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 Lafeuillade  
*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-Fênoël  
*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-κB/IκBα 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 
       John Coffin
       McGill University AIDS Centre, Montreal, Canada
       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
       Joep Lange
       University of California, San Diego, USA
       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 Lafeuillade 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 Virema 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 Lafeuillade  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-α1,3-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 Jatrophane 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 Lafeuillade  
Chalucet Hospital, Toulon, France
Luc Perrin  
Geneva University Hospital, Geneva, Switzerland
Mario Stevenson  
University of Massachusetts Medical School, Worcester, USA