USA)

³The Jenner Institute Nuffield Department of Medicine, University of Oxford - Oxford (GBR),

⁴Department of Infectious Disease, Merck & Co. Inc. - Kenilworth, Nj (USA)

▶ **OP 8.6: Post-therapy viral set-point abatement following combined antiproliferative and immune-boosting interventions: Results from a randomized clinical trial**

Author(s): R. Sobhie Diaz^{1*}, L.B. Giron², J. Galinskas³, J. Hunter¹, M. Janini¹, I.L. Shytaj³, R. Cauda⁴,

M.C. Sucupira⁵, J. Maricato⁵, A. Savarino⁶

¹Federal University of Sao Paulo, Infectious Diseases Department - São Paulo (BRA)

²Wistar Institute - Philadelphia (USA)

³Heidelberg University Hospital, Department of Infectious Diseases - Heidelberg (USA)

⁴Institute of Infectious Diseases, Gemelli Hospital, Catholic University of Sacred Heart - Rome (ITA)

⁵Federal University of Sao Paulo, Infectious Diseases Department - São Paulo (BRA)

⁶Department of Infectious Diseases, Italian Institute of Health - Rome (ITA)

▶ **OP 8.7: B cell depletion alone or in combination with IL-15 or PD-1 blockade facilitates enhanced control of virus replication in SIV-infected rhesus macaques**

Author(s): Y. Fukazawa^{1,2*}, L.J. Picker^{1,2*}, Y. Fukazawa^{1,2*}, H. Behrns¹, B.E. Randall¹, B. Varco-Merth¹, H. Park¹,

B.K. Felber², G.N. Pavlakis², J.D. Lifson³, A.A. Okoye¹

¹Vaccine and Gene Therapy Institute and Oregon National Primate Research Center, Oregon Health & Science University - Beaverton, Or (USA)

²Center for Cancer Research, National Cancer Institute - Frederick, Md (USA)

CLOSING CEREMONY

Alain LAFEUILLADE, Infectious disease private practice, La Valette du Var - FRA

David MARGOLIS, University of North Carolina, Chapel Hill, NC - USA

Karl SALZWEDEL, NIAID, Division of AIDS, Bethesda, MD - USA

Mario STEVENSON, University of Miami Leonard School of Medicine, Miami, FL - USA

SESSION 1: BASIC SCIENCE OF HIV LATENCY

► PP 1.1: Remodeling of the core leads HIV-1 pre-integration complex into the nucleus of human lymphocytes

Author(s): F. Di Nunzio ^{1,*}, G. Blanco-Rodriguez ¹, A. Gazi ², B. Monel ³, S. Frabetti ¹, V. Scoca ¹, O. Schwartz ⁴, J. Krijnse-Locker ², P. Charneau ¹

¹Department of Virology, VMV, Institut Pasteur - Paris (FRA), ²Unit of Ultra-structural bio-imaging (UBI), Institut Pasteur - Paris (FRA), ³Institut Pasteur - Paris (FRA) - ⁴Department of Virology, UVI, Institut Pasteur - Paris (FRA)

► PP 1.2: Combination of quadruplex qPCR and next-generation sequencing for qualitative and quantitative analysis of the HIV-1 latent reservoir

Author(s): C. Gaebler ^{1,*}

¹The Rockefeller University - New York (USA)

► PP 1.3: Single cell analysis reveals molecular signatures of HIV latency in primary cell models

Author(s): S. Telwatte ^{1,2,*}, M. Montano ³, R. Resop ⁴, E. Battivelli ⁵, S. Morón-López ¹, E. Verdin ⁵, W. Greene ³, A. Bosque ⁴, J. Wong ², S. Yu ¹

¹University of California, San Francisco (UCSF) - San Francisco (USA), ²San Francisco VA Health Care System - San Francisco (USA), ³Gladstone Institutes - San Francisco (USA), ⁴George Washington University - Washington (USA), ⁵Buck Institute for Research and Aging - San Francisco (USA)

► PP 1.4: Evaluation of IAP/SMAC Mimetics as Latency Reversal Agents in Primary Cells and Cytokine induction in In Vivo Models Predictive of Cytokine Release

Author(s): B. Howell ^{1,*}, W. Shipe ¹, G. Adam ¹, S. Quan ¹, L. Li ², C.N.A. Sim ², R. Dunham ³, D. Margolis ⁴, B. Henry ², D. Hazuda ¹

¹Merck & Co., Inc - West Point (USA), ²MSD - Singapore (Singapore), ³Viiv - Chapel Hill (USA), ⁴UNC - Chapel Hill (USA)

► PP 1.5: Live-Track of HIV genome in the nuclear space

Author(s): F. Di Nunzio ^{1,*}, V. Scoca ¹, G. Blanco-Rodriguez ¹, D. Ershov ², J.Y. Tinevez ²

¹Department of Virology, Institut Pasteur - Paris (FRA), ²Image Analysis Hub/ C2RT, Institut Pasteur - Paris (FRA)

► PP 1.6: Genome-wide RNAi screen identifies MAPK-RPK required for HIV-1 proviral silencing in non-T cell reservoir cell-line model

Author(s): H. Takeuchi ^{1,*}, T. Ishida ², Y. Satou ³, J. Gohda ², H. Kitamura ¹, S. Gan ¹, K. Takahashi ¹, Shoji Yamaoka ⁴,

¹Department of Molecular Virology, Tokyo Medical and Dental University - Tokyo (JAP), ²Research Center for Asian Infectious Diseases, The Institute of Medical Science, The University of Tokyo - Tokyo (JAP), ³Division of Genomics and Transcriptomics, Joint Research Center for Human Retrovirus Infection, Kumamoto University - Kumamoto (JAP)

⁴Department of Molecular Virology, Tokyo Medical and Dental University, Tokyo, Japan

*authors contributed equally

► PP 1.7: Intact HIV Genomes are Enriched in Memory T-cells with Short Half-lives

Author(s): V. Morcilla ^{1,*}, C. Bacchus-Souffan ², T. Schlub ³, M. Fitch ⁴, R. Hoh ⁵, S. Deeks ⁵, M. Hellerstein ⁴, J. Mccune ⁶, P. Hunt ², S. Palmer ¹

¹Centre for Virus Research, The Westmead Institute of Medical Research, The University of Sydney - Westmead (Australia), ²Division of Experimental Medicine, Department of Medicine, University of California San Francisco - San Francisco (USA), ³Sydney School of Public Health, Faculty of Medicine and Health, The University of Sydney - University of Sydney (Australia), ⁴Department of Nutritional Sciences and Toxicology, University of California - Berkeley (USA), ⁵Division of HIV, Infectious Diseases and Global Medicine, Department of Medicine, Zuckerberg San Francisco General Hospital, University of California San Francisco - San Francisco (USA), ⁶Global Health Innovative Technology Solutions/HIV Frontiers, Bill & Melinda Gates Foundation - Seattle (USA)

► PP 1.8: HBV-related inflammation is linked to the level of genetically intact HIV proviruses

Author(s): X. Wang ^{1,2,*}, J.M. Zerbato ³, A. Avihingsanon ⁴, A. Rhodes ³, J. Audsley ³, K. Singh ³, W. Zhao ³, M. Crane ³, S. Lewin ³, S. Palmer ³

¹Centre for Virus Research, The Westmead Institute for Medical Research - Westmead (AUS), ²Sydney Medical School, The University of Sydney - Sydney (AUS), ³The Peter Doherty Institute for Infection and Immunity, The University of Melbourne and Royal Melbourne Hospital - Melbourne (AUS), ⁴HIV-NAT, Thai Red Cross AIDS Research Center (TRCARC) - Bangkok (THA)

► PP 1.9: Intact Proviruses from Naive and Effector Memory T-Cells Match Persistent Viremia

Author(s): K. Fisher ^{1,*}, B. Hiener ¹, T.E. Schlub ², E. Lee ¹, J.M. Milush ³, R. Hoh ³, R. Fromentin ⁴, N. Chomont ⁴, S.G. Deeks ³, S. Palmer ¹

¹Westmead Institute for Medical Research - Westmead (AUS), ²University of Sydney - Sydney (AUS), ³University of California San Francisco - San Francisco (USA), ⁴Université de Montreal - Montreal (CAN)

POSTER PRESENTATION

- ▶ PP 1.10: Global mapping of the macrophage transcriptome upon CCL2 neutralization reveals an association between activation of innate immune pathways and HIV-1 restriction
Author(s): D.A. Covino ^{1,*}, L. Fantuzzi ^{1,*}, J. Lu ², M.V. Chiantore ³, G. Fiorucci ⁴, C. Purificato ¹, L. Catapano ¹, C.M. Galluzzo ¹, R. Amici ¹, M. Pellegrini ²
¹National Center for Global Health, Istituto Superiore di Sanità - Rome (ITA), ²Department of Molecular, Cell, and Developmental Biology, University of California Los Angeles - Los Angeles (USA), ³Department of Infectious Diseases, Istituto Superiore di Sanità - Rome (ITA), ⁴Institute of Molecular Biology and Pathology, CNR - Rome (ITA)
- ▶ PP 1.11 - 00078
HIV-1 Replication is Metabolically Regulated in an Ex vivo Human Tonsil Histoculture Model of Infection.
Author(s): R. Furler ^{1,*}, K. Newcombe ¹, D. Nixon ¹
¹Weill Cornell Medicine - New York (USA)
- ▶ PP 1.12: Histone deacetylase inhibitors induce transcription of unspliced but not multiply spliced HIV-1 RNA from proviral genomes during latency reversal, affecting antigen presentation and detection by CD8 + T cells
Author(s): T. Mota ^{1,*}, C. Mccann ¹, S.H. Huang ¹, M. Dean ¹, R. Yanqin ¹, R. Thomas ², K. Colin ³, H. David ⁴, S. Jeffery ⁵, J. Brad ⁵
¹Weill Cornell Medicine - Ny (USA), ²GWU - Washington (USA), ³Maple Leaf Clinic - Toronto (CAN), ⁴Whitman-Walker Health - Washington (USA), ⁵NantBioScience Inc./NantKwest LLC - Culver City (USA)
- ▶ PP 1.13: Distinct HIV reservoir measures correlate with defective but not intact pro-viral DNA
Author(s): E. Papisavvas ^{1,*}, L. Azzoni ¹, P. Tebas ², K. Mounzer ³, J.R. Kostman ⁴, D. Richman ⁵, N. Chomont ⁶, B. Howell ⁷, L.J. Montaner ¹
¹The Wistar Institute - Philadelphia (USA), ²University of Pennsylvania - Philadelphia (USA), ³Jonathan Law Immune Disorders Treatment Center, Philadelphia Field Initiating Group for HIV-1 Trials - Philadelphia (USA), ⁴John Bell Health Center, Philadelphia Field Initiating Group for HIV-1 Trials - Philadelphia (USA), ⁵VA San Diego Healthcare System and the University of California - San Diego (USA), ⁶University of Montreal - Montreal (CAN), ⁷Merck, Inc. - West Point (USA)
- ▶ PP 1.14: HIV integration site selection in the 3D genome: impact on viral and host gene expression
Author(s): M. Benkirane ^{1,*}
IGH. CNRS-University of Montpellier - Montpellier (FRA)
- ▶ PP 1.15: Protein crotonylation sensitizes SMACm disruption of latent HIV by modulating the ncNF- κ B signaling pathway at the step of p100 cleavage into p52
Author(s): G. Jiang ^{1,*}, D. Li ^{1,*}, S. Falcinelli ², L. Wong ¹, C. Garrido ¹, C. Galardi ³, R. Dunham ³, E. Brown ¹, N. Archin ¹, D. Margolis ¹
¹UNC HIV Cure Center; Institute of Global Health & Infectious Diseases - Chapel Hill (USA), ²UNC HIV Cure Center - Chapel Hill (USA), ³UNC HIV Cure Center; HIV Drug Discovery, ViiV Healthcare - Chapel Hill (USA)
- ▶ PP 1.16: Interactions with Pathogenic Bacteria Induce HIV-1 Latency in Macrophages through Altered Transcription Factor Recruitment to the LTR
Author(s): T. Hanley ^{1,*}, V. Planelles ¹, G. Viglianti ²
¹University of Utah Health - Salt Lake City (USA), ²Boston University School of Medicine - Boston (USA)
- ▶ PP 1.17: Low-level Persistent/Latent HIV-1 Infection of Macrophages Corresponds to Decreased NF- κ B Activity
Author(s): T. Hanley ^{1,*}, L. Dickey ¹, V. Planelles ^{1,*}
University of Utah Health - Salt Lake City (USA)
- ▶ PP 1.18: Cell Proliferation Contributes to the Increase of Genetically Intact HIV Over Time
Author(s): S. Palmer ^{1,*}, B. Horsburgh ¹, B. Hiener ¹, K. Fisher ¹, E. Lee ¹, J. Milush ², R. Hoh ², R. Fromentin ³, N. Chomont ³, S. Deeks ²
¹Westmead Millennium Institute and University of Sydney - Westmead (AUS), ²Department of Medicine, University of California San Francisco - San Francisco (USA), ³Université de Montréal - Montréal (CAN)
- ▶ PP 1.19: Intra- and Inter-individual HIV Diversity Limits the Application of the Intact Proviral Detection Assay (IPDA)
Author(s): N. Kinloch ^{1,2*}, Y. Ren ^{3*}, W. Conce Alberto ³, W. Dong ², S. Han Huang ³, A. Wilson ⁴, T. M. Mota ³, D. Kikby ², P. M. Del Rio Estrada ⁵, C. J. Brumme ^{2,6}, G. Q. Lee ³, R. M. Lynch ⁴, Z. L. Brumme ^{1,2*}, R. Brad Jones ^{3,4*}
¹Faculty of Health Sciences, Simon Fraser University, Burnaby (CAN)
²BC Centre for Excellence in HIV/AIDS, Vancouver (CAN)
³Division of Infectious Diseases, Weill Cornell Medical College, New York (USA)
⁴School of Medicine and Health Sciences, George Washington University, Washington DC (USA)
⁵Departamento de Investigación en Enfermedades Infecciosas, Instituto Nacional de Enfermedades Respiratorias, Mexico City (MEX)
⁶Faculty of Medicine, University of British Columbia, Vancouver (CAN)

POSTER PRESENTATION

► PP 1.20: Exploring histone loading on unintegrated HIV-1 DNA reveals the chromatin dynamics between unintegrated and integrated viral genome.

Author(s): M. Benkirane ^{1,*}; S. Machida ^{1,*}, D. Depierre ², M. Takaku ³, O. Cuvier ²

¹Institut de Génétique Humaine. Université de Montpellier. Laboratoire de Virologie Moléculaire CNRS-UMR9002 - Montpellier (FRA), ²LBME, Centre de Biologie Intégrative (CBI), Université de Toulouse, CNRS - Toulouse (FRA), ³School of Medicine and Health Sciences, University of North Dakota - North Dakota (USA)

► PP 1.21: A novel, ultra-sensitive technology for quantifying the HIV unintegrated linear DNA responsible for pre-integrative latency

Author(s): J. Dutrieux ^{9,*}, H. Roux ^{1,2,*}, J. Migraine ³, M. Salmona ⁴, J. Hamroune ⁵, N. Arhel ⁶, A. Hance ⁷, F. Clavel ⁸, R. Cheyner ⁵

¹Université de Paris - Paris (FRA), ² Institut Cochin, INSERM, U1016, CNRS, UMR8104 - Paris (FRA), ³Inserm U1259 - Tours (FRA), ⁴Université de Paris, Assistance Publique Hôpitaux de Paris, Hôpital Saint Louis - Paris (France), ⁵Institut Cochin, INSERM, U1016, CNRS, UMR8104 - Paris (FRA), ⁶Institut de Recherche en Infectiologie de Montpellier, CNRS UMR 9004 - Montpellier (FRA), ⁷Inserm U941 - Paris(FRA), ⁸Assistance Publique Hôpitaux de Paris, Hôpital Saint Louis - Paris (FRA), ⁹Inserm U94 - Paris (FRA)

► PP 1.22: A novel, ultra-sensitive technology for quantifying the HIV unintegrated linear DNA responsible for pre-integrative latency

Author(s): J. Dutrieux ^{6,*}, H. Roux ^{1,2,*}, J. Migraine ³, M. Salmona ⁴, J. Hamroune ², N. Arhel ⁵, A. Hance ⁶, F. Clavel ⁴, R. Cheyner ²

¹Université de Paris - Paris (FRA), ²Institut Cochin, INSERM, U1016, CNRS, UMR8104 - Paris (FRA), ³Inserm U1259 - Tours (FRA), ⁴Université de Paris, Assistance Publique Hôpitaux de Paris, Hôpital Saint Louis - Paris (FRA), ⁵Institut de Recherche en Infectiologie de Montpellier, CNRS UMR 9004 - Montpellier (FRA), ⁶INSERM U941 - Paris (FRA)

► PP 1.23: A delicate balance between the number of RBEII and NF- κ B motifs impacts latency kinetics in HIV-1

Author(s): U. Ranga ^{1,*}, D. Bhanghe ¹, N. Prasad ¹

Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) - Bangalore (IND)

► PP 1.24: Epigenomic characterization of a primary cell model of HIV latency.

Author(s): E. Browne ^{1,*}, B. Pace ¹, D. Margolis ¹, B. Strahl ¹, R. Dronamraju ¹, S. Jefferys ¹, J. Parker ¹
UNC-Chapel Hill - Chapel Hill (USA)

► PP 1.25: Proteasomal degradation of PML protein is a stress response to HIV-1 replication and reactivation

Author(s): I. Shytaj ^{1,2,*}, B. Lucic ¹, C. Penzo ¹, S. Biccato ³, M. Forcato ³, A. Savarino ⁴, M. Lucic ¹

¹Department of Infectious Diseases, Integrative Virology, Heidelberg University - Heidelberg (GER), ²German Center for Infection Research (DZIF) - Heidelberg (GER), ³Department of Life Sciences, University of Modena and Reggio Emilia - Modena (ITA) - ⁴Department of Infectious and Immune-Mediated Diseases, Italian Institute of Health - Rome (ITA)

► PP 1.26: Expression of CircRNAs in HIV-1 latently infected cells from an in vitro model

Author(s): L. Iniguez ^{1,*}, D.C. Copertino Jr ¹, D.F. Nixon ¹, M. De Mulder Rougvie ¹

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► PP 1.27: Cleavage And Polyadenylation Specific Factor 6 is required for HIV latency reversal

Author(s): Y. Zheng ^{1,*}, A. Nau ², V. Achuthan ³, A. Engelman ³, V. Planelles ¹

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► PP 1.28: Using Single-cell Analysis and a Primary Model of HIV to study Latency Establishment and Reactivation

Author(s): L. De Armas ^{1,*}, S. Williams ¹, L. Pan ¹, S. Rinaldi ¹, S. Pallikuth ¹, R. Pahwa ¹, S. Pahwa ¹

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► PP 1.29: Degradation of the XPB subunit of TFIIH by Spironolactone reduces HIV-1 reactivation from latency

Author(s): L. Mori ^{1,*}, Y.C. Ho ², B.C. Ramirez ³, S. Valente ¹

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► PP 1.30: Updates on Two Public Databases for Studies of HIV Persistence; the Retrovirus Integration Database (RID) and HIV Proviral Sequence Database (PSD)

Author(s): W. Shao ^{1,*}, J. Shan ¹, W.S. Hu ², E. Halvas ³, J. Mellors ³, J. Coffin ⁴, M. Kearney ²

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POSTER PRESENTATION

► PP 1.31: Specificity of Bivalent Chemical Degraders Targeted to the BET Proteins

Author(s): A-M. Turner^{1,*}, F. Potjewyd², A. Keller³, L. James², D. Margolis¹

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► PP 1.32: Utilizing Genetic Barcodes to Understand the Role of Silent Integration in HIV Latency

Author(s): E. Larragoite^{1,*}, K.E. Kimball¹, E. Atindaana², A. Telesnitsky², V. Planelles¹

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► PP 1.33: Factors Associated with Viral Control after Structured Treatment Interruptions

Author(s): N. Jilg^{1,*}, B. Etemad², R. Dele-Oni², C. Wong², E. Aga³, R. Bosch³, D. Kuritzkes², I. Frank⁴, J. Jacobson⁵, J. Li⁵

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► PP 1.34: Visualization of HIV Reactivation from Latency in Primary Resting Memory T-cells

Author(s): F. Kizito^{1,*}, J. Karn^{1,*}, U. Mbonye¹, C. Dobrowolski¹, S. Valadkhan¹

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► PP 1.35: An Unbiased Platform to Identify Regulators of HIV Latency in Infected Primary Human CD4+ T Cells

Author(s): U. Rathore^{1,2,*}, J. Hiatt¹, D.A. Cavero¹, A. Marson^{1,*}

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► PP 1.36: HIV-1 genomes cluster in nuclear niches of human macrophages

F. Di Nunzio^{1,*}, Francesca Di Nunzio¹, Elena Rensen^{1,2}, Florian Mueller², Viviana Scoca¹, Jyotsana Parmar², Philippe Souque¹, Christophe Zimmer²,

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SESSION 2: IN VITRO AND ANIMAL MODELS STUDIES OF HIV PERSISTENCE

- ▶ **PP 2.1: Elimination of HIV-1/SHIV infected cells by combinations of bispecific HIV x CD3 DART® molecules**
 Author(s): M. Tuvishime^{1,*}, J. Pickeral¹, N. Jeffrey², C. Ann³, S. Guido⁴, M. David⁵, F. Guido¹
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- ▶ **PP 2.2: Subtype and tropism can influence the establishment and inducibility of latent HIV-1 in primary CD4 T cells**
 Author(s): I. Sarabia^{1,*}, S.H. Huang², A.R. Ward², R.B. Jones², A. Bosque¹
¹George Washington University - Washington (USA), ²Weill Cornell Medicine - New York (USA)
- ▶ **PP 2.3: Biomarkers to predict reactivation from latency in SIV infection**
 Author(s): M. Pinkevych^{1,*}, M. Davenport^{1,*}, C. Fennessey², C. Trubey², K. Brandon²
¹UNSW Sydney - Sydney (Australie), ²Frederick National Laboratory for Cancer Research - Frederick (USA)
- ▶ **PP 2.4: The Effect of Natural Killer Cells on Viral Rebound in HIV-1-infected Humanized Mice**
 Author(s): J. Kim^{1,*}, C. Carmona¹, K. Farrell¹, T.H. Zhang¹, H. Chen¹, M. Dimapasoc¹, M. Soliman¹, M. Marsden¹, R. Sun¹, J. Zack¹
 University of California Los Angeles - Los Angeles (USA)
- ▶ **PP 2.5: Cell-associated provirus size decreases in the xenografted CD4 + T cells from chronically infected natural host in a novel simianized mice model**
 Author(s): Z. Yuan^{1,*}, S. Lai², K. Portion², R. Fast³, I. Ourmanov², A. Buckler-White², J. Lifson³, J. Brenchley³, L. Montaner¹, V. Hirsch²
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- ▶ **PP 2.6: μ -Lat: A High-Throughput Humanized Mouse Model of Latent HIV Infection**
 Author(s): H. Sperber^{1,*}, P.P. Togarrati¹, K. Raymond¹, M.S. Bouzidi¹, R. Gilfanova¹, M.O. Muench¹, S.K. Pillai¹
 Vitalant Research Institute - San Francisco (USA)
- ▶ **PP 2.7: Donor T cell chimerism correlates with viral reservoir clearance following allogeneic stem cell transplantation in fully cART-suppressed Mauritian cynomolgus macaques**
 Author(s): H. L. Wu^{1,*}, W. Weber¹, S. A. Abdulhaqq¹, C. Shriver-Munsch², T. Swanson², M. Northrup^{1,2}, K. Armantrout², H. Price², M. Robertson-LeVay², J. S. Reed¹, K. B. Bateman¹, B. N. Bimber², S. L. Junell⁴, Rhonda MacAllister², A. W. Legasse², M. K. Axthelm², C. Moats², J. Smedley², T. R. Hobbs², L. D. Martin², G. Meyers³, R. T. Maziarz³, B. J. Burwitz¹, J. Stanton², J. B. Sacha^{1,2}
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- ▶ **PP 2.8: Unprimed CD8+ lymphocytes promote the establishment of HIV latency in CD4+ T cells**
 Author(s): L. Franchitti^{1,*}, Z. Zhang², J. Yoon², M. Paiardini¹, G. Silvestri¹, D.A. Kulpa^{2,*}
¹Yerkes National Primate Research Center, Department of Pathology & Laboratory Medicine, and Emory Vaccine Center - Atlanta (USA), ²Department of Pediatrics, Emory University School of Medicine - Atlanta (USA)
- ▶ **PP 2.9: Origin of Rebound Virus in Chronically SIV-Infected Monkeys Following Treatment Discontinuation**
 Author(s): D. Barouch^{1,*}, P-T. Liu^{1,*}, B. Keele², P. Abbink¹, N. Mercado¹, R. Gelezianas³
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- ▶ **PP 2.10: Barcoded HIV reveals effects of PKC modulation on viral reservoir**
 Author(s): J. Zack^{1,*}, M. Marsden^{1,*}, T.H. Zhang¹, Y. Du¹, M. Dimapasoc¹, X. Wu¹, P. Wender², R. Sun¹
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- ▶ **PP 2.11: IL-17A Imprints Intestinal Epithelial Cells with the Ability to Promote HIV-1 Dissemination/Outgrowth in CD4+ T-Cells**
 Author(s): T. Wiche Salinas^{1,*}, A. Gosselin², B. Mariana³, H. Touil¹, Y. Zhang², J.P. Routy⁴, É.A. Cohen³, C.L. Tremblay¹, P. Ancuta¹
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► PP 2.12: Evaluating latency reactivation synergies between the bromodomain inhibitor iBET-151 and the SMAC mimetic AZD5582 in SIV-infected macaques on ART

Author(s): A.A. Okoye^{1,*}, Y. Fukazawa^{1,*}, B.E. Randall¹, R. Lum¹, B. Varco-Merth¹, S.D. Falcinelli², J. Smedley¹, R. Dunham², J.D. Lifson³, L.J. Picker¹

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► PP 2.13: Next Generation Sequencing in a direct infection model reveals important parallels to in vivo reservoir dynamics

Author(s): U. O'Doherty^{1,*}, M. Pinzone^{1,*}, M.P. Bertuccio², D.J. Vanbelzen³

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► PP 2.14 : Treatment of SHIV-infected, ART-suppressed rhesus macaques with bispecific HIVxCD3 DART® molecules

Author(s): D. M. Gorman¹, M.-T. Lai², C. McHale², M. Lu², D. Graham², J. Strizki², Y. Zheng¹, S. Ma¹, S. Moltagh¹, M. Bailly¹, S. Hseih¹, G. Azadi¹, Yaoli Song¹, F. Ugarte¹, R. Riener¹, W. Blumenschein¹, D. Hazuda², J. Nordstrom³, B. Howell²

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► PP 2.15: Single-cell transcriptome of in vivo SIV-infected rhesus macaque CD4 T cells

Author(s): A. Tokarev^{1,2,*}, A. Geretz¹, P. Ehrenberg², M. Roederer³, R. Thomas¹, D.L. Bolton¹

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► PP 2.16: Novel SHIVs encoding transmitted/founder Envs for latency and cure research

Author(s): A. Bauer^{1,*}, E. Lindemuth¹, L. Kuri-Cervantes¹, H. Li¹, M. Watkins², W. Ziani², H. Xu², R. Veazey², G. Shaw¹, K. Bar¹

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SESSION 3: VIROLOGY OF HIV PERSISTENCE

- ▶ **PP 3.1: Automated high-throughput quantification of persistent HIV-1 plasma viremia in individuals on ART**
 Author(s): J. Jacobs^{1,*}, M. Tosiano¹, D. Koontz¹, A. Worlock², K. Harrington², K. Shutt¹, S. Bakkour³, M. Busch³, J. Mellors¹
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- ▶ **PP 3.2: Proviral Landscape In Children Parallels Adults And Enables Reservoir Reconstruction**
 Author(s): J. Hasson^{1,*}, M.G. Katusiime², S. Smith³, M. Cotton², E. Boritz³, J. Coffin⁴, J. Mellors⁵, S. Patro¹, G. Van Zyl², M. Kearney¹
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- ▶ **PP 3.3: The dynamics of HIV-1 quasispecies diversity circulating in the plasma RNA and cellular DNA of patients with ART**
 Author(s): M. Living^{3,*}, Z. Yuanyuan^{1,*}, Y. Qianqian¹, N. Ming², L. Tingting³, W. Chen¹, D. Yibo¹, L. Lingjie¹, X. Hui¹, C. Chen³
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- ▶ **PP 3.4: High-Throughput Sequencing of Integrated HIV-1 Reveals Novel Proviral Structures**
 Author(s): K. Joseph^{1,*}, E. Halvas¹, L. Brandt¹, S. Patro², J. Rausch³, M. Kearney², J. Coffin⁴, J. Mellors¹
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- ▶ **PP 3.5: nHIV-Infected Cells that Survive Co-culture with HIV-specific CTL Exhibit Distinctive Viral Messenger RNA Transcript Profiles**
 Author(s): R.B. Jones^{1,*}, G. Lee^{1,*}, T. Klevorn¹, Y. Ren¹
 Weill Cornell Medical College - New York (USA)
- ▶ **PP 3.6: HIV Proviruses with Identical Sequences Arise from Cell Expansion and Infection by a Common Ancestor Virus**
 Author(s): S. Patro^{1,*}, A. Niyongabo¹, S. Guo², X. Wu², E. Boritz³, S. Deeks⁴, F. Maldarelli¹, S. Hughes¹, J. Coffin⁵, M. Kearney¹
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- ▶ **PP 3.7: Diversity of the replication-competent HIV reservoir in treated patients**
 Author(s): A. Nicolas^{1,2,*}, J. Migraine¹, J. Dutrieux¹, M. Salmona^{1,3}, A. Tauzin⁴, A. Hachiya⁵, J.M. Molina³, F. Clavel³, A. Hance¹, F. Mammano^{4,*}
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- ▶ **PP 3.8: Peripheral blood SIV/HIV originates from infected cells in tissues**
 Author(s): M. Betts^{1,*}, L. Kuri Cervantes^{1,*}, M.B. Pampena¹, S. Samer², D. Khoury³, I. Frank¹, M. Paiardini², M. Davenport³, K. Bar¹, R. Veazey⁴
¹University of Pennsylvania - Philadelphia (USA), ²Emory University - Atlanta (USA), ³The Kirby Institute - Sydney (AUS), ⁴Tulane National Primate Research Center - Covington (USA)
- ▶ **PP 3.9: Ultradeep Analysis of Pretherapy HIV Predicts Large and Genetically Complex Reservoirs During Antiretroviral Therapy**
 Author(s): K. Huik^{1,*}, J. Hattori¹, V. Boltz¹, J. Rausch¹, W. Shao², M. Kearney¹, J. Coffin³, F. Maldarelli¹
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POSTER PRESENTATION

- ▶ **PP 3.10: In Vivo Analysis of HIV From an Occupational Exposure to Laboratory Adapted HIV-IIIB With Twenty Year Follow-Up: Implications for Reservoir Formation**
Author(s): C. Lange^{1,*}, N. Lindo², R. Little², T. Uldrick³, S. Hill¹, J. Bell², K. Lurain², R. Ramaswami², R. Yarchoan², F. Maldarelli²
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- ▶ **PP 3.11: Post-ATI viremia in a hyperacute subject comprises macrophage-tropic viral variants**
Author(s): V. Machado^{1,*}, M. Sharkey¹, T. Cordeiro¹, L. Barrios¹, T. Henrich², M. Stevenson¹
¹University of Miami - Miami (USA), ²University of California San Francisco - San Francisco (USA)
- ▶ **PP 3.12: Long-term persistence of HIV-infected cell clones in early treated children**
Author(s): M. Bale^{1,*}, M.G. Katusiime², D. Wells³, X. Wu³, J. Coffin⁴, M. Cotton⁵, S. Hughes¹, J. Mellors⁶, G. Van Zyl², M. Kearney²
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- ▶ **PP 3.13: CXCR4-usage HIV-1 strains isolated from blood and cerebrospinal fluid in subjects on suppressive antiretroviral therapy**
Author(s): A. Nath^{1,*}, G. Li^{1,*}, L. Henderson¹, B. Smith¹, L. Reoma¹, X. Jiao², U. Santamaria¹, H. Imamichi², C. Lane³
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- ▶ **PP 3.14: Marked variation in the susceptibility of HIV-1 to type 1 interferon inhibition during early, late and rebound infection**
Author(s): M. Gondim^{1,*}, S. Sherrill-Mix¹, M. Saag², M. Nussenzweig³, J. Silicano⁴, P. Sharp⁵, P. Borrow⁶, L. Montaner⁷, K. Bar¹, B. Hahn^{1,*}
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- ▶ **PP 3.15: Single-cell multiplexed RNA flow-FISH analysis of primary human samples reveals distinct VR reactivation profiles among LRA classes and curtailed VR transcriptional and translational reactivation patterns by HDAC inhibitors**
Author(s): D. Kaufmann^{1,*}, G. Sannier^{1,*}, M. Dubé¹, N. Brassard¹, G.G. Delgado¹, A. Baxter¹, J.P. Routy², N. Chomont¹
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- ▶ **PP 3.16: HIV-1 sequence compartmentalization and evolution in CNS and immune tissue**
Author(s): M. Gonzalez-Perez^{1,*}, R. Rose², D.J. Nolan², S.L. Lamers², P.R. Clapham¹, K. Luzuriaga¹
¹University of Massachusetts Medical School - Worcester (USA), ²BioInfoExperts LLC - Thibodaux (USA)
- ▶ **PP 3.17: Intact and replication-competent reservoir virus populations differ from each other and rebound plasma viruses**
Author(s): K. Bar^{1,*}, F. Mampe¹, M.A. Monroy¹, E. Lindemuth¹, L. Kuri Cervantes¹, F. Bibollet-Ruche¹, B. Hahn¹, D.B. Salantes¹
University of Pennsylvania - Philadelphia (USA)
- ▶ **PP 3.18: Longitudinal Sequencing Reveals Multiphasic Decay of HIV Reservoir**
Author(s): L. Cannon^{1,*}, M. Pinzone¹, E. Venanzi-Rullo¹, U. O'doherty¹
University of Pennsylvania - Philadelphia (USA)

SESSION 4: IMMUNOLOGY OF HIV PERSISTENCE

- ▶ PP 4.1: Baseline inducible HIV P24 is associated with viral control during interferon-β monotherapy with ART interruption
 Author(s): L.J. Montaner^{1,*}, L. Azzoni^{1,*}, E. Papasavvas¹, P. Tebas², K. Mounzer³, B. Howell⁴, D. Holder⁵, N. Chomont⁶, L. Kuri Cervantes², M. Betts²
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- ▶ PP 4.2: Enhancement of antiviral CD8+ T-cell responses and complete remission of metastatic melanoma in an HIV-1 infected subject treated with pembrolizumab
 Author(s): O. Blanch-Lombarte^{1,*}, C. Gálvez¹, B. Revollo², E. Jiménez-Moyano¹, J. M Llibre², J. Dalmau¹, D. E. Speiser³, B. Clotet², J. G Prado¹, J. Martínez-Picado¹
¹AIDS Research Institute, IrsiCaixa - Badalona (SPA), ²Infectious Diseases Department, University Hospital "Germans Trias i Pujol" - Badalona (SPA), ³Department of Oncology, University of Lausanne - Lausanne (CHE)
- ▶ PP 4.3: Characterizing antibody responses in ART-treated individuals
 Author(s): A. Wilson^{1,*}, Y. Ren², E. Stevenson², R.B. Jones², R. Lynch¹
¹George Washington University - Washington (USA), ²Weill Cornell School of Medicine - New York (USA)
- ▶ PP 4.4: Th2 cytokines are associated with higher levels of intact proviruses on ART
 Author(s): J. Cyktor^{1,*}, H. Mar², G. Laird³, R. Bosch², A. Martin³, J. Eron⁴, B. Macatangay¹, D. McMahon¹, R. Gandhi⁵, J. Mellors¹
¹University of Pittsburgh - Pittsburgh (USA), ²Harvard University - Boston (USA), ³Accelevir Diagnostics - Baltimore (USA), ⁴University of North Carolina - Chapel Hill (USA), ⁵Massachusetts General Hospital - Boston (USA)
- ▶ PP 4.5: Marker of gut damage REG3β and microbial translocation are associated with integrated HIV DNA in CD4 T-cells during early HIV infection
 Author(s): S. Isnard^{1,*}, F.P. Dupuy¹, J. Lin¹, B. Fombuena¹, R. Ramendra¹, J. Ouyang¹, B. Lebouché¹, C. Costiniuk¹, C. Tremblay², J.P. Routy¹
¹McGill University - Montréal (CAN), ²Université de Montréal - Montréal (CAN)
- ▶ PP 4.6: BCL-2 Antagonism Sensitizes CTL-Resistant HIV Reservoirs to Elimination Ex Vivo
 Author(s): R.B. Jones^{1,*}, Y. Ren^{1*}, S.H. Huang^{1*}, S. Patel², W.C. Alberto¹, D. Magat¹, D. Ahimovic¹, A.B. Macedo³, A. Bosque³, C.M. Bollard²
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- ▶ PP 4.7: PD-1+ CD4 T cells are associated with HIV reservoir size and impaired function of T follicular helper cells in children and young adults on long-term viral control
 Author(s): S. Rinaldi^{1,*}, V. Dinh¹, S. Pallikkuth¹, L. De Armas¹, R. Pahwa¹, N. Cotugno², E. Nastouli³, C. Foster⁴, P. Palma², S. Pahwa¹
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- ▶ PP 4.8: Restriction Factor Expression in HIV-1 Vertically Infected Children
 Author(s): D. Copertino Jr^{1,*}, M. Bortlik², B. Phillip², G. Beckerle¹, C. Ormsby³, M. Rosenberg⁴, R.A.S. Raposo², D. Nixon¹, M. De Mulder Rougvié¹
¹Weill Cornell Medicine - New York (USA), ²Department of Microbiology, Immunology and Tropical Medicine, The George Washington University - Washington (USA), ³Centre for Research in Infectious Diseases, National Institute of Respiratory Diseases - Mexico City (MEX), ⁴Pediatric Infectious Diseases Department, Jacobi Medical Center - Bronx (USA)
- ▶ PP 4.9: HIV-infected macrophages evade NK cell-mediated killing while driving inflammation
 Author(s): K. Clayton^{1,*}, H. Stuart¹, G. Mylvaganam¹, A. Villasmil Ocando¹, M. Maus², B. Walker¹
¹Ragon Institute of MGH, MIT and Harvard - Cambridge (USA), ²Massachusetts General Hospital - Cambridge (USA)
- ▶ PP 4.10 : A Modified TZM-bl Assay (MoCo-TZA) Documents Replication-Competent HIV in Circulating Monocytes Despite 2 years of Antiretroviral Therapy Initiated Early During Acute Infection
 Author(s): B. Mitchell^{1,*}, E. Laws¹, R. Paul², S. Vasani³, E. Kroon³, V. Valcour⁴, S. Spudich⁵, C. Shikuma¹, J. Ananworanich³, L. Ndlovu¹
¹University of Hawaii - Honolulu (USA), ²Missouri Institute of Mental Health - St. Louis (USA), ³South East Research Collaboration in HIV - Bangkok (THA), ⁴Memory and Aging Center - San Francisco (USA), ⁵Yale University - New Haven (USA)

► PP 4.11: B Cells Mediate R5-Tropic HIV Infection of CCR5neg Naive CD4+ T Cells

Author(s): A. Gerberick ^{1,*}, N. Sluis-Cremer ¹, P. Piazza ¹, D. Delucia ¹, C. Rinaldo ¹, G. Rappocciolo ¹
University of Pittsburgh - Pittsburgh (USA)

► PP 4.12: Harnessing the specialized effector function of FcR γ ⁻ NK cells to control HIV-1 infection

Author(s): R. Anderko ^{1,*}, C. Rinaldo ¹, R. Mailliard ¹
University of Pittsburgh - Pittsburgh (USA)



SESSION 5 AND 7: HUMAN STUDIES AND DRUG DEVELOPMENT I & II

► **PP 5.7.1: From Reservoirs to the Real World: A Framework for Integrating Behavioral and Social Sciences Research into Biomedical HIV Cure-Related Research**

Author(s): K. Dube^{1,*}, J.D. Auerbach², M.J. Stirratt³, P. Gaist⁴

¹UNC Gillings School of Global Public Health - Chapel Hill, (USA), School of Medicine, University of California San Francisco - San Francisco (USA), ³Division of AIDS Research (DAR), National Institute of Mental Health (NIMH), National Institutes of Health (NIH) - Bethesda (USA), ⁴Office of AIDS Research, Division of Program Coordination, Planning, and Strategic Initiatives, Office of the Director, NIH - Bethesda (USA)

► **PP 5.7.2: Permanent control of HIV-1 pathogenesis in exceptional elite controllers: a model of spontaneous cure**

Author(s): C. Gálvez^{1,*}, C. Casado², M. Pernas², L. Tarancón-Diez³, C. Rodríguez⁴, R. Lorenzo-Redondo⁵, E. Ruiz-Mateos³, M. Salgado¹, C. Lopez-Galindez², J. Martínez-Picado¹

¹AIDS Research Institute IrsiCaixa - Badalona (SPA), ²Centro Nacional de Microbiología. Instituto de Salud Carlos III - Madrid (SPA), ³Institute of Biomedicine of Seville (IBiS) - Seville (SPA), ⁴Centro Sanitario Sandoval - Madrid (SPA), ⁵Northwestern University Feinberg School of Medicine - Chicago (USA)

► **PP 5.7.3: Awareness of HIV cure-directed research among HIV clinic patients in Philadelphia**

Author(s): L.J. Montaner^{1,*}, B. Peterson¹, C. White^{2,*}, W. Freshwater², M. Lefae³, C. Roebuck⁴, N. Jones⁵, D. Robinson², S. Johnson⁶, E. Burton⁶

¹The Wistar Institute - Philadelphia (USA), ²BEAT-HIV CAB - Philadelphia (USA), ³AIDS Law Project - Philadelphia (USA), ⁴Cornell University - Ithaca (USA), ⁵Temple University - Philadelphia (USA), ⁶Philadelphia FIGHT - Philadelphia (USA)

► **PP 5.7.4: Collaboration in Community Education: BEAT-HIV Community Engagement Group (CEG) and the HIV Cure Research Education Video Series**

Author(s): L.J. Montaner^{1,*}, B. Peterson^{1,*}, W. Freshwater², C. White², M. Lefae³, C. Roebuck⁴, N. Jones⁵, J. Shull⁶, D.S. Metzger⁷, J.L. Riley⁷

¹The Wistar Institute - Philadelphia (USA), ²BEAT-HIV CAB - Philadelphia (USA), ³AIDS Law Project - Philadelphia (USA), ⁴Cornell University - Ithaca (USA), ⁵Temple University - Philadelphia (USA), ⁶Philadelphia FIGHT - Philadelphia (USA), ⁷University of Pennsylvania - Philadelphia (USA)

► **PP 5.7.5: Behind the Scenes: Clinical and Rapid Autopsy Staff Members' Experiences and Perceptions of HIV Reservoir Research at the End of Life**

Author(s): K. Perry^{2,*}, J. Taylor^{1,*}, S. Concha-Garcia³, S. Javadi⁴, H. Patel², A. Kaytes³, S. Little³, D. Smith³, S. Gianella³, K. Dubé²

¹HIV + Aging Research Project--Palm Springs - Palm Springs (USA), ²University of North Carolina - Chapel Hill (USA), ³University of California San Diego - La Jolla (USA), ⁴University of California San Diego - Chapel Hill (USA)

► **PP 5.7.6: Virological impact of HCV elimination with DAAs in the HIV reservoir in HIV/HCV patients**

Author(s): M. Coiras¹, P. Martínez-Román^{1,*}, C. Crespo-Bermejo¹, A. Fernández-Rodríguez¹, V. Briz¹

Institute of Health Carlos III - Majadahonda (SPA)

► **PP 5.7.7: HIV Particles Expressed in Semen under INSTI-based Suppressive Therapy are Largely Myeloid Cell-Derived and Exhibit Widely Diverse Genotypes**

Author(s): J. Johnson^{1,*}, D. Anderson², J.F. Li¹, A. Santos Tino³, J. Politch², J. Lipscomb¹, J. Defelice⁴, M. Gelman⁴, K. Mayer⁴

¹CDC - Atlanta (USA), ²BU School of Medicine - Boston (USA), ³The DESA Group - Atlanta (USA), ⁴The Fenway Institute - Boston (USA)

► **PP 5.7.8: Rapid ART in blood donors with Acute and Recent HIV clade C infection in South Africa**

Author(s): E. Murphy^{3,*}, K. Van Den Berg^{1,*}, M. Vermeulen¹, S. Bakkour², M. Busch

¹South African National Blood Service - Johannesburg (ZAF), ²Vitalant Research Institute - San Francisco (USA), ³UCSF and Vitalant Research Institute - San Francisco (USA)

► **PP 5.7.9: HIV-1 in the Latent Reservoir Is Largely Sensitive To Circulating T Cells**

Author(s): J. Warren^{1,*}, S. Zhou¹, Y. Xu¹, M. Moeser¹, J. Kuruc¹, C. Gay¹, D. Margolis¹, N. Archin¹, R. Swanstrom¹, N. Goonetilleke¹

University of North Carolina at Chapel Hill - Chapel Hill (USA)

- **PP 5.7.10: Analytical treatment interruption and rearrangement of HIV-1 drug resistance mutations in peripheral reservoir**
Author(s): E. Bruzzesi^{1,*}, R. Scutari², M.C. Bellocchi², V. Spagnuolo³, L. Galli⁴, L. Carioti², M.M. Santoro², C. Alteri², F. Ceccherini-Silberstein², A. Castagna¹
¹Università Vita-Salute San Raffaele - Milan (ITA), ²Department of Experimental Medicine, University of Rome Tor Vergata - Rome (ITA), ³Università Vita-Salute San Raffaele - Milano (ITA), ⁴Infectious Diseases, San Raffaele Scientific Institute - Milan (ITA)
- **PP 5.7.11: Persistent HIV reservoir suppression by (-)-hopeaphenol, a plant-derived stilbenoid**
Author(s): I. Tietjen^{1,2,*}, Z. Haq², M. Naidu², J. Rivera-Ortiz¹, Y. Cai¹, K. Beattie³, T. Rali⁴, Z. Brumme², L. Montaner¹, R. Davis³
¹The Wistar Institute - Philadelphia (USA), ²Simon Fraser University - Burnaby (CAN), ³Griffith University - Brisbane (Australie), ⁴University of Papua New Guinea - Port Moresby (Papouasie-nouvelle-guinée)
- **PP 5.7.12: Phorbol esters isolated from *Croton megalobotrys* reverse HIV latency ex vivo**
Author(s): I. Tietjen^{1,2,*}, K. Richard², D. Williams³, J. Rivera-Ortiz¹, Y. Cai¹, A. Pagliuzza⁴, N. Chomont⁴, R. Andersen³, L. Montaner¹, K. Andrae-Marobela⁵
¹The Wistar Institute - Philadelphia (USA), ²Simon Fraser University - Burnaby (CAN), ³University of British Columbia - Vancouver (CAN), ⁴Centre de Recherche du Centre Hospitalier de l'Université de Montréal (CRCHUM) - Montreal (CAN), ⁵University of Botswana - Gaborone (Botswana)
- **PP 5.7.13: Targeting HIV-1-driven aberrant transcription and proliferation**
Author(s): Y-C. Ho^{1,*}, Y.H. Yeh¹, K. Jenike²
¹Yale University - New Haven (USA), ²Johns Hopkins University - Baltimore (USA)
- **PP 5.7.14: A Mechanistic Modeling Platform for HIV Cure Drug Development**
Author(s): Y. Cao^{1,*}, D. Rosenbloom^{1,*}, M. Ahamadi¹, S. Bae¹, R. Vargo¹
Merck & Co., Inc. - Kenilworth, Nj (USA)
- **PP 5.7.15: In vitro demonstration of a potential role for STING agonist in HIV cure**
Author(s): A. Koblansky^{1,2,*}, S. Raines², J. Schawalder¹, D. Irlbeck¹, C. Galardi¹, J. Brehm¹, J. Ramanjulu³, D. Margolis², H. Madsen¹
¹ViiV Healthcare - Chapel Hill (USA), ²UNC HIV Cure Center - Chapel Hill (USA), ³GlaxoSmithKline - Upper Providence (USA)
- **PP 5.7.16: Enhancing antiretroviral drug penetration into lymph nodes through intramuscular and subcutaneous routes of administration in BALB/c mice**
Author(s): S. Dyavar^{1,*}
UNMC - Nebraska (USA)

SESSION 6 AND 8: NEW THERAPEUTIC APPROACHES I & II

▶ PP 6.8.1: Targeting IncRNA SAF to induce apoptosis in HIV-1 infected macrophages

Author(s): S. Boiliar^{1,*}, D.W. Gludish¹, K.C. Jambo², H.C. Mwandumba², D.G. Russell¹
¹Cornell University - Ithaca (USA), ²University of Malawi - Blantyre (Malawi)

▶ PP 6.8.2: Blocking TIM-3 reinvigorates exhausted CD8 T cells with no impact on NK cell function in ART-treated HIV-infected patients

Author(s): C. Gutiérrez^{1,*}, M. Sanz¹, N. Madrid-Elena¹, S. Serrano-Villar¹, S. Moreno^{1,*}
 Infectious Diseases Department, Ramón y Cajal Hospital - Madrid (SPA)

▶ PP 6.8.3: Isolation of monoclonal antibodies targeting HLA-E/HIV-1 and SIV peptide complexes

Author(s): D. Li^{1,*}, S. Brackenridge², M. Tuyishime³, D. Cain¹, Z. Mu¹, B. Mattia¹, G. Ferrari³, G. Geraldine², A. McMichael², B. Haynes¹
¹Duke Human Vaccine Institute, Duke University - Durham (USA), ²Nuffield Department of Medicine, University of Oxford - Oxford (United Kingdom), ³Department of Surgery, Duke University - Durham (USA)

▶ PP 6.8.4: Improved Killing of HIV-infected Cells by a Combination of Three Antibodies: implications for clearing persistent infection

Author(s): M. Tuyishime^{1,*}, C. Garrido², S. Jha¹, D. Mielke¹, M. Moeser³, B. Haynes⁴, S. Joseph³, D. Margolis⁵, G. Ferrari¹
¹Department of Surgery, Duke University Medical Center - Durham (USA), ²UNC HIV Cure Center and Department of Medicine, University of North Carolina at Chapel Hill - Chapel Hill (USA), ³Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill - Chapel Hill (USA), ⁴Duke Human Vaccine Institute, Department of Medicine, Duke University Medical Center - Durham (USA), ⁵Departments of Microbiology and Immunology, and Epidemiology, University of North Carolina at Chapel Hill - Chapel Hill (USA)

▶ PP 6.8.5: Maraviroc reactivates HIV with a potency similar to that of other latency reversing drugs without inducing toxicity in CD8 T cells

Author(s): S. Moreno^{1,*}, M. López Huertas^{1,*}, L. Jiménez Tormo¹, N. Madrid Elena¹, C. Gutiérrez¹, M.J. Vivancos¹, L. Luna¹
 Instituto Ramón y Cajal de Investigación Sanitaria. - Madrid (SPA)

▶ PP 6.8.6: Modulated Production of Endogenous Anti-HIV Broadly Neutralizing Antibodies

Author(s): Y. Gao^{1,*}, D. Patel², C. Ding¹, Y. Ma², W. Li¹, R. Dekoter²
¹The First Affiliated Hospital, University of Science and Technology of China - Hefei (CHI), ²Department of Microbiology and Immunology, Schulich School of Medicine and Dentistry, The University of Western Ontario - London (CAN)

▶ PP 6.8.7: CD4+ T cells from patients with chronic myeloid leukemia are resistant to HIV-1 proviral integration and transcription after prolonged withdrawal of treatment with tyrosine kinase inhibitors

Author(s): M. Coiras^{1,*}, L. Vigón¹, S. Rodríguez-Mora¹, V. García-Gutiérrez², J. Ambrosioni³, J. Alcamí^{1,3}, J.L. Steegmann⁶, J.M. Miró³, V. Planelles⁷, M.R. López-Huertas¹, E. Mateos¹, V. García², N. Climent⁴, G. Bautista⁵, M. Plana⁴,
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⁶Hematology Service, Hospital Universitario La Princesa - Madrid (SPA)
⁷Division of Microbiology and Immunology, Department of Pathology, University of Utah School of Medicine, Salt Lake City - Utah (USA)

▶ PP 6.8.8: Antagonism of PPAR α for Th17 Mucosal Immunity Restoration and HIV Reservoir Purging

Author(s): D. Planas^{1,*}, A. Fert^{1,*}, Y. Zhang¹, M.J. Ruiz¹, J.P. Goulet², T.R. Wiche Salinas¹, E.A. Cohen³, J.P. Routy⁴, N. Chomont¹, P. Ancuta¹
¹Centre de recherche du CHUM - Montréal (CAN), ²Caprion - Montréal (CAN), ³Institut de Recherches Cliniques de Montréal - Montréal (CAN), ⁴McGill University - Montréal (CAN)

▶ PP 6.8.9: Targeting STAT SUMOylation to enhance NK cell cytotoxicity

Author(s): A. Macedo^{1,*}, C. Levinger¹, A. C. Hernandez Santini², N. Bonan¹, B. Nguyen¹, K. Crandall¹, R. Lynch¹, A. Bosque¹
¹George Washington University - Washington (USA), ²University of Puerto Rico - Ponce (PRI)

▶ PP 6.8.10: Broad-spectrum gRNAs abolish HIV-1 LTR-mediated transcription in cells that receive CRISPR/Cas9 therapy

Author(s): B. Wiggahl^{1,*}, A. Allen^{1,*}, S. Worell¹, G. Nwaozo¹, R. Madrid¹, W. Dampier¹, M. Nonnemacher
 Drexel University College of Medicine - Philadelphia (USA)

- ▶ **PP 6.8.11: CRISPR/Cas9 editing of HIV-1 transcription factor binding sites on the 5' long terminal repeats to permanently inactivate latent provirus**
 Author(s): B. Wigdahl ^{1,*}, C-H. Chung ^{1,2}, A.G. Allen ¹, A.J. Atkins ¹, R. Costello ¹, N.T. Sullivan ¹, M.R. Nonnemacher ¹, W.N. Dampier ¹
 Drexel University - Philadelphia (USA)
- ▶ **PP 6.8.12: AsCpf1/crRNA-array Excises HIV-1 Proviral Genome More Efficiently Than SaCas9/multiplexed-sgRNAs**
 Author(s): W. Hu ^{1,*}, Y. Zhu ^{1*}, E. Bouikidis ¹, F. Li ¹, Y. Lin ¹, Y. Cai ², H. Wang ¹, L. Montaner ², W. Ho ¹, S. Turville ³
¹Temple University School of Medicine - Philadelphia (USA), ²Wistar Institute - Philadelphia (USA), ³University of New South Wales (UNSW) - Sydney (Australia)
- ▶ **PP 6.8.13: Block and kill: a new approach to a prevent HIV reactivation, reduce immune activation, induce apoptosis of infected cells**
 Author(s): A. Garzino Demo ^{1,2*}, S. Lingling ², C. Cairo ³, T.W. Chun ⁴, M.K. Lafferty ³
^{1,2,3}Institute of Human Virology, University of Maryland School of Medicine - Baltimore (USA), ⁴National Institute of Allergy and Infectious Diseases, National Institutes of Health - Bethesda (USA)
- ▶ **PP 6.8.14: HIV-1 diversity considerations for clinical studies of passively transferred broadly neutralizing antibodies**
 Author(s): K. Wagh ^{1,*}, K. Stephenson ², D. Barouch ², B. Korber ¹
¹Theoretical Biology & Biophysics, Los Alamos National Laboratory - Los Alamos (USA), ²Center for Virology and Vaccine Research, Beth Israel Deaconess Medical Center - Boston (USA)
- ▶ **PP 6.8.15: Cleaving HIV-1 Provirus from ART-Suppressed Patient-derived Resting CD4+ T Cells Using Cpf1/crRNA-array Ribonucleotide Protein Packaged by CD4-targeting Lentivirus-like Particle**
 Author(s): W. Hu ^{2,*}, Y. Cai ¹, Y. Zhu ², F. Li ², A.O. Stella ³, P. Tebas ⁴, K. Mounzer ⁵, J. Kostman ⁵, S. Turville ³, L. Montaner ¹
¹HIV-1 Immunopathogenesis Laboratory, The Wistar Institute - Philadelphia (USA), ²Department of Pathology and Laboratory Medicine, Temple University Lewis Katz School of Medicine - Philadelphia (USA), ³The Kirby Institute, University of New South Wales (UNSW) - Sydney (Australia), ⁴Perelman School of Medicine, University of Pennsylvania - Philadelphia (USA), ⁵Philadelphia Field Initiating Group for HIV-1 Trials - Philadelphia (USA),
- ▶ **PP 6.8.16: A bispecific antibody that simultaneously recognizes the V2- and V3-glycan epitopes of the HIV-1 envelope glycoprotein**
 Author(s): M. Davis-Gardner ^{1,*}, M. Gardner ¹, M. Farzan ¹
 The Scripps Research Institute - Jupiter (USA)
- ▶ **PP 6.8.17: Exploring Sequence Specific Silencing of Latent HIV Using CRISPR Interference**
 Author(s): R. Schwarzer ^{1,*}, M. Montano ¹, W.C. Greene ¹
 Gladstone Center for HIV Cure Research - San Francisco (USA)
- ▶ **PP 6.8.18: Enhancement of antibody-dependent cellular phagocytosis is essential to the clearance of HIV-1 reservoirs in lymphoid organs**
 Author(s): L. Shan ^{1,*}
 Washington University - St. Louis (USA)
- ▶ **PP 6.8.19: Tat inhibition by didehydro-Cortistatin A promotes heterochromatin formation at the HIV-1 Long Terminal repeat**
 Author(s): C. Li ^{1,2,*}, S. Valente ^{1,*}, G. Mousseau ¹
 The Scripps research Institute - Jupiter (USA)
- ▶ **PP 6.8.20: Resistance to the Tat inhibitor didehydro-Cortistatin A is mediated by heightened basal HIV-1 transcription**
 Author(s): S. Mediouni ^{1,*}, S. Valente ¹
 The Scripps research Institute - Jupiter (USA)
- ▶ **PP 6.8.21: HLA-E-presented peptides as novel targets for HIV-1 therapy**
 Author(s): S. Brackenridge ^{1,*}, H. Yang ¹, D. Li ², G. Gillespie ¹, B. Haynes ², A. McMichael ¹
¹University of Oxford - Oxford (United Kingdom), ²Duke University - Durham (USA)
- ▶ **PP 6.8.22: Development of anti-PD-1 chimeric antigen receptor T cells to target a PD-1 + CD4 T cell population enriched in HIV provirus**
 Author(s): K. Eichholz ^{1,*}, F. Haeseleer ², L. Corey ³
¹VIDD, Fred Hutchinson Cancer Research Center - Seattle (USA), ²Departments of Laboratory Medicine and Medicine, University of Washington - Seattle (USA), ³Departments of Laboratory Medicine and Medicine, University of Washington, VIDD, Fred Hutchinson Cancer Research Center - Seattle (USA)
- ▶ **PP 6.8.23: Conditions for post-rebound SHIV control in autologous hematopoietic-stem cell transplantation**
 Author(s): F. Cardozo ^{1,*}, E. Duke ¹, C. Peterson ¹, D. Reeves ¹, B. Mayer ¹, H.P. Kiem ^{1,2}, J. Schiffer ³
¹Fred Hutchinson Cancer Research Center - Seattle, WA (USA), ²University of Washington - Seattle, WA (USA), ³Fred Hutchinson Cancer Research Center/University of Washington - Seattle, WA (USA)

POSTER AREA

Poster presenters are asked to stand next to their poster during the wine & cheese tasting (times indicated below):

Wednesday, December 11: 4:00 – 7:00 PM

Thursday, December 12: 4:00 – 7:00 PM

POSTER TOPICS

Basic science of HIV latency

PP 1.1 ► PP 1.36

In vitro and animal models studies of the persistence

PP 2.1 ► PP 2.16

Virology of HIV persistence

PP 3.1 ► PP 3.18

Immunology of HIV persistence

PP 4.1 ► PP 4.12

Human studies and drug development I & II

PP 5.7.1 ► PP 5.7.16

New therapeutic approaches I & II

PP 6.8.1 ► PP 6.8.23

The selected abstracts will benefit from a high visibility thanks to their presentation into the open access scientific Journal of Virus Eradication from December 10, 2019.

Please connect to www.viruseradication.com to read the abstracts

COFFEE BREAKS

Tuesday, December 10: 3:30 – 4:00 PM

Wednesday, December 11: 10:00 – 10:30 AM

Thursday, December 12: 10:00 – 10:30 AM

Friday, December 13: 10:00 – 10:30 AM

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ACKNOWLEDGEMENTS

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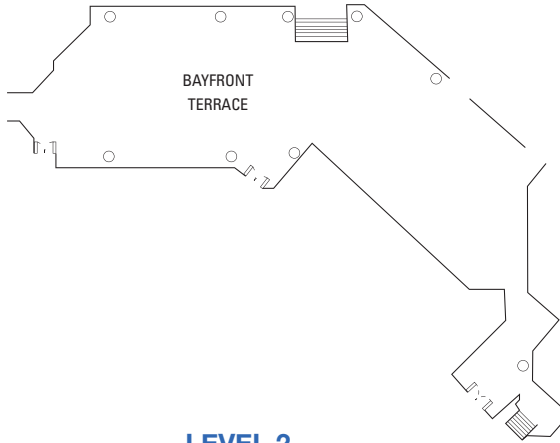
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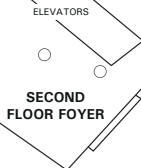
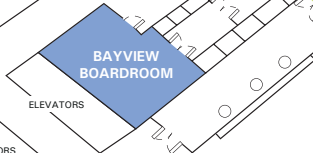
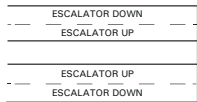
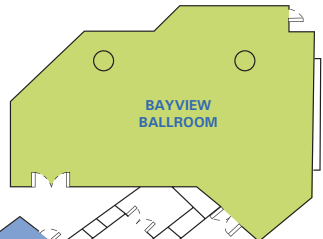
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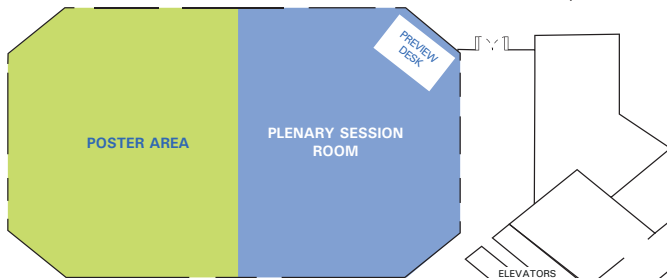


LEVEL 1
CATERING AREA
FINE WEATHER*

LEVEL 2
CATERING AREA
WEATHER BACK UP*



*See Lunches & dinners p.37



LEVEL 3
PREVIEW DESK
PLENARY SESSIONS
POSTER AREA
COFFEE BREAK



GENERAL INFORMATION

LOGISTIC ORGANIZATION & REGISTRATION

OVERCOME: 13-15 rue des Sablons, 75116 Paris, France
Tel: +33 (0)1 40 88 97 97 - Email: hivpersistence@overcome.fr

CONGRESS VENUE

MARRIOTT BISCAYNE BAY HOTEL
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WORKSHOP OPENING HOURS

- Tuesday, December 10: 8:00 AM - 7:30 PM
- Wednesday, December 11: 7:45 AM - 7:00 PM
- Thursday, December 12: 7:45 AM - 7:00 PM
- Friday, December 13: 7:45 AM - 2:00 PM

WORKSHOP OBJECTIVES

Provide an opportunity for scientist experts on HIV reservoirs to share ideas and debate in order to develop and increase knowledge to help for future researche:

- Provide a place for network and information-sharing between scientists specialized in the reservoir
- Present state-of-the-art basic science and clinical researches on HIV therapy with unpublished data and have a panel of experts to sum up the current advances in the field
- Accelerate research on reservoirs and latency to find a cure

BADGES & CERTIFICATE OF ATTENDANCE

• Certificate of attendance

Certificate of attendance will be sent by email after the week after the workshop.

• Badges

The name badges must be worn at all times during the workshop and is non transferable.
Access to the conference will not be granted without an official conference name badge.

LANGUAGE

All sessions will be held in English

COFFEE BREAKS

Coffee will be served free of charge in the catering area of the workshop on level 3 to all registered delegates during the following times:

- Tuesday, December 10: 3:30 - 4:00 PM
- Wednesday, December 11: 10:00 - 10:30 AM
- Thursday, December 12: 10:00 - 10:30 AM
- Friday, December 13: 10:00 - 10:30 AM

GENERAL INFORMATION

LUNCH & DINNER

Lunch will be served free of charge in a dedicated room on level 2 - in Watson Island room/Bayview Ballroom if the weather is bad or in the Bayfront Terrace if the weather is fine - as follows:

Lunch:

- Wednesday, December 10: 4.00 - 7.00 PM
- Thursday December 11: 4.00 - 7.00 PM

WELCOME DINNER:

- Tuesday, December 10: 7:30 - 11:30 PM

At Briza on the Bay, 1717 N.

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Miami, FL 33132

One minute walk - 20 steps from the Marriott!

Meeting point: Marriott Biscayne bay hotel's lobby at 7:30 PM. Prior registration is required.

ABSTRACT BOOK

All accepted abstracts will be published in the online abstract book. It will be available on the Journal of Virus Eradication website: www.viruseradication.com

POSTER AREA

Poster area is located in level 3, close to the conference room.

Poster authors will be asked to be present next to their poster during the poster viewing session during at the following times:

- Wednesday, December 10: 4:00 - 7:00 PM
- Thursday, December 11: 4:00 - 7:00 PM

PREVIEW FOR SPEAKERS AND ORAL PRESENTERS

Invited speakers and oral abstract presenters must report to the Preview desk situated at the back of the plenary room at least 3 hours prior to their presentation to upload and check their presentation. For a morning presentation, please report to preview desk the day before until 6:00 PM.

TRANSPORTATION

The airlines of SkyTeam, Official Alliance Network offer attractive airfares for participants (subject to conditions). To book your electronic ticket, visit: <http://globalmeetings.airfranceklm.com/Search/promoDefault.aspx?vendor=AFR&promocode=32284AF¤tculture=fr-FR>

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Call for Papers: Volume 6

We are seeking papers for issues in 2020 and can offer the following advantages:

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Issue	Copy date
6.1	16th October 2019
6.2	10th January 2020
6.3	10th April 2020
6.4	10th July 2020

SAVE THE DATES!



STRATEGIES FOR AN HIV CURE 2020



National Institute of
Allergy and
Infectious Diseases

NOVEMBER 16 - 18, 2020

NIH MAIN CAMPUS, NATCHER CONFERENCE CENTER
BETHESDA, MARYLAND

The National Institute of Allergy and Infectious Diseases (NIAID) will host the fifth biennial *Strategies for an HIV Cure meeting* at the NIH main campus in Bethesda, MD on **November 16-18, 2020**. The goal of the meeting is to highlight state-of-the-art research in the field and facilitate communication and collaboration among NIAID-funded researchers, the broader HIV cure research community, and community stakeholders. The meeting will serve as the joint meeting of the Martin Delaney Collaboratories for 2020. Registration is free, and poster abstracts are encouraged.

Information on the 2018 meeting, as well as video links to presentations can be found at: <https://www.cvent.com/events/strategies-for-an-hiv-cure-2018/event-summary-67d64ae8621247079e009b4757f45c9e.aspx>

NIAID will also convene researchers supported by its *Understanding HIV Rebound* program for a one-day workshop in Rockville, MD on **Monday, April 20th, 2020**. Registration for this workshop will also be free and open to the public. We look forward to seeing you next year in Maryland!

Diane Lawrence
David McDonald
Leia Novak
Eric Refsland
Karl Salzwedel



The views expressed in written conference materials or publications and by speakers and moderators at HHS-sponsored conferences do not necessarily reflect the official policies of the Department of Health and Human Services (HHS), nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

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