

Third International Workshop on HIV Persistence during Therapy

Scientific Program

Tuesday, December 4, 2007

19:30 Welcome Dinner – Poolside Patio, Westin

Wednesday, December 5, 2007

Morning Sessions

8:00 Opening Remarks

Mario Stevenson

University of Massachusetts Medical School, Worcester, USA

SESSION 1: BASIC SCIENCE & ANIMAL MODELS OF VIRAL PERSISTENCE

Chairs: Michaela Müller-Trutwin *Institut Pasteur, Paris, France*

Mario Stevenson

University of Massachusetts Medical School, Worcester, USA

8:05 Viral Reservoirs and HIV Pathogenesis: Lessons from SIV Primate Models

Michaela Müller-Trutwin

Institut Pasteur, Paris, France

8:25 Reservoirs of SIV in Macaques Controlling Infection

Ronald S. Veazey

Tulane National Primate Research Center, Covington, USA

8:45 Cellular Restrictions to Lentivirus Infection of Macrophages

Mario Stevenson

University of Massachusetts Medical School, Worcester, USA

9:05 Discussant

Simon Wain-Hobson

Institut Pasteur, Paris, France

9:15 Cats with Feline Immunodeficiency Virus (FIV) as an Animal Model for Studying
Lentiviral Persistence during Antiretroviral Treatment

Andrea Savarino

Istituto Superiore di Sanita, Rome, Italy

9:25 Improved Integrase Inhibitor Containing Combination Antiretroviral Therapy
Regimen in SIV Infected Macaques

Jeffrey D. Lifson

National Cancer Institute, Frederick, USA

9:40 BREAK

SESSION 2: CELLULAR BIOLOGY & RESERVOIRS

- Chairs: Christine Rouzioux *CHU Necker Enfants Malades, Paris, France*
Alain Lefeuvre *Chalucet Hospital, Toulon, France*
- 10:10 New Insights into the Molecular Underpinnings of HIV Latency
Warner C. Greene *Gladstone Institute of Virology and Immunology, San Francisco, USA*
- 10:30 Mechanisms that Maintain Proviral Latency: Targets for Future Therapeutics
David M. Margolis *University of North Carolina, Chapel Hill, USA*
- 10:50 Discussant
Christine Rouzioux *CHU Necker Enfants Malades, Paris, France*
- 11:00 A Clinical Integration Assay Shows that Patients on HAART Have Lower Levels of Integrated HIV-1 DNA than Patients not on HAART
Una O'Doherty *University of Pennsylvania, Philadelphia, USA*
- 11:12 HIV-1 Reservoirs: Viral Population Dynamics in Rectal Tissue in Comparison with Blood Infected Cells
Veronique Avettand-Fènoël *CHU Necker Enfants Malades, Paris, France*
- 11:24 HIV-1 TAR miRNA and Latency
Zachary Klase *The George Washington University School of Medicine, Washington DC, USA*
- 11:36 A Post-Transcriptional Block in Gene Expression Contributes to the Establishment and Maintenance of HIV-1 Latency
Kara G. Lassen *Case Western Reserve University School of Medicine, Cleveland, USA*
- 11:48 NF- κ B/I κ B α Shuttling is an Essential Pathway for Maintenance and Reactivation of Resting HIV-1 Latent Reservoirs
Jose Alcamí *Instituto de Salud Carlos III, Madrid, Spain*
- 12:30 Lunch

Afternoon Sessions

13:30-16:00 **POSTER VIEWING SESSION I**
Basic Science & Animal Models of Viral Persistence, Cellular Biology & Reservoirs
and Immunology & Reservoirs

SESSION 3: IMMUNOLOGY & RESERVOIRS

Chairs: Marie-Lise Gougeon *Institut Pasteur, Paris, France*
Satya Dandekar *University of California, Davis, USA*

16:00 Immunopathogenesis of HIV in the Gut
Satya Dandekar *University of California, Davis, USA*

16:20 HIV, Virological & Immunological Synapses
Olivier Schwartz *Institut Pasteur, Paris, France*

16:40 Discussant
Marie-Lise Gougeon *Institut Pasteur, Paris, France*

17:00 CCR7 Ligands CCL19 and CCL21 Increase Permissiveness of Resting Memory
CD4+ T-cells to HIV-1 Infection: a Novel Model of HIV-1 Latency
Sharon R. Lewin *Alfred Hospital, Melbourne, Australia*

17:12 Homeostatic and Antigen-induced Cellular Proliferations Ensure HIV-1 Reservoir
Persistence
Nicolas Chomont *Université de Montreal, Montreal, Canada*

17:24 Urokinase-type Plasminogen Activator (uPA) Inhibition of HIV-1 Replication in
Mononuclear Phagocytes is Dependent Upon Vitronectin-mediated Cell Adhesion
Massimo Alfano *San Raffaele Scientific Institute, Milan, Italy*

17:36 Beneficial Effects of TRAIL on HIV Viral Burden Without Detectable Immune
Consequences
Stacey Rizza *Mayo Clinic, Rochester, USA*

17:48 Fewer Integrated Provirus Copies in Peripheral Blood Mononuclear Cells and
Resting Memory CD4+ T Cell Subsets from Long-term Controllers than in Cells
from Chemotherapeutically-suppressed Subjects
Carey K. Hwang *Vanderbilt University, Nashville, USA*

19:00 **Dinner – Courtyard, Westin**

Thursday, December 6, 2007

Morning Session

SESSION 4: RESISTANCE & RESERVOIRS

Chairs: Mark A. Wainberg *McGill University AIDS Centre, Montreal, Canada*
John Coffin *National Cancer Institute, Frederick, USA*

8:45 Arginine Methylation by PRMT6 Diminishes HIV-1 Tat Interaction with Both TAR and Cyclin T1

Mark A. Wainberg *McGill University AIDS Centre, Montreal, Canada*

9:05 HIV “Elite” Controllers: The Relationship Between Persistent HIV and Immune Responses
Steven G. Deeks *University of California, San Francisco, USA*

9:25 Discussant
John Coffin *National Cancer Institute, Frederick, USA*

9:45 Restriction of HIV-1 Replication by Human Cytidine Deaminase APOBEC3H
Yong-Hui Zheng *Michigan State University, East Lansing, USA*

9:55 Genetic Diversity of Reverse Transcriptase in Blood and Genital Tract of HIV-1 Infected Antiretroviral Naïve Females
Shanmugasundaram Uma *Y. R. Gaitonde Center for AIDS Research and Education, Chennai, India*

10:15 BREAK

SESSION 5: HAART POTENCY, PHARMACOLOGY, COMPARTMENTS & RESERVOIRS

Chairs: Scott Letendre *University of California, San Diego, USA*
Joep Lange *University of Amsterdam, Amsterdam, the Netherlands*

10:45 Antiretroviral Distribution and Effectiveness in the Central Nervous System
Scott Letendre *University of California, San Diego, USA*

11:05 Pharmacology & Sanctuary Sites in HIV Infection
Sanjay Sankatsing *University of Amsterdam, Amsterdam, the Netherlands*

11:25 Discussant
Joep Lange *University of Amsterdam, Amsterdam, the Netherlands*

11:30 CD4 T Lymphocytes May Not Be the Source of Residual Plasma HIVs in Patients Receiving Prolonged Effective HAART
Gautam K. Sahu *University of Texas Medical Branch, Galveston, USA*

11:40 Plasma Protein Binding Determines the Disposition of Antiretrovirals in Semen
Martin D. Hill *Ponce School of Medicine, Ponce, Puerto Rico*

- 11:50 Persistent Intrathecal Immune Activation in HIV-1-infected Individuals on Antiretroviral Therapy
Aylin Yilmaz *The Sahlgrenska Academy at Göteborg University, Göteborg, Sweden*
- 12:00 HIV-1 Protease Inhibitors do not Interfere with Provirus Transcription and Host Cell Apoptosis Induced by Combined Treatment TNF- α + TSA
Claire Vandergeeten *University of Liege, Belgium*
- 12:10 Cellular Targets of the HIV-1 Maturation Inhibitor Bevirimat
Chin-Ho Chen *Duke University Medical Center, Durham, USA*

12:30 Lunch

Afternoon Sessions

13:30-16:00 **POSTER VIEWING SESSION II**
Resistance & Reservoirs and Primary HIV Infection & Eradication Issues

SESSION 6: RESEARCH PRESENTATIONS FROM FIRMS SUPPORTING THE WORKSHOP

Chairs: Jose M. Gatell *Hospital Clinic, Barcelona, Spain*
Alain Lefeuvre *Chalucet Hospital, Toulon, France*

- 16:00 Screening and Selecting for Optimized Antiretroviral Drugs: Rising to the Challenge of Drug Resistance
On behalf of Tibotec: Guenter Kraus; Mechelen, Belgium
- 16:15 Challenges and Opportunities for Future HIV Therapeutics
On behalf of Merck: Daria Hazuda; West Point, USA
- 16:30 Update on Gilead Anti-HIV Development Programs
On behalf of Gilead: Michael Miller; Foster City, USA

SESSION 7: PRIMARY HIV INFECTION & ERADICATION ISSUES

Chairs: Dean H. Hamer *National Cancer Institute, Bethesda, USA*
Luc Perrin *Geneva University Hospital, Geneva, Switzerland*

17:30 Targeting the Persistent HIV Reservoir by Combined Cis- and Trans-activators
Dean H. Hamer *National Cancer Institute, Bethesda, USA*

17:50 The Effect of Treatment of Acute and Early HIV Infection with Combination ART
on the GI-associated Lymphoid Tissue
Martin Markowitz *Aaron Diamond AIDS Research Center and Rockefeller
University, New York, USA*

18:10 Discussant
Luc Perrin *Geneva University Hospital, Geneva, Switzerland*

18:20 Low-level Viremia in HIV-1-Infected Patients Classified as “Elite Controllers”
Compared to Patients on Suppressive Antiretroviral Therapy
Sarah Palmer *National Institutes of Health, Frederick, USA*

18:35 Elite Suppressor-derived HIV-1 Envelope Glycoproteins Exhibit Reduced Coreceptor
Affinity and Delayed Fusion Kinetics *In Vitro*
Michael A. Lobritz *Case Western Reserve University, Cleveland, USA*

20:00 **Gala Dinner – Beach North, Westin**

Friday, December 7, 2007

Morning Sessions

SESSION 8: NEW THERAPEUTIC APPROACHES

Chairs: David M. Margolis *University of North Carolina, Chapel Hill, USA*
Alain Lefeuvre *Chalucet Hospital, Toulon, France*

9:15 Why Are We Having HAART Failure?
Joseph Kulkosky *Chestnut Hill College, Philadelphia, USA*

9:35 HIV-1 Latency: A Drug Discovery and Development Perspective
Daria Hazuda *Merck Research Laboratories, West Point, USA*

9:55 Cellular Reservoirs of HIV: Perspectives for Eradication and Development of
Therapeutic Strategies
Tae-Wook Chun *National Institute of Allergy and Infectious Diseases,
Bethesda, USA*

- 10:15 Discussant
Elimination of HIV-1 Infection by Treatment with a Doxorubicin-conjugated
Anti-envelope Antibody
Susanne Johansson *Karolinska Institutet, Stockholm, Sweden*
- 10:35 Redirecting Natural Antibodies using CD4 Peptides Coupled to the Disaccharide
Gal- α 1,3-gal as Antibody-antigen Linker
Anders Vahlne *Karolinska Institutet, Stockholm, Sweden*
- 10:47 Inhibition of HIV-1 Release from Human Macrophage Reservoirs with the Novel
Compound BIT225
John Wilkinson *Biotron Limited, Sydney, Australia*
- 10:59 The Effects of HDAC Inhibitors Inducing HIV Infected Resting CD4+ T-cells
Herbert K. Dang *Merck Research Laboratory, West Point, USA*
- 11:11 HPH116, the First in a New Class of Anti-viral Agents, Potentiates T-20, Tenofovir
and AZT Anti-viral Activity *In Vitro*
Patrick R. Mahy *H-PHAR, Gosselies, Belgium*
- 11:23 SJ23B, a Jatrophone Diterpene Isolated from *Euphorbia Hyberna* Displays Strong
Activity Against HIV *In Vitro*
Jose Alcamí *Instituto de Salud Carlos III, Madrid, Spain*

WORKSHOP CONCLUSIONS

- 12:00 Jose M. Gatell *Hospital Clinic, Barcelona, Spain*
Alain Lefeuvre *Chalucet Hospital, Toulon, France*
Luc Perrin *Geneva University Hospital, Geneva, Switzerland*
Mario Stevenson *University of Massachusetts Medical School, Worcester, USA*