HIV Persistence during Therapy

Fifth International Workshop

St. Maarten, West Indies • December 6-9, 2011

Final Program

This program is jointly sponsored by the University of Massachusetts Medical School Office of Continuing Medical Education and Informed Horizons.

UMASS

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Fifth International Workshop on HIV Persistence during Therapy

Scientific Program

Tuesday, December 6, 2011 **Abstract**

15:00 Satellite Symposium: Unique Challenges and Opportunities for Eradication of Brain HIV-1 Reservoirs
Sponsored by the National Institute of Mental Health

19:00 Welcome Dinner

Wednesday, December 7, 2011
MORNING SESSIONS

8:00 Opening Remarks
Mario Stevenson — *University of Miami Leonard M. Miller School of Medicine, Miami, FL, USA*

8:10 SESSION I: MODELS OF HIV PERSISTENCE
Chairs: José Alcami — *Instituto de Salud Carlos III, Madrid, Spain*
Monsef Benkirane — *Laboratory of Molecular Biology, CNRS UPR 1142, Montpellier, France*

8:10 Viral Activators Evaluated for Treatment of Viral Persistence in a Nonhuman Primate Model for AIDS Therapy 01
Paul Luciw — *University of California Davis, Davis, USA*

8:30 Simian Models of Viral Persistence
Jeff Lifson — *NCI-Frederick, Frederick, USA*

8:50 Eradication Trials in SIVmac251-infected Macaques 02
Andrea Savarino — *Istituto Superiore di Sanità, Rome, Italy*

9:10 HIV-1 Latency in *in-vitro* Differentiated Central Memory Cells 03
Vicente Planelles — *University of Utah School of Medicine, Salt Lake City, USA*

9:25 Generation of HIV Latency in BLT Humanized Mice 04
J. Victor Garcia — *University of North Carolina at Chapel Hill, Chapel Hill, USA*

9:40 The Contribution of Splenic Macrophages to SIV Infection and Changes in this Population Following Antiretroviral Treatment 05
Julia Russell — *Johns Hopkins University School of Medicine, Baltimore, USA*

9:55 Mega-ART Induces Viral Suppression and Restriction of the Viral Reservoir in a Simian AIDS Model 06
Iart Shytaj — *Istituto Superiore di Sanità, Rome, Italy*

10:10 SIV/Macaque Model of Highly Active Antiretroviral Therapy: Viral Persistence and Ongoing CNS Inflammation 07
M. Christine Zink — *Johns Hopkins University School of Medicine, Baltimore, USA*

10:25 Break

11:00 SESSION II: BASIC SCIENCE OF HIV PERSISTENCE **Abstract**

Chairs: Mario Stevenson *University of Miami Leonard M. Miller School of Medicine, Miami, USA*
Alain Lafeuillade *General Hospital, Toulon, France*

11:00 Control of HIV Latency by the "Two Peas in a Pod:" Polycomb and P-TEFb 08
Jonathan Karn *Case Western Reserve University, Cleveland, USA*

11:20 New Mechanisms of HIV Transcriptional Latency 09
Monsef Benkiran *Laboratory of Molecular Biology, CNRS UPR 1142, Montpellier, France*

11:40 Intracellular Tat Expression Modifies the Environment of Infected Lymphocytes 10
José Alcami *Instituto de Salud Carlos III, Madrid, Spain*

12:00 Thoughts on Elimination of Latent HIV Reservoirs 11
Jerome Zack *University of California, Los Angeles, USA*

12:15 Lunch

AFTERNOON SESSIONS

14:00-16:00 Poster Viewing Session

16:00 SESSION III: VIROLOGICAL ASPECTS OF HIV PERSISTENCE

Chairs: John Coffin *Tufts University, Boston, USA*
Christine Rouzioux *CHU Necker-Enfants Malades, Paris, France*

16:00 Characterizing Latent HIV Reservoirs 12
Sarah Palmer *Swedish Institute for Infectious Disease Control and Karolinska Institute, Stockholm, Sweden*

16:20 Perspectives on Therapeutic Intervention and Eradication in HIV Infection 13
Tae-Wook Chun *NIH, Bethesda, USA*

16:40 Residual HIV Replication on ART 14
Javier Martinez-Picado *AIDS Research Institute (IrsiCaixa) and ICREA, Barcelona, Spain*

17:00 Epigenetic Modifications that Control Latency in T-Cells and Macrophages: Effect Of Chromatin Remodeling Complexes and Tat Modifications. 15
Fatah Kashanchi *GMU, Manassas, USA*

17:15 Exosomes from HIV-1 Infected Cells: Trojan Horses that Contain TAR miRNA and Proteins that Effect Latency 16
Fatah Kashanchi *GMU, Manassas, USA*

17:30 Targeted Activation of Viral Gene Expression by Exogenous Tat During Infection Inhibits the Establishment of HIV-1 Latency 17
Daniel Donahue *McGill University AIDS Centre, Jewish General Hospital, Montreal, Canada*

17:45 M1 Polarization of Human Monocyte-derived Macrophages (MDM) Restricts Pre- and Post-integration Steps of the HIV-1 Life Cycle. A Potential Role of APOBEC3A 18
Guido Poli *San Raffaele Scientific Institute & Vita-Salute San Raffaele University, Milano, Italy*

18:00 Hematopoietic Progenitor Cells (HPCs) are Preferentially Infected by CXCR4- and Dual-tropic HIV, and HIV from Latently Infected HPCs can be Transferred to CD4+ T Cells *in vitro* 19
Adewunmi Onafuwa-Nuga *University of Michigan, Ann Abor, USA*

18:15 TRIM22 Inhibits Sp1-dependent HIV-1 Transcription 20
Elisa Vicenzi *San Raffaele, Milan, Italy*

19:30 Dinner

Thursday, December 8, 2011 **Abstract**
MORNING SESSION

8:00 SESSION IV: INNATE IMMUNITY AND HIV PERSISTENCE
Chairs: Monsef Benkirane *Laboratory of Molecular Biology, CNRS UPR 1142, Montpellier, France*
Marie-Lise Gougeon *Institut Pasteur, Paris, France*

9:15 Break

9:30 **Poster Viewing Session**

10:00 SESSION V: IMMUNE CONTROL OF HIV RESERVOIRS
Chairs: Nicolas Chomont *VGTI-Florida, Port St. Lucie, USA*
Marie-Lise Gougeon *Institut Pasteur, Paris, France*

11:45 Lunch

AFTERNOON SESSIONS **Abstract**

14:00-15:00 Poster Viewing Session II

15:00-15:30 SESSION VI A: LATE BREAKER ABSTRACTS
Chair: Alain Lafeuillade *General Hospital, Toulon, France*

15:30-16:00 SESSION VI B: RESEARCH PRESENTATIONS FROM FIRMS SUPPORTING THE MEETING
Chair: Alain Lafeuillade *General Hospital, Toulon, France*

15:30 Title TBA
On behalf of Gilead Sciences Inc.: Romas Geleziunas; *Foster City, USA*

15:45 Title TBA
On behalf of Tibotec: Guenter Kraus; *Mechelen, Belgium*

16:00 SESSION VII: ACUTE HIV INFECTION
Chairs: Mark Wainberg *McGill University AIDS Centre, Montreal, Canada*
Martin Markowitz *Aaron Diamond AIDS Research Center, New York, USA*

16:00 A Randomized, Open-label Trial of 5-drug *versus* Standard 3-drug PI-based cART Initiated During Acute and Early Infection: 96-week Results 31
Martin Markowitz *Aaron Diamond AIDS Research Center, New York, USA*

16:20 The Effect of Mega-HAART and HAART Instituted During Fiebig I to IV Acute HIV Infection on HIV Reservoir Size and Gut T cells 32
Jintanat Ananworanich *The Thai Red Cross AIDS Research Center, Bangkok, Thailand, and the US Military HIV Research Program, Rockville, USA*

16:40 Reduced HIV-1 Reservoir Size after 10 years of Suppressive Antiretroviral Therapy in Patients Initiating Treatment during Primary Infection 33
Maria Buzon *Ragon Institute of MGH, MIT and Harvard, Charlestown, USA*

16:55 Control of HIV-1 Replication in $CD4^+$ T Lymphocytes by using PKC Theta Inhibitors as a Strategy to Reduce the Size of Reservoirs during Primary Infection 34
Mayte Coiras *Instituto de Salud Carlos III, Madrid, Spain*

17:00 SESSION VIII: ANATOMIC RESERVOIRS
Chairs: José Gatell *Hospital Clinic, Barcelona, Spain*
Alain Lafeuillade *General Hospital, Toulon, France*

17:00 Tissue Analysis of Lymphatic Reservoirs of HIV Infection 35
Timothy Schacker *Department of Medicine, University of Minnesota, Minneapolis, USA*

17:20 Virologic Analysis of Lymphatic Reservoirs of HIV Infection 35
Mario Stevenson *University of Miami Leonard M. Miller School of Medicine, Miami, FL, USA*

17:40 Pharmacologic Analysis of Lymphatic Reservoirs of HIV Infection 35
Courtney Fletcher *University of Nebraska Medical Center, Omaha, USA*

18:00 The Brain and Spleen are Reservoirs of SIV Infection in Macrophages 36
Janice Clements *Johns Hopkins University School of Medicine, Baltimore, USA*

18:20 Poster Viewing Session

20:00 Gala Dinner

Friday, December 09, 2011 **Abstract**

MORNING SESSIONS

8:00 SESSION IX: NEW APPROACHES & ERADICATION TRIALS - PART I

Chairs: Alain Lafeuillade — *General Hospital, Toulon, France*
Jean Michel Molina — *Hopital Saint Louis, Paris, France*

10:05 Poster Viewing Session

10:30 SESSION X: NEW APPROACHES & ERADICATION TRIALS - PART 2

Chairs: David Margolis — *Institute for Global Health & Infectious Diseases, UNC Chapel Hill, Chapel Hill, USA*
José Gatell — *Hospital Clinic, Barcelona, Spain*

WORKSHOP CONCLUSIONS

12:00 Alain Lafeuillade — *General Hospital, Toulon, France*
Françoise Barré-Sinoussi — *Institut Pasteur, Paris, France*

Posters