

CROI 2014

Conference on Retroviruses
and Opportunistic Infections

Program
at a Glance



 **IAS-USA**
International Antiviral Society-USA

March 3-6, 2014 Boston, Massachusetts

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2014 CROI PROGRAM COMMITTEE

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Fred Hutchinson Cancer Research Center
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Conference Secretariat

International Antiviral (formerly AIDS) Society—USA (IAS—USA)
San Francisco, CA, United States
Donna M. Jacobsen, Executive Director

GENERAL INFORMATION

Overview

The 2014 Conference on Retroviruses and Opportunistic Infections (CROI) will be held at the John B. Hynes Veterans Memorial (Hynes) Convention Center from March 3 to 6, 2014. CROI was established in 1993 to provide a forum for basic scientists and clinical investigators to present, discuss, and critique their investigations into the epidemiology and biology of human retroviruses and associated diseases. The synergy of basic science and clinical investigation has been a major contributor to the success of the meeting. CROI is the preeminent HIV research meeting in the world and attracts more than 4000 HIV/AIDS research leaders internationally. The goal of the conference is to provide a forum for researchers to translate their laboratory and clinical findings into tangible progress against the HIV pandemic. CROI has facilitated the presentation of important discoveries in the field, thereby ultimately accelerating progress in HIV/AIDS research.

Americans with Disabilities Act

CROI 2014 endeavors to fully comply with the legal requirements of the Americans with Disabilities Act (ADA). If you require assistance onsite, please visit the Attendee Services booth on the Plaza level during the conference.

CROI Foundation

The CROI Foundation operates exclusively for the charitable and educational purpose of organizing, promoting, and presenting the Conference on Retroviruses and Opportunistic Infections (CROI).

IAS–USA

The International Antiviral (formerly AIDS) Society–USA (IAS–USA) is a 501(c)(3) not-for-profit professional education organization. The IAS–USA serves as the CROI 2014 Conference Secretariat.

The mission of the IAS–USA is to improve the treatment, care, and quality of life for people with HIV, hepatitis C virus, or other viral infections through high-quality, relevant, balanced, and needs-oriented education and information for practitioners who are actively involved in medical care.

Continuing Medical Education (CME)

Objectives

After participating in CROI 2014, learners will be able to:

- Describe current basic science research on the pathogenesis of HIV and on advances toward a cure

- Discuss the most recent findings from clinical trials in the HIV field and the implications of these data for state-of-the-art treatment strategies
- Review current epidemiologic data on the prevalence of HIV infection, transmission, treatment, and linkage to and retention in care in populations worldwide and discuss the implications of these data for public health program planning

Statement of Need

Since HIV was identified, the scientific response to the global pandemic has been a coordinated effort among basic researchers, clinical investigators, health care providers, epidemiologists, and community leaders to move information and potential treatment options from research to clinical trials and out to affected communities as quickly as possible. CROI was founded in 1993 by research investigators working in HIV/AIDS and its complications as a science-focused forum for exchanging current research findings among their international peers. CROI continues to focus on scientific exchange, providing an environment in which basic science researchers, translational researchers, clinical investigators, epidemiologists, and public health experts meet to present and discuss the latest research on different facets of HIV and its complications.

Accreditation Statement

The International Antiviral Society–USA (IAS–USA) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The IAS–USA designates this live activity for a maximum of **27.50 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Since 2006, the IAS–USA has had Accreditation with Commendation, being a member of an elite group of organizations in the United States that have been awarded this prestigious status, which is, in the words of the ACCME, “reserved for programs that are truly exceptional.”

Faculty Financial Disclosure

It is the policy of the IAS–USA to ensure balance, independence, objectivity, and scientific rigor in all its educational activities. All faculty members (speakers, presenters, moderators, conveners, etc) participating in IAS–USA-sponsored activities are required to disclose to the program audience any financial interests within the past 12 months that could be perceived to influence, or give the appearance of potentially influencing, the written or oral



presentation. (The ACCME defines a financial interest as an interest in any amount.) The information is intended to make our audience aware of author/contributor interests and commitments with commercial companies or other entities so that they may form their own judgments about such associations.

Each author or contributor is required to complete this financial disclosure declaration. In accordance with IAS–USA policy, the IAS–USA will identify and resolve ahead of time any possible conflicts of interest that may influence CME activities with regard to exposition or conclusion. Disclosure information will be printed in the electronic Program and Abstracts eBook.

Drug and Product Disclaimer

This activity may contain information about the investigational uses of drugs or products that are not approved by the US Food and Drug Administration. Please consult full prescribing information before using any medication or product mentioned in this activity.

Welcome Reception

Please join us after the opening session, Monday, March 3rd, for an attendee welcome reception at the Hynes Convention Center. Light hors d'oeuvres and refreshments will be served. The reception will be held in Hall C.

Meals

Morning coffee breaks and afternoon snack breaks will be available to conference registrants in the Poster Hall. The Convention Center will open the permanent concession stands in Halls A, B, and D, as well as 2 Outtakes Express concession stands on Level 3, from 11 AM to 2 PM every day. The Outtakes Express stands will have cold items for purchase such items as wraps, sandwiches, salads, snacks, and chips as well as beverages. The permanent concession stands will offer these cold items as well as some hot items. **Attendees are on their own for lunch during the hours of approximately 12 noon to 1:30 PM each day.** Below is a list of food service options located in the Convention Center or within a short walking distance.

At the Convention Center

Towne Stove and Spirits The Capital Grill

At the Prudential Center

(next to the South Lobby main entrance of the Convention Center)

5 Napkin Burger	Au Bon Pain
Ben & Jerry's	Boston Chowda Co
California Pizza	Cheeseboy
Cheesecake Factory	Dunkin' Donuts
Flamers	Godiva
Gourmet India	Haru
Legal Sea Foods	Panda Express

Paradise Bakery	PF Chang's
Pizzeria Regina	Poulet
Qdoba	Sarku Japan
Teavana	Tossed
Top of the Hub	Wagamama

At the Sheraton Boston

(next to the South Lobby main entrance of the Convention Center)

SideBar & Grille	Starbucks
Café Apropos	

At the Marriott Copley, Copley Place Mall, and Westin Copley Place

(within 1 block of the Convention Center)

Bar 10	Champion's Sports Bar
The Huntington	Legal Sea Foods
The Palm	Turner Fisheries
Starbucks	Osushi

Overflow Accommodations for Session Rooms

Most session rooms will have designated overflow areas. Should any session draw substantially higher attendance than can be accommodated, a nearby space will be available to provide a live audio and video feed.

USB Flash Drive

Each participant was supplied a blank 4Gbyte USB flash drive upon badge pick-up. The 2014 Program at a Glance and Agenda and Abstracts Book are available online to be loaded on to the USB flash drive. Downloads can be completed at the Cyber Cafe or directly from the conference website.

Website

For additional information about the conference please visit the website at: www.CROI2014.org



Webcasts and Podcasts

Plenaries, symposia, scientific overviews, oral abstract sessions, and themed discussions will be webcast and podcast. Webcasts are also available as streaming video for the Apple iPad and iPhone.

Visit www.CROI2014.org or www.CROIwebcasts.org to access the CROI 2014 webcasts and podcasts. Webcasts will be available within 24 hours of the end of the session.

WiFi Access at the Conference

Complimentary WiFi access is provided at the Hynes Convention Center. There are 2 network options:

- Hynes Wireless
- Hynes Wireless Fast (only for recent models of smart phones and tablets)

There is no login information required.

Badges

Badge pickup will be available at the registration lobby; please bring photo identification that clearly shows your name. You must wear your name badge to gain entry to all official meeting activities, including the poster sessions.

DO NOT LOSE YOUR BADGE. Payment of an additional registration fee (\$730) will be required to replace a lost badge.

Child Care

Children are not permitted entry into any meeting room, including the poster area. If you should require child care, please contact the concierge of your hotel.

Conference Etiquette

Please ensure all cell phones and pagers are off or are placed in SILENT mode.

No flash photography is permitted in session rooms.

Conference Services at the Hynes Convention Center

Services	Location	Hours	Notes
Boston Information	Main Lobby Plaza Level	Sunday 3 PM–5 PM Monday 11 AM–7 PM Tuesday to Thursday 10 AM–6 PM	Local information and reservations assistance
Bag and Coat Check	Plaza Level	Monday 8 AM–9:30 PM Tuesday/Wednesday 7:30 AM–6:30 PM Thursday 7:30 AM–6:30 PM	\$3.00 per item
CyberCafe	Hall C 2nd Level	Sunday 3 PM–5 PM Monday to Wednesday 7 AM–7 PM Thursday 7 AM–6 PM	Computers with Internet access available for webcasts, abstract searches, and messages
Media Center	Room 208 2nd Level	Monday 9 AM–7 PM Tuesday to Thursday 8 AM–6:30 PM	There is no onsite press registration. Registered press can pick up press kits and obtain location for press conferences.
Message Center	Main Lobby Plaza Level	Sunday 3 PM–5 PM Monday 7 AM–7 PM Tuesday 7 AM–6 PM Wednesday/Thursday 8 AM–6 PM	Access to voice and text messages in addition to the CyberCafe
Badge Pickup Attendee Services Housing Information Scholarship Badge Pickup Media Badge Pickup	Main Lobby Plaza Level	Sunday 3 PM–6 PM Monday 7 AM–7 PM Tuesday 7 AM–6 PM Wednesday 8 AM–6 PM Thursday 8 AM–12 PM	Location to pick up badges and conference materials
Speaker Ready Room and Poster Drop-off	Room 200 2nd Level	Sunday 3 PM–6 PM Monday to Thursday 7:30 AM–6 PM	Oral abstract, invited, and themed discussion session speakers should drop off presentations at least 24 hours before their presentation. Poster presenters should submit an electronic version of their poster for placement on the CROI website before their assigned session.

Hotel Information

CROI 2014 hotels are listed below. For more detailed housing information, please visit:
www.CROI2014.org/housing.

Omni Parker House

60 School Street
Boston, MA 02108
PH: +1 617 227 8600

The Boston Park Plaza Hotel & Towers

50 Park Plaza at Arlington Street
Boston, MA 02116
PH: +1 617 426 2000

Hyatt Regency Boston

One Avenue de Lafayette
Boston, MA 02111
PH: +1 617 912 1234

Taj Boston

15 Arlington Street
Boston, MA 02116
PH: +1 617 536 5700

Sheraton Boston Hotel

39 Dalton Street
Boston, MA 02199
PH: +1 617 236 2000

Marriott Boston Copley Place

110 Huntington Avenue
Boston, MA 02116
PH: + 1 617 236 5800

The Westin Copley Place Boston

10 Huntington Avenue
Boston, MA 02116
PH: +1 617 262 9600

Hilton Boston Back Bay

40 Dalton Street
Boston, MA 02115
PH: +1 617 236 1100

The Colonnade Hotel

120 Huntington Avenue
Boston, MA 02116
PH: +1 617 424 7000

Mandarin Oriental Boston

776 Boylston Street
Boston, MA 02199
PH: +1 617 535 8888

The Midtown Hotel

220 Huntington Avenue
Boston, MA 02115
PH: +1 617 262 1000

Hampton Inn & Suites

– Crosstown Center
811 Massachusetts Avenue
Boston, MA 02118
PH: + 1 617 445 6400

COMMERCIAL SUPPORT

In the interest of objective, balanced, and scientifically rigorous activities, the IAS–USA seeks grant support from multiple commercial companies, particularly from companies with competing products. These companies

have no input in or control over the selection of faculty or content of the presentations.

CROI 2014 has received grant support commitments from the following commercial companies:

Platinum



MERCK



Gold



Bristol-Myers Squibb



Silver

abbvie



GILEAD



Additional support has been provided by Mylan, Inc

ORAL SESSIONS

MONDAY MARCH 3, 2014

Session W1 Workshop

9:00 AM – 1:15 PM **Ballroom B/C**

Program Committee Workshop for New Investigators and Trainees

Target audience: This workshop is directed toward new trainees (eg, undergraduate students, graduate students, postdoctoral fellows, and physician fellows) and new investigators (both international and domestic).

Level of knowledge: It is assumed that learners have been conducting active research in the field for less than 3 years.

Objectives: At the completion of the workshop, learners will be able to:

- Recognize the major areas of HIV investigation being presented at the conference
- Identify the top 3 to 5 research questions in the field of retroviruses and opportunistic infections today
- Describe some of the proposed solutions for addressing the challenges presented globally by a variety of retroviruses and opportunistic infections

Conveners

Judith S. Currier, *University of California Los Angeles, Los Angeles, CA, United States*

John W. Mellors, *University of Pittsburgh School of Medicine, Pittsburgh, PA, United States*

- 1 HIV Pathogenesis: Current Understanding and Future Research
Dana H. Gabuzda, *Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, United States*
- 2 HIV Cure Research
John W. Mellors, *University of Pittsburgh, Pittsburgh, PA, United States*
- 3 HIV Vaccine Immunology: Recent Progress and Continuing Challenges
Richard A. Koup, *Vaccine Research Center, National Institute of Allergy and Infectious Disease, National Institutes of Health, Bethesda, MD, United States*
- 4 HIV Prevention Research: Progress and Challenges
Sharon L. Hillier, *University of Pittsburgh School of Medicine, Magee-Womens Hospital, Pittsburgh, PA, United States*
- 5 Pathogenesis and Control of HCV Infection
David L. Thomas, *The Johns Hopkins University School of Medicine, Baltimore, MD, United States*

Session MD Panel

1:30 PM – 2:30 PM **Ballroom B/C**

6 Martin Delaney Panel: Hepatitis C Virus: From Trials and Tribulations To Triumph

The Martin Delaney Panel is held annually during the workshops for Young Investigators, International Scholars, and Community Educators in honor of pioneering HIV/AIDS activist Martin Delaney (1945-2009). It recognizes the important contributions of community advocacy and engagement to research.

Panel Leaders

Jeff Taylor, *AIDS Treatment Activists Coalition, Palm Springs, CA, United States*

Tracy Swan, *Treatment Action Group, New York, NY, United States*

Panelists

Isabelle Andrieux-Meyer, *Médecins sans Frontières, Geneva, Switzerland*

Jules Levin, *National AIDS Treatment Advocacy Project (NATAP), New York, NY, United States*

Lynn E. Taylor, *Brown University, Providence, RI, United States*

Session W2 Workshop

2:30 PM – 4:30 PM **Ballroom B/C**

Clinical Trial Design and Analysis

Target audience: This session is directed to clinicians and scientists who are interested in designing or interpreting clinical trial results.

Level of knowledge: It is assumed that learners are familiar with the basic design of randomized and observational clinical studies.

Objectives: At the completion of the session, learners will be able to:

- Discuss one or more possible solutions to adherence challenges
- Define factorial designs and discuss their advantages and disadvantages
- Define meta-analyses and discuss their advantages and disadvantages

Conveners

Susan Buchbinder, *San Francisco Department of Public Health, San Francisco, CA, United States*

Richard Chaisson, *The Johns Hopkins University School of Medicine, Baltimore, MD, United States*

- 7 Adherence: The Achilles Heel for Trial Interventions
David R. Bangsberg, *Massachusetts General Hospital Center for Global Health, Boston, MA, United States*
- 8 Studying Multiple Interventions: Factorial Designs and Other Approaches
Richard J. Hayes, *London School of Hygiene and Tropical Medicine, London, United Kingdom*

9 So Many Trials, So Little Time: Meta-Analysis Dos and Don'ts

Dean A. Follmann, *National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States*

Session W3 Workshop

2:30 PM – 4:30 PM **Ballroom A**

Frontiers in Laboratory Science Workshop

The purpose of this workshop is to present the main technological and conceptual developments in life sciences that are influencing HIV research or hold a significant potential for research. The presentation should educate and engage investigators and clinicians, and spark interest in emerging technologies. The workshop format is designed to provide in-depth views on technologies that define B and T cell development and characterization, progress in the study of host-pathogen interactions at molecular and cellular levels, and new approaches to genetic editing. Applications in HIV research will be discussed.

Conveners

Galit Alter, *Ragon Institute of Massachusetts General Hospital, Massachusetts Institute of Technology, and Harvard, Cambridge, MA, United States*

Amalio Telenti, *Institute of Microbiology, University of Lausanne, Lausanne, Switzerland*

10 Systems Immunology Approaches for Vaccine Profiling and Antibody Discovery
Sai Reddy, *Swiss Federal Institute of Technology Zurich, Basel, Switzerland*

11 3-D Structural Analysis of HIV Using Correlative CryoEM and Live Cell Imaging
Peijun Zhang, *University of Pittsburgh School of Medicine, Pittsburgh, PA, United States*

12 Virus-Host Interactions Revealed Through Proteomics/Phosphoproteomics
Beatrix Ueberheide, *New York University Langone Medical Center, New York, NY, United States*

13 CRISPRs and Other Genome Editing Systems
Paul F. Bates, *University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA, United States*

Session W4 Workshop

2:30 PM – 4:30 PM **Room 304**

Workshop for Clinicians Who Are New To Hepatitis C Management: A Case-Based Interactive Session

Target audience: This session is directed to persons newly engaged in the care of HCV-infected patients

Level of knowledge: It is assumed that learners are familiar with fundamental principles of medicine and antimicrobial therapy

Objectives: At the completion of the session, learners will be able to:

- List the practices routinely required for HCV-infected persons with cirrhosis
- Describe patients for whom HCV treatment is not currently advisable
- List the recommended therapies for persons with genotypes 1-4 HCV infection

Conveners

David L. Thomas, *The Johns Hopkins University School of Medicine, Baltimore, MD, United States*

Robert T. Schooley, *University of California San Diego, San Diego, CA, United States*

14 Liver Management
Kenneth E. Sherman, *University of Cincinnati College of Medicine, Cincinnati, OH, United States*

15 Interactive Case Presentations
David L. Wyles, *University of California San Diego, San Diego, CA, United States*
Susanna Naggie, *Duke Clinical Research Institute, Durham, NC, United States*

Opening Session

5:00 PM – 7:00 PM **Auditorium**

Welcome

Session NL1 Lecture

Bernard Fields Lecture

The Bernard Fields Lecture, named in tribute to the exemplary work of the esteemed microbiologist and virologist Bernard Fields, is given during the opening session, to recognize the speaker for their important and relevant contributions to the fields of virology and viral pathogenesis.

17 Making and Breaking Barriers To Cross-Species HIV-1 Transmission
Paul D. Bieniasz, *Aaron Diamond AIDS Research Center, The Rockefeller University, New York, NY, United States*

Session NL2 Lecture

N'Galy-Mann Lecture

The N'Galy-Mann Lecture, named in honor of Drs Bosenge N'Galy and Jonathan Mann for their pioneering work in HIV science in Africa, is given during the opening session and recognizes an HIV/AIDS researcher for his or her important and relevant work in the fields of epidemiology or clinical research.

18 Application of Scientific Knowledge and Evidence To Limit the Progression of HIV/AIDS and Fight Other Endemic Diseases in West Africa
Souleymane Mboup, *Centre Hospitalier Universitaire Aristide le Dantec, Dakar, Senegal*

Welcome Reception

7:00 PM – 9:00 PM **Hall C**

TUESDAY MARCH 4, 2014

Session PL1 Plenary

8:30 AM – 9:00 AM Auditorium

19 HPV Vaccines: Progress To Date and Future Worldwide Directions

Douglas R. Lowy, National Cancer Institute, Bethesda, MD, United States

Session PL2 Plenary

9:00 AM – 9:30 AM Auditorium

20 HIV in People Who Use Drugs

Adeeba Kamarulzaman, University of Malaya, Kuala Lumpur, Malaysia

Session O-1 Oral Abstracts

10:00 AM – 12:15 PM Ballroom B/C

Hepatitis

Moderators

Jürgen Rockstroh, University Hospital Bonn, Bonn, Germany

Kristen M. Marks, Weill Cornell Medical College, New York, NY, United States

21 Longitudinal Phenotypic Profiling of Early HCV-Specific CD4 T Cells in HIV- and HIV+ Individuals

Diana Y. Chen¹, Lyndon K. Matsubara¹, Joelle Brown¹, Stephanie S. Kulaga², Jasneet Aneja², Lia Lewis-Ximenez³, Eddie James⁴, William W. Kwok⁴, Arthur Y. Kim², Georg M. Lauer¹¹Gastrointestinal Unit, Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States; ²Infectious Disease Division, Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States; ³Laboratório de Hepatites Virais, Instituto Oswaldo Cruz, Fundação Oswaldo Cruz, Rio de Janeiro, Brazil; ⁴Benaroya Research Institute at Virginia Mason, Seattle, WA, United States

22 Rapid Peripheral In Vivo Cellular Changes During Interferon-Free Treatment of Hepatitis C

Eric G. Meissner¹, Brian Santich¹, Yu-Jin Lee¹, Olga Prokunina¹, Anuoluwapo Osinusi^{1,2}, Anita Kohli^{1,2}, Henry Masur³, Susan Moir¹, Shyamasundaran Kottitil¹¹Laboratory of Immunoregulation, NIAID/NIH, Bethesda, MD, United States; ²SAIC-Frederick, Inc, Frederick, MD, United States; ³CCMD/NIH, Bethesda, MD, United States

23 Faldaprevir Plus Pegylated Interferon Alfa-2a/Ribavirin in HIV/HCV Coinfection: STARTVerso4

Douglas Dieterich¹, Cristina Turaf², Mark Nelson³, Keikawus Arastéh⁴, Vicente Soriano⁵, Josep Guardiola⁶, Sanjay Bhagani⁷, Jürgen K. Rockstroh⁸, Jerry O. Stern⁹, Anne-Marie Quinson⁹
¹Mount Sinai Medical Center, New York, NY, United States; ²Hospital Universitari Germans Trias i Pujol, Barcelona, Spain; ³Chelsea and Westminster Hospital, London, United Kingdom; ⁴EPIMED/Vivantes Auguste-Viktoria-Klinikum, Berlin, Germany; ⁵Hospital Carlos III, Madrid, Spain; ⁶Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; ⁷The Royal Free Hospital, London, United Kingdom; ⁸Department of Medicine I, Universityof Bonn, Bonn, Germany; ⁹Boehringer Ingelheim Pharmaceuticals Inc., Ridgefield, CT, United States

24 Simeprevir (TMC435) Plus PegIFN/Ribavirin in HCV Genotype-1/HIV-1 Coinfection (Study C212)

Douglas Dieterich¹, Jürgen K. Rockstroh², Chloe Orkin³, Félix Gutiérrez⁴, Marina B. Klein⁵, Jacques Reynes⁶, Lotke Tambuyzer⁷, Monika Peeters⁸, Alan Jenkins⁹, Wolfgang Jessner¹⁰
¹Icahn School of Medicine at Mount Sinai, New York, NY, United States; ²Medizinische Universitätsklinik I, Bonn, Germany; ³Royal London Hospital, London, United Kingdom; ⁴Hospital General de Elche and Universidad Miguel Hernández, Alicante, Spain; ⁵McGill University Health Centre, Montreal, QC, Canada; ⁶Gui De Chauliac University Hospital, Montpellier, France; ⁷Janssen Infectious Diseases BVBA, Beerse, Belgium; ⁸Janssen Research & Development, Raritan, NJ, United States

25 All-Oral Combination of Daclatasvir, Asunaprevir, and BMS-791325 for HCV Genotype 1 Infection

Gregory T. Everson¹, Paul J. Thuluvath², Eric Lawitz³, Tarek Hassanein⁴, Maribel Rodríguez-Torres⁵, Trevor Hawkins⁶, Vinod Rustgi⁷, Federico Hineastrosa⁸, James Levin⁹, Karen Sims¹⁰¹University of Colorado Denver, Aurora, CO, United States; ²Mercy Medical Center, Baltimore, MD, United States; ³The Texas Liver Institute, University of Texas Health Science Center, San Antonio, TX, United States; ⁴Southern California Liver Centers, Coronado, CA, United States; ⁵Fundación de Investigación, San Juan, Puerto Rico; ⁶Southwest CARE Center, Santa Fe, NM, United States; ⁷Metropolitan Research, Arlington, VA, United States; ⁸Orlando Immunology Center, Orlando, FL, United States; ⁹Dean Foundation for Health, Research and Education, Inc, Madison, WI, United States; ¹⁰Bristol-Myers Squibb, Hopewell, NJ, United States

26 Sofosbuvir Plus Ribavirin for HCV Genotype 1-3 Infection in HIV Coinfected Patients (PHOTON-1)

Susanna Naggie¹, Mark Sulikowski², Jacob Lalezari³, W. Jeffrey Fessel⁴, Karam Mounzer⁵, Margaret Shuhart⁶, Anne Luetkemeyer⁷, David Asmuth⁸, Douglas Dieterich⁹, Maribel Rodríguez-Torres¹⁰, and The Gilead PHOTON-1 Study Team
¹Duke Clinical Research Institute, Durham, NC, United States; ²The Johns Hopkins University, Baltimore, MD, United States; ³Quest Clinical Research, San Francisco, CA, United States; ⁴Kaiser Permanente, San Francisco, CA, United States; ⁵Philadelphia FIGHT, Philadelphia, PA, United States; ⁶Harborview Medical Center, Seattle, WA, United States; ⁷San Francisco General Hospital, San Francisco, CA, United States; ⁸University of California Davis Medical Center, Sacramento, CA, United States; ⁹Mount Sinai School of Medicine, New York, NY, United States; ¹⁰Fundación De Investigación, San Juan, PR, United States

27LB Combination Oral, Hepatitis C Antiviral Therapy for 6 or 12 Weeks: Final Results of the SYNERGY Trial

Anita Kohli^{1,2}, Zayani Sims¹, Amy Nelson³, Anu Osinusi^{3,4}, Geb Tefari⁵, Phil Pang⁶, William Symonds⁶, John McHutchison⁶, Henry Masur¹, Shyam Kottitil³¹Critical Care Medicine Department, National Institutes of Health, Bethesda, MD, United States; ²Clinical Research Directorate/Clinical Monitoring Research Program, Leidos Biomedical Research, Inc. (formerly SAIC-Frederick, Inc.), Frederick National Laboratory for Cancer Research, Frederick, MD, United States; ³Laboratory of Immunoregulation, National Institutes of Health, Bethesda, MD, United States; ⁴University of Maryland,

Baltimore, MD, United States;³Unity Health Care, Washington, DC, United States;⁴Gilead Sciences, Foster City, CA, United States

28LB Daclatasvir in Combination With Simeprevir ± Ribavirin for Hepatitis C Virus Genotype 1 Infection

Stefan Zeuzem¹, Christophe Hezode², Jean-Pierre P. Bronowicki³, Veronique Loustau-Ratti⁴, Francisco Gea⁵, Maria Buti⁶, Maria Beumont-Mauviel⁷, Navdeep Boparai⁸, Gaston Picchio⁹, Stephanie Noviello⁸, on behalf of the LEAGUE-1 Study Team

¹JW Goethe University Hospital, Frankfurt a.m., Germany; ²Hôpital Henri Mondor, Paris, France; ³Centre Hospital Universitaire de Nancy, Vandoeuvre Les Nancy, France; ⁴Université Limoges, Limoges, France; ⁵University Hospital La Paz, Madrid, Spain; ⁶Hospital Vall Hebron, Barcelona, Spain; ⁷Janssen Infectious Disease BVBA, Beerse, Belgium; ⁸Bristol-Myers Squibb, Princeton, NJ, United States; ⁹Janssen Research and Development, Titusville, NJ, United States

29LB PEARL III: SVR ≥99% After 12 Wks of ABT-450/r/267 + ABT-333 ± RBV in Treatment Naïve HCV GT1b Infection

Peter Ferenci¹, Anders Nyberg², David Bernstein³, Yaacov Baruch⁴, Vladimir Chulanov⁵, Wangang Xie⁶, Daniel Cohen⁶, Thomas Podsadecki⁶, **K Rajender Reddy**⁷, on behalf of the PEARL-III Study Group

¹Universitätsklinik fuer Innere Medizin III, Vienna, Austria; ²Kaiser Permanente, San Diego, CA, United States; ³North Shore University Hospital, Manhasset, NY, United States; ⁴Rambam Health Care Campus, Haifa, Israel; ⁵Federal Budget Institute of Science, Moscow, Russian Federation; ⁶AbbVie Inc., North Chicago, IL, United States; ⁷University of Pennsylvania, Philadelphia, PA, United States

Session 0-2 Oral Abstracts

10:00 AM – 12:00 PM **Room 304**

NeuroHIV: Developments in Treatment and Pathogenesis

Moderators

Edwina J. Wright, The Alfred Hospital, Monash University, Melbourne, Australia

Victor G. Valcour, University of California San Francisco, San Francisco, CA, United States

30 Early Antiretroviral Therapy Appears To Normalize Intrathecal Markers of Immune Activation

Julia Peterson¹, Evelyn Lee², Dietmar Fuchs², Richard W. Price³, Serena Spudich³

¹Neurology, University of California San Francisco, San Francisco, CA, United States; ²Innsbruck Medical University, Innsbruck, Austria; ³Neurology, Yale University, New Haven, CT, United States

31 Immediate Antiretroviral Therapy Mitigates the Development of Neuronal Injury in Acute HIV

Michael J. Peluso¹, Victor Valcour², Jintanat Ananworanich^{3,4}, Pasiri Sithinamsuwan⁵, Thep Chalermchai⁶, Nitiya Chomchey⁴, Bonnie Silke⁶, Magnus Gisslen⁷, Henrik Zetterberg⁷, Serena Spudich⁸, on behalf of the RV254/SEARCH 010 and 011 Study Teams

¹Department of Medicine, Brigham and Women's Hospital, Boston, MA, United States; ²Memory and Aging Center, University of California San Francisco, San Francisco, CA, United States; ³Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ⁴SEARCH, The Thai Red Cross AIDS Research Center, Bangkok, Thailand; ⁵Phramongkutklo Hospital, Bangkok, Thailand; ⁶US Military HIV Research Program, Walter Reed Army Institute of Research, Silver Spring, MD, United States; ⁷University of Gothenburg, Gothenburg, Sweden; ⁸Yale University School of Medicine, New Haven, CT, United States

32 Replication of HIV-1 in the Central Nervous System of Adults Early After Infection

Christa Buckheit Sturdevant¹, Gretja Schnell¹, Richard W. Price², Serena Spudich³, Ronald Swanstrom¹

¹UNC Chapel Hill, Chapel Hill, NC, United States; ²University of California San Francisco, San Francisco, CA, United States; ³Yale University, New Haven, CT, United States

33 Persistent CSF, But Not Plasma HIV RNA Is Associated With Increased Risk of New-Onset Depression

Edward R. Hammond¹, Rosa M. Crum¹, Glenn J. Treisman¹, Shruti H. Mehta¹, Ronald J. Ellis², Igor Grant², Scott L. Letendre³, Christina M. Marra³, Susan Morgello⁴, Justin C. McArthur¹

¹The Johns Hopkins University, Baltimore, MD, United States; ²University of California San Diego, San Diego, CA, United States; ³University of Washington, Seattle, WA, United States; ⁴Icahn School of Medicine at Mount Sinai, New York, NY, United States

34 CSF Metabolomics Reveals Altered Waste Clearance and Accelerated Aging in HIV Patients With HAND

Edana Cassol¹, Vikas Misra¹, Anupriya Dutta¹, Susan Morgello², Dana Gabuzda²

¹Cancer Immunology and AIDS, Dana-Farber Cancer Institute, Boston, MA, United States; ²The Mount Sinai Medical Center, New York, NY, United States

35 Cerebral Small Vessel Disease and HAND in ARV-Treated Subjects

Virawudh Soontornniyomkij, Anya Umlauf, Benchawanha Soontornniyomkij, Ben Gouaux, Will Toperoff, David J. Moore, Eliezer Masliah, Igor Grant, **Cristian L. Achim**
UC San Diego, San Diego, CA, United States

Session 0-3 Oral Abstracts

10:00 AM – 12:15 PM **Ballroom A**

Prevention and Epidemiology: Evolving Trends

Moderators

Rochelle P. Walensky, Harvard Medical School, Massachusetts General Hospital, Boston, MA, United States

Ian M. McGowan, University of Pittsburgh, Pittsburgh, PA, United States

36 Temporal Trends in Prognostic Markers of HIV-1 Virulence and Transmissibility

Nikos Pantazis¹, Kholoud Porter², Dominique Costagliola³, Andrea De Luca⁴, Jade Ghosn⁵, Marguerite Guiguet³, Anthony D. Kelleher⁶, Charles Morrison⁷, Rodolphe Thiebaut⁸, Giota Touloumi¹, on behalf of the CASCADE Collaboration in EuroCoord

- ¹Hygiene, Epidemiology & Medical Statistics, Athens University Medical School, Athens, Greece; ²MRC Clinical Trials Unit at University College London, London, United Kingdom; ³INSERM U943, Université Pierre et Marie Curie - Paris 6, UMR S 943, Paris, France; ⁴Institute of Clinical Infectious Diseases, Università Cattolica del Sacro Cuore, Roma, Italy; ⁵Internal Medicine and Infectious Diseases, Bicetre University Hospital, Kremlin Bicetre, Paris, France; ⁶Kirby Institute, University of New South Wales, Sydney, Australia; ⁷FHI 360, Durham, NC, United States; ⁸INSERM U897 Centre of Epidemiology and Biostatistics, ISPED Bordeaux School of Public Health, University Bordeaux Segalen, Bordeaux, France
- 37 Transmission Clusters, Recent Infection and STIs Among New HIV Cases: Implications for Prevention**
Hong-Ha M. Truong^{1,2}, Sharon Pipkin¹, Kara O'Keefe³, Brian Louie¹, Teri Liegler¹, Willi McFarland^{1,3}, Robert M. Grant^{1,2}, Mark Pandori³, Kyle Bernstein³, Susan Scheer³
¹University of California San Francisco, San Francisco, CA, United States; ²Gladstone Institute of Virology and Immunology, San Francisco, CA, United States; ³Department of Public Health, San Francisco, CA, United States
- 38 Race and Age Disparities in HIV Incidence and Prevalence Among MSM in Atlanta, GA**
Eli S. Rosenberg¹, Patrick S. Sullivan¹, Colleen F. Kelley², Travis H. Sanchez¹, Nicole Luisi¹, Carlos del Rio³, Laura F. Salazar⁴, Paula F. Frew⁵, John L. Peterson⁶
¹Epidemiology, Emory University Rollins School of Public Health, Atlanta, GA, United States; ²Infectious Diseases, Emory University School of Medicine, Atlanta, GA, United States; ³Hubert Department of Global Health, Emory University Rollins School of Public Health, Atlanta, GA, United States; ⁴Institute of Public Health, Georgia State University, Atlanta, GA, United States; ⁵Medicine, Emory University School of Medicine, Atlanta, GA, United States; ⁶Psychology, Georgia State University, Atlanta, GA, United States
- 39 Correlating GSK1265744 Plasma Levels To Prevention of Rectal SHIV Transmission in Macaques**
Chasity D. Andrews¹, William Spreen², Yun Lan Yueh², Agegnehu Gettie¹, Kasi Russell-Lodrigue³, Hiroshi Mohri¹, Cecilia Cheng-Mayer¹, Zhi Hong², Martin Markowitz¹, David D. Ho¹
¹Aaron Diamond AIDS Research Center, The Rockefeller University, New York, NY, United States; ²GlaxoSmithKline, Research Triangle Park, NC, United States; ³Tulane National Primate Research Center, Covington, LA, United States
- 40LB Monthly GSK744 Long-Acting Injections Protect Macaques Against Repeated Vaginal SHIV Exposures**
Jessica Radzio¹, William Spreen², Yun Lan Yueh², James Mitchell¹, Leecresia Jenkins¹, **J. Gerardo Garcia-Lerma**¹, Walid Heineine¹
¹Division of HIV/AIDS Prevention, CDC, Atlanta, GA, United States; ²GlaxoSmithKline, Research Triangle Park, NC, United States
- 41 Safety and Pharmacokinetics/ Pharmacodynamics of Dapivirine and Maraviroc Vaginal Rings**
Beatrice A. Chen¹, Lori Panther², Craig Hoesley³, Craig Hendrix⁴, Ariane van der Straten⁵, Marla Husnik⁶, Lydia E. Soto-Torres⁷, Annalee Nel⁸, Sherri Johnson⁹, Charlene S. Dezzutti¹⁰
¹University of Pittsburgh, Pittsburgh, PA, United States; ²The Fenway Institute, Boston, MA, United States; ³University of Alabama at Birmingham, Birmingham, AL, United States; ⁴The Johns Hopkins University, Baltimore, MD, United States; ⁵RTI International, San Francisco, CA, United States; ⁶Statistical Center for HIV/AIDS Research & Prevention, Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ⁷NIAID/DAIDS, Bethesda, MD, United States; ⁸International Partnership for Microbicides, Silver Spring, MD, United States; ⁹FHI 360, Research Triangle Park, NC, United States; ¹⁰Magee-Women's Research Institute, Pittsburgh, PA, United States
- 42LB FAME-02: A Phase I Trial To Assess Safety, PK, and PD of Gel and Film Formulations of Dapivirine**
Katherine E. Bunge¹, Charlene S. Dezzutti², Ingrid Macio¹, Craig W. Hendrix³, Lisa C. Rohan², Mark A. Marzinko³, Brid Devlin⁴, Leslie A. Meyn⁵, Hans M. L. Spiegel⁶, Sharon L. Hillier²
¹Department of Obstetrics, Gynecology and Reproductive Sciences, University of Pittsburgh, Pittsburgh, PA, United States; ²Magee-Womens Research Institute, Pittsburgh, PA, United States; ³Department of Medicine, The Johns Hopkins University, Baltimore, MD, United States; ⁴International Partnership for Microbicides, Silver Spring, MD, United States; ⁵Division of AIDS, National Institutes of Health, Bethesda, MD, United States
- 43 Single-Agent TDF Versus Combination FTC/TDF PrEP Among Heterosexual Men and Women**
Jared Baeten¹, Deborah Donnell^{1,2}, Patrick Ndase³, Nelly Mugo^{1,3}, Connie Celum¹, Partners PrEP Study Team
¹University of Washington, Seattle, WA, United States; ²Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ³Kenya Medical Research Institute, Nairobi, Kenya
- 44 Divergent Adherence Estimates With Pharmacokinetic and Behavioral Measures in VOICE (MTN003)**
Ariane van der Straten^{1,2}, Elizabeth R. Brown³, Jeanne M. Marrazzo⁴, Zvavahera M. Chirenje⁵, Kailazarid Gomez⁶, Jeanna M. Piper⁷, Craig W. Hendrix⁸
¹Women's Global Health Imperative, RTI International, San Francisco, CA, United States; ²Department of Medicine, Center for AIDS Prevention Studies (CAPS), University of California San Francisco, San Francisco, CA, United States; ³Statistical Center for HIV/AIDS Research & Prevention (SCHARP), Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ⁴Department of Medicine, Division of Infectious Diseases, University of Washington, Seattle, WA, United States; ⁵Department of Obstetrics and Gynecology, University of Zimbabwe, Harare, Zimbabwe; ⁶FHI 360, Research Triangle Park, NC, United States; ⁷Division of AIDS, National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States; ⁸Department of Medicine, The Johns Hopkins University, Baltimore, MD, United States

153LB HIV Transmission Risk Through Condomless Sex If HIV+ Partner On Suppressive ART: PARTNER Study

Alison Rodger¹, Tina Bruun², Valentina Cambiano¹, Pietro Vernazza³, Vicente Estrada⁴, Jan Van Lunzen⁵, Simon Collins⁶, Anna Maria Geretti⁷, Andrew Phillips¹, Jens Lundgren⁸, for the PARTNER Study Group

¹Research Department of Infection & Population Health, University College London, London, United Kingdom; ²Copenhagen HIV Programme, University of Copenhagen, Copenhagen, Denmark; ³Infectious Diseases, Cantonal Hospital, St. Gallen, Switzerland; ⁴Department of Infectious Diseases, Hospital Clínico San Carlos, Madrid, Spain; ⁵Department of Infectious Diseases, University Medical Center, Hamburg, Germany; ⁶HIV i-Base, London, United Kingdom; ⁷Institute of Infection & Global Health, University of Liverpool, Liverpool, United Kingdom; ⁸Centre for Viral Diseases and the Copenhagen HIV Programme, University of Copenhagen, Copenhagen, Denmark

Jacint G. Sanchez¹, Katarzyna Okreglicka¹, Viswanathan Chandrasekaran², Jordan M. Welker¹, Wesley I. Sundquist², **Owen Pornillos¹**

¹Molecular Physiology and Biological Physics, University of Virginia, Charlottesville, VA, United States; ²Biochemistry, University of Utah, Salt Lake City, UT, United States

50 Global Identification of the RNA Targets of HIV-1 Gag During Particle Genesis

Sebla B. Kutluay¹, Daniel Blanco-Melo¹, Trinity Zang¹, Paul D. Bieniasz^{1,2}

¹Aaron Diamond AIDS Research Center, New York, NY, United States; ²Rockefeller University & Howard Hughes Medical Institute, New York, NY, United States

51 Gorillas Transmitted SIV To Humans: Identification of HIV-1 Group P and O Ancestors

Mirela D'arc¹, Ahidjo Ayoub², Amandine Esteban², Avelin Aghoghe^{2,3}, Sabrina Locatelli¹, Lucie Etienne², Beatrice Hahn⁴, Eric Delaporte², Eitel Mpoudi Ngole², Martine Peeters²

¹Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; ²UMI 233, IRD and University of Montpellier 1, Montpellier, France; ³Projet PRESICA and IMPM/CREMER, Yaoundé, Cameroon; ⁴University of Pennsylvania, Philadelphia, PA, United States; ⁵Projet PRESICA and IMPM/CREME, Yaoundé, Cameroon

52LB A Gorilla Reservoir for Human T-lymphotropic Virus Type 4 (HTLV-4)

Matthew LeBreton^{1,2}, William M. Switzer³, Cyrille F. Djoko², Amethyst Gillis¹, Hongwei Jia³, Anupama Shankar³, HaoQiang Zheng³, Bradley S. Schneider¹, Nathan D. Wolfe^{1,4}

¹Metabiota, San Francisco, CA, United States; ²Global Viral Cameroon, Yaounde, Cameroon; ³CDC, Atlanta, GA, United States; ⁴Global Viral, San Francisco, CA, United States

Session 0-4 Oral Abstracts

10:00 AM – 12:00 PM Room 312

Host Factors and HIV/SIV Replication

Moderators

Renate R. Könenig, Paul-Ehrlich-Institut, Langen, Germany

Alan N. Engelman, Dana-Farber Cancer Institute, Boston, MA, United States

45 Inhibition of Cul4A Neddylation Causes a Reversible Block To SAMHD1-Mediated Restriction of HIV-1

Henning Hofmann, Thomas D. Norton, Eric C. Logue, Megan L. Schultz, Sylvie B. Polsky, Nicole Sunseri, Nathaniel R. Landau, NYU School of Medicine, New York, NY, United States

46 MX2, an Interferon-Induced Inhibitor of HIV-1 Infection

Melissa Kane¹, Shalini S. Yadav^{1,2}, Julia Bitzegeio¹, Sebla B. Kutluay¹, Trinity Zang^{1,2}, Sam J. Wilson^{1,2}, Daniel Blanco-Melo¹, Masahiro Yamashita³, Theodora Hatziioannou³, Paul D. Bieniasz^{1,2}

¹The Rockefeller University, New York, NY, United States; ²Howard Hughes Medical Institute, New York, NY, United States; ³Aaron Diamond AIDS Research Center, New York, NY, United States

47 BCA2/Rabring7 Targets HIV-1 Gag for Lysosomal Degradation in a Tetherin-Independent Manner

Ruth Serra-Moreno

Harvard Medical School, Southborough, MA, United States

48 Crystal Structure of APOBEC3F Elucidates HIV-1 Vif Interaction and Dynamic Oligomerization

Markus-Frederik Bohn, Shivender M. D. Shandilya, Mohan Somasundaran, Celia A. Schiffer

Biochemistry, UMass Medical School, Worcester, MA, United States

49LB Crystal Structure of a TRIM Coiled-Coil: Implications for HIV-1 Capsid Recognition by TRIM5α

Session TD1 Themed Discussion

1:30 PM – 2:30 PM Room 309

Acute HCV Infection

Discussion Leader

Georg M. Lauer, Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States

676 Seminal HCV RNA Level May Mirror Dynamics of Plasma HCV RNA in HIV-Positive Men With Acute HCV

Daniel Bradshaw¹, Francois Lamoury¹, Beth Catlett², Tanya L. Applegate¹, John Mcallister², Gregory J. Dore¹, Gail Matthews¹, Mark Danta²

¹Kirby Institute, University of New South Wales, Sydney, Australia; ²St Vincent's Hospital, Sydney, Australia; ³Faculty of Medicine, University of New South Wales, Sydney, Australia

675 Higher Risk of Sexually Acquired HCV Coinfection in MSM With Wide HIV Transmission Bottleneck

Roger D. Kouyos¹, Andri Rauch², Dominique Braun¹, Sabine Yerly¹, Jürg Böni⁴, Thomas Klimkait⁵, Vincent Aubert⁶, Bruno Ledergerber¹, Huldrych Günthard¹, The Swiss HIV Cohort Study (SHCS)

¹University Hospital Zurich, University of Zurich, Zurich, Switzerland; ²Inselspital Bern, Bern, Switzerland; ³University of Geneva, Geneva, Switzerland; ⁴University of Zurich, Zurich, Switzerland; ⁵University of Basel, Basel, Switzerland; ⁶University of Lausanne, Lausanne, Switzerland

674 Assessing HCV Acquisition Routes in HIV-Infected MSM Using Single Genome Sequencing—A Pilot Study

Daniel S. Fierer¹, Andrew H. Talal², Kristen M. Marks³, Wouter O. van Seggelen¹, Andrea D. Branch⁴, Shirish Huprikar¹, Shuyi Wang⁵, George M. Shaw⁵, Hui Li⁵

¹Infectious Diseases, Mount Sinai School of Medicine, New York, NY, United States; ²Gastroenterology, University of Buffalo School of Medicine, Buffalo, NY, United States; ³Infectious Diseases, Weill Cornell Medical College, New York, NY, United States; ⁴Liver Diseases, Mount Sinai School of Medicine, New York, NY, United States; ⁵Microbiology, University of Pennsylvania, Philadelphia, PA, United States

681 CD3+CD56+ Natural Killer-Like T Cells in HIV(+) Patients With Acute Hepatitis C

Pavlos Kokkordelis^{1,2}, Benjamin Krämer^{1,2}, Christoph Boesecke^{1,2}, Esther Voigt³, Patrick Ingiliz⁴, Andreas Glässner^{1,2}, Ulrich Spengler^{1,2}, Jürgen K. Rockstroh^{1,2}, Jacob Nattermann¹

¹Internal Medicine I, University of Bonn, Bonn, Germany; ²German Center for Infection Research (DZIF), Bonn, Germany; ³Internal Medicine I, Praxis am Ebertplatz, Cologne, Germany; ⁴Medical Center for Infectious Diseases (MID), Berlin, Germany

Session TD2 Themed Discussion

1:30 PM – 2:30 PM **Ballroom A**
Restriction Factors

Discussion Leader

Paul W. Spearman, Emory University, Atlanta, GA, United States

188 Degradation of SAMHD1 Specifically Decreases the Efficacy of Thymidine HIV RT Analog Inhibitors

Ester Ballana, Gerard Terradas, Eva Riveira-Muñoz, Bonaventura Clotet, Eduardo Pauls, José A. Esté, IrsiCaixa AIDS Research Institute, Badalona, Spain

182 Characterizing Novel N-Terminal Domains of APOBEC3G

Meiling R. May¹, Ann M. Sheehy²

¹College of the Holy Cross, Worcester, MA, United States; ²Biology, College of the Holy Cross, Worcester, MA, United States

188A Natural Resistance To HIV-1 by Select APOBEC3H Haplotypes

Eric W. Refsland¹, Judd F. Hultquist¹, Elizabeth M. Luengas¹, Rachel Prosser², Keith Henry², Michael Emerman³, Reuben S. Harris¹

¹Biochemistry, Molecular Biology, and Biophysics, University of Minnesota, Minneapolis, MN, United States; ²Hennepin County Medical Center, Minneapolis, MN, United States; ³Fred Hutchinson Cancer Research Center, Seattle, WA, United States

186 Nuclear Import of APOBEC3F-Labeled HIV-1 Preintegration Complexes

Ryan C. Burdick, Wei-Shau Hu, Vinay K. Pathak
HIV Drug Resistance Program, National Cancer Institute, Frederick, MD, United States

Session TD3 Themed Discussion

1:30 PM – 2:30 PM **Room 304**
Heart Failure, Cardiac Steatosis, and HIV

Discussion Leader

Wendy S. Post, The Johns Hopkins University School of Medicine, Baltimore, MD, United States

725 ST2 and GDF-15 Are Associated With Structural Heart Disease and Mortality in HIV

Eric Secemsky, Rebecca Scherzer, Elaine Nitta, Alan Wu, David Lange, Steven Deeks, Jeffrey Martin, James Snider, Peter Ganz, Priscilla Hsue

University of California San Francisco, San Francisco, CA, United States

723 Elevated NT-proBNP Levels Predict Mortality in HIV-Infected Women

Matthew R. Gingo¹, Kidane Ghebrehawariat¹, Jong-Hyeon Jeong¹, Yanxia Chu¹, Quanwei Yang¹, Lorrie Lucht¹, David Hanna², Jason Lazaar³, Mark Gladwin¹, Yingze Zhang⁴, Alison Morris¹

¹University of Pittsburgh, Pittsburgh, PA, United States; ²Albert Einstein College of Medicine and Montefiore Medical Center, Bronx, NY, United States; ³SUNY Downstate Medical Center, Brooklyn, NY, United States; ⁴University of Pittsburgh, Pittsburgh, PA, United States

726 Depression and HIV Are Risk Factors for Incident Heart Failure Among Veterans

Jessica R. White¹, Chung-Chou H. Chang^{1,2}, Adeel A. Butt^{2,3}, Hilary A. Tindle², Maria C. Rodriguez Barradas^{4,5}, David Rimland^{6,7}, David Leaf^{8,9}, Matthew Budoff^{10,11}, Amy C. Justice^{12,13}, Matthew S. Freiberg^{2,3}

¹University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States; ²University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ³Veteran Affairs Pittsburgh Healthcare System, Pittsburgh, PA, United States; ⁴Baylor College of Medicine, Houston, TX, United States; ⁵Michael E. DeBakey Veteran Affairs Medical Center, Houston, TX, United States; ⁶Emory University School of Medicine, Atlanta, GA, United States; ⁷Atlanta Veteran Affairs Medical Center, Atlanta, GA, United States; ⁸David Geffen School of Medicine, Los Angeles, CA, United States; ⁹Veteran Affairs Greater Los Angeles Health Care System, Los Angeles, CA, United States; ¹⁰Harbor-UCLA Medical Center, Los Angeles, CA, United States; ¹¹Los Angeles Biomedical Research Institute, Los Angeles, CA, United States; ¹²Veteran Affairs Connecticut Health Care System, West Haven, CT, United States; ¹³Yale University School of Medicine, New Haven, CT, United States

724 Cardiac Steatosis Increased in HIV: Related To Gender, Visceral Fat and ARV Exposure

Julia B. Purdy¹, Chia-Ying Liu², Sabrina Mangat³, Horacio Duarte⁴, Diana Thiera⁵, Nancyanne Schmidt⁶, Jamie Hur⁷, Christopher T. Sibley⁸, David A. Bluemke⁹, Colleen Hadigan³

¹Critical Care Medicine, National Institutes of Health, Bethesda, MD, United States; ²Diagnostic Radiology Department, National Institutes of Health, Bethesda, MD, United States; ³National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States; ⁴University of Washington School of Medicine, Seattle, WA, United States; ⁵Vanderbilt University School of Medicine, Nashville, TN, United States; ⁶Stony Brook University School of Medicine, Stony Brook, NY, United States; ⁷Drexel University College of Medicine, Philadelphia, PA, United States

Session TD4 Themed Discussion

1:30 PM – 2:30 PM **Room 312**

Response To Early ART Initiation in Infants

Discussion Leader

Mark F. Cotton, Stellenbosch University, Cape Town, South Africa

922 Routine Antibody Tests Have No Place in Determining HIV Status After Early ART: Evidence From CHER

Helen Payne^{1,2}, Nonhlanhla Mkhize³, Lynn Morris³, Kennedy Otwombe⁴, Ravindere Panchia⁴, Avey Violar¹, Nigel Klein¹, Abdel G. Babiker⁵, Mark F. Cotton⁶, Diana M. Gibb⁶¹Infectious Diseases and Microbiology, Institute of Child Health, London, United Kingdom; ²Children's Infectious Diseases Clinical Research Unit, Faculty of Medicine and Health Sciences, University of Stellenbosch, Cape Town, South Africa; ³Centre for HIV and STIs, National Institute for Communicable Diseases, Johannesburg, South Africa; ⁴Perinatal HIV Research Unit, University of the Witwatersrand, Johannesburg, South Africa; ⁵Clinical Trials Unit, Medical Research Council, London, United Kingdom

923 Different Profiles of HIV in Early Treated HIV-Infected Children Seronegative by ELISA in Cameroon

Mathurin C. Tejiokem¹, Anfumbom Kfutwah², Francis Ateba Ndong³, Suzie Tetang Ndiang⁴, Ida Calixte Penda^{5,6}, William Mbanzouen², Félicité Owona⁷, Josiane Warszawski⁸, Christine Rouzioux^{9,10}, Albert Faye^{11,12}¹Service d'Epidémiologie et de Santé Publique, Centre Pasteur du Cameroun, Membre du Réseau International des Instituts Pasteur, Yaoundé, Cameroon; ²Service de Virologie, Centre Pasteur du Cameroun, Membre du Réseau International des Instituts Pasteur, Yaoundé, Cameroon; ³Unité de Jour, Centre Mère et Enfant, Fondation Chantal Biya, Yaoundé, Cameroon; ⁴Service de Pédiatrie, Centre Hospitalier d'Essos, Yaoundé, Cameroon; ⁵Hôpital de Jour, Hôpital Laquintinie de Douala, Douala, Cameroon; ⁶Université de Douala, Faculté de Médecine et des Sciences Pharmaceutiques, Douala, Cameroon; ⁷EPF, Equipe 4 (VIH et IST), INSERM U1018 (CESP), Le Kremlin Bicêtre, France; ⁸Université de Paris Sud 11, Paris, France; ⁹Laboratoire de Virologie, Assistance Publique des Hôpitaux de Paris, Hôpital Necker, Paris, France; ¹⁰Université Paris Descartes, EA 3620, Paris, France; ¹¹Pédiatrie Générale, Assistance Publique des Hôpitaux de Paris, Hôpital Robert Debré, Paris, France; ¹²Université Paris 7 Denis Diderot, Paris Sorbonne Cité, Paris, France

924 Greater Virologic Control in Infants Initiated On ART Before 6 Months of Age

Stephanie Shiau¹, Ashraf Coovadia², Karl-Gunter Technau², Renate Strehlau², Leigh Martens², Francoise Pinillos², Elaine J. Abrams¹, Louise Kuhn¹¹Columbia University, New York, NY, United States; ²University of the Witwatersrand, Johannesburg, South Africa

925 Early Viral Suppression Improves Neurocognitive Outcomes in HIV-Infected Children

Claudia S. Crowell¹, Yanling Huo², Katherine Tassiopoulos², Kathleen M. Malee³, Ram Yogev³, Rohan Hazra⁴, Richard M. Rutstein⁵, Sharon L. Nichols⁶, Renee A. Smith⁷, William J. Muller³, for the IMPAACT 219C Study Team and the PediatricHIV/AIDS Cohort Study¹Pediatrics, University of Washington, Seattle, WA, United States; ²Epidemiology, Harvard School of Public Health, Boston, MA, United States; ³Northwestern University Feinberg School of Medicine, Chicago, IL, United States; ⁴National Institute of Child Health and Human Development, Bethesda, MD, United States; ⁵Children's Hospital of Philadelphia, Philadelphia, PA, United States; ⁶University of California San Diego, La Jolla, CA, United States; ⁷University of Illinois at Chicago, Chicago, IL, United States

926 Early Cytomegalovirus Viraemia and Clinical Outcomes of HIV-Infected Children in the Early ART Era

Nei-yuan Hsiao¹, Kennedy Otwombe², Landon Myer³, Avey Violar², Diana Gibb⁴, Ravindere Panchia², Abdel Babiker⁵, Patrick Jean-Phillipe⁶, Mark Fredric Cotton⁶
¹Clinical Laboratory Sciences, University of Cape Town, Cape Town, South Africa; ²Perinatal HIV Research Unit, Johannesburg, South Africa; ³Public Health and Family Medicine, University of Cape Town, Cape Town, South Africa; ⁴Medical Research Council UK, London, United Kingdom; ⁵National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States; ⁶Paediatrics and Child Health, Stellenbosch University, Cape Town, South Africa

Session TD5 Themed Discussion

1:30 PM – 2:30 PM **Room 311**

Treatment Cascade and Loss To Follow-Up

Discussion Leader

David R. Bangsberg, Massachusetts General Hospital Center for Global Health, Boston, MA, United States

1060 Comparative Effectiveness of HIV Care and Treatment Programs in East Africa

Elvin Geng¹, Thomas Odeny², Rita Lyamuya³, Alice Nakiwogga-Muwanga⁴, Mwebesa Bwana⁵, Paula Braitstein⁶, Andrew Kambugu⁴, Elizabeth Bukusi⁷, Geoffrey Somi⁸, Lameck Diero⁹, Jeffrey Martin⁹¹Medicine, University of California San Francisco, San Francisco, CA, United States; ²KEMRI, Nairobi, Kenya; ³Medicine, NACP, Dar es Salaam, Tanzania, United Republic of; ⁴IDI, Kampala, Uganda; ⁵Medicine, MUST, Mbarara, Uganda; ⁶AMPATH, Eldoret, Kenya; ⁷Medicine, KEMRI, Nairobi, Kenya; ⁸NACP, Dar es Salaam, Tanzania, United Republic of; ⁹AMPATH, Eldoret, Kenya; ¹⁰University of California San Francisco, San Francisco, CA, United States

1063 HIV Care Cascade Among Hard To Reach Populations in India: Need To Expand HIV Counseling and Testing

Shruti H. Mehta¹, Gregory M. Lucas², Suniti Solomon³, Aylur K. Srikrishnan⁴, Allison McFall¹, P. Nandagopal⁵, Pachamuthu Balakrishnan⁶, Muniratham S. Kumar², David D. Celentano¹, Sunil S. Solomon^{2,3}¹Epidemiology, The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States; ²The Johns Hopkins University School of Medicine, Baltimore, MD, United States; ³VR Gaitonde Centre for AIDS Research and Education, Chennai, India

1061 Loss To Follow-up: Determining Outcomes for Adults Enrolled in HIV Services in Kenya

William Reidy¹, Mansi Agarwal¹, Matthew Lamb¹, Mark Hawken¹, Duncan Chege¹, Batya Elul¹, Elaine J. Abrams¹, Elvin Geng²

¹Mailman School of Public Health, ICAP-Columbia University, New York, NY, United States; ²School of Medicine, University of California at San Francisco, San Francisco, CA, United States

1064 Unplanned Interruptions in HIV Care in Nigeria: Rates and Implications

Aima A. Ahonkhai¹, Bolanle Banigbe², Juliet Adeola², Ifeyinwa Onwuatuelo², Ingrid V. Bassett³, Elena Losina⁴, Kenneth A. Freedberg¹, Prosper Okonkwo², Susan Regan¹

¹Massachusetts General Hospital, Boston, MA, United States; ²AIDS Prevention Initiative Nigeria, Abuja,

Nigeria; ³Infectious Disease, Massachusetts General Hospital, Boston, MA, United States; ⁴Brigham and Women's Hospital, Boston, MA, United States

1065 Using the Side Door: Non-Linear Patterns Within the HIV Treatment Cascade in Zambia

Charles B. Holmes^{1,2}, Angela Bengtson^{1,2}, Izukanji Sikazwe^{1,2}, Carolyn Bolton-Moore^{1,2}, Lloyd B. Mulenga¹, Patrick Musonda^{1,3}, Benjamin H. Chi^{1,2}

¹Centre for Infectious Disease Research in Zambia, Lusaka, Zambia; ²Infectious Disease, North Carolina School of Medicine, Chapel Hill, NC, United States; ³University of East Anglia, East Anglia, United Kingdom

POSTER SESSIONS

2:30 PM – 4:00 PM

(Use the Poster Abstract section of the Program at a Glance, page 37 to 106, for specific posters in each session)

Session P-A1 SAMHD1

Session P-A2 Integration/Nuclear Import

Session P-B1 Transmission Networks

Session P-C1 The Gut and Lymph Nodes in HIV Pathogenesis

Session P-C2 Immune Activation and Pathogenesis

Session P-C3 NK Cells in HIV Pathogenesis

Session P-C4 CD8 T-Cell Pathogenesis

Session P-C5 Exhaustion Markers

Session P-D1 It's All About the Gut

Session P-E1 Modulating Immune Activation

Session P-E2 Therapeutic Vaccines and Immunotherapies

Session P-F1 Mechanisms of HIV Latency

Session P-F2 Dynamics of Persistent and Rebound HIV

Session P-F3 Effect of ART Early in HIV Infection

Session P-G1 CNS Viral Escape and

Neuroinflammation on ART

Session P-G2 HAND in Aging Populations

Session P-H1 Clinical Pharmacology of TB and HCV Co-infection

Session P-H2 Pharmacogenetics: Drug Disposition To Therapeutics

Session P-I1 Preclinical Studies of Novel ART Approaches: Entry

Session P-I2 Preclinical Studies of Novel ART Approaches: Post-Entry

Session P-K1 Viral Set Point and Elite Controllers

Session P-L1 Primary Drug Resistance

Session P-L2 Acquired HIV Drug Resistance

Session P-M1 HIV Early Detection: Application of New Assays

Session P-N1 HCV Testing and Epidemiology

Session P-N2 HCV Pre-Clinical Studies and Pharmacology

Session P-O1 Lymphoma/Liver/Gammopathy

Session P-O2 Cancer: Natural History and Epidemiology

Session P-P1 Heart Failure, Cardiac Steatosis, and HIV

Session P-P2 Immune Activation, Immunodeficiency, and CVD

Session P-Q1 Biomarkers and Non-AIDS Events

Session P-Q2 Frailty: Physical Function and Telomeres

Session P-Q3 Diabetes and Insulin Resistance

Session P-S1 Reproductive Hormones in Women: Impact on Risk and Barrier Dysfunction

Session P-T1 Clinical Outcomes of HIV-Exposed Uninfected Infants

Session P-T2 Neonatal Sequelae of In Utero ART Exposure

Session P-U1 ART in Children and Adolescents

Session P-U2 HIV Drug Resistance and Tropism in Children and Youth

Session P-U3 ARV Pharmacokinetics, Pharmacogenetics, and Safety in Children and Adolescents

Session P-W1 Cascade of Care and Testing

Session P-W2 Cascade of Care, Linkage, and Retention

Session P-W3 Cascade of Care, Community Viral Load, and Viral Suppression

Session P-W4 Cascade of Care

Session P-X1 HIV Testing in Low-Income Settings

Session P-X2 HIV Treatment and Care

Session S1 Symposium

4:00 PM – 6:00 PM **Ballroom B/C**

Toward a Cure: A Challenging Game of Hide and Seek

Target audience: This session is directed to clinicians, basic researchers, and affected persons interested in the latest developments in HIV cure research.

Level of knowledge: It is assumed that learners are familiar with basic aspects of HIV replication and latency as well as standard therapeutic options.

Objectives: At the completion of the session, learners will be able to:

- Understand the effects of early treatment on the establishment of the latent reservoir
- Understand the roles of different T-cell subsets in maintaining the latent reservoir

- Describe how different animal models can be used to investigate cure strategies prior to clinical trials

Conveners

Christine Rouzioux, *Université Paris Descartes, Paris, France*
Hiroyu Hatano, *University of California San Francisco, San Francisco, CA, United States*

- 53 Impact of Early ART On HIV Eradication in Children**
Katherine F. Luzuriaga
University of Massachusetts Medical School, Worcester, MA, United States
- 54 T Memory Stem Cells: The Stem Cell Reservoir for HIV?**
Mathias Lichterfeld
Massachusetts General Hospital, Boston, MA, United States
- 55 Inflammation as an Obstacle for Remission: Lessons Learned From Non-Human Primate Models**
Michaela Müller-Trutwin
Institut Pasteur, Paris, France
- 56 Humanized Mouse Models for Studies On HIV Latency, Reservoirs, and Eradication Strategies**
J. Victor Garcia-Martinez
University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

Session S2 Symposium

4:00 PM – 6:00 PM Ballroom A
HCV and Beyond

Target audience: This session is directed to clinicians and researchers interested in viral hepatitis, including the latest information on the epidemiology of HEV, the biology of HCV, and efforts to cure HCV and HBV infections.

Level of knowledge: It is assumed that learners are familiar with basic principles of virology, epidemiology, and immunology.

Objectives: At the completion of the session, learners will be able to:

- Recognize the nonhuman reservoirs for HEV infection
- Compare the innate immune responses to HCV and HIV infections
- Compare efforts to cure HIV and HBV infections
- Identify the major strategies for interferon alpha-sparing treatment of HCV

Conveners

Arthur Y. Kim, *Harvard Medical School, Boston, MA, United States*
Camila S. Graham, *Beth Israel Deaconess Medical Center, Boston, MA, United States*

- 57 HEV: State of the Art**
Kenneth E. Sherman
University of Cincinnati College of Medicine, Cincinnati, OH, United States

- 58 HBV Eradication: Similarities To and Differences From HIV**
Shyam Kottitil
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

- 59 Humoral Immunity and the Innate Response To HCV**
Andrea L. Cox
The Johns Hopkins University School of Medicine, Baltimore, MD, United States

- 60 Interferon Alfa-Free Treatment of HCV**
Jean-Michel Pawlotsky
Henri Mondor Hospital, University of Paris-Est, Créteil, France

Session S3 Symposium

4:00 PM – 6:00 PM Room 304
PrEP: Use It or Lose It

Target audience: This session is directed to clinicians and scientists who are interested in understanding the differences in pre-exposure prophylaxis (PrEP) trial results and how PrEP can best be implemented for populations at high risk of HIV acquisition.

Level of knowledge: It is assumed that learners are familiar with the current status of PrEP for HIV prevention, the results from major clinical trials, and the challenges associated with the success of PrEP.

Objectives: At the completion of the session, learners will be able to:

- Discuss potential reasons for differences in trial results
- Identify benefits and challenges in PrEP implementation in different settings
- Identify which populations may gain the greatest benefit from PrEP

Conveners

Lisa K. Fitzpatrick, *United Medical Center, Washington, DC, United States*
Suwat Chariyalertsak, *Chiang Mai University, Chiang Mai, Thailand*

- 61 HIV Pre-Exposure Prophylaxis: Clinical Pharmacology Insights**
Craig W. Hendrix
The Johns Hopkins University School of Medicine, Baltimore, MD, United States
- 62 Notes From the Field: Implementing PrEP in Resource Constrained Settings**
Nelly R. Mugo
Kenya Medical Research Institute, Nairobi, Kenya
- 63 A Community Perspective On PrEP**
Christopher Balthazar and London Dorris
Stroger Hospital of Cook County, Chicago, IL, United States
- 64 Choosing Populations for Maximal Impact**
David V. Glidden
University of California San Francisco, San Francisco, CA, United States

WEDNESDAY MARCH 5, 2014

Session PL3 Plenary

8:30 AM – 9:00 AM Auditorium

65 B-Cell Responses To HIV Infection: Challenges and Opportunities

Susan L. Moir, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

Session PL4 Plenary

9:00 AM – 9:30 AM Auditorium

66 NeuroHIV in 2014: Beyond Dementia

Serena S. Spudich, Yale University, New Haven, CT, United States

Session O-5 Oral Abstracts

10:00 AM – 12:15 PM Room 304

Critical Issues in MTCT: Maternal Health and HIV Treatment in Children

Moderators

Amita Gupta, The Johns Hopkins University School of Medicine, Baltimore, MD, United States

A. Sarah Walker, Medical Research Council Clinical Trials Unit, London, United Kingdom

67 A 15-Year Review of Maternal Deaths in a Background of Changing HIV Management Guidelines

Coceka N. Mnyani^{1,2}, Eckhart Buchmann², Karlyn Frank², Helen Struthers¹, James McIntyre¹

¹Anova Health Institute, Johannesburg, South Africa,

²University of the Witwatersrand, Johannesburg, South Africa

68 Incidence and Cofactors of Acute HIV During Pregnancy and Postpartum

John Kinuthia¹, Alison Drake², Daniel Matemo¹, Barbra Richardson³, R. Scott McClelland⁴, Grace John-Stewart⁵

¹Obstetrics and Gynaecology, University of Nairobi, Nairobi, Kenya; ²Global Health, University of Washington, Seattle, WA, United States; ³Biostatistics, University of Washington, Seattle, WA, United States; ⁴Medicine, Global Health, Epidemiology, University of Washington, Seattle, WA, United States; ⁵Global Health, Epidemiology, Medicine, Pediatrics, University of Washington, Seattle, WA, United States

69 Efficacy and Safety of LPV/r Versus EFV in HIV+ Pregnant and Breast-Feeding Ugandan Women

Deborah Cohan¹, Paul Natureeba², Albert Plenti³, Flavia Luwedge Julia Mwesigwa², Veronica Ades⁴, Edwin Charlebois³, Tamara Clark Bridget Nzarubara², Moses Kamya⁵, Pius Okong⁶, Diane Havir³

¹OBGYN, University of California San Francisco, San Francisco, CA, United States; ²Infectious Diseases Research Collaboration, Kampala, Uganda; ³Medicine, University of California San Francisco, San Francisco, CA, United States; ⁴OBGYN, New York University, New York, NY, United States; ⁵Medicine, Makerere University, Kampala, Uganda; ⁶OBGYN, Makerere University, Kampala, Uganda

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Infant Lopinavir/r Versus 3TC To Prevent Postnatal HIV-1 Transmission: The ANRS 12174 Trial

Chipepo Kankasa¹, Nicolas Nagot^{2,3}, Nicolas Meda^{4,5}, James K. Tumwine⁶, Amwe Aku⁷, Debra Jackson⁷, Roselyne Vallo^{2,8}, Thorikild Tylleskar⁹, Philippe Van de Perre^{2,3}, ANRS 12174 Trial Group

¹Department of Paediatrics and Child Health, University Teaching Hospital, Lusaka, Zambia; ²INSERM U1058, Montpellier, France; ³CHU Montpellier, Montpellier, France; ⁴Centre de Recherche Internationale pour la Santé (CRIS), Université de Ouagadougou, Ouagadougou, Burkina Faso; ⁵Centre Muraz, Bobo-Dioulasso, Burkina Faso; ⁶Department of Paediatrics and Child Health, Makerere University, Kampala, Uganda; ⁷School of Public Health, University of Western Cape, Cape Town, South Africa; ⁸Université de Montpellier I, Montpellier, France; ⁹Centre for International Health, University of Bergen, Bergen, Norway

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Lower Newborn Bone Mineral Content Associated With Maternal Use of Tenofovir Disoproxil Fumarate

George K. Siberry¹, Denise L. Jacobson², Heidi Kalkwarf³, Julia W. Wu⁴, Linda A. DiMeglio⁵, Ram Yoge^{6,7}, Katherine M. Knapp⁸, Justin Wheeler⁹, Rohan Hazra¹, Kenneth C. Rich¹⁰

¹NICHD, Maternal and Pediatric Infectious Disease Branch, NIH, Bethesda, MD, United States; ²Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ³Division of General and Community Pediatrics, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States; ⁴Department of Epidemiology, Harvard School of Public Health, Boston, MA, United States; ⁵Pediatric Endocrinology/Diabetology, Riley Hospital for Children at Indiana University Health, Indianapolis, IN, United States; ⁶Ann & Robert Lurie Children's Hospital of Chicago, Chicago, IL, United States; ⁷Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL, United States; ⁸Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, TN, United States; ⁹Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA, United States; ¹⁰Department of Pediatrics, University of Illinois at Chicago, Chicago, IL, United States

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Virologic Control by 1 Year of Age Significantly Reduces HIV-1 Reservoirs in Perinatal Infection

Deborah Persaud¹, Kunjal Patel², Brad Karalus², Carrie Ziemiak¹, Kaitlin Rainwater-Lovett¹, Ya Chen¹, Douglas D. Richman³, George K. Siberry⁴, Russell VanDyke⁵, Katherine Luzuriaga⁶, Pediatric HIV/AIDS Cohort Study (PHACS) and IMPAACT Network

¹Pediatrics, The Johns Hopkins University School of Medicine, Baltimore, MD, United States; ²Epidemiology, Harvard School of Public Health, Boston, MA, United States; ³Pathology and Medicine, University of California San Diego, San Diego, CA, United States; ⁴Unicef Kennedy Krieger National Institutes of Child Health and Human Development, Bethesda, MD, United States; ⁵Pediatrics, Tulane University Health Sciences Center, New Orleans, LA, United States; ⁶Pediatrics, University of Massachusetts Medical School, Boston, MA, United States

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Virologic Efficacy of Efavirenz Maintenance Therapy in Nevirapine Prophylaxis-Exposed Children

Ashraf Coovadia¹, Elaine Abrams², Renate Strehlau¹, Stephanie Shiau², Francoise Pillilos¹, Leigh Martens¹, Gillian Hunt³, Wei-Yann Tsai², Lynn Morris³, Louise Kuhn², NEVEREST 3 Study Team

¹University of the Witwatersrand, Johannesburg, South Africa,
²Columbia University, New York, NY, United States; ³National
Institute of Communicable Diseases, Johannesburg, South Africa

74LB Final Results of Koncert: A Randomized Noninferiority Trial of Qd Vs Bd LPV/r Dosing in Children

Hermione Lyall, KONCERT Trial Team
Imperial College London, London, United Kingdom

75LB Very Early Combination Antiretroviral Therapy in Perinatal HIV Infection: Two Case Studies

Deborah Persaud¹, Audra Deveikis², Hannah Gay³, Jagmohan Batra², Tempe Chen², David E. Michalik², Kaitlin Rainwater-Lovett¹, Carrie Ziemniak¹, Katherine Luzuriaga⁴, Yvonne Bryson⁵

¹Pediatrics, The Johns Hopkins University School of Medicine, Baltimore, MD, United States; ²Pediatrics, Miller Children's Hospital, Long Beach, CA, United States; ³Pediatrics, University of Mississippi Medical Center, Jackson, MS, United States; ⁴Pediatrics, University of Massachusetts Medical School, Worcester, MA, United States; ⁵Pediatrics, UCLA School of Medicine, Los Angeles, CA, United States

Session 0-6 Oral Abstracts

10:00 AM – 12:00 PM **Room 312**

HIV/SIV Pathogenesis

Moderators

Marcus Altfeld, Ragon Institute of Massachusetts General Hospital, Massachusetts Institute of Technology, and Harvard, Cambridge, MA, United States

R. Keith Reeves, Harvard Medical School, Boston, MA, United States

76 Pyroptosis Drives Both CD4 T Cell Death and Chronic Inflammation in HIV-Infected Lymphoid Tissues

Gilad Doitsh¹, Nicole Galloway¹, Xin Geng¹, Kathryn Monroe¹, Zhiyuan Yang¹, Orlando Zepeda², Peter Hunt², Hiroyu Hatano², Stefanie Sowinski¹, Warner C. Greene¹

¹Gladstone Institute of Virology and Immunology, San Francisco, CA, United States; ²University of California, San Francisco, San Francisco, CA, United States

77 Early ART Initiation Prevents Disruption of the Mucosal Barrier and Subsequent T-Cell Activation

Alexandra Schuetz¹, Yuwadee Phuang-Ngern¹, Rungsun Rerknimit², Eugene Kroon^{1,3}, Nitiya Chomchey², Praphan Phanuphak³, Merlin Robb⁴, Jerome Kim⁴, Mark de Souza³, Jintanat Ananworanich^{2,3}, on behalf of the RV254/SEARCH 010 and RV304 StudyGroups

¹Retrovirology, USAMC-AFRIMS, Bangkok, Thailand; ²Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ³SEARCH, Bangkok, Thailand; ⁴US Military HIV Research Program, Silver Spring, MD, United States

78 Characterizing the IFN α Resistance of Transmitted Founder HIV-1

Shilpa S. Iyer¹, Angharad E. Fenton-May², Andrew G. Smith¹, Weiyou Zhang¹, John C. Kappes¹, Feng Gao¹, Frederic Bibollet-Ruche¹, Hui Li¹, George M. Shaw¹, Persephone Borrow¹, Beatrice Hahn¹

¹Departments of Medicine and Microbiology, University of Pennsylvania, Philadelphia, PA, United States; ²Nuffield Department of Clinical Medicine, Oxford, United Kingdom,

³Departments of Medicine, University of Alabama at Birmingham, Birmingham, AL, United States; ⁴Duke Human Vaccine Institute and Department of Medicine, Duke University Medical Center, Durham, NC, United States; ⁵Nuffield Department of Clinical Medicine, University of Oxford, Oxford, United Kingdom

79LB Identification of IFI16 as HIV Restriction Factor

Amalia Teletni¹, Ali Gawanbacht², Dominik Hotter³, Christian Krapp³, Nitisha Pyndiah¹, Greg Jordan⁴, Søren R. Paludan⁵, Martin R. Jakobsen⁵, Frank Kirchhoff²

¹University of Lausanne, Lausanne, Switzerland; ²Institute of Molecular Virology, Ulm University Medical Center, Ulm, Germany; ³Institute of Molecular Virology, Ulm University Medical Center, Ulm, Germany; ⁴European Bioinformatics Institute, Cambridge, United Kingdom; ⁵Department of Biomedicine and Aarhus Research Center for Innate Immunology, Aarhus, Denmark

80 Central Memory and Effector Memory CD4 T Cells From HIV Controllers Harbor Distinct HIV Strains

Eli Boritz¹, Luke Swaszek¹, Rebecca Hoh², Jeffrey Martin³, Steven Deeks², Daniel Douek¹

¹Human Immunology Section, Vaccine Research Center, Bethesda, MD, United States; ²Department of Medicine, University of California San Francisco, San Francisco, CA, United States; ³Department of Epidemiology and Biostatistics, University of California San Francisco, San Francisco, CA, United States

81 Accelerated Viral Load Increase and CD4 Decline in HIV-1 Superinfected Women

Keshet Ronen¹, Barbra Richardson¹, Susan Graham², Kishor Mandaliya³, Walter Jaoko⁴, Scott McClelland², Julie Overbaugh¹

¹Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ²University of Washington, Seattle, WA, United States; ³Coast Provincial General Hospital, Mombasa, Kenya; ⁴University of Nairobi, Nairobi, Kenya

82 Selection for Active SAMHD1 Antagonism in Natural Infections of SIVagm

Chelsea Spragg^{1,2}, Michael Emerman²

¹Molecular and Cellular Biology, University of Washington, Seattle, WA, United States; ²Human Biology, Fred Hutchinson Cancer Research Center, Seattle, WA, United States

83 Probiotic and IL-21 Treatment Promotes Th17 Cell Recovery in ARV-Treatment of Pigtail Macaques

Alexandra M. Ortiz¹, Zachary A. Klase¹, Kirby M. Carmack¹, Carol L. Vinton¹, Molly R. Perkins¹, Francois Villinger², Mirko Palardini², Jason M. Brenchley¹

¹LMM, NIH, Bethesda, MD, United States; ²Verkes National Primate Research Center, Atlanta, GA, United States

Session 0-7 Oral Abstracts

10:00 AM – 12:15 PM **Ballroom B/C**

Randomized Controlled Trials and Antiretroviral Resistance

Moderators

Urvi M. Parikh, University of Pittsburgh, Pittsburgh, PA, United States
Edmund C. Tramont, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

- 84LB First-Line RAL + DRV/r Is Non-Inferior To TDF/FTC + DRV/r: The NEAT001/ANRS143 Randomised Trial**
François Raffi¹, Abdel G. Babiker², Laura Richert³, Jean-Michel Molina⁴, Elizabeth C. George⁵, Andrea Antinori⁶, Jose Arribas⁶, Stefano Vella⁷, Genevieve Chêne⁸, Anton L. Pozniak⁸, NEAT001/ANRS143 Study Group
¹University Hospital, Nantes, France; ²MRC Clinical Trials Unit at UCL, London, United Kingdom; ³INSERM U897, Bordeaux, France; ⁴St Louis Hospital, Paris, France; ⁵INMI L Spallanzani, Rome, Italy; ⁶Hospital La Paz, Madrid, Spain; ⁷Istituto Superiore di Sanità, Rome, Italy; ⁸Chelsea and Westminster Hospital, London, United Kingdom

- 85 Efficacy and Tolerability of Atazanavir, Raltegravir, or Darunavir With FTC/Tenofovir: ACTG 5257**
Raphael J. Landovitz¹, Heather J. Ribaudo², Ighowwerha Oforokun³, Hongying Wang², Bryan P. Baugh⁴, Randi Y. Leavitt⁵, James F. Rooney⁶, Daniel Seekins⁷, Judith S. Currier¹, Jeffrey L. Lennox³
¹Center for Clinical AIDS Research & Education, University of California Los Angeles, Los Angeles, CA, United States; ²Harvard Center for Biostatistics in AIDS Research, Boston, MA, United States; ³Division of Infectious Diseases, Emory University, Atlanta, GA, United States; ⁴Janssen Therapeutics, Titusville, NJ, United States; ⁵Merck & Co, Whitehouse Station, NJ, United States; ⁶Gilead Sciences, Foster City, CA, United States; ⁷Bristol-Myers Squibb, Wallingford, CT, United States

- 86 Attachment Inhibitor Prodrug BMS-663068 in ARV-Experienced Subjects: Week 24 Analysis**
Jacob Lalezari¹, Gulam H. Latiff², Cynthia Brinson³, Juan Echevarria⁴, Sandra Treviño-Pérez⁵, Johannes R. Bogner⁶, David Stock⁷, Samit R. Joshi⁸, George J. Hanna⁹, Max Lataillade⁷, for the A1438011 study team
¹Quest Clinical Research, San Francisco, CA, United States; ²Maxwell Clinic, Durban, South Africa; ³Central Texas Clinical Research, Austin, TX, United States; ⁴Hospital Nacional Cayetano Heredia, Lima, Peru; ⁵Mexico Centre for Clinical Research, Mexico City, Mexico; ⁶Hospital of the University of Munich, Munich, Germany; ⁷Bristol-Myers Squibb, Wallingford, CT, United States; ⁸Bristol-Myers Squibb, Princeton, NJ, United States

- 87 Sensitive Screening Reveals Widespread Underestimation of Transmitted HIV Drug Resistance**
 Jin-fen Li, David Kim, Laurie Linley, Richard Kline, Walid Heneine, **Jeffrey A. Johnson**
 Division of HIV/AIDS Prevention, CDC, Atlanta, GA, United States

- 88 Transmitted HIV-1 Drug Resistance Between Partner-Pairs**
 Joanne Stekler¹, Rachel Payant², Ingrid Beck², Brandon Maust¹, Sarah Holte^{1,3}, Janine Maenza¹, Claire E. Stevens¹, James I. Mullins¹, Ann C. Collier¹, **Lisa M. Frenkel**^{1,2}
¹University of Washington, Seattle, WA, United States; ²Seattle Children's Hospital, Seattle, WA, United States; ³Fred Hutchinson Cancer Research Center, Seattle, WA, United States

- 89 Silent Mutations in HIV-1 Subtype B Reverse Transcriptase Selected by ART Restore Viral Fitness**
Sushama Telwatte^{1,2}, Anna C. Hearn^{1,3}, Adam Johnson¹, Con Sonza⁴, Nicolas P. Sluis-Cremers⁵, Richard P. Harrigan⁶, Gilda Tachedjian^{1,2}
¹Centre for Biomedical Research, Burnet Institute, Melbourne, Australia; ²Department of Microbiology, Monash University, Melbourne, Australia; ³Department of Infectious Diseases, Monash University, Melbourne, Australia; ⁴Department of Microbiology and Immunology, University of Melbourne, Melbourne, Australia; ⁵Division of Infectious Diseases, University of Pittsburgh, Pittsburgh, PA, United States; ⁶Drug Treatment Program, BC Centre for Excellence in HIV/AIDS, British Columbia, BC, Canada
- 90 Reduced In Vivo Replicative Capacity of Drug-Resistant SHIV During Acute Infection**
 Mian-er Cong, Chou-Pong Pau, Walid Heneine, **J. Gerardo Garcia-Lerma**
 Division of HIV/AIDS Prevention, CDC, Atlanta, GA, United States

- 91LB 744 and Rilpivirine as Two-Drug Oral Maintenance Therapy: LAI116482 (LATTE) Week 48 Results**
David Margolis¹, Cynthia Brinson², Joseph Eron³, Gary Richmond⁴, Roger LeBlanc⁵, Sandy Griffith¹, Marty St. Clair¹, Marita Stevens⁶, Peter Williams⁶, William Spreen¹
¹GSK, RTP, NC, United States; ²Central Texas Clinical Research, Austin, TX, United States; ³University of North Carolina, Chapel Hill, NC, United States; ⁴HIV Clinic, Ft. Lauderdale, FL, United States; ⁵Clinique Opus Inc, Montreal, QC, Canada; ⁶Janssen, Beerse, Belgium
- 92LB Safety and Antiviral Effect of MK-1439, A Novel NNRTI (+FTC/TDF) in ART-Naive HIV-Infected Patients**
Javier O. Morales-Ramirez¹, Jose M. Gatell¹, Debbie P. Hagins², Melanie Thompson³, Keikawus Arastéh⁴, Christian Hoffmann⁵, Charlotte Harvey⁷, Xia Xu⁷, Hedy Tepler⁷
¹Clinical Research Puerto Rico, San Juan, Puerto Rico; ²University of Barcelona, Barcelona, Spain; ³Chatham County Health Dept, Savannah, GA, United States; ⁴AIDS Research Consortium of Atlanta, Atlanta, GA, United States; ⁵EPIMED/Vivantes Auguste-Viktoria-Klinikum, Berlin, Germany; ⁶ICH Study Center, Hamburg, Germany; ⁷Merck, Whitehouse Station, NJ, United States

Session O-8 Oral Abstracts

10:00 AM – 12:00 PM Ballroom A
TB and Other Coinfections

Moderators

Anne F. Luetkemeyer, University of California San Francisco, San Francisco, CA, United States
Alison D. Grant, London School of Hygiene and Tropical Medicine, London, United Kingdom

- 93 A Phase 2 Trial of a Rifapentine Plus Moxifloxacin-Based Regimen for Pulmonary TB Treatment**
 Marcus B. Conde¹, Solange C. Cavalcante^{2,3}, Margaret Dalcolmo⁴, Fernanda Mello¹, Rafael Duarte⁵, Carla Loredó⁶, Valeria Rolla², Betina Durovni^{2,3}, Silvia Cohn⁶, Richard E. Chaisson⁶, **Susan E. Dorman**⁶

¹Thoracic Diseases Institute, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil; ²Municipal Health Secretariat, Rio de Janeiro, Brazil; ³Instituto de Pesquisa Clínica Evandro Chagas, Rio de Janeiro, Brazil; ⁴Centro de Referencia Professor Helio Fraga, ENSP-Fiocruz, Rio de Janeiro, Brazil; ⁵Federal University of Rio de Janeiro, Rio de Janeiro, Brazil; ⁶The Johns Hopkins University School of Medicine, Baltimore, MD, United States

¹Military HIV Research Program, Walter Reed Army Institute of Research, University of Washington, Bethesda, MD, United States; ²Global Health, University of Washington, Seattle, WA, United States; ³Kenya Medical Research Institute/ University of Washington, Nairobi, Kenya

94 Tuberculosis Infection in Early Childhood in Uganda and the Influence of HIV Exposure

Carina Marquez¹, Gabriel Chamie¹, Jane Achian², Anne F. Luetkemeyer¹, Mary Kyohere³, Grant Dorsey¹, Moses R. Kamya², Edwin D. Charlebois¹, Diane V. Havlir¹

¹University of California, San Francisco, San Francisco, CA, United States; ²Makerere University College of Health Sciences, Kampala, Uganda; ³Infectious Diseases Research Collaboration, Kampala, Uganda

95 Effect of Xpert MTB/RIF On Early Mortality in Adults With Suspected TB: A Pragmatic Randomized Trial

Gavin Churchyard¹, Kerrigan McCarthy¹, Katherine L. Fielding², Wendy Stevens³, Violet Chihota¹, Mark Nicol⁴, Norbert Ndjeka⁵, Alison D. Grant⁶, David Mametja³

¹Aurum Institute, Houghton, South Africa; ²London School of Hygiene and Tropical Medicine, London, United Kingdom; ³National Health Laboratory Service, Sandringham, South Africa; ⁴University of Cape Town, Cape Town, South Africa; ⁵South African Department of Health, Pretoria, South Africa

96LB Xpert as the First-Line TB Test in South Africa: Yield, Initial Loss To Follow-Up, Proportion Treated

Katherine L. Fielding¹, Kerrigan M. McCarthy², Helen Cox³, Linda Erasmus⁴, Sibuse Ginindza², Anna Vassalli¹, Lindiwe Mvusi⁵, Chris Dye⁶, Alison D. Grant¹, Gavin J. Churchyard²

¹London School of Hygiene & Tropical Medicine, London, United Kingdom; ²Aurum Institute, Johannesburg, South Africa; ³University of Cape Town, Cape Town, South Africa; ⁴National Health Laboratory Service, Johannesburg, South Africa; ⁵South African Department of Health, Pretoria, South Africa; ⁶World Health Organization, Geneva, Switzerland

97LB 14 Day EBA Study of PA-824, Bedaquiline, Pyrazinamide and Clofazimine in Smear-Positive TB Patients

Andreas Diacon¹, Rodney Dawson², Christo Van Niekerk³, Jane Hutchings³, Stephen Murray⁴, Robert Schall⁵, Divan Burger⁶, Dan Everitt⁴, Carl Mendel⁴

¹Department of Medical Biochemistry, Stellenbosch University, Cape Town, South Africa; ²Medicine, University of Cape Town Lung Institute, Cape Town, South Africa; ³Clinical Development, TB Alliance, Pretoria, South Africa; ⁴Clinical Development, TB Alliance, New York, NY, United States; ⁵Mathematical Statistics and Actuarial Science, University of The Free State, Bloemfontein, South Africa; ⁶Mathematical Statistics and Actuarial Science, University of the Free State, Bloemfontein, South Africa

98 CTX Prophylaxis Discontinuation Among ART-Treated Adults: A Randomized Non-Inferiority Trial

Christina S. Polyak¹, Krista Yuhass², Benson Singa³, Monica Khaemba⁴, Judd Watson², Barbra Richardson², Grace John-Stewart²

Session TD6 Themed Discussion

1:30 PM – 2:30 PM **Room 309**

Frailty and Functional Impairment

Discussion Leader

Kevin E. Yarasheski, Washington University School of Medicine, St Louis, MO, United States

766 Geriatric Syndromes Are Common Among Older HIV-Infected Adults

Meredith Greene^{1,2}, Victor Valcour^{1,3}, Yinghui Miao^{2,4}, Ken Covinsky^{1,2}, Joy Madamba⁵, Monica Mattes⁶, Harry Lampiris^{2,7}, Jeffrey Martin⁸, Steven Deeks⁹

¹Medicine-Geriatrics, University of California San Francisco, San Francisco, CA, United States; ²San Francisco VA Medical Center, San Francisco, CA, United States; ³Neurology, University of California San Francisco, San Francisco, CA, United States; ⁴NCIRE, San Francisco, CA, United States; ⁵Medicine-HIV/AIDS, University of California San Francisco, San Francisco, CA, United States; ⁶University of Central Florida College of Medicine, Orlando, FL, United States; ⁷Medicine-Infectious Diseases, University of California San Francisco, San Francisco, CA, United States; ⁸Epidemiology & Biostatistics, University of California San Francisco, San Francisco, CA, United States

767 Physical Function Impairment On Quality of Life Among Persons Aging With HIV Infection

Kristine M. Erlandson, Amanda A. Allshouse, Catherine M. Jankowski, Samantha MaWhinney, Wendy M. Kohrt, Thomas B. Campbell
University of Colorado Anschutz Medical Campus, Aurora, CO, United States

764 Cell-Mediated CMV Responses in HIV-Infected Persons With Impaired Physical Function

Kristine M. Erlandson, Amanda A. Allshouse, Rick Rapaport, Brent E. Palmer, Cara C. Wilson, Samantha MaWhinney, Thomas B. Campbell
University of Colorado Anschutz Medical Campus, Aurora, CO, United States

762 Frailty, Inflammation and Mortality Among Aging HIV-Infected and At-Risk Injection Drug Users

Damani A. Piggott, Ravi Varadhan, Shruti H. Mehta, Todd T. Brown, Sean X. Leng, Gregory D. Kirk
The Johns Hopkins University, Baltimore, MD, United States

763 Brisk Walking Improves Inflammatory Markers in cART-Treated Patients

Valeria Longo¹, Matteo Bonato², Simona Bossolasco¹, Laura Galli¹, Andrea Caumo², Gaspare Pavei³, Adriano Lazzarini¹, Giampiero Merati³, Antonio La Torre², Paola Cinque¹
¹Infectious Diseases, San Raffaele Scientific Institute, Milano, Italy; ²Biomedical Sciences for Health, Università degli Studi di Milano, Milano, Italy; ³Pathophysiology and Transplantation Department, Università degli Studi di Milano, Milano, Italy

Session TD7 Themed Discussion

1:30 PM – 2:30 PM **Ballroom A**
Clinical Pharmacology in Patient Care**Discussion Leader**

Stephen Taylor, Birmingham Heartlands Hospital, Birmingham, United Kingdom

496 Pharmacokinetics of Raltegravir 400 vs 800 mg BID With Intermittent Rifampicin Dosed Thrice WeeklyHelen E. Reynolds¹, Deirdre Egan¹, Laura Else¹, Mas Chaponda², Ales Chrdle², David J. Back¹, **Saye H. Khoo¹**¹University of Liverpool, Liverpool, United Kingdom; ²Royal Liverpool University Hospital, Liverpool, United Kingdom**494 Relationship Between Efavirenz Trough & CYP2B6 Genotypes With Rifampin-Based TB Therapy in STRIDE****Anne Luetkemeyer¹**, Susan L. Rosenkranz², Darlene Lu³, Beatriz Grinsztejn⁴, Jorge Sanchez⁵, Michael Ssemmanda⁶, Ian Sanne⁷, Helen McIlerron⁸, Diane Havlir¹, David Haas⁹, ACTG A5221 & A5243 Study Teams¹HIV/AIDS Division, San Francisco General Hospital, University of California, San Francisco, San Francisco, CA, United States; ²Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ³HIV/AIDS Division, Center for Biostatistics in AIDS Research, Harvard School of Public Health, San Francisco, CA, United States; ⁴Instituto de Pesquisa Clínica Evandro Chagas, Fundacao Oswaldo Cruz, Rio de Janeiro, Brazil; ⁵Asociación Civil Impacta Salud y Educación, Lima, Peru; ⁶Joint Clinical Research Center, Kampala, Uganda; ⁷Clinical HIV Research Unit, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa; ⁸Division of Clinical Pharmacology, University of Cape Town, Cape Town, South Africa; ⁹Vanderbilt University School of Medicine, Nashville, TN, United States**497 Pharmacokinetics of Faldaprevir and Antiretrovirals in Patients With HIV/HCV Coinfection****Jürgen K. Rockstroh¹**, Marc-Antoine Valantin², Josep Mallolas³, Massimo Puoti⁴, Juan Antonio Pineda⁵, Patrick Ingiliz⁶, Marina Núñez⁷, Fenglei Huang⁸, Richard Vinisko⁹, Douglas Dieterich⁹¹Department of Medicine I, University of Bonn, Bonn, Germany; ²Service des Maladies Infectieuses et Tropicales, Hôpital Pitié-Salpêtrière, Paris, France; ³Hospital Clinic-University of Barcelona, Barcelona, Spain; ⁴Department of Infectious Diseases, AO Ospedale Niguarda Ca' Granda Milano, Milan, Italy; ⁵Unit of Infectious Diseases and Microbiology, Hospital Universitario de Valme, Seville, Spain; ⁶Medical Center for Infectious Diseases, Berlin, Germany; ⁷Wake Forest University Health Sciences, Winston-Salem, NC, United States; ⁸Boehringer Ingelheim Pharmaceutical, Inc, Ridgefield, CT, United States; ⁹Mount Sinai Medical Center, New York, NY, United States**504 Relative Genetic Contribution To the Pharmacokinetics of Commonly Prescribed Antiretrovirals****Marco S. Siccardi¹**, Adeniyi Olagunju^{1,2}, Marco Simiele³, Antonio D'Avolio³, Andrea Calcagno³, Giovanni Di Perri³, Stefano Bonora³, Andrew Owen¹¹Department of Molecular and Clinical Pharmacology, University of Liverpool, Liverpool, United Kingdom; ²Faculty of Pharmacy, Obafemi Awolowo University, Ile-Ife, Nigeria; ³Amedeo di Savoia Hospital, University of Turin, Turin, Italy**505 Leveraging Genomics in HIV Treatment Decisions****Paul J. McLaren¹**, Margalida Rotger¹, Manel Aouri¹, Huldrych Günthard², Catia Marzolini³, Laurent Decosterd², Amalio Telenti¹
¹The Swiss HIV Cohort, Lausanne, Switzerland; ²The Swiss HIV Cohort, Zurich, Switzerland; ³The Swiss HIV Cohort, Basel, Switzerland

Session TD8 Themed Discussion

1:30 PM – 2:30 PM **Room 304**
How Transmission Networks Drive Epidemics**Discussion Leader**

Roger D. Kouyos, University Hospital Zurich, University of Zurich, Zurich, Switzerland

213 HIV Transmission in the United States: The Roles of Risk Group, Race/Ethnicity, and Geography**Alexandra M. Oster¹**, Joel O. Wertheim², Angela L. Hernandez³, Marie C. B. Ofemelia⁴, Neeraja Saduvala³, David Kim¹, H. I. Hall¹¹Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States; ²ICF International and University of California San Diego, San Diego, CA, United States; ³ICF International, Atlanta, GA, United States**205 Ongoing HIV-1 Subtype B Transmission Networks in the Netherlands****Daniela Bezemer¹**, Oliver Ratmann², Ard van Sighem¹, Bas E. Dutilh³, Nuno Faria⁴, Rob van den Hengel¹, Luuk Gras¹, Peter Reiss¹, Frank de Wolf², Christophe Fraser², ATHENA observational cohort¹Research, HIV Monitoring Foundation, Amsterdam, Netherlands; ²Imperial College, London, United Kingdom; ³Centre for Molecular and Biomolecular Informatics, Nijmegen, Netherlands; ⁴University, Oxford, United Kingdom**206 Using HIV Networks To Inform Real Time Prevention Interventions****Susan J. Little¹**, Sergei L. K. Pond¹, Christy M. Anderson¹, Jason A. Young¹, Joel O. Wertheim¹, Sanjay R. Mehta¹, Susanne May², Davey M. Smith¹¹Medicine, University of California San Diego, San Diego, CA, United States; ²Biostatistics, University of Washington School of Public Health, Seattle, WA, United States**215 Large MSM Group and Local Heterosexual Transmission Are Major Concerns in the HIV Epidemic in Japan****Teichiro Shiino¹**, Kenji Sadamasu², Junko Hattori³, Mami Nagashima⁴, Yasumasa Iwata^{1,2}, Yoshiyuki Yokomaku³, Wataru Sugiura³, The Japanese Drug Resistance HIV-1 Surveillance Network¹Infectious Diseases Surveillance Center, National Institute of Infectious Diseases, Tokyo, Japan; ²Tokyo Metropolitan Institute of Public Health, Tokyo, Japan; ³Clinical Research Center, Nagoya Medical Center, Nagoya, Japan

- 207 Transmission Networks of HIV-1 Subtype B, CRF01_AE and CRF51_01B Among MSM in Singapore**
Kim Tien Ng¹, Kah Ying Ng², Wei Xin Khong³, Oliver Laeyendecker^{3,4}, Thomas C Quinn^{3,4}, Adeeba Kamarulzaman¹, Oon Tek Ng², Kok Keng Tee¹
¹Centre of Excellence for Research in AIDS (CERIA), Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; ²Institute of Infectious Disease and Epidemiology, Communicable Disease Centre, Tan Tock Seng Hospital, Novena, Singapore; ³Division of Infectious Diseases, The Johns Hopkins School of Medicine, Baltimore, MD, United States; ⁴Laboratory of Immunoregulation, Division of Intramural Research, National Institute of Allergy and Infectious Disease, National Institutes of Health, Baltimore, MD, United States
- 208 HIV-1 Phylodynamics and Phylogeography Among High-Risk and General Populations in Uganda**
Gonzalo Yebra¹, Manon Ragonnet-Cronin¹, Deogratius Ssemwanga², Chris M. Parry², Pontiano Kaleebu², Andrew J. Leigh Brown¹
¹Institute of Evolutionary Biology, University of Edinburgh, Edinburgh, United Kingdom; ²Research Unit on AIDS, MRC/Uganda Virus Research Institute, Entebbe, Uganda

Session TD9 Themed Discussion

1:30 PM – 2:30 PM Room 312

Gut and Immune Activation

Discussion Leader

Peter W. Hunt, University of California San Francisco, San Francisco, CA, United States

- 312 Rapid Gut-Homing of Plasmacytoid Dendritic Cells During Acute SIV Infection**
 Haiying Li, Jacqueline Gillis, **R. Keith Reeves**
 NEPRC, Harvard Medical School, Southborough, MA, United States
- 313 CCR6+ and CD161+ CD4 T Cell Loss Contributes To the Pathogenesis of SIV Infection in Rhesus Macaques**
Colleen S. McGary¹, Luca Micci¹, Emily S. Ryan¹, Maria J. Buzon², Amy Shaw², Mathias Lichterfeld², Guido Silvestri^{1,3}, Aftab A. Ansari³, Mirko Paiardini^{1,3}
¹Department of Microbiology and Immunology, Emory University, Atlanta, GA, United States; ²Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States; ³Department of Pathology and Laboratory Medicine, Emory University, Atlanta, GA, United States
- 315 Decreased Diversity of Gut Microbiota Is Associated With Immune Status During HIV-1 Infection**
Piotr Nowak¹, Babilonia Bargasho², Ekatarina Avershina³, Kajsa Noyan², Jan Vesterbacka¹, Marius Trosseid⁴, Knut Rudi³, Anders Sönnernborg¹
¹Department of Infectious Diseases, Karolinska Institute, Huddinge, Sweden; ²Department of Laboratory Medicine, Karolinska Institute, Huddinge, Sweden; ³Department of Chemistry, Biotechnology and Food Science, Norwegian University of Life Sciences, Aas, Norway; ⁴Infectious Diseases, Oslo University Hospital, Oslo, Norway

- 317 Dysbiotic Bacteria Translocate in Progressive SIV Infection**
Zachary Klase¹, Elias Schwartzman¹, Alexandra Ortiz¹, Lauren Canary¹, Mariam Quinones², Jason Brenchley¹
¹Laboratory of Molecular Microbiology, NIAID/NIH, Bethesda, MD, United States; ²NIAID/NIH, Bethesda, MD, United States
- 311 Breaches in Colonic Claudin-4 Expression Correlate With T-Cell Activation in HIV-1 Infection**
Louise Greathead¹, Anna Mroz¹, Hiromi Kudo¹, Brian Gazzard², Mark Nelson², Robert D. Goldin¹, Alan Steef¹, Peter Kelleher¹
¹Imperial College, London, United Kingdom; ²Chelsea and Westminster Hospital NHS Trust, London, United Kingdom
- 310 Increased Immune Activation After Gut Permeabilization in SIV-Infected African Green Monkeys**
Jan Kristoff¹, Thaidra Gaufin², Rajeev Gautam³, Dongzhu Ma¹, Jacob Estes⁴, Russell Tracy⁵, Cristian Apetrei¹, Steve Nelson⁶, Gregory Bagby⁶, Ivona Pandrea¹
¹Center for Vaccine Research, University of Pittsburgh, Pittsburgh, PA, United States; ²UCLA, Los Angeles, CA, United States; ³Center for Vaccine Research, NIAID/NIH, Bethesda, MD, United States; ⁴NCI/NIH, Frederick, MD, United States; ⁵University of Vermont, Colchester, VT, United States; ⁶Louisiana State University, New Orleans, LA, United States

Session TD10 Themed Discussion

1:30 PM – 2:30 PM Room 311

Reproductive Hormones in Women: Impact On Risk and Barrier Dysfunction

Discussion Leader

Susan Cu-Uvin, Brown University, Providence, RI, United States

- 844 Depot-Medroxyprogesterone Acetate Does Not Increase Genital SHIV Shedding in Macaques**
Jessica Radzio¹, Kristina Hanley², Debra Hanson¹, James Mitchell¹, Leecresia Jenkins¹, Shanon Ellis¹, Frank Deyoungs¹, Walid Heneine¹, J. Gerardo Garcia-Lerma¹
¹Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States; ²Pathology, Emory University, Atlanta, GA, United States
- 846 Hormonal Contraceptives Increase Innate Immune Effector Molecules in Cervicovaginal Secretions**
Brandon L. Guthrie¹, Robert Y. Choi², Alison C. Roxby², Rose Bosire³, Barbara Lohman-Payne^{1,2}, Taha Hirbod⁴, Carey Farquhar^{1,2}, Kristina Brolden⁴
¹Department of Global Health, University of Washington, Seattle, WA, United States; ²Department of Medicine, University of Washington, Seattle, WA, United States; ³Center for Public Health Research, Kenya Medical Research Institute, Nairobi, Kenya; ⁴Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden
- 847 Injectable Contraception and HIV Acquisition in the VOICE Study (MTN-003)**
Lisa M. Noguchi^{1,2}, Barbra Richardson³, Z. Mike Chirenje⁴, Gita Ramjee⁵, Gonasagrie Nair⁶, Thesla Palanee⁷, Pearl Selepe⁸, Ravindere Panchia⁹, Kailazarid Gomez¹⁰, Jeanne Marrazzo¹¹, on behalf of the VOICE Study Team

¹Epidemiology, The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States; ²Microbicide Trials Network, Pittsburgh, PA, United States; ³SCHARP, Seattle, WA, United States; ⁴UCSF, Harare, Zimbabwe; ⁵MRC, Durban, South Africa; ⁶CAPRISA, Durban, South Africa; ⁷WITS Reproductive Health and HIV Institute, Johannesburg, South Africa; ⁸Aurum Institute, Klerksdorp, South Africa; ⁹PHRU, Soweto, South Africa; ¹⁰FHI 360, Durham, NC, United States; ¹¹University of Washington, Seattle, WA, United States

845 Dysregulation of Estradiol Signaling Contributes To Mucosal Barrier Dysfunction HIV+ Women

Sumathi Sankaran-Walters¹, Anne Fenton¹, Chris Gaulke¹, Lauren Nagy¹, Irina Grishina¹, Jason Flamm², Thomas Prindiville³, Satya Dandekar¹

¹Medical Microbiology and Immunology, University of CA, Davis, Davis, CA, United States; ²Internal Medicine, Kaiser Permanente, Sacramento, CA, United States; ³Internal Medicine, University of CA, Davis, CA, United States

Session TD16 Themed Discussion

1:30 PM – 2:30 PM **Ballroom B/C**

Real-World Experiences With Hepatitis C

Discussion Leader

Marion G. Peters, University of California San Francisco, San Francisco, CA, United States

668 Telaprevir in Treatment-Experienced HIV-HCV G1 Coinfected Patients (ANRS HC26 TelapreviH)

Laurent Cotte^{1,2}, Corinne Vincent³, Philippe Sogni^{4,5}, Isabelle Fournier⁶, Hugues Aumaitre⁶, Pierre De Truchis⁷, Isabelle Rosa⁸, Stéphane Chevaliez⁹, Jean-Pierre Aboulker¹⁰, Jean-Michel Molina^{4,11}

¹Infectious Diseases, Hospices Civils de Lyon, Lyon, France; ²U1052, INSERM, Lyon, France; ³SC10-US019, INSERM, Villejuif, France; ⁴Assistance Publique - Hôpitaux de Paris, Paris, France; ⁵Paris Descartes University, Paris, France; ⁶Saint Jean Hospital, Perpignan, France; ⁷Assistance Publique - Hôpitaux de Paris, Garches, France; ⁸Centre Hospitalier Intercommunal, Créteil, France; ⁹Assistance Publique - Hôpitaux de Paris, Créteil, France; ¹⁰INSERM, Villejuif, France; ¹¹University of Paris VII Denis Diderot, Paris, France

660 Boceprevir/Telaprevir-Based Therapy in HIV-Infection: Interim Analysis of a Multicenter Cohort

Karin Neukam^{1,2}, Daniela Munteanu^{3,4}, Antonio Rivero⁵, Annette Haber⁶, Manuel Márquez⁷, Patrick Ingiliz⁸, Ignacio de los Santos-Gil⁹, Thomas Lutz¹⁰, Juergen K. Rockstroh³, Juan A. Pineda¹

¹Unit of Infectious Diseases and Microbiology, Hospital Universitario de Valme, Seville, Spain; ²University of Liverpool, Liverpool, United Kingdom; ³Bonn University Hospital, Bonn, Germany; ⁴Matei Bals National Institute of Infectious Diseases, Bucharest, Romania; ⁵Hospital Universitario Reina Sofia, Cordoba, Spain; ⁶Frankfurt University Hospital, Frankfurt am Main, Germany; ⁷Hospital Virgen de la Victoria, Malaga, Spain; ⁸Medical Center for Infectious Diseases, Berlin, Germany; ⁹Hospital Universitario de la Princesa, Madrid, Spain; ¹⁰Infektologikum, Frankfurt am Main, Germany

658 Protease Inhibitors To Treat Hepatitis C in the Swiss HIV Cohort Study: High Efficacy But Low Uptake

Sebastian Haubitz¹, Verena Schaerer², Juan Ambrosioni³, Matthias Cavassini⁴, Marcel Stoeckle⁵, Patrick Schmid⁶, Laurent Decosterd⁴, Karin Metzner², Jan Fehr², **Andri Rauch¹**

¹Division of Infectious Diseases, Bern, Switzerland; ²Division of Infectious Diseases, Zurich, Switzerland; ³Division of Infectious Diseases, Geneva, Switzerland; ⁴Division of Infectious Diseases, Lausanne, Switzerland; ⁵Division of Infectious Diseases, Basel, Switzerland; ⁶Division of Infectious Diseases, St Gallen, Switzerland

655 Slow HCV-RNA Decay and Early Resistance Predict the Risk of Failure To TVR/BOC Treatment

Francesca Ceccherini-Silberstein¹, Valeria Cento¹, Velia Chiara Di Maio¹, Daniele Di Paolo², Sergio Babudieri³, Antonio Di Biagio⁴, Massimo Andreoni⁵, Giustino Parruti⁶, Giuliano Rizzardini⁷, Carlo Federico Perno¹

¹Department of Experimental Medicine and Surgery, University of Rome Tor Vergata, Rome, Italy; ²Hepatology Unit, University Hospital of Rome Tor Vergata, Rome, Italy; ³Infectious Diseases Unit, Department of Clinical and Experimental Medicine, University of Sassari, Sassari, Italy; ⁴S. Martino Hospital, Genoa, Italy; ⁵Infectious Diseases Unit, University Hospital of Rome Tor Vergata, Rome, Italy; ⁶Infectious Diseases Unit, Pescara General Hospital, Pescara, Italy; ⁷Division of Infectious Diseases, Hospital Sacco di Milan, Milan, Italy

661 Favorable Adverse Event Profile of Sofosbuvir/Ribavirin Versus Standard of Care for Hepatitis C Kerry Townsend¹, Shivakumar Narayanan², Amy Nelson¹, Adrian Majid³, Luciano Kapelusznik², Robert R. Redfield², Shyamundaran Kottilli¹, Rohit Talwani², Anuoluwapo Osinusi^{1,2}

¹LIR, NIAID, NIH, Bethesda, MD, United States; ²Institute of Human Virology, Div. of Infectious Diseases, University of Maryland School of Medicine, Baltimore, MD, United States

641 Sustained Virologic Response and the Risk of Liver Decompensation in HCV and HIV/HCV Patients

Temitope O. Olufade¹, Li Wang², Scott Devine¹, Onur Baser², Vincent Lo Re³

¹US Outcomes Research, Merck Sharpe & Dohme, North Wales, PA, United States; ²STATinMED Research, Dallas, TX, United States; ³Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, United States

650 Predicting Risk of ESLD in HIV/HCV Patients for Individualized HCV Therapy Decisions

Vincent Lo Re¹, Janet P. Tate², Adeel A. Butt³, Marina B. Klein⁴, Cynthia Gilbert⁵, David Rimland⁶, Matthew B. Goetz⁷, Jay R. Kostman¹, Amy C. Justice², Russell Localio¹

¹University of Pennsylvania, Philadelphia, PA, United States; ²VA Connecticut Healthcare System, West Haven, CT, United States; ³University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ⁴McGill University Health Centre, Montreal, QC, Canada; ⁵Washington DC VA Medical Center, Washington, DC, United States; ⁶Atlanta VA Medical Center, Atlanta, GA, United States; ⁷VA Greater Los Angeles Healthcare System, Los Angeles, CA, United States

POSTER SESSIONS

2:30 PM–4:00 PM

(Use the Poster Abstract section of the Program at a Glance, page 37 to 106, for specific posters in each session)

- Session P-A4 Late Events in HIV Replication
- Session P-A5 Apobec, Apobec, Apobec
- Session P-B2 Application of NGS To Viral Profiling
- Session P-C6 Clades and Pathogenesis
- Session P-C7 Correlative Marker Studies
- Session P-C8 Elite Controllers
- Session P-C9 Pathogenesis: Insights From Clinical Trials
- Session P-C10 Innate Immunity and Pathogenesis
- Session P-D2 New SIV Models
- Session P-D3 SCID Mice
- Session P-D4 Non-Pathogenic vs Pathogenic Hosts
- Session P-E3 New Technologies in Immunology
- Session P-E4 Monocytes, Dendritic Cells, NK Cells
- Session P-E5 Pre-Clinical Vaccine Studies
- Session P-F4 Methods for Measuring Reservoirs
- Session P-F5 What and Where Is the Reservoir?
- Session P-F6 What Can We Learn From Bone Marrow Transplantation?
- Session P-G3 Neuropathogenesis
- Session P-G4 Host Genetics in HAND
- Session P-G5 PML and Other CNS Infections
- Session P-G6 CNS Viral Genetics
- Session P-H3 ARV Pharmacokinetics, Drug Interactions, and Pharmacodynamics
- Session P-K2 ART Initiation, Monitoring, and Outcomes
- Session P-L3 Mechanisms of HIV Drug Resistance
- Session P-L4 HIV Drug Resistance Variants
- Session P-M2 HIV Diagnostics
- Session P-N3 HCV: Prognosis and Impact of Treatment, Including Liver Transplantation
- Session P-N4 HCV Treatment: Real-World Experience
- Session P-N5 HCV: The Cascade
- Session P-O4 Kaposi Sarcoma, PEL, and KSHV
- Session P-P3 Alcohol, Smoking, and Atherosclerosis
- Session P-P4 Risk Factors and Incidence: MI and Stroke
- Session P-Q4 Lung Disease and HIV
- Session P-Q5 Bone Disease: Osteopenia Fracture Risk and Osteoarthritis
- Session P-Q6 Hepatic Fibrosis and Other Hepatic Complications
- Session P-R1 Epidemiology and Transmission of TB
- Session P-R2 TB Screening and Diagnosis
- Session P-R3 Latent TB Screening and Treatment
- Session P-R4 Inflammatory and Immune Activation Markers in TB
- Session P-R5 Impact of ART on TB Risk and Disease

- Session P-T3 Pregnancy Incidence and Outcomes Among Women in ART Programs
- Session P-T4 Cellular and Immune Correlates of MTCT
- Session P-T5 Characteristics of Pregnant Women in PMTCT
- Session P-T6 Early Infant HIV Diagnosis
- Session P-U4 Host and Immune Response in Children and Adolescents
- Session P-U5 Complications of HIV and ART in Children and Adolescents
- Session P-V1 Pre-Clinical Studies of Microbicides
- Session P-V2 Animal Model of Clinical Studies and PrEP
- Session P-V3 Identifying and Reducing HIV Risk
- Session P-V4 PrEP, PEP, TasP
- Session P-V5 Circumcision
- Session P-W5 Acute Infection
- Session P-W6 Incidence Assays
- Session P-X3 The Treatment Cascade and Loss To Follow-Up
- Session P-X4 Mental Health in HIV Care

Session O-11 Oral Abstracts

4:00 PM – 6:00 PM **Room 312**

Malignancies and Pharmacology

Moderators

Kelly E. Dooley, *The Johns Hopkins University School of Medicine, Baltimore, MD, United States*

Margaret Z. Borok, *University of Zimbabwe, Harare, Zimbabwe*

- 99 **HIV and Elevated Cancer-Specific Mortality Following Cancer Diagnosis in the United States**
 Anna E. Coghill¹, Meredith S. Shiels, Eric A. Engels
Division of Cancer Epidemiology and Genetics, National Cancer Institute, Washington, DC, United States
- 100 **Impact of Kaposi Sarcoma On Survival in HIV-Infected African Adults On Antiretroviral Therapy**
 Stephen B. Asimwe^{1,2}, Miriam Laker-Oketta^{1,3}, John Bennett¹, Adrienne Mocello¹, David Glidden¹, Jessica Haberer⁴, Mwembesa Bwana¹, Peter Hunt¹, David Bangsberg⁴, Edward Mbidde¹, Jeffrey Martin¹
¹Department of Epidemiology and Biostatistics, University of California San Francisco, San Francisco, CA, United States; ²Department of Internal Medicine, Mbarara Regional Referral Hospital, Mbarara, Uganda; ³Infectious Diseases Institute, Kampala, Uganda; ⁴Department of Medicine, Massachusetts General Hospital and Harvard Medical School, Boston, MA, United States
- 101 **Prospective Characterization of Kaposi Sarcoma Herpesvirus Inflammatory Cytokine Syndrome**
 Mark N. Polizzotto¹, Thomas S. Uldrick¹, Kathleen M. Wyvill¹, Karen Aleman¹, Vickie Marshall², Denise Whitby², Stefania Pittaluga³, Seth Steinberg⁴, Irini Sereti⁵, Robert Yarchoan¹
¹HIV and AIDS Malignancy Branch, National Cancer Institute, Bethesda, MD, United States; ²Viral Oncology Section, Frederick

National Laboratory for Cancer Research, Frederick, MD, United States;³Laboratory of Pathology, National Cancer Institute, Bethesda, MD, United States;⁴Biostatistics and Data Management Section, National Cancer Institute, Bethesda, MD, United States;⁵HIV Pathogenesis Unit, National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States

102 Quadrivalent HPV Vaccine Demonstrates

Immune Memory in HIV-1-Infected Men

Timothy Wilkin¹, Shelly Lensing², Mark Einstein³, Jeannette Lee⁴, Stephen Goldstone⁵, Elizabeth A. Stier⁶, Michael Berry⁷, Naomi Jay⁸, Ronald Mitsuyasu⁹, Joel Palefsky⁸

¹Division of Infectious Diseases, Weill Cornell Medical College, New York, NY, United States; ²Department of Biostatistics, University of Arkansas for Medical Sciences, Little Rock, AR, United States; ³Department of Obstetrics & Gynecology and Women's Health, Albert Einstein College of Medicine and Montefiore Medical Center, New York, NY, United States; ⁴University of Arkansas for Medical Sciences, Little Rock, AR, United States; ⁵Icahn School of Medicine at Mount Sinai, New York, NY, United States; ⁶Department of Obstetrics and Gynecology, Boston University Medical Center, Boston, MA, United States; ⁷Department of Medicine, University of California San Francisco, San Francisco, CA, United States; ⁸University of California San Francisco, San Francisco, CA, United States; ⁹UCLA CARE Center, University of California Los Angeles, Los Angeles, CA, United States

103 HIV-1 Infection Alters Intestinal Expression of Antiretroviral Drug Transporters and Enzymes

Olena Kis¹, Md. Tozammel Hoque¹, Sharon L. Walmsley^{2,3}, Sumathi Sankaran-Walters⁴, Satya Dandekar⁵, **Reina Bendayan¹**

¹Pharmaceutical Sciences, University of Toronto, Toronto, ON, Canada; ²University of Toronto, Toronto, ON, Canada; ³Division of Infectious Diseases, University Health Network, Toronto, ON, Canada; ⁴Medical Microbiology and Immunology, University of California, Davis, CA, United States; ⁵Medical Microbiology and Immunology, University of California, Davis, CA, United States

104 Tenofovir-Emtricitabine Directly Observed Dosing: 100% Adherence Concentrations (HPTN 066)

Craig W. Hendrix¹, Adriana Andrade¹, Angela D. Kashuba², Mark Marzinko¹, Peter L. Anderson³, Ayana Moore⁴, Vanessa Elharrar⁵, Lei Wang⁶, Kenneth H. Mayer⁷, Kristine B. Patterson²

¹The Johns Hopkins University, Baltimore, MD, United States; ²University of North Carolina (Chapel Hill), Chapel Hill, NC, United States; ³University of Colorado, Aurora, CO, United States; ⁴FHI 360, Durham, NC, United States; ⁵National Institutes of Health, Rockville, MD, United States; ⁶SCHARP, Seattle, WA, United States; ⁷Fenway Health, Boston, MA, United States

105 Efavirenz Pharmacokinetics in HIV+ Persons Receiving Rifampentine and Isoniazid for TB Prevention

Anthony T. Podany¹, Yajing Bao², Richard E. Chaisson³, Susan Swindells⁴, Janet W. Andersen², Thando Mwelase⁵, Khuanchai Supparatpinyo⁶, Amita Gupta³, Constance A. Benson⁷, Courtney V. Fletcher¹

¹College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, United States; ²Statistical & Data Analysis Center, Harvard School of Public Health, Boston, MA, United States; ³Division of Infectious Diseases, The Johns Hopkins University, Baltimore, MD, United States; ⁴Infectious Diseases/Internal

Medicine, University of Nebraska Medical Center, Omaha, NE, United States; ⁵Clinical HIV Research Unit, Wits Health Consortium, Johannesburg, South Africa; ⁶Chiang Mai University, Chiang Mai, Thailand; ⁷Antiviral Research Center, University of California San Diego, San Diego, CA, United States

106 Pharmacokinetic Variability in TB Therapy: Associations With HIV and Effect On Outcome

Derek J. Sloan¹, Alessandro Schipani², David Waterhouse³, Lisa Stone³, Henry C. Mwandumba⁴, Anthony E. Butterworth⁴, Robert S. Heyderman¹, Elizabeth L. Corbett¹, Saye H. Khoo², Geraint R. Davies¹

¹Malawi Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi; ²University of Liverpool, Liverpool, United Kingdom; ³Liverpool School of Tropical Medicine, Liverpool, United Kingdom; ⁴College of Medicine, University of Malawi, Blantyre, Malawi

Session S4 Symposium

4:00 PM – 6:00 PM Ballroom B/C

TB: Looking To The Future: Resistance, Persistence, Monitoring, and Control

Target audience: This session is directed to clinicians and scientists interested in the pathogenesis, diagnosis, treatment, and prevention of TB.

Level of knowledge: It is assumed that learners are familiar with basic aspects of the disease, drug therapies, and development of resistance and with current tools available for disease monitoring on an individual and population basis.

Objectives: At the completion of the session, learners will be able to describe:

- Methods for sequencing MDR and XDR TB strains and factors beyond inadequate adherence that contribute to emergence of resistance
- The pathogenesis of latency, novel animal models of latency, and implications for treating latent TB infections
- Use of PET-CT, PET-MRI, and other novel imaging to detect mycobacterial replication, tissue inflammation, and responses to TB therapy
- Insights gained from population-based studies of TB prevention

Conveners

Neil A. Martinson, University of the Witwatersrand, Johannesburg, South Africa

Jean William Pape, Weill Cornell Medical College, New York, NY, United States, and Centres GHESKIO, Port-au-Prince, Haiti

107 The Genetics and Pathogenesis of MDR and XDR TB Drug Resistance

Megan B. Murray
Harvard Medical School, Boston, MA, United States

108 Is Latent TB Infection Really Latent?

Petros C. Karakousis
The Johns Hopkins University School of Medicine, Baltimore, MD, United States

- 109 Quantifying TB Treatment Response Using PET/CT**
Clifton E. Barry III
National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

- 110 Population-Level Control of HIV-Related TB**
Peter Godfrey-Faussett
Joint United Nations Programme on HIV/AIDS (UNAIDS), Geneva, Switzerland

Session S5 Symposium

4:00 PM – 6:00 PM Ballroom A
Visualizing the Virus

Target audience: This session is directed to scientists and clinicians who are interested in current concepts of how the HIV viral particle is assembled and how it interacts with cellular proteins, particularly during entry. Learners will also learn about state-of-the-art technological approaches and breakthroughs that have enabled visualization and analysis of HIV virions and proteins in real time.

Level of knowledge: It is assumed that learners will have a basic understanding of the HIV virion components and virus life cycle.

Objectives: At the completion of the session, learners will be able to:

- Appreciate technological advances that are being applied to study HIV particles, viral proteins, and protein-protein interactions involved in viral entry
- Describe current views of how the HIV virion is assembled and how key cellular interactions contribute to infection and virus production
- Describe recent advances in structural biology that have enabled complex viral proteins to be visualized

Conveners

Hans-Georg Kräusslich, *University of Heidelberg, Heidelberg, Germany*
Eric O. Freed, *National Cancer Institute, Frederick, MD, United States*

- 111 An Ingenious Cloak for Subterfuge: The HIV Capsid Structure**
Angela M. Gronenborn
University of Pittsburgh, Pittsburgh, PA, United States
- 112 Structure of a Soluble, Cleaved HIV-1 Env Trimer and Its Interaction With Broadly Neutralizing Antibodies**
Ian A. Wilson
The Scripps Research Institute, La Jolla, CA, United States
- 113 Imaging the Molecular Dance of Single HIV-1 Env Molecules**
Walter H. Mothes
Yale University, New Haven, CT, United States

- 114 Kill HIV by Starvation: SAMHD1 as a Potent Viral Restriction Factor and a Master Regulator of Cellular dNTP Metabolism**
Yong Xiong
Yale University, New Haven, CT, United States

Session S6 Symposium

4:00 PM – 6:00 PM Room 304

Know Your Epidemic: From Data To Action

This session aims to inform the attendees of the value of data in furthering the understanding of the epidemiology of the HIV epidemic and the critical role that data and evidence can play in informing research as well as policy decisions regarding HIV. The availability of various population-level surveys and the wealth of other research findings allow for a more effective response to the HIV epidemic.

Target audience: This session is directed to clinicians, researchers and policy makers who are interested in use of data and evidence to inform their work

Level of knowledge: It is assumed that learners are familiar with the global HIV epidemic, basic epidemiology of HIV, and affected populations

Objectives: At the completion of the session, learners will be able to:

- Describe the complexity of the global epidemiology of HIV
- List available population surveys related to HIV
- Recognize the evolution of the HIV epidemic within subpopulations
- Identify ways in which data and evidence can be used to inform policy

Conveners

John Stover, *Futures Institute, Glastonbury, CT, United States*
Beatriz Grinsztejn, *Instituto de Pesquisa Clínica Evandro Chagas-Fiocruz, Rio de Janeiro, Brazil*

- 115 Population Surveys: What Do They Show?**
Peter D. Ghys
Joint United Nations Programme on HIV/AIDS (UNAIDS), Geneva, Switzerland
- 116 MSM in the UK: Prevention Effects of ART in Perspective**
Andrew Phillips
University College London, London, United Kingdom
- 117 Understanding Networks of HIV Transmission**
Stéphane Helleinger
Columbia University, New York City, NY, United States
- 118 From Evidence To Policy: Experience From Swaziland**
Velephi J. Okello
Swaziland National AIDS Programme, Mbabane, Swaziland

THURSDAY MARCH 6, 2014

Session PL5 Plenary

8:30 AM – 9:00 AM Auditorium

119 HIV-1 Infection and Type-1 Interferon

Michael H. Malim

King's College London, London, United Kingdom

Session PL6 Plenary

9:00 AM – 9:30 AM Auditorium

120 PEPFAR/Global Fund at 10 years: Past, Present, and Future

Stefano M. Bertozzi

University of California Berkeley School of Public Health, Berkeley, CA, United States

Session 0-9 Oral Abstracts

10:00 AM – 12:15 PM Room 312

Interferon and Antibody at the Interface of Innate and Adaptive Immunity To HIV

Moderators

Xueling Wu, Aaron Diamond AIDS Research Center, New York, NY, United States

David T. Evans, University of Wisconsin, Madison, WI, United States

121 Cryo-EM Structures of the HIV-1 Env Trimer Reveal the Full Extent of Neutralizing Antibody Epitopes

Andrew B. Ward¹, Dmitry Lyumkis¹, Natalia de Val¹, Jean-Philippe Julien¹, Albert Cupo², Per Johan Klasse², Rogier Sanders³, John Moore², Ian Wilson¹¹Integrative Structural and Computational Biology, The Scripps Research Institute, La Jolla, CA, United States; ²Weill Cornell Medical College, New York, NY, United States; ³Academic Medical Center, Amsterdam, Netherlands

122LB Immunogenicity of Cleaved, Soluble BG505 SOSIP.664 Native-Like Trimers in Rabbits

John P. Moore

Microbiology/Immunology, Weill Medical College, New York, NY, United States

123 Identification of a New Neutralization Target at the N262/N448 Glycosylation Sites On HIV-1 gp120

Xueling Wu¹, Tongqing Zhou², Ivelin S. Georgiev², Sijy O'Dell², Mark Louder², Dennis R. Burton³, Wayne C. Koff³, Martin Markowitz¹, Peter D. Kwong², John R. Mascola²¹Aaron Diamond AIDS Research Center, New York, NY, United States; ²Vaccine Research Center, Bethesda, MD, United States; ³International AIDS Vaccine Initiative, New York, NY, United States124 CD169 Mediates HIV-1 Evasion From Detection by α -gp120 Neutralizing Antibodies in Dendritic CellsHisashi Akiyama¹, Nora G. P. Ramirez¹, Manasa Gudheti², Suryaram Gummuluru¹¹Microbiology, Boston University School of Medicine, Boston, MA, United States; ²Vutara Inc., Salt Lake City, UT, United States

125 Tetherin Antagonism by Vpu Protects HIV-Infected Cells From ADCC

Juan F. Arias¹, Lisa N. Heyer², Benjamin von Bredow¹, Kim L. Weisgrau³, Brian Moldt⁴, Dennis R. Burton⁴, Eva G. Rakasz³, David T. Evans¹¹Department of Pathology and Laboratory Medicine, University of Wisconsin, Madison, WI, United States; ²Department of Microbiology and Immunobiology, Harvard Medical School, Southborough, MA, United States; ³Wisconsin National Primate Research Center, University of Wisconsin, Madison, WI, United States; ⁴Department of Immunology and Microbial Science, The Scripps Research Institute, La Jolla, CA, United States

126 HIV Nef and Vpu Protect HIV-infected CD4+ T Cells From ADCC Through Downmodulation of CD4 and BST2

Tram N. Q. Pham¹, Sabelo Lukhele¹, Fadi Hajjar¹, Jonathan Richard¹, Rajesh M. Valanparambil², Halima Medjahed³, Mathieu Coutu³, Andres Finzi^{3,4}, Eric A. Cohen^{1,4}¹Institut de Recherches Cliniques de Montréal, Montreal, QC, Canada; ²Department of Medicine, McGill University, Montreal, QC, Canada; ³Centre de Recherche du Centre Hospitalier de l'Université de Montréal, Montreal, QC, Canada; ⁴Department of Microbiology, Infectiology and Immunology, Université de Montréal, Montreal, QC, Canada

127 Identification of HIV-infected CD4+ T Cells Using HIV RNA and Broadly Neutralizing Antibodies

Joseph P. Casazza¹, Alexander C. Vostal¹, Irene R. Primmer¹, David R. Ambrozak¹, Amarendra Pegu², Eli Boritz³, Mark K. Louder², Daniel C. Douek³, John R. Mascola³, Richard A. Koup¹¹Immunology Laboratory, NIAID, Bethesda, MD, United States; ²Virology Laboratory, NIAID, Bethesda, MD, United States; ³Human Immunology Section, NIAID, Bethesda, MD, United States

128 Type I Interferon Signaling Is Critical for Early Control of Immune System Damage

Netanya G. Sandler¹, Steven E. Bosinger², Jacob D. Estes³, Eli Boritz², Brandon F. Keele³, Jerome A. Langer³, Jeffrey D. Lifson³, Srinil S. Rao⁴, Gideon Schreiber⁵, Daniel C. Douek⁴¹Internal Medicine, University of Texas Medical Branch at Galveston, Galveston, TX, United States; ²Yerkes NHP Genomics Laboratory, Yerkes National Primate Research Center, Emory University, Atlanta, GA, United States; ³Leidos Biomedical Research, Inc, AIDS and Cancer Virus Program, Frederick National Laboratory for Cancer Research, Frederick, MD, United States; ⁴NIAID Vaccine Research Center, National Institutes of Health, Bethesda, MD, United States; ⁵Pharmacology, Robert Wood Johnson Medical School, Rutgers University, Piscataway, NJ, United States; ⁶Biological Chemistry, Weizmann Institute of Science, Rehovot, Israel129 miR-422a: A Solitary MicroRNA Biomarker of Interferon- α Anti-HIV-1 Activity In VivoMohamed Abdel-Mohsen^{1,2}, Xutao Deng², Teri Liegler¹, Andri Rauch³, Bruno Ledergerber⁴, Huldrych F. Günthard⁵, Joseph K. Wong^{1,6}, Satish K. Pillai^{1,2}¹Medicine, University of California, San Francisco, San Francisco, CA, United States; ²Blood Systems Research Institute, San Francisco, CA, United States; ³Infectious Diseases, Bern University Hospital and University of Bern, Bern, Switzerland; ⁴Infectious Diseases and Hospital Epidemiology, University Hospital Zurich, University of Zurich, Zurich, Switzerland

Switzerland;²Division of Infectious Diseases and Hospital Epidemiology, University Hospital Zurich, University of Zurich, Zurich, Switzerland;⁴Medicine, San Francisco Veterans Affairs Medical Center, San Francisco, San Francisco, CA, United States

Session 0-10 Oral Abstracts

10:00 AM – 12:00 PM **Ballroom B/C**

CV and Other Complications

Moderators

Jason V. Baker, University of Minnesota, Hennepin County Medical Center, Minneapolis, MN, United States

Cristina Mussini, University of Modena and Reggio Emilia, Modena, Italy

130 Increased Arterial Inflammation Relates to High-Risk Coronary Plaque Morphology in HIV+ Patients

Ahmed Tawakol¹, **Markella V. Zanni**², Janet Lo², Ezinne J. Ihenachor², Allison Han², Megan MacNabb¹, Bryan Wal², Udo Hoffmann³, Suhny Abbara³, Steven Grinspoon²

¹Cardiology Division, Massachusetts General Hospital/Harvard Medical School, Boston, MA, United States; ²Program in Nutritional Metabolism, Massachusetts General Hospital/Harvard Medical School, Boston, MA, United States; ³Cardiovascular Radiology Division, Massachusetts General Hospital/Harvard Medical School, Boston, MA, United States

131 Arterial Inflammation in HIV as Measured by FDG-PET/CT Is Associated With Splenic Activity

Priscilla Y. Hsue¹, Megan MacNabb², Rebecca Kaplan², Elaine Nitta¹, Steven Deeks³, Jeffrey Martin³, Miguel Pampaloni³, Peter Ganz¹, Ahmed Tawakol²

¹Cardiology, University of California San Francisco, San Francisco, CA, United States; ²Massachusetts General Hospital, Boston, MA, United States; ³University of California San Francisco, San Francisco, CA, United States

132 Replicative Senescence of Circulating Osteogenic Cells and Low BMD in Perinatally Infected Men

John S. Manavalan, Stephen Arapidi, Jayesh Shah, Chiyuan A. Zhang, Marc Foca, Natalie Neu, Stavroula Kousteni, **Michael T. Yin**

Columbia University Medical Center, New York, NY, United States

133 High-Dose Vitamin D and Calcium Attenuates Bone Loss With ART Initiation: Results From ACTG A5280

Edgar T. Overton¹, Ellen S. Chan², Todd T. Brown³, Pablo Tebas⁴, Grace A. McComsey², Kathleen M. Melbourne⁵, Andrew Napoli⁷, Royce Hardin⁸, Heather J. Ribaud², Michael T. Yin⁹, ACTG A5280 Study Team

¹University of Alabama School of Medicine, Birmingham, AL, United States; ²Harvard School of Public Health, Boston, MA, United States; ³The Johns Hopkins University, Baltimore, MD, United States; ⁴Hospital of the University of Pennsylvania, Philadelphia, PA, United States; ⁵Pediatrics, Case Western Reserve University, Cleveland, OH, United States; ⁶Gilead Sciences, Foster City, CA, United States; ⁷Virology, Bristol-Myers Squibb, Plainsboro, NJ, United States; ⁸Duke University Community Advisory Board, Durham, NC, United States; ⁹Harvard School of Public Health, New York, NY, United States

134 Rosuvastatin Improves Hip Bone Mineral Density But Worsens Insulin Resistance

Grace A. McComsey¹, Ying Jiang¹, Kristine M. Erlandson², Sara M. Debanne¹

¹Case Western Reserve University, Cleveland, OH, United States; ²University of Colorado Anschutz Medical Campus, Aurora, CO, United States

135 Effects of Tesamorelin On Hepatic Fat in HIV Patients: A Randomized, Placebo-Controlled Trial

Takara Stanley, Meghan Feldpausch, Jinhee Oh, Karen Branch, Martin Torriani, Steven Grinspoon

Massachusetts General Hospital, Boston, MA, United States

Session 0-12 Oral Abstracts

10:00 AM – 12:15 PM **Ballroom A**

Persistence

Moderators

Nicolas Chomont, Vaccine and Gene Therapy Institute of Florida, Port St. Lucie, FL, United States

Mary Kearney, National Cancer Institute, Frederick, MD, United States

136LB Early Treatment in Acute SIV Infection Limits the Size and Distribution of the Viral Reservoir

Afani A. Okoye¹, Mukta Rohankhedkar¹, Matthew Reyes¹, Joseph Clock¹, Derick Duell¹, Yoshinori Fukazawa¹, Richard Lum¹, Haesun Park¹, Jeffrey D. Lifson², Louis J. Picker¹

¹Vaccine & Gene Therapy Institute and the Oregon National Primate Research Center, Oregon Health & Science University, Beaverton, OR, United States; ²Frederick National Laboratory for Cancer Research, SAIC-Frederick, Inc, Frederick, MD, United States

137 CD4 T-Cell Subset Composition of HIV Reservoirs in Gut, Lymphnode, and Blood During HAART

Steven A. Yuki^{1,2}, Teri Liegler¹, Mohamed Abdel-Mohsen¹, Elizabeth Sinclair¹, Hiroyu Hatano¹, Frederick Hecht¹, Ma Somsouk¹, Sarah Palmer^{3,4}, Steven G. Deeks³, **Joseph K. Wong**^{1,2}

¹University of California San Francisco, San Francisco, CA, United States; ²San Francisco Veterans Affairs Medical Center, San Francisco, CA, United States; ³Karolinska Institute, Stockholm, Sweden; ⁴Westmead Millennium Institute for Medical Research, Sydney, Australia

138 Proliferation of Cells With HIV Integrated Into Regulatory Genes Is a Mechanism of Persistence

Thor A. Wagner^{1,2}, Sherry McLaughlin^{1,2}, Kavita Garg³, Hannah Huang², Sheila Styrchak², James I. Mullins¹, Lisa M. Frenkel^{1,2}

¹University of Washington, Seattle, WA, United States; ²Seattle Children's Hospital, Seattle, WA, United States; ³Fred Hutchinson Cancer Research Center, Seattle, WA, United States

139 Novel Ex Vivo Approaches Distinguish Effective and Ineffective Drugs for Reversing Latency In Vivo

Gregory M. Laird, C. Korin Bullen, Janet D. Siliciano, Robert F. Siliciano

The Johns Hopkins University School of Medicine, Baltimore, MD, United States

140 Effect of Vorinostat On Host Gene Expression in HIV Infected Patients On Antiretroviral Therapy

Khader Gheim¹, Jeff Ahlers¹, Julian Elliot², Miranda Smith², Fiona Wightman³, Ajantha Solomon², Miles Prince³, Steven Deeks³, Rafick Sekaly¹, Sharon Lewin²

¹VTGI-FL, Port Saint Lucie, FL, United States; ²Department of Infectious Diseases, Monash University, Melbourne, Australia; ³Department of Hematology, Peter Macallum Hospital, Melbourne, Australia; ⁴Department of Medicine, University of California, San Francisco, CA, United States

141 Cyclophosphamide Enhances SB-728-T Engraftment To Levels Associated With HIV-RNA Control

Gary Blick¹, Jay Lalezari², Ricky Hsu³, Edwin DeJesus⁴, Trevor Hawkins⁵, Ronald Mitsuyasu⁶, Steven Deeks⁷, Gary Lee⁸, Winson Tang⁹, Dale Ando⁹

¹Circle Care Center, Norwalk, CT, United States; ²Quest Clinical Research, San Francisco, CA, United States; ³Private Practice, New York, NY, United States; ⁴Orlando Immunology Center, Orlando, FL, United States; ⁵Southwest Care, Santa Fe, NM, United States; ⁶UCLA David Geffen School of Medicine, Los Angeles, CA, United States; ⁷UCSF School of Medicine, San Francisco, CA, United States; ⁸Sangamo BioSciences, Richmond, CA, United States

142 Stimulation of Subdominant CTL Response Is Required for the Elimination of HIV-1 Latent Reservoir

Kai Deng¹, Mihaela Perteau², Liang Shan³, Robert Siliciano⁴
The Johns Hopkins University, Baltimore, MD, United States

143 Dendritic Cell-Based HIV Therapeutic Vaccine Increases Residual Viremia in Individuals On ART

Bernard J. Macatangay¹, Mariam B. Lawani¹, Sharon A. Riddler¹, Nicole D. Wheeler¹, Margaret A. Bedison¹, Charles R. Rinaldo², John W. Mellors¹

¹Medicine, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ²Infectious Disease and Microbiology, University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States

144LB HIV-1 Rebound Following Allogeneic Stem Cell Transplantation and Treatment Interruption

Timothy J. Henrich¹, Emily Hanhauser², Michael N. Sirignano³, Jonathan Z. Li¹, Mathias Lichterfeld⁴, Francisco M. Marty¹, Philippe Armand⁵, Robert J. Soiffer⁶, Marcus Altfeld³, Daniel R. Kuritzkes¹

¹Brigham and Women's Hospital, Harvard Medical School, Cambridge, MA, United States; ²Brigham and Women's Hospital, Cambridge, MA, United States; ³Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States; ⁴Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States; ⁵Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, United States

Session 0-13 Oral Abstracts

10:00 AM – 12:15 PM Room 304

Antiretroviral Scale-Up in Sub-Saharan Africa: Challenges and Opportunities

Moderators

Joep M.A. Lange, Academic Medical Center, University of Amsterdam, Amsterdam, The Netherlands

Harriet Nuwagaba-Biribonwoha, International Center for AIDS Care and Treatment Programs (ICAP) in Swaziland, Columbia University Mailman School of Public Health, Mbabane, Swaziland

145 Age-Disparate Relationships and HIV Incidence Amongst Rural South Africa Women

Guy Harling¹, Marie-Louise Newell^{2,3}, Frank Tanser³, Ichiro Kawachi⁴, SV Subramanian⁴, Till Bärnighausen^{1,3}

¹Global Health and Population, Harvard School of Public Health, Boston, MA, United States; ²University of Southampton, Southampton, United Kingdom; ³Africa Centre for Health and Population Studies, Mtubatuba, South Africa; ⁴Social and Behavioral Sciences, Harvard School of Public Health, Boston, MA, United States

146 Introduction of HIV into Stable Heterosexual Couples in Rakai, Uganda Before and After ART

Mary K. Grabowski¹, Justin Lessler¹, Fred Nalugoda², Steve J. Reynolds^{3,4}, Robert Ssekubugu⁵, Xiangrong Kong¹, Godfrey Kigozi⁶, Maria Wawer^{1,5}, David Serwadda^{5,6}, Ronald H. Gray^{1,5}

¹Epidemiology, The Johns Hopkins University, Baltimore, MD, United States; ²Epidemiology, Rakai Health Sciences Program, Kasisizo, Uganda; ³Medicine, The Johns Hopkins University, Baltimore, MD, United States; ⁴National Institutes of Health, Bethesda, MD, United States; ⁵Rakai Health Sciences Program, Kasisizo, Uganda; ⁶University of Makerere, Kampala, Uganda

147 One Year Outcomes Following Community-Based HIV Self-Testing: A Prospective Study in Malawi

Augustine T. Choko¹, Peter MacPherson^{1,2}, Emily L. Webb³, Helena Ball³, Rodrick Sambakunsi¹, Aaron Mdofo¹, Simon D. Makombe⁴, Nicola Desmond^{1,2}, Richard Hayes³, Elizabeth L. Corbett^{1,3}

¹Malawi Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi; ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom; ³London School of Hygiene & Tropical Medicine, London, United Kingdom; ⁴HIV Unit, Ministry of Health, Lilongwe, Malawi

148 Community HIV Testing and Linkage To Care Reduces Population Viral Load in South Africa and Uganda

Ruanne V. Barnabas^{1,2}, Heidi van Rooyen³, Elioda Tumwesigye⁴, Meighan Krows¹, Pam Murnane¹, Hilton Humphries³, Bosco Turyamureeba⁴, James P. Hughes^{2,5}, Jared Baeten⁶, Connie Celum⁶

¹Global Health and Medicine, University of Washington, Seattle, WA, United States; ²Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ³HIV/AIDS, STIs and Tuberculosis (HAST) Programme, Human Sciences Research Council, Sweetwaters, South Africa; ⁴Integrated Community Based Initiatives, Kabwohe, Uganda; ⁵Global Health and Epidemiology, University of Washington, Seattle, WA, United States; ⁶Global Health, Epidemiology and Medicine, University of Washington, Seattle, WA, United States

149 Enhanced HIV Surveillance To Evaluate the National Response To HIV/AIDS in Kenya

William Maina¹, Davies Kimanga¹, Ibrahim Mohammed¹, Mamo Umuro², Macdonald Obudho³, George Kichamu⁴, Patrick Mureithi⁵, Willis Akhwale⁶, Kevin M. De Cock⁷, Andrea A. Kim¹

¹National AIDS and STI Control Programme, Ministry of Health, Nairobi, Kenya; ²National Public Health Laboratory Services, Ministry of Health, Nairobi, Kenya; ³Kenya National Bureau of Statistics, Nairobi, Kenya; ⁴National Council for Population and

Development, Nairobi, Kenya;³National AIDS Control Council, Nairobi, Kenya;⁴Ministry of Health, Nairobi, Kenya;⁵Division of Global HIV/AIDS-Kenya, US Centers for Disease Control and Prevention, Nairobi, Kenya

150 Unequal Benefits From ART: A Growing Male Disadvantage in Life Expectancy in Rural South Africa

Till Barnighausen^{1,2}, Abraham J. Herbst², Frank Tanser², Marie-Louise Newell^{2,3}, Jacob Bor^{2,4}
¹Global Health and Population, Harvard School of Public Health, Boston, MA, United States;²Africa Centre for Health and Population Studies, Mtubatuba, South Africa;³University of Southampton, Southampton, United Kingdom;⁴Department of International Health, Boston University School of Public Health, Boston, MA, United States

151 A New Paradigm for Evaluating the HIV Care Cascade

Margaret L. McNairy, Matthew Lamb, Batya Elul, Elaine Abrams, Wafaa El-Sadr, The Identifying Optimal Models of HIV Care in Africa Study
 ICAP Columbia University, New York, NY, United States

152LB Moderate HIV Incidence and High ART Coverage in Rural Kwazulu-Natal: First Population-Based Survey

Helena Huerga¹, Médecins Sans Frontières, Adrian Puren², Malika Bouhenia¹, Jihane Ben Farhat¹, Alex Welte³, Lubbe Wiesner⁴, David Maman¹, Jean-François Etard^{1,5}
¹Epicentre, Paris, France;²National Institute for Communicable Diseases of the NHLS, Johannesburg, South Africa;³South African DST/NRF Centre of Excellence in Epidemiological Modelling and Analysis (SACEMA), Stellenbosch, South Africa;⁴Division of Clinical Pharmacology, Cape Town, South Africa;⁵Institut de Recherche pour le Développement, Montpellier, France

Session TD11 Themed Discussion

1:30 PM – 2:30 PM Room 309

Kaposi Sarcoma

Discussion Leader

Thomas S. Uldrick, National Cancer Institute, Bethesda, MD, United States

709 Guidelines On Kaposi's Sarcoma Treatment: Results From Two Cochrane Systematic Reviews

Esther E. Freeman¹, Charles Okwundu², Oluwatoyin Gbabe³, Miriam Laker⁴, Philippa Easterbrook⁵, Toby Maurer⁶, Jeffrey Martin⁴

¹Department of Dermatology, Harvard Medical School, Massachusetts General Hospital, Boston, MA, United States;²Centre for Evidence-Based Health Care, Faculty of Medicine and Health Sciences, Stellenbosch University, Tygerberg, South Africa;³Centre for Evidence-Based Health Care, Faculty of Health Sciences, Stellenbosch University, Tygerberg, South Africa;⁴Department of Epidemiology and Biostatistics, University of California at San Francisco, San Francisco, CA, United States;⁵HIV Department, World Health Organization, Geneva, Switzerland;⁶Department of Dermatology, University of California at San Francisco, San Francisco, CA, United States

711 Kaposi Sarcoma in the Era of Combination Antiretroviral Therapy

Natascha Wyss, Matthias Egger, Julia Bohlius, Malignancy Working Group for COHERE in EuroCoord
 Institute of Social and Preventive Medicine, University of Bern, Bern, Switzerland

710 Randomized Trial of Protease Inhibitor-Based Antiretroviral Therapy for Kaposi Sarcoma in Africa

Jeffrey Martin¹, Miriam Laker-Oketta^{1,2}, Victoria Walusansa³, Jackson Orem³, John Bennett¹, Adrienne Mocello¹, Toby Maurer¹, Peter Hunt¹, Andrew Kambugu², Edward Mbidde^{2,4}
¹University of California San Francisco, San Francisco, CA, United States;²Infectious Diseases Institute, Kampala, Uganda;³Uganda Cancer Institute, Kampala, Uganda;⁴Uganda Virus Research Institute, Entebbe, Uganda

708 The Effect of Protease Inhibitor Use On Kaposi Sarcoma Incidence in a cART-Experienced Cohort

Elizabeth Chiao, Marc Kowalkowski
 Baylor College of Medicine, Houston, TX, United States

714 Indoleamine 2,3-Dioxygenase (IDO) Activity as a Determinant of Kaposi Sarcoma in Africa

Helen Byakwaga^{1,2}, Peter W. Hunt¹, Miriam Laker-Oketta^{1,3}, David V. Glidden¹, Yong Huang¹, Mwebesa Mwebesa², Victoria Walusansa⁴, David R. Bangsberg⁵, Edward Mbidde³, Jeffrey N. Martin¹
¹University of California San Francisco, San Francisco, CA, United States;²Mbarara University of Science and Technology, Mbarara, Uganda;³Infectious Diseases Institute, Kampala, Uganda;⁴Uganda Cancer Institute, Kampala, Uganda;⁵Harvard Medical School, Massachusetts General Hospital, Center for Global Health, Boston, MA, United States

Session TD12 Themed Discussion

1:30 PM – 2:30 PM Ballroom A

Pulmonary Complications of HIV Infection

Discussion Leader

Marshall J. Glesby, Weill Cornell Medical College, New York, NY, United States

775 HIV Infection and Related Biomarkers Are Independent Risk Factors for Radiographic Emphysema

Engi F. Attia¹, Matthew B. Goetz², Maria C. Rodriguez-Barradas³, David Rimland⁴, Sheldon T. Brown⁵, Guy Soo Hoo⁶, Joon Kim⁷, Cherry Wongtrakool⁸, Kathleen Akgun⁹, Kristina Crothers¹
¹Medicine, University of Washington, Seattle, WA, United States;²Medicine, West Los Angeles Veterans Affairs Medical Center and David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA, United States;³Medicine, Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine, Houston, TX, United States;⁴Medicine, Atlanta Veterans Affairs Medical Center and Emory University, Atlanta, GA, United States;⁵Medicine, James J. Peters Veterans Affairs Medical Center and Icahn School of Medicine at Mt. Sinai, Bronx and NYC, NY, United States;⁶Medicine, West Haven Veterans Affairs Medical Center and Yale University, West Haven, CT, United States

776 Factors Associated With Chronic Obstructive Pulmonary Disease in a High-Risk HIV-Infected Cohort

Alain Makinson¹, Maurice Hayot², Sabrina Eymard-Duvernay³, François Raffi⁴, Laurence Thirard⁵, Fabrice Bonnet⁶, Pierre Tattevin⁷, Sophie Abgrall⁸, Jacques Reynes¹, Vincent Le Moing¹, ANRS EP48 HIV CHEST Study Team

¹Infectious and Tropical Diseases Department, University Hospital Montpellier 1, UMI 233, Montpellier, France; ²Department of Clinical Physiology, INSERM U1046, University Hospital Montpellier, Montpellier, France; ³UMI 233, IRD, University Montpellier 1, Montpellier, France; ⁴Infectious and Tropical Diseases Department, Nantes University Hospital, Nantes, France; ⁵Tourcoing University Hospital, Tourcoing, France; ⁶Internal Medicine and Infectious Diseases Department, University Hospital Bordeaux, INSERM U897, Bordeaux, France; ⁷Infectious Diseases and ICU, Pontchaillou University Hospital, Rennes, France; ⁸Infectious and Tropical Diseases Department, Groupement Hospitalier Nord, Bobigny, France

773 HIV Infection Increases Risk of Acute Exacerbations of COPD

Allison A. Lambert, Gregory D. Kirk, Jacquie Astemborski, Shruti H. Mehta, M. Bradley Drummond
The Johns Hopkins University, Baltimore, MD, United States

774 Association of HIV Infection and Immune Activation With Decline in Lung Function

Kristina Crothers¹, Carla V. Rodriguez², Cherry Wongtrakool², Guy Soo Hoo³, Joon Kim⁴, Sheldon T. Brown⁴, David Rimland², Maria C. Rodriguez-Barradas⁵, Matthew B. Goetz⁶, Amy C. Justice⁶
¹Department of Medicine, University of Washington, Seattle, WA, United States; ²Department of Medicine, Atlanta Veterans Affairs Medical Center and Emory University, Atlanta, GA, United States; ³Department of Medicine, West Los Angeles Veterans Affairs Medical Center and David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA, United States; ⁴Department of Medicine, James J. Peters Bronx Veterans Affairs Medical Center and Icahn School of Medicine at Mt Sinai, New York, NY, United States; ⁵Department of Medicine, Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine, Houston, TX, United States; ⁶Department of Medicine, Veterans Affairs Connecticut Healthcare System and Yale University, New Haven, CT, United States

Session TD13 Themed Discussion

1:30 PM – 2:30 PM **Room 304**

Incidence Assays

Discussion Leader

Christine M. Rousseau, Bill and Melinda Gates Foundation, Seattle, WA, United States

1006 Performance of the Limiting-Antigen Avidity EIA for Use With Dried Blood Spot Specimens

Erin K. Rottinghaus, Trudy Dobbs, Bharat S. Parekh, Yen T. Duong
Centers for Disease Control and Prevention, Atlanta, GA, United States

1008 Incorrect Identification of Recent HIV Infection Using a LAg-Avidity Assay in Adults in the US

Andrew F. Longosz¹, Ron Brookmeyer², Shruti Mehta³, Greg D. Kirk³, Joseph B. Margolick⁴, Joelle Brown⁵, Thomas C. Quinn^{1,6}, Susan H. Eshleman⁷, Oliver Laeyendecker^{1,6}

¹Laboratory of Immunoregulation, Division of Intramural Research, National Institutes of Health, Baltimore, MD, United States; ²Department of Biostatistics, University of California Los Angeles, Los Angeles, CA, United States; ³Department of Epidemiology, The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States; ⁴Department of Molecular Microbiology and Immunology, The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States; ⁵Department of Epidemiology, University of California Los Angeles, Los Angeles, CA, United States; ⁶Department of Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁷Department of Pathology, The Johns Hopkins University School of Medicine, Baltimore, MD, United States

1007 The Impact of HIV Subtype On Specificity of Cross-Sectional HIV Incidence Assays in Rakai, Uganda

Andrew F. Longosz¹, David Serwadda^{2,3}, Fred Nalugoda², Godfrey Kigozi³, Veronica Franco⁴, Ronald H. Gray^{3,5}, Thomas C. Quinn^{1,4}, Susan H. Eshleman⁴, Oliver Laeyendecker^{1,4}
¹NIH, National Institutes of Health, Baltimore, MD, United States; ²Makerere University School of Public Health, Kampala, Uganda; ³Rakai Health Sciences Program, Rakai, Uganda; ⁴The Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁵The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

1005 Independent Evaluation of Predicate Incidence Assays for HIV Surveillance

Reshma Kassarjee¹, Christopher Pilcher², Sheila Keating³, Shelley Facente², Matt Price⁴, Jeffrey Martin², Susan Little⁵, Alex Weller¹, Michael Busch³, Gary Murphy⁶, Consortium for the Evaluation and Performance of HIV Incidence Assays (CEPHIA)
¹The South African DST/NRF Centre of Excellence in Epidemiological Modelling and Analysis (SACEMA), Stellenbosch University, Stellenbosch, South Africa; ²University of California San Francisco, San Francisco, CA, United States; ³Blood Systems Research Institute, San Francisco, CA, United States; ⁴Department of Medical Affairs, International AIDS Vaccine Initiative (IAVI), New York City, NY, United States; ⁵Department of Medicine, University of California San Diego, La Jolla, CA, United States; ⁶Health Public England, London, United Kingdom

Session TD14 Themed Discussion

1:30 PM – 2:30 PM **Room 312**

What We Learn From Bone Marrow Transplants

Discussion Leader

Paula M. Cannon, University of Southern California, Los Angeles, CA, United States

418 Impact of Systemic Cytotoxic Chemotherapy for Malignancies On HIV-1 Reservoir Persistence

Timothy J. Henrich¹, Emily Hanhauser², Jonathan Z. Li¹, Andrea Heisey³, Jeremy S. Abramson³, Ayad Hamdan⁴, Philippe Armand⁵, Ann S. LaCasce⁶, Daniel R. Kuritzkes¹
¹Brigham and Women's Hospital, Harvard Medical School, Cambridge, MA, United States; ²Brigham and Women's Hospital, Cambridge, MA, United States; ³Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States; ⁴Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, United States; ⁵Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, United States

- 417 Dynamics of HSPC Repopulation in Nonhuman Primates Revealed by a Decade-Long Clonal Tracking**
Sangu Kim¹, Namshin Kim², Angela Presson¹, Dong Sung An¹, Robert E. Donahue³, Irvin S. Y. Chen¹
¹University of California, Los Angeles, Los Angeles, CA, United States; ²Korean Bioinformatics Center, Daejeon, Korea, Republic of; ³National Heart, Lung and Blood Institute, Bethesda, MD, United States
- 416 Targeting SIV Reservoirs via Autologous Hematopoietic Stem Cell Transplant in Rhesus Macaques**
Maud Mavigner¹, Benjamin Watkins^{2,3}, Benton O. Lawson¹, Ann Chahroudi^{1,2}, Leslie S. Kean^{2,3}, Guido Silvestri¹
¹Yerkes National Primate Research Center, Emory University, Atlanta, GA, United States; ²Department of Pediatrics, Emory University, Atlanta, GA, United States; ³Emory Transplant Center, Emory University, Atlanta, GA, United States
- 419 Modeling Functional Cure of HIV in Nonhuman Primates Using Gene-Modified Hematopoietic Stem Cells**
Hans-Peter Kiem¹, Christopher W. Peterson¹, Patrick M. Younan¹, Shiu-Lok Hu², Patricia Polacino², Michael Holmes³, Philip Gregory³, Jianbin Wang³
¹Transplantation Biology, Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ²University of Washington, Seattle, WA, United States; ³Sangamo Biosciences, Richmond, CA, United States

Session TD15 Themed Discussion

1:30 PM – 2:30 PM Room 311

CNS Viral Escape and Neuroinflammation in ART

Discussion Leaders

Dennis L. Kolson, University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA, United States

Scott L. Letendre, University of California San Diego, San Diego, CA, United States

- 447 CNS Outcomes of cART vs. cART plus Maraviroc and Raltegravir Intensification During Acute HIV**
Victor Valcour¹, Serena Spudich², Napaporn Sailasuta³, Sukalaya Lerdlum⁴, James L. K. Fletcher⁵, Eugene D. M. B. Kroon⁵, Peeriya Mangyu⁵, Bonnie Silke⁶, Jerome Kim⁶, Jintanat Ananworanich⁷, on behalf of the SEARCH 010/RV254 Study Group
¹Memory and Aging Center, UCSF, San Francisco, CA, United States; ²Neurology, Yale University, New Haven, CT, United States; ³Huntington Medical Research Institutes, Pasadena, CA, United States; ⁴Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ⁵SEARCH, The Thai Red Cross AIDS Research Center, Bangkok, Thailand; ⁶U.S. Military HIV Research Program, Walter Reed Army Institute of Research, Silver Springs, MD, United States; ⁷Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

- 442 HIV-1 RNA Detection in CSF in ART-Treated Subjects With Incomplete Viral Suppression in Plasma**
Sam Nightingale, the PARTITION Study Group
 Institute of Infection and Global Health, University of Liverpool, Liverpool, United Kingdom

- 443 CSF Viral Escape in Patients Without Neurological Disorders: Prevalence and Associated Factors**
Carmela Pinnetti¹, Patrizia Lorenzini¹, Federica Forbici¹, Adriana Ammassari¹, Raffaella Libertone¹, Maria Letizia Giancola¹, Maria Rosaria Capobianchi¹, Carlo Federico Perno², Andrea Antinori¹
¹National Institute for Infectious Disease, Rome, Italy; ²University of Rome, Rome, Italy
- 445 Cerebrospinal Fluid Viral Blips and Persistent Escape in HIV-Infected Patients On ART**
Arvid Eden¹, Lars-Magnus Andersson¹, Dietmar Fuchs², Lars Hagberg¹, Staffan Nilsson³, Bo Svennerholm¹, Aylin Yilmaz¹, Henrik Zetterberg¹, Magnus Gisslen¹
¹University of Gothenburg, Gothenburg, Sweden; ²Innsbruck Medical University, Innsbruck, Austria; ³Chalmers University of Technology, Gothenburg, Sweden
- 446 Mitochondrial DNA Is Associated With Inflammation and Neurocognitive Deficits in HIV Infection**
Josué Pérez-Santiago¹, Sanjay R. Mehta¹, Sara Gianella¹, Rachel D. Schrier¹, Mariana Chermer¹, Susanna R. Var¹, Tyler R. C. Day¹, Miguel Ramirez-Gaona², Davey M. Smith^{1,3}, Scott L. Letendre¹
¹Medicine, University of California San Diego, La Jolla, CA, United States; ²Bioinformatics, University of Alberta, Edmonton, AB, Canada; ³Veterans Administration San Diego Healthcare System, San Diego, CA, United States
- 444 Early Monocyte Inflammation Among Treatment-Naïve Acute HIV-Infected Thai Subjects**
Lishomwa C. Ndhlovu¹, Mary Margaret Byron¹, Guangxiang Zhang², Duangthathai Sutthichom³, Somprarthana Rattanamane³, Rapee Trichavaro⁴, Nittaya Phanuphak³, Victor Valcour⁵, Merlin Robb⁶, Jintanat Ananworanich⁷
¹Hawaii Center for AIDS, University of Hawaii, Honolulu, HI, United States; ²University of Hawaii, Honolulu, HI, United States; ³SEARCH, The Thai Red Cross AIDS Research Center, Bangkok, Thailand; ⁴Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand; ⁵University of California San Francisco, San Francisco, CA, United States; ⁶US Military HIV Research Program, Walter Reed Army Institute of Research, Silver Spring, MD, United States; ⁷SEARCH, HIV-NAT, The Thai Red Cross AIDS Research Center, Bangkok, Thailand

POSTER SESSIONS

2:30 PM–4:00 PM

(Use the Poster Abstract section of the Program at a Glance, page 37 to 106, for specific posters in each session)

- Session P-A6 HIV Entry**
Session P-A7 Factor Potpourri
Session P-B3 Viral Subtype: Expansion, Migration, and Recombination
Session P-C11 CD4/CD8, Aging, and Immune Senescence
Session P-C12 Mucosal CD4 and TH17 Cells
Session P-C13 In Vitro Studies
Session P-C14 Genomics and Endogenous Retroviruses
Session P-D5 Compartmentalization
Session P-D6 New Themes in Host Control

Session P-E6 Human Vaccine Trial Results
 Session P-E7 Immune Response To Infection
 Session P-F7 Effect of ART on Persistence
 Session P-F8 Immunology for Cure
 Session P-F9 Toward A Cure...
 Session P-G7 ART Effects on HAND and CNS Reservoirs
 Session P-G8 CNS Inflammation, Immune Activation, and HAND Biomarkers
 Session P-H4 New Clinical and Preclinical Formulations
 Session P-J1 RCTs in Second-Line ART and Virologic Failure
 Session P-J2 RCTs in First-Line ART in Treatment Naïve Patients
 Session P-J3 ART Simplification, Intensification, and Switch Studies
 Session P-K3 ART: Adherence and Retention
 Session P-K4 Second-Line ART
 Session P-K5 HIV-2
 Session P-L5 Laboratory Detection of Drug Resistance and Tropism
 Session P-L6 Cost Effectiveness Studies of ART and Drug Resistance Testing
 Session P-N6 Acute HCV Infection: Pathogenesis
 Session P-N7 HCV Infection and Cellular and Humoral Immune Responses
 Session P-N8 HCV-Related Outcomes: Cardiac and Non-Liver
 Session P-N9 HBV and HDV
 Session P-N10 HEV
 Session P-O5 Cervical Cancer, HPV, and HPV Vaccine
 Session P-O6 Anal Cancer and HPV
 Session P-P5 Antiretroviral Therapy, Lipids, and CVD
 Session P-P6 Statins and ARV Effects in HIV
 Session P-Q7 Renal Disease: ART, Genetic Factors, and Long-Term Outcomes
 Session P-Q8 Obesity: ART and Animal Models
 Session P-Q9 Genetic Factors and ART Outcomes
 Session P-Q10 ART and Suicidality
 Session P-R6 Cryptococcal Disease
 Session P-R7 Ols other than TB and Cryptococcal Disease
 Session P-S2 HIV in Women: Pregnancy, Progression, Pap, and Bones
 Session P-S3 Immune Mediators and Immune Activation in Women
 Session P-S4 Immune Response To Vaccination in HIV+ Women
 Session P-T7 Risk Factors for MTCT
 Session P-T8 PMTCT Approaches: Implementation and Outcome
 Session P-T9 ART Pharmacokinetics During Pregnancy and Breast Feeding

Session P-U6 Response To Early ART Initiation in Infants
 Session P-U7 Co-Infections and Treatment Responses in Children and Adolescents
 Session P-U8 Outcomes Among Adolescents – Perinatally and Behaviorally Acquired HIV Infection
 Session P-W7 Disease Progression/Mortality
 Session P-W8 Co-Morbidities
 Session P-W9 Transmission/Risk Factors

Session S7 Symposium

4:00 PM – 6:00 PM **Room 304**

Interferon: Whatever Turns You On

Target audience: This session is directed to basic, translational, and clinical researchers interested in the role played by mechanisms of antiviral innate immunity — and, specifically, the type I interferons — in HIV-infected individuals in both protecting against virus replication and potentially inducing immunopathology in the host.

Level of knowledge: It is assumed that learners are familiar with the basic aspects of virology, immunology, and pathogenesis of HIV infection and AIDS.

Objectives: At the completion of the session, learners will be able to:

- Recognize the potential antiviral as well as pro-inflammatory roles of type I IFNs during HIV infection
- Understand the role of type I IFNs in HIV transmission and pathogenesis
- Describe the similarities and differences of the role played by type I IFNs in HIV and HCV infections

Conveners

Nina Bhardwaj, Icahn School of Medicine at Mount Sinai, New York, NY, United States

Michael M. Lederman, Case Western Reserve University, Cleveland, OH, United States

- 154 **HIV-1 Evades Innate Immune Recognition Through Specific Co-Factor Recruitment**
Greg J. Towers
 University College London, London, United Kingdom
- 155 **Interferon Treatments for Chronic Hepatitis C**
Markus H. Heim
 University Hospital Basel, Basel, Switzerland
- 156 **Perturbing Interferon Signaling in SIV Infection**
Daniel C. Douek
 National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States
- 157 **Type 1 Interferon-Mediated Selective Pressure On HIV-1 Transmission**
Persephone Borrow
 University of Oxford, Oxford, United Kingdom

Session S8 Symposium

4:00 PM – 6:00 PM **Room 311**

The Road To Elimination: Preventing and Treating HIV Infection in Infants

Target audience: This session is directed to individuals interested in prevention of perinatal transmission and early antiretroviral therapy for HIV-exposed infants at high risk for perinatal transmission.

Level of knowledge: It is assumed that learners are familiar with pathophysiology of perinatal HIV transmission, approaches to prevention of infant infection and HIV management of pregnant and breast-feeding women. In addition, learners should have a basic understanding of manifestations and treatment of HIV infection during infancy and early childhood.

Objectives: At the completion of the session, learners will be able to:

- Describe the rationale for and implementation experience with the Option B+ approach to prevention of perinatal HIV transmission
- Identify short- and long-term effects of antiretroviral exposure during pregnancy and breast-feeding
- Recognize new approaches to early diagnosis and treatment of HIV-exposed and -infected newborns

Conveners

Dalton C. Wamalwa, *University of Nairobi, Nairobi, Kenya*

Cocoka N. Mnyani, *University of the Witwatersrand, Anova Health Institute, Johannesburg, South Africa*

- 158 **Treatment of Pregnant and Breast-Feeding Women: Evidence and Rationale for Option B+**
Saeed Ahmed

Baylor College of Medicine, Lilongwe, Malawi

- 159 **Achievements and Challenges With Option B+ Implementation in the Field To Date**
Edward Bitarakwate

Elizabeth Glaser Pediatric AIDS Foundation, Kampala, Uganda

- 160 **No Free Rides: Consequences of Fetal & Infant ARV Exposure Among Children Remaining HIV Uninfected**

Kathleen M. Powis

Harvard Medical School, Boston, MA, United States

- 161 **Treatment of HIV-Infected Newborns: Why, When, and What To Start?**

Ellen G. Chadwick

Northwestern University, Feinberg School of Medicine, Chicago, IL, United States

Session S9 Symposium

4:00 PM – 6:00 PM **Room 312**

Intimate Infections: What's Love Got To Do With It?

Target audience: This session is directed to clinicians and scientists interested in sexually transmitted infections affecting HIV-infected and -at risk persons.

Level of knowledge: It is assumed that learners are familiar with basic HIV epidemiology and sexually transmitted infections.

Objective: At the completion of the session, learners will be able to:

- Describe the epidemiology, clinical manifestations, association with HIV infection, and approaches to prevention and treatment of human papilloma virus (HPV), bacterial vaginosis (BV), meningococcus, and lymphogranuloma venereum (LGV)

Conveners

Christine Katlama, *Pitié-Salpêtrière Hospital, Paris, France*

Bernard Liautaud, *GHEKIO Centers, Port-au-Prince, Haiti*

- 162 **Oral Human Papillomavirus (HPV): Epidemiology and Role in Oropharyngeal Cancer**
Gypsyamber D'Souza

The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

- 163 **Bacterial Vaginosis**
Landon Myer

University of Cape Town, Cape Town, South Africa

- 164 **Outbreak of Invasive Meningococcal Disease Among Men Who Have Sex With Men — New York City, 2010-2013**

Alison Ridpath

New York City Department of Health and Mental Hygiene, New York, NY, United States

- 165 **Lymphogranuloma venereum**
David A. Lewis

National Institute for Communicable Diseases, Johannesburg, South Africa

POSTER ABSTRACTS

Session P-A1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A SAMHD1

- 166 CDK2 But Not CDK1 Phosphorylates SAMHD1 in Primary Macrophages**
Alba Ruiz¹, Eduardo Pauls¹, Ester Ballana¹, Albert Gubern², Mar Álvarez³, Luis Menéndez-Arias³, Francesc Posas², Bonaventura Clotet¹, José A. Esté¹
¹IrsiCaixa AIDS Research Institute, Hospital Germans Trias i Pujol, Universitat Autònoma de Barcelona, Badalona, Spain; ²Cell Signaling Unit, Departament de Ciències Experimentals i de la Salut, Universitat Pompeu Fabra, Parc de Recerca Biomèdica de Barcelona, Barcelona, Spain; ³Centro de Biología Molecular Severo Ochoa, Consejo Superior de Investigaciones Científicas, Universidad Autónoma de Madrid, Madrid, Spain

- 167LB p21 Regulates the HIV-1 Restriction Factor SAMHD1**
Alba Ruiz¹, Eduardo Pauls¹, Eva Riveira-Muñoz¹, Marc Permanyer¹, Roger Badia¹, Oliver T. Keppeler², Bonaventura Clotet¹, Ester Ballana¹, Jose Este¹
¹AIDS Research Institute - IrsiCaixa, Badalona, Spain; ²Institute for Medical Virology, Frankfurt, Germany

- 168 Inhibitors of CDK2 and CDK6 Block HIV-1 RT Through the Control of SAMHD1 Activity**
Ester Ballana, Roger Badia, Marc Permanyer, Eva Riveira-Muñoz, Bonaventura Clotet, Eduardo Pauls, José A. Esté
¹IrsiCaixa AIDS Research Institute, Badalona, Spain

- 169 Vpx Mediated Degradation of SAMHD1 Does Not Render HSCs More Permissive To Lentiviral Gene Transfer**
Duo Li¹, Erika Schlaepfer¹, Caitlin Knowlton², Baek Kim², Annette Audigé¹, Roberto Speck¹
¹Division of Infectious Diseases and Hospital Epidemiology, University Hospital of Zurich, Zurich, Switzerland; ²Center for Drug Discovery, Department of Pediatrics, Emory University, Atlanta, GA, United States

Session P-A2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A Integration/Nuclear Import

- 170 BET Proteins Mediate Integration Site Selection of MLV Much Alike LEDGF/p75 in HIV Integration**
Jan De Rijck¹, Christine de Kogel¹, Jonas Demeulemeester¹, Sofie Vets¹, Nirav Malani², Frederic Bushman², **Frauke Christ¹**, Rik Gijbsers¹, Zeger Debyser¹
¹Department of Pharmaceutical and Pharmacological Sciences, KU Leuven, Leuven, Belgium; ²Department of Microbiology, University of Pennsylvania, Philadelphia, PA, United States
- 171 Zinc-Finger Endonuclease Targeting LEDGF/p75 Inhibits HIV-1 Integration**
Roger Badia, Ester Ballana, Bonaventura Clotet, José Esté
¹IrsiCaixa AIDS Research Institute, Badalona, Spain
- 172 Small-Molecule Inhibits HIV-1 Replication by Interacting With HIV Capsid**
Atsuko Hachiya^{1,2}, Anna Gres¹, Karen A. Kirby², Michailidis Elfenherios², Masami Maejima¹, Wataru Suglura¹, Kyeongseun Lee³, Vineet KewalRamani³, Kamalendra Singh⁴, Stefan G. Sarafianos^{2,4}
¹Clinical Research Center, Laboratory of Infectious Diseases, National Hospital Organization, Nagoya Medical Center, Nagoya, Japan; ²C. S. Bond Life Sciences Center & Department of Molecular Microbiology and Immunology, University of Missouri School of Medicine, Columbia, MO, United States; ³HIV Drug Resistance Program, National Cancer Institute, Frederick, MD, United States; ⁴Department of Biochemistry, University of Missouri, Columbia, MO, United States

- 173 Resistance To HIV-1 Infection in PBLs From LGMD1F Patients Carrying a Genetic Defect in TNPO3**

Mercedes Bermejo¹, Mayte Coiras¹, Sara Rodríguez-Mora¹, Elena Mateos¹, Ramón Martí², Juan Vilchez², Antonio Andreu², Jose Alcamí¹
¹AIDS Immunopathology Unit, Instituto de Salud Carlos III, El Centro Nacional de Microbiología, Majadahonda, Madrid, Spain; ²Research Group on Neuromuscular and Mitochondrial Disorders, Vall d'Hebron Institut de Recerca, VHIR and CIBERER, Barcelona, Spain; ³Hospital Universitari i Politécnic La Fe, Department of Neurology, Universitat de Valencia, and CIBERNED, Department of Medicine, Valencia, Spain

- 174 HIV Integrase^{R263A/K264A} Is Defective for TRN-SR2/IN Interaction and Nuclear Import of the PIC**

Stephanie Dehouwer, Jonas Demeulemeester, Wannes Thys, Zeger Debyser, **Frauke Christ**
¹Department of Pharmaceutical and Pharmacological Sciences, KU Leuven, Leuven, Belgium

Session P-A4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A Late Events in HIV Replication

- 175 SHAPE-Directed Discovery of a Novel Structure in the HIV-1 RNA Polyadenylation Signal**

Nathan A. Siegfried¹, Steven Busan¹, Gregory M. Rice¹, Christine E. Hajdin¹, **Julie A. E. Nelson²**, Kevin M. Weeks¹
¹Chemistry, Univ of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²UNC Center for AIDS Research and Microbiology & Immunology, Univ of North Carolina at Chapel Hill, Chapel Hill, NC, United States

- 176 HIV-1 Assembly On Intracellular Plasma Membrane-Connected Compartments of Human Macrophages**

David O. Nkwe, Annegret Pelchen-Matthews, Mark Marsh
¹Laboratory for Molecular Cell Biology, University College London, London, United Kingdom

- 177 LEDGIN (ALLINI) Disruption of HIV-1 Assembly Does Not Involve LEDGF/p75**

Hind J. Fadel¹, James Morrison¹, Dyana Saenz¹, Stephen C. Ekker², James R. Fuchs³, Mamuka Kvaratskhelia³, Eric M. Poeschla¹
¹Division of Infectious Diseases & Department of Molecular Medicine, Mayo Clinic, Rochester, MN, United States; ²Department of Biochemistry and Molecular Biology, Mayo Clinic, Rochester, MN, United States; ³Ohio State University Center for Retrovirus Research, Columbus, OH, United States

- 178 Characterization of the Interaction Between Staufen-1 With HIV-1 Rev and HERV-K(HML-2) Rec**

Katharina Fiddeke, Alexander Rohde, Kirsten Hanke, Julia Wamara, Oliver Hohn, **Norbert Bannert**
¹HIV and Other Retroviruses, Robert Koch Institute, Berlin, Germany

- 179 The Role of RNA Interference in HIV-1-Infected Primary Human Monocyte-Derived Macrophages**

Valentina Vongrad¹, Jochen Imig², Pejman Mohammadi³, Shivendra Kishore⁴, Lukasz Jaskiewicz², Mihaela Zavolan¹, Jonathan Hall², Niko Beerenwinkel⁵, Huldrych F Günthard¹, Karin J Metzner¹
¹Division of Infectious Diseases and Hospital Epidemiology, University Hospital Zurich, Zurich, Switzerland; ²Institute of Pharmaceutical Sciences, ETH Zurich, Zurich, Switzerland; ³ETH Zurich, D-BSSE, Basel, Switzerland; ⁴Computational and Systems Biology, University of Basel, Basel, Switzerland

- 180 Induced Maturation of HIV-1 Virions**

Barbara Mueller¹, Simone Mattei², Maria Anders³, John A. G. Briggs⁴, Hans-Georg Krausslich¹
¹Infectious Diseases, Virology, University of Heidelberg, Heidelberg, Germany; ²EMBL, Heidelberg, Germany

181 Interplay of Cholesterol and Env Protein in the Lytic Deformation of HIV-1 by Peptide Triazoles

R Venkat Kalyana Sundaram^{1,2}, Huiyuan Li³, Lauren Bailey⁴, A Rosemary Bastian^{2,5}, Steven Wrenn⁶, Cameron Abrams⁶, Irwin Chaiken¹

¹Biochemistry and Molecular Biology, Drexel University College of Medicine, Philadelphia, PA, United States; ²School of Biomedical Engineering, Science and Health Systems, Drexel University, Philadelphia, PA, United States; ³Shared Research Facility, West Virginia University, Morgantown, WV, United States; ⁴Biochemistry, Drexel University College of Medicine, Philadelphia, PA, United States; ⁵Biochemistry, Drexel University College of Medicine, Philadelphia, PA, United States; ⁶Chemical and Biological Engineering, Drexel University, Philadelphia, PA, United States

Session P-A5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Apobec, Apobec, Apobec

182 Characterizing Novel N-Terminal Domains of APOBEC3G

Meiling R. May¹, Ann M. Sheehy²

¹College of the Holy Cross, Worcester, MA, United States; ²Biology, College of the Holy Cross, Worcester, MA, United States

183 SLBP (Stem-Loop Binding Protein) Regulates the Expression of APOBEC3G

Ming Li, Lynne Tucker, Michelle Lally, Bharat Ramratnam
^{Alpert Medical School of Brown University, Providence, RI, United States}

184 Incomplete Apobec3G Neutralization by Vif Mutations Facilitates Evolution From CCR5 To CXCR4 Use

Claudia Alteri¹, Matteo Surdo¹, Patrizia Saccomandi¹, Fabio Continenza², Daniele Armenia¹, Luca Carloti¹, Anna Artese³, Francesca Ceccherini-Silberstein¹, Carlo Federico Perno^{1,2}, Valentina Svicher¹

¹Department of Experimental Medicine and Surgery, University of Rome Tor Vergata, Rome, Italy; ²Istituto Nazionale per le Malattie Infettive "Lazzaro Spallanzani", Rome, Italy; ³Department of Pharmacobiological Sciences, Magna Graecia University of Catanzaro, Roccella di Borgia (CZ), Italy

185 17 β -Estradiol Protects Primary Macrophages Against HIV Through Induction of IFN α and APOBEC3A

Carley Tasker¹, Jian Ding¹, Mirco Schmolke², Amariliz Rivera-Medina², Adolfo Garcia-Sastre², Theresa Chang¹

¹Department of Microbiology and Molecular Genetics, Rutgers Biomedical and Health Sciences, Newark, NJ, United States; ²Department of Microbiology, Mount Sinai School of Medicine, New York, NY, United States; ³Department of Medicine, Rutgers Biomedical and Health Sciences, Newark, NJ, United States

186 Nuclear Import of APOBEC3F-Labeled HIV-1 Preintegration Complexes

Ryan C. Burdick, Wei-Shau Hu, **Vinay K. Pathak**

^{HIV Drug Resistance Program, National Cancer Institute, Frederick, MD, United States}

187 Non-Integrating HIV-1 Is Sensitive To Inhibition by Target Cell Apobec3a

Carsten Münk¹, Aikaterini Krikoni¹, Wolfgang Goering², Andre Franken¹, Daniela Marino¹, Gerald G. Schumann³, Renate König⁴, Wolfgang A. Schulz², Dieter Häussinger¹

¹Clinic for Gastroenterology, Hepatology and Infectiology, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany; ²Clinic for Urology, Heinrich-Heine University Düsseldorf, Düsseldorf, Germany; ³Medical Biotechnology, Paul-Ehrlich-Institute, Langen, Germany; ⁴Host-Pathogen-Interaction, Paul-Ehrlich-Institute, Langen, Germany

188 Degradation of SAMHD1 Specifically Decreases the Efficacy of Thymidine HIV RT Analog Inhibitors

Ester Ballana, Gerard Terradas, Eva Riveira-Muñoz, Bonaventura Clotet, Eduardo Pauls, José A. Esté
^{IrsiCaixa AIDS Research Institute, Badalona, Spain}

188A Natural Resistance To HIV-1 by Select APOBEC3H Haplotypes

Eric W. Rensland¹, Judd F. Hultquist¹, Elizabeth M. Luengas¹, Rachel Prosser², Keith Henry², Michael Emerman³, Reuben S. Harris¹

¹Biochemistry, Molecular Biology, and Biophysics, University of Minnesota, Minneapolis, MN, United States; ²Hennepin County Medical Center, Minneapolis, MN, United States; ³Fred Hutchinson Cancer Research Center, Seattle, WA, United States

Session P-A6 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
HIV Entry

189 The Sphingosine-1-Phosphate Receptor 1 Dimerizes With CCR5 and Enhances HIV Infection

Charline Duquenne¹, Sandrine Gimenez¹, Adeline Guigues¹, Laurent Prézeau², Noellie Campos³, Jamal Tazi³, Pierre Corbeau¹, **Vincent François**¹

¹Institute of Human Genetics, CNRS, Montpellier, France; ²Institute of Functional Genomics, CNRS, Montpellier, France; ³Institute of Molecular Genetics, CNRS, Montpellier, France

190 Purinergic Receptor Antagonists as Potent Inhibitors of HIV-1 Infection by Blocking Early Entry

Talia H. Swartz, Anthony M. Esposito, Natasha D. Durham, Benjamin K. Chen
^{Icahn School of Mount Sinai, New York, NY, United States}

191 Optical Sorting of HIV-1 Reveal the Minimum Number of Spikes Required for Optimal Viral Infectivity

Wei Cheng
^{University of Michigan, Ann Arbor, MI, United States}

192 Application of an HIV Entry Assay To Identify HIV Target Cells in the Female Genital Tract

Vineet R. Joag
^{University of Toronto, Toronto, ON, Canada}

193 Early Non-Mac-Tropic HIV-1 R5 Envs Efficiently Trans-Infect T Cells and Infect Ectocervices

Paul J. Peters¹, Olivia O'Connell¹, Thomas Musich², Maria Paz Gonzalez-Perez¹, Tiffany Moore-Simas³, Cynthia Derdeyn⁴, Paul R. Clapham¹

¹Molecular Medicine, University of Massachusetts Medical School, Worcester, MA, United States; ²National Cancer Institute, Bethesda, MD, United States; ³Obstetrics & Gynecology, UMass Memorial Medical Center, Worcester, MA, United States; ⁴Emory Vaccine Center, Atlanta, GA, United States

194 Transmitter as Compared To Recipient Envelopes Confer Greater Replication and α 4 β 7 Utilization

Victor Pena-Cruz¹, Behzad Etemad¹, Nikolaos Chatziandreu¹, Shannon Stock², Steven J. Reynolds³, Oliver Layendecker⁴, Ronald H. Gray⁵, David Serwadda⁶, Thomas C. Quinn⁷, **Manish Sagar**¹

¹Boston University, Boston, MA, United States; ²College of the Holy Cross, Worcester, MA, United States; ³The Johns Hopkins University, Baltimore, MD, United States; ⁴Makerere University School of Public Health, Kampala, Uganda

195 Differences in HIV Receptor Activity of CXCR4 Isoforms: Consequences for X4 Strains Emergence

Charline Duquenne¹, Christina Psomas², Sandrine Gimenez¹, Marie-Josée Carles³, Claudine Barbuat⁴, Jean-Philippe Lavigne⁵, Albert Sotto⁴, Jacques Reynes⁶, **Vincent François**¹, Pierre Corbeau¹
¹Institute of Human Genetics, CNRS, Montpellier, France; ²Infectious Diseases, University Hospital, Montpellier, France; ³Microbiology, University Hospital, Nîmes, France; ⁴Infectious Diseases, University Hospital, Nîmes, France

196 Defining Interactions of HIV With Rectal Epithelial Barriers and Rectal Mucosa

Luis M. Barcena¹, Minh Dinh¹, Peter A. Anton², Thomas J. Hope¹
¹Northwestern University Feinberg School of Medicine, Chicago, IL, United States; ²UCLA, David Geffen School of Medicine, Los Angeles, CA, United States

Session P-A7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A

Factor Potpourri

197LB Platelet Factor 4 Oligomeric State Correlates With Antiviral Activity

Zahra F. Parker¹, Ann Rux², Fang-Hua Lee¹, Amber Riblett¹, Mortimer Poncz³, Bruce Sachais⁴, Robert Donats⁵
¹Microbiology, University of Pennsylvania, Philadelphia, PA, United States; ²Pathology, University of Pennsylvania, Philadelphia, PA, United States; ³Hematology, The Children's Hospital of Philadelphia, Philadelphia, PA, United States; ⁴Pathology and Laboratory Medicine, Hospital of the University of Pennsylvania, Philadelphia, PA, United States; ⁵Pathology and Laboratory Medicine, The Children's Hospital of Philadelphia, Philadelphia, PA, United States

198 CRM-1: A Critical Regulator of HIV Replication in a Quest Towards a Small Animal Model for HIV

Hila Elinav¹, Yuanfei Wu², Ayse Coskun², Katarzyna Hryckiewicz², Iris Kemler³, Yani Hu⁴, Bing Hao⁵, Choukri Ben Mamoun⁶, Eric Poeschla², Richard Sutton²

¹Clinical Microbiology and Infectious Diseases, Hadassah Hebrew University Medical Center, Jerusalem, Israel; ²Infectious Diseases, Yale University, New Haven, CT, United States; ³Department of Molecular Medicine, Mayo Clinic, Rochester, MN, United States; ⁴Infectious Diseases, Yale University, New Haven, CT, United States; ⁵Molecular, Microbial and Structural Biology, University of Connecticut Health Center, Farmington, CT, United States; ⁶Infectious diseases, Yale University, Jerusalem, CT, United States

199 Analyses of the Sequence-Function Relationships Among HIV-1 Vpr, SIvAgmVpr, and SIvMacVpr

Ana Beatriz DePaula-Silva, Patrick A. Cassidy, Vincence Planelles
 Pathology, University of Utah, Salt Lake City, UT, United States

200 Elevated Expression of Anti-HIV-1 Restriction Factors in Effector Memory CD4+ T Cells In Vivo

Mohamed Abdel-Mohsen¹, Xutao Deng², Rui Andre Saraiva Raposo¹, Teri Liegler¹, Elizabeth Sinclair¹, Rebecca Hohl¹, Douglas F. Nixon¹, Joseph K. Wong¹, Steven G. Deeks¹, Satish K. Pillai¹
¹University of California, San Francisco, San Francisco, CA, United States; ²Blood Systems Research Institute, San Francisco, CA, United States

201LB TRIM5alpha Determinants for the Activation of Innate Immunity

Marie-Edith Nepveu-Traversy, Lionel Berthou
 Medical Biology, UQTR, Trois-Rivières, QC, Canada

202 HIV-1 Vpu Antagonizes Macaque and Chimpanzee BST-2 Through Cytoplasmic Domain Interactions

Takeshi Yoshida^{1,2}, Yoshio Koyanagi³, Hirofumi Akari¹, Klaus Strebel¹
¹Center for Human Evolution Modeling Research, Primate Research Institute, Kyoto University, Inuyama, Japan; ²Laboratory of Molecular Microbiology, National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD, United States; ³Laboratory of Viral Pathogenesis, Institute for Virus Research, Kyoto University, Kyoto, Japan

203 Investigating the Requirement of a NOD-Like Receptor for Early HIV Replication

Manja Burggraf¹, Prashant Jain², Crystal Shih², Nicole Esly¹, John Marlett³, John A. Young³, Sumit K. Chanda², Renate Koenig¹
¹Host-Pathogen-Interactions, Paul-Ehrlich-Institute, Langen, Germany; ²Sanford-Burnham Medical Research Institute, La Jolla, CA, United States; ³The Salk Institute, La Jolla, CA, United States

204 ITIH4: A Cellular Factor Targeted by HIV-1 Vpr

Steven Santos¹, Yong-Hui Zheng², Michael Bukrinsky¹
¹The George Washington University, NW Washington, DC, United States; ²Michigan State University, East Lansing, MI, United States

Session P-B1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A

Transmission Networks

205 Ongoing HIV-1 Subtype B Transmission Networks in the Netherlands

Daniela Bezemer¹, Oliver Ratmann², Ard van Sighem¹, Bas E. Dutilh³, Nuno Faria⁴, Rob van den Hengel¹, Luuk Gras¹, Peter Reiss¹, Frank de Wolf², Christophe Fraser², ATHENA observational cohort
¹Research, HIV Monitoring Foundation, Amsterdam, Netherlands; ²Imperial College, London, United Kingdom; ³Centre for Molecular and Biomolecular Informatics, Nijmegen, Netherlands; ⁴University of Oxford, Oxford, United Kingdom

206 Using HIV Networks To Inform Real Time Prevention Interventions

Susan J. Little¹, Sergei L. K. Pond¹, Christy M. Anderson¹, Jason A. Young¹, Joel O. Wertheim¹, Sanjay R. Mehta¹, Susanne May², Davey M. Smith¹

¹Medicine, University of California San Diego, San Diego, CA, United States; ²Biostatistics, University of Washington School of Public Health, Seattle, WA, United States

207 Transmission Networks of HIV-1 Subtype B, CRF01_AE and CRF51_01B Among MSM in Singapore

Kim Tien Ng¹, Kah Ying Ng², Wei Xin Khong², Oliver Laeyendecker^{3,4}, Thomas C Quinn^{3,4}, Adeeba Kamarulzaman¹, Oon Tek Ng², Kok Keng Tee¹

¹Centre of Excellence for Research in AIDS (CERIA), Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; ²Institute of Infectious Disease and Epidemiology, Communicable Disease Centre, Tan Tock Seng Hospital, Novena, Singapore; ³Division of Infectious Diseases, The Johns Hopkins School of Medicine, Baltimore, MD, United States; ⁴Laboratory of Immunoregulation, Division of Intramural Research, National Institute of Allergy and Infectious Disease, National Institutes of Health, Baltimore, MD, United States

208 HIV-1 Phylogenetics and Phylogeography Among High-Risk and General Populations in Uganda

Gonzalo Yebra¹, Manon Ragonnet-Cronin¹, Deogratius Ssemwanga², Chris M. Parry³, Pontiano Kaleebu², Andrew J. Leigh Brown¹
¹Institute of Evolutionary Biology, University of Edinburgh, Edinburgh, United Kingdom; ²Research Unit on AIDS, MRC/Uganda Virus Research Institute, Entebbe, Uganda

209 Sustained Spread of HIV-1 Drug Resistance in Treatment-Naïve Patients in the United Kingdom

Jean L. Mbsia¹, Esther Fearnhill², David T. Dunn², Deenan Pillay³, David Asboe⁴, Patricia Anne Cane¹, on behalf of the UK HIV Drug Resistance Database

¹Virus Reference Department, Public Health England, London, United Kingdom; ²Medical Research Council Clinical Trials Unit, University College London, London, United Kingdom; ³Research Department of Infection, University College London, London, United Kingdom; ⁴Directorate of HIV Medicine and Sexual Health, Chelsea and Westminster Hospital, London, United Kingdom

210 Transmission Clustering Among Newly Diagnosed HIV+ Patients in Chicago, 2008 To 2011

Sarah Hoehnen¹, Anna Hottot², Audrey L. French¹, Stacey Kincaid³, David Barker¹, Ronald Lubelchek¹

¹Infectious Disease, Rush University Medical Center, Chicago, IL, United States; ²Chicago Developmental Center for AIDS Research, Chicago, IL, United States; ³Ruth M. Rothstein CORE Center, Chicago, IL, United States

211 Can Molecular HIV Surveillance Identify Groups To Prioritize for Prevention?

Alexandra M. Oster¹, Joel O. Wertheim², Angela L. Hernandez¹, Marie C. B. Ocfemia¹, Neeraja Saduvala¹, David Kim¹, H. I. Hall¹

¹Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States; ²ICF International and University of California, San Diego, CA, United States; ³Division of HIV/AIDS Prevention, ICF International, Atlanta, GA, United States

- 212 **Investigation of HIV Transmission Dynamics Reveals "Active" Clusters of Men Who Have Sex With Men**
Philip A. Chan¹, Austin Huang², Allison DeLong³, Joseph Hogan³, Marissa Reitsma¹, Marco Salemi⁴, Rami Kantor¹

¹Medicine, Brown University, Providence, RI, United States; ²Computer Science, Brown University, Providence, RI, United States; ³Center for Statistical Sciences, Brown University, Providence, RI, United States; ⁴Pathology, University of Florida, Gainesville, FL, United States

- 213 **HIV Transmission in the United States: The Roles of Risk Group, Race/Ethnicity, and Geography**

Alexandra M. Oster¹, Joel O. Wertheim², Angela L. Hernandez², Marie C. B. Ocfemia³, Neeraja Saduvalla³, David Kim¹, H. I. Hall¹

¹Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States; ²ICF International and University of California San Diego, San Diego, CA, United States; ³ICF International, Atlanta, GA, United States

- 214 **Risk Factor Predicts Geographic Spread Within New York City HIV-1 Transmission Network and Beyond**

Joel O. Wertheim¹, Sanjay R. Mehta¹, Sergii L. Kosakovsky Pond¹, Davey M. Smith¹, Lisa A. Forgiione², Lucia L. Torian²

¹University of California, San Diego, San Diego, CA, United States; ²New York City Department of Health and Mental Hygiene, New York, NY, United States

- 215 **Large MSM Group and Local Heterosexual Transmission Are Major Concerns in the HIV Epidemic in Japan**

Teichiro Shiino¹, Kenji Sadamasu², Junko Hattori³, Mami Nagashima⁴, Yasumasa Iwatani⁵, Yoshiyuki Yokomaku⁶, Wataru Sugura⁷

¹The Japanese Drug Resistance HIV-1 Surveillance Network; ²Infectious Diseases Surveillance Center, National Institute of Infectious Diseases, Tokyo, Japan; ³Tokyo Metropolitan Institute of Public Health, Tokyo, Japan; ⁴Clinical Research Center, Nagoya Medical Center, Nagoya, Japan

Session P-B2 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Application of NGS To Viral Profiling

- 216 **Full-Length HIV-1 Haplotype Reconstruction From Heterogeneous Virus Populations**

Armin Töpfer^{1,2}, Francesca Di Giallonardo^{3,4}, Melanie Rey⁵, Sandhya Prabhakaran⁶, Yannik Dupont⁷, Christine Leemann⁸, Huldrych F. Günthard⁹, Volker Roth¹⁰, Niko Beerenwinkel^{11,12}, Karin J. Metzner³

¹D-BSSE, ETH Zurich, Basel, Switzerland; ²SIB Swiss Institute of Bioinformatics, Basel, Switzerland; ³University of Zurich, Zurich, Switzerland; ⁴Life Science Zurich Graduate School, Zurich, Switzerland; ⁵University of Basel, Basel, Switzerland

- 217 **Limited HIV-1 Superinfection in Seroconvertors From the CAPRISA 004 Microbicide Trial**

Andrew Redd¹, Caroline Mullis², Daniel Sheward³, Carolyn Williamson³, Lise Werner⁴, Nigel Garrett⁴, Stephen Porcella⁵, Quarraisha Abdool Karim⁴, Thomas Quinn⁶, Salim Abdool Karim⁴, TRAPS Study Team

¹NAID, Baltimore, MD, United States; ²The Johns Hopkins, Baltimore, MD, United States; ³University of Cape Town, Cape Town, South Africa; ⁴CAPRISA, Durban, South Africa; ⁵NAID, Hamilton, MT, United States

- 218 **Analysis of PCR Bias Using Primer IDs and Illumina Sequencing of HIV RNA Populations**

Valerie F. Boltz¹, Wei Shao², Mary F. Kearney¹, John W. Mellors³, Frank Maldarelli¹, John M. Coffin⁴

¹Drug Resistance Program, National Cancer Institute, Frederick, MD, United States; ²Advanced Biomedical Computing Center, Leidos Biomedical Research, Inc, Frederick, MD, United States; ³Division of Infectious Disease, University of Pittsburgh, Pittsburgh, PA, United States; ⁴Department of Molecular Biology and Microbiology, Tufts University, Boston, MA, United States

- 219 **HIV Surveillance and Parallel Virome Analysis Using Unbiased Next-Generation Sequencing**

Ka-Cheung Luk¹, Michael Berg¹, Samia Nacache², Scot Federman², Charlotte Ngansop³, Dora Mbanya³, Lazare Kaptue⁴, Charles Y. Chiu², John Hackett¹

¹Abbott Diagnostics, Abbott Park, IL, United States; ²University of California, San Francisco, San Francisco, CA, United States; ³University of Yaounde, Yaounde, Cameroon; ⁴Université des Montagnes, Bangangte, Cameroon

- 220 **Primer ID Deep Sequencing of HIV-1 env Region To Reveal Genetic Structure of Viral Population**

Shuntai Zhou¹, Maria Bednar¹, Christa Sturdevant^{1,2}, Serena Spudich³, Richard Price⁴, Ronald Swanstrom^{1,5}

¹Lineberger Cancer Center, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²Department of Microbiology and Immunology, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ³Department of Neurology, Yale University, New Haven, CT, United States; ⁴Department of Neurology, University of California at San Francisco, San Francisco, CA, United States; ⁵UNC Center For AIDS Research, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ⁶Department of Biochemistry and Biophysics, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

- 221 **Using RNASeq To Characterize Viral Genetic Diversity in a Cohort of HIV-2 Monoinfected Individuals**

Katherine L. James¹, Louis-Marie Vindom¹, Thushan De Silva², Shokouh Makvandi-Nejad³, Stephen Taylor³, Hilton Whittle⁴, Tim Vincent⁵, Gilean McVean⁶, Sarah Rowland-Jones⁷

¹NDM, University of Oxford, Oxford, United Kingdom; ²University of Sheffield, Sheffield, United Kingdom; ³Weatherall Institute of Molecular Medicine, University of Oxford, Oxford, United Kingdom; ⁴London School of Hygiene and Tropical Medicine, London, United Kingdom; ⁵Medical Council Research Unit, Fajara, Gambia; ⁶Wellcome Trust Centre for Human Genetics, University of Oxford, Oxford, United Kingdom

- 222 **Next Generation Sequencing of Full-Length HIV-1 env During Primary Infection**

Melissa E. Laird¹, N. Lance Helper¹, Colleen Ludka², Michael Brown³, Stephen Espitia⁴, Yan Guo⁵, Douglas D. Richman⁴, Sergei Kosakovsky Pond¹, Ellen E. Paxinos², Davey M. Smith^{1,4}

¹University of California, San Diego, La Jolla, CA, United States; ²Applications and Collaborations, Pacific Biosciences, Menlo Park, CA, United States; ³Bioinformatics, Pacific Biosciences, Menlo Park, CA, United States; ⁴Veterans Affairs San Diego Healthcare System, San Diego, CA, United States

Session P-B3

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Viral Subtype: Expansion, Migration, and Recombination

- 223 **Spread of CRF33_01B and Emergence of Novel Recombinants Among People Who Inject Drugs in Malaysia**

Wei Zhen Chow¹, Lai Yee Ong¹, Hui Ting Cheong¹, Nur Ezreen Syafina¹, Maryam Nabil Al-Khannaq², Yutaka Takebe³, Clayton Koh¹, Haider Al-Darraj¹, Adebba Kamarulzaman⁴, Kok Keng Tee¹

¹Centre of Excellence for Research in AIDS (CERIA), Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; ²AIDS Research Center, National Institute of Infectious Diseases, Toyama, Shinkju-ku, Tokyo, Japan

- 224 **AH1 Detection Among People Who Inject Drugs in Russia Reveals the HIV-1 Transmission Bottleneck**

Elena Dukhovinnova¹, Alexey Masharsky^{2,3}, Sergei Verevchokin³, Olga Toussova^{3,4}, Andrey Shevchenko^{3,5}, David Montefiori⁶, Irving Hoffman⁷, William Miller⁸, Andrei Kozlov^{2,3}, Ronald Swanstrom^{1,9}

¹CFAR and Lineberger CCC, University of North Carolina, Chapel Hill, NC, United States; ²Saint Petersburg State University, Saint Petersburg, Russian Federation; ³the Biomedical Center, Saint Petersburg, Russian Federation; ⁴Pavlov State Medical University, Saint Petersburg, Russian Federation; ⁵Theodosius Dobzhansky Center for Genome Bioinformatics, Saint Petersburg, Russian Federation; ⁶Laboratory for AIDS Vaccine Research and Development, Duke University, Durham, NC, United States; ⁷Center for Infectious Diseases, University of North Carolina, Chapel Hill, NC, United States; ⁸Gillings School of Global Public Health, University of North Carolina, Chapel Hill, NC, United States; ⁹Department of Biochemistry and Biophysics, University of North Carolina, Chapel Hill, NC, United States

- 225 Migration of HIV-1 Subtypes in East Africa Is Associated With Proximity To Highway Corridor**
Nuno R. Faria¹, Kim C. E. Sigaloff², David A. M. C. van de Vijver³, Andrew J. Tatem⁴, Andrea C. Pineda⁵, Carole L. Wallis⁶, Marc A. Suchard⁷, Tobias F. Rinke de Wit⁸, Raph L. Hamers⁹, Philippe Lemey⁹, Nicaise Ndemi⁹
¹Department of Zoology, University of Oxford, Oxford, United Kingdom; ²Department of Global Health, PharmAccess Foundation, Academic Medical Center of the University of Amsterdam, Amsterdam, Netherlands; ³Department of Virology, Erasmus Medical Center, Rotterdam, Netherlands; ⁴Department of Geography and Environment, University of Southampton, Southampton, United Kingdom; ⁵Department of Microbiology and Immunology, Rega Institute for Medical Research, Leuven, Belgium; ⁶Lancet Laboratories, Johannesburg, South Africa; ⁷Department of Biomathematics and Human Genetics, David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, United States; ⁸Institute of Human Virology, Baltimore, MD, United States
- 226 Ongoing Cross-Species Transmission of Simian Retroviruses and High HIV Prevalence in Cameroon**
 Julius Chial^{1,2}, Avelin Agbokeng^{1,2}, Emilande Guichet¹, Ahidjo Ayoubas², Steve Ahuka-Mundeké², Nicole Vidal³, William Switzer³, **Eric Delaporte**², Eitel Mpoudi Ngole¹, Maudine Peeters²
¹Projet PRESICA and IMPM/CREMER, Yaoundé, Cameroon; ²IRD, Montpellier, France; ³Centers for Disease Control and Prevention, Atlanta, GA, United States
- 227 An Emerging HIV-1 Recombinant (CRF58_01B) Disseminating Among People Who Inject Drugs in Malaysia**
Wei Zhen Chow¹, Yutaka Takebe², Nur Ezreen Syafina¹, Malarvelli Soorya Prakasa¹, Haider Al-Darraj¹, Clayton Koh¹, Adebba Kamuruzaman¹, Kok Keng Tee¹
¹Centre of Excellence for Research in AIDS (CERIA), Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; ²National Institute of Infectious Diseases, AIDS Research Center, Toyama, Shijinku-ku, Tokyo, Japan
- 228 Exploring the Hidden Interrelationship of HIV-1 Epidemics in Asia and Beyond**
Yutaka Takebe¹, Makiko Kondo²
¹AIDS Research Center, National Institute of Infectious Diseases, Tokyo, Japan; ²Department of Microbiology, Kanagawa Prefectural Institute of Public Health, Chigasaki, Japan
- 229 CRF01_AE and Subtype B Transmission Networks Cross Over; A New AE-B Recombinant Emerges in Japan**
Masumi Hosaka¹, Seichiro Fujisaki², Junko Hattori¹, Teichiro Shiino², Atsuko Hachiya¹, Masakazu Matsuda¹, Yasumasa Iwatani^{1,3}, Yoshiyuki Yokomaku¹, Wataru Sugimura^{1,3}
¹National Hospital Organization Nagoya Medical Center, Nagoya, Japan; ²National Institute of Infectious Diseases, Tokyo, Japan; ³Nagoya Graduate School of Medicine, Nagoya, Japan
- 230 Phylodynamic Analysis of a Regional HIV Epidemic**
Jeffrey B. Joy, Richard Liang, Conan K. Woods, Susan Shurgold, Guillaume Colley, Chanson Brumme, Robert S. Hogg, Julio S. G. Montaner, P. Richard Harrigan, Art F. Y. Poon
¹Medicine, BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada
- 231 Damage of Gut Junctional Complexes Features HIV-Infected Immunological Non Responders**
Camilla Tincati¹, Giuseppe Ancona¹, Paola Braidotti¹, Delfina Tosi¹, Federica Savi¹, Elisa Borghi¹, Alessandra Barassi¹, Esther Merlini¹, Nicolas Chomont², Giulia Marchetti¹
¹Department of Health Sciences, University of Milan, Milan, Italy; ²Vaccine and Gene Therapy Institute, Port St. Lucie, FL, United States
- 232 Gut Homing and HIV-1 Permissiveness Are Specifically Regulated by Retinoic Acid in Ccr6+ T-Cells**
Delfine Planas^{1,2}, Sandrine Da Fonseca^{1,2}, Jean-Philippe Goulet³, Annie Gosselin¹, Aurélie Cléret-Bubot^{1,2}, Mohammad-Ali Jenabian⁴, Jean-Pierre Routy^{5,6}, Petronela Ancuta^{1,2}
¹CHUM-Research Center, Montréal, QC, Canada; ²Department of Microbiology, Infectology, and Immunology, Université de Montréal, Montréal, QC, Canada; ³CATRaGENE, Montréal, QC, Canada; ⁴McGill University Health Center, Montréal, QC, Canada; ⁵Division of Hematology, McGill University Health Center, Montréal, QC, Canada; ⁶Immunodeficiency Service, McGill University Health Center, Montréal, QC, Canada
- 233 Dysregulated Gut Dendritic Cells Correlate With T-Cell Activation During Untreated HIV Infection**
Stephanie M. Dillon¹, Eric J. Lee¹, Gregory L. Austin¹, Sara Gianella², Davey M. Smith³, Basile Siewe⁴, Alan L. Landay⁵, Cara C. Wilson¹
¹University of Colorado AMC, Aurora, CO, United States; ²University of California San Diego, La Jolla, CA, United States; ³Rush University Medical Center, Chicago, IL, United States
- 234 HIV-1 RNA+ Cells Are Concentrated in the Germinal Centers of Activated Lymph Nodes In Vivo**
Tessa Arends¹, Joy Folkvord¹, Martin McCarter¹, Amie Meditz², Elizabeth Connick³
¹University of Colorado Anschutz Medical Campus, Aurora, CO, United States; ²Boulder Community Hospital, Boulder, CO, United States
- 235 Duodenal and Rectal Mucosa Immune Reconstitution Differ After ART Initiation**
Talia Sainz¹, Sergio Serrano-Villar², Anthony Albanese³, Tammy Yotter⁴, Paolo Troia-Cancio⁴, Darin Lartimore⁵, Steve Deeks⁵, Elizabeth Sinclair⁶, Vera Go⁴, David Asmuth⁶
¹Molecular Immune-Biology Laboratory, Hospital General Universitario Gregorio Marañón, Madrid, Spain; ²Infectious Diseases Department, Hospital Universitario Ramon y Cajal, Madrid, Spain; ³Veterans Administration Northern California Health Care System, Sacramento, CA, United States; ⁴University of California Davis Medical Center, Sacramento, CA, United States; ⁵UCSF, San Francisco, CA, United States; ⁶UCDMC and VANCHCS, Sacramento, CA, United States
- 236 Gut Microbiota of HIV Infected Subjects Induce Inflammatory Cytokines But Not T Regulatory Cells**
Charles P. T. Neff, Andrew Fontenot, Catherine Lozupone, Brent E. Palmer
¹Allergy and Clinical Immunology, University of Colorado, Aurora, CO, United States

Session P-C2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Immune Activation and Pathogenesis

264LB An SMS Intervention To Improve HIV Linkage To Care:

A Randomized, Comparative Effectiveness Trial
Mark J. Siedner¹, Data Santorino², Alexander J. Lankowski³, Michael Kanyesigye⁴, Bosco Mwebesa Bwana⁴, Jessica E. Haberer¹, David R. Bangsberg¹
¹Medicine, Massachusetts General Hospital, Boston, MA, United States; ²Mbarara University of Science and Technology, Mbarara, Uganda; ³University of Philadelphia, Philadelphia, PA, United States; ⁴Mbarara University of Science and Technology, Mbarara, Uganda

265 CD4 T-Cell Responses in Relationship With Immune

Activation and Viral Load in Primary HIV Infection
Mathieu F. Chevalier¹, Céline Didier¹, Gaël Petitjean¹, Pierre-Marie Girard², Françoise Barré-Sinoussi³, Daniel Scott-Algara⁴, Laurence Weiss^{3,4}

¹Institut Pasteur, Paris, France; ²AP-HP, Hôpital Saint-Antoine, Paris, France; ³Université Paris Descartes, Paris, France; ⁴AP-HP, Hôpital Européen Georges Pompidou, Paris, France

266 Herpesvirus Infections in HIV+ Individuals On ART Are

Not Associated With Immune Activation
Bernard J. Macatangay¹, Yue Chen², Arlene Bullotta², Aarika Yates², Eric Fialkovich², Luann Borowski², William Buchanan², Pahalguni Gupta², Charles Rinaldo²

¹Medicine, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ²Infectious Disease and Microbiology, University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States

267 Chronic Inflammation in HIV-1 Infected Individuals

Reduces T-Cell Responsiveness To Vaccines

Jean Boyer¹, Lorenzo Ramirez², Ian Frank¹, Pablo Tebas²
¹University of Pennsylvania, Philadelphia, PA, United States; ²Hospital of the University of Pennsylvania, Philadelphia, PA, United States

268 Persistently Activated CD27+CD80+ B Cells Following ART Correlate With Macrophage Activation

Stephanie N. Hudey¹, Bret J. Rudy², Xinrui Zhang³, Susan Lukas⁴, Maureen Goodenow⁵, John Sleasman⁶

¹University of South Florida Morsani College of Medicine, Tampa, FL, United States; ²New York University School of Medicine, New York City, NY, United States; ³University of Florida, Gainesville, FL, United States; ⁴University of South Florida Morsani College of Medicine, St. Petersburg, FL, United States; ⁵Duke School of Medicine, Durham, NC, United States

269 Novel Exosomal HIV miRNAs may Contribute To Chronic Immune Activation

Mark A. Bernard¹, Simon C. Yue, Asha Anandaiah, Henry Koziel, Souvenir D. Tachado
¹Division of Pulmonary, Critical Care and Sleep Medicine, Beth Israel Deaconess Medical Center, Boston, MA, United States

270LB Interleukin-21 Reduces Residual Immune Activation in ART-Treated SIV-Infected Rhesus Macaques

Luca Micci¹, Emily Ryan¹, Colleen McGary¹, Sara Paganini¹, Guido Silvestri¹, Jason Brenchley², Francois Villinger³, **Mirko Paiardini¹**
¹Department of Microbiology and Immunology, Emory University, Atlanta, GA, United States; ²NIH/NIAD, Bethesda, MD, United States

271 Immune Activation and Risk of HIV-1 Transmission Among HIV-1 Serodiscordant Couples

Erin M. Kahle¹, Michael Bolton², James Hughes³, Deborah Donnell², Connie Celum⁴, Jairam Lingappa⁴, Allan Ronald⁵, Guy de Bruyn⁴, Julie McCrath⁶, Jared M. Baeten¹
¹University of Washington, Seattle, WA, United States; ²Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ³University of Makerere, Kampala, Uganda; ⁴University of Witwatersrand, Johannesburg, South Africa

272 Inflammation in Acute HIV Infection Correlates With Blood and Gut CD4 T-Cell Loss and Viral Burden

Netanya G. Sandler¹, Jintanat Ananworanich^{2,3}, Suteeraporn Pinyakorn^{2,3}, Adam Rupert⁴, Alexandra Schuetz^{2,3}, James L. K. Fletcher², Daniel C. Douek⁴, Nicholas Chomont⁵, Jerome H. Kim⁶, Irini Sereti⁹

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Session P-C3 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A
NK Cells in HIV Pathogenesis

273 NK Cell Subsets Responding To HIV-Infected Autologous CD4 T Cell in Protective KIR/HLA Genotypes

Irene Lisovsky^{1,2}, Rujun Song³, Bertrand Lebouche⁴, Jean-Pierre Routy^{1,5}, Julie Bruneau⁶, Nicole F. Bernard⁷

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274 Siglec-7 Binds HIV-1 GP120 and Facilitates Infection of CD4pos T Cells and Macrophages

Stefania Varchetta¹, Paolo Lusso², Dalia Mele¹, Stefania Paolucci¹, Raffaello Cimbro², Mauro Malnati², Agostino Riva⁴, Renato Maserati¹, Mario U. Mondelli¹, **Domenico Mavilio⁴**

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275 Monocyte and NK Cell Dysfunctional Responses To Mycobacteria During Chronic HIV-1 Infection

Melanie A. Gasper^{1,2}, David R. Sherman¹, Donald L. Sodora¹

¹Seattle Biomedical Research Institute, Seattle, WA, United States; ²Pathobiology Graduate Program, University of Washington, Seattle, WA, United States

276 Identification of a New Isoform of MLL5: A Surrogate Marker of the CD4 Depletion in HIV-1

Vincent Vieillard¹, Florence Baycheiller¹, Alexis Sennepin¹, Myriam Ermonval², Karim Dorgham¹, **Patrice Debre¹**
¹INSERM UMR-S 945, Paris, France; ²Département de Virologie, Institut Pasteur, Paris, France

277 Do KIR3DL1/HLA-B Combinations Influence ADCC Responses of HIV-1 Infected Slow Progressors?

Ganze Ishtam^{1,2}, Zoya Padamsi^{1,2}, Pilar Zanoni^{1,2}, Matthew Parsons³, Marianne Harris⁴, Jean-Pierre Routy^{1,5}, Cecile L. Tremblay⁶, Nicole F. Bernard^{1,2}

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278 CD8+ NK Cells in HIV-1 Infection Are Associated With Slower Disease Progression Towards AIDS

Fareed Ahmad¹, Henoch S. Hong^{1,2}, I-Na Lu¹, Marc Jäckel³, Nupur Bhatnagar⁴, Johanna M. Eberhardt⁴, Benjamin A. Bollmann¹, Reinhold E. Schmidt¹, Dirk Meyer-Olson^{1,4}

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Session P-C4 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A
CD8 T-Cell Pathogenesis

279 HLA-B*35:05 Is a Protective Allele With a Unique Structure Amongst CRF01_AE-Infected Thais.

Masahiko Mori^{1,2}, Nuanjun Wichukhinda³, Reiko Miyahara¹, Archawin Rojanawiwat³, Panita Pathipvanich³, Tomoyuki Maekawa⁴, Philip Goulder⁵, Michio Yasunami¹, Koya Ariyoshi¹, Pathom Sawanpanyalert¹

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280 Eomes and T-Bet Are Differentially Linked To CD8+ T-Cell Exhaustion in HIV Infection

Johanna Tauriainen¹, Marcus Buggert¹, Takuya Yamamoto², Bo Hejdeman³, Richard A. Koup², Marianne Jansson⁴, Anders Sonnerborg¹, Michael R. Betts⁵, Annika C. Karlsson¹

¹Department of Laboratory Medicine, Institute of Clinical Microbiology, Karolinska Institutet, Stockholm, Sweden; ²Immunology Laboratory, Vaccine Research Center, National Institutes of Health, Bethesda, MD, United States; ³Stockholm South General Hospital, Stockholm, Sweden; ⁴Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Stockholm, Sweden; ⁵Department of Microbiology, University of Pennsylvania, Philadelphia, PA, United States

281 Increased Frequencies of HLA-G+ HIV-1-Specific Regulatory CD8 T Cells in HIV-1 Controllers

Selena Viganò¹, Chun Li¹, Jordi Negroni¹, Florencia Pereyra¹, Mathias Lichterfeld², Xu Yu³

¹Ragon Institute of MGH, MIT, and Harvard, Cambridge, MA, United States; ²Infectious Disease Division, Massachusetts General Hospital, Boston, MA, United States

282 CD8+CD28-CD127loCD39+ Treg: A New Biomarker for HIV Infection

Chiara Dentone^{1,2}, Daniela Fenoglio^{1,3}, Alessia Parodi¹, Francesca Kalli¹, Antonio Di Biagio⁴, Paolo Fraccaro⁵, Giancarlo Orofino⁶, Giovanni Cenderello¹, Mauro Giacomini^{1,5}, Gilberto Filaci^{1,3}

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Session P-C5 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A Exhaustion Markers

283 Determinants of PD-1 Expression On CD4+ and CD8+ T Cells in Treated and Untreated HIV Disease

Leslie R. Cockerham¹, Vivek Jain¹, Elizabeth Sinclair¹, David V. Glidden², Wendy Hartogenesis³, Hiroyu Hatanoto⁴, Peter W. Hunt¹, Jeffery N. Martin⁵, Frederick M. Hecht¹, Steven G. Deeks¹

¹HIV/AIDS Division, University of California - San Francisco, San Francisco, CA, United States; ²Division of Experimental Medicine, University of California - San Francisco, San Francisco, CA, United States; ³Department of Epidemiology and Biostatistics, University of California - San Francisco, San Francisco, CA, United States

284 CD160 Is the Most Specific Co-Inhibitory Molecule Associated With CD8 T Cell Functional Impairment

Selena Viganò¹, Riddhima Banga², Florence Bellanger³, Alex Farina⁴, Denis Comte⁵, Giuseppe Pantaleo⁶, **Matthieu Perreau¹**

¹Division of Immunology and Allergy, Lausanne University Hospital, Lausanne, Switzerland

285 Expansion of TIGIT-Expressing CD8+ T Cells Persists in Virally Suppressed HIV-1 Infection

Glen M. Chew¹, Tsuyoshi Fujita², Ravi Tandon¹, Jeffrey N. Martin³, Steven Deeks⁴, Lishomwa C. Ndhlovu¹

¹Tropical Medicine, University of Hawaii, Manoa, Honolulu, HI, United States; ²University of California San Francisco, San Francisco, CA, United States

286 PD-1 Expression Is Associated With Preserved CD4+ T Cell Homeostasis in Viremic Non-Progressors

Melicent C. Peck¹, Elizabeth Sinclair¹, Nichole R. Klatt², Lorrie Epling¹, Jeffrey N. Martin³, Frederick M. Hecht¹, Steven G. Deeks¹, David Camerini⁴, Peter W. Hunt¹

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287 PD-1 Homolog Expression Regulates Spontaneous Cytokine Production in HIV Infection

Preeti Bharaj¹, Harendra S. Chahar², Lizette Rodarte³, Ogechika Alozie⁴, Manjunath Swamy⁵, Premalata Shankar⁶

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Session P-C6 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A Clades and Pathogenesis

288 HIV Virulence Has Not Increased in the UK Subtype B Epidemic

Emma B. Hodcroft¹, Jarrod Hadfield², Esther Fearnhill³, Andrew Phillips⁴, David Dunn⁵, Deenan Pillay⁶, Andrew Leigh Brown⁷, UK HIV Drug Resistance Database

¹Institute of Evolutionary Biology, University of Edinburgh, Edinburgh, United Kingdom; ²Department of Zoology, University of Oxford, Oxford, United Kingdom; ³MRC Clinical Trials Unit, London, United Kingdom; ⁴Infection and Population Health, University College London, London, United Kingdom; ⁵Research Department of Infection, University College London, London, United Kingdom

289 Subjects Infected With Clade C-Containing HIV Exhibit Higher CD4+ T Cell Activation

Priscilla R. Costa¹, Wendy Hartogensis², Ricardo S. Diaz³, Peter Bacchetti⁴, Rick Hecht⁵, Breno R. Santos⁶, AMPLIAR study team, Esper G. Kallias⁷, **Chris Pilcher²**

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Session P-C7 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A Correlative Marker Studies

290 Telomere Length Predicts Immunological Recovery in Older HIV Patients Treated With cART

Jose-Ramon Blanco¹, Inmaculada Jarrin², Alfredo Martinez³, Eva Siles⁴, Ana Cañuelo⁵, Felix Gutierrez⁶, Jorge del Romero⁷, Jesus Santos⁸, Santiago Moreno⁹, CoRIS

¹Hospital San Pedro-CIBIR, Logroño, Spain; ²ISCIII, Madrid, Spain; ³Oncologia-CIBIR, Logroño, Spain; ⁴Department of Experimental Biology, University of Jaen, Jaen, Spain; ⁵Hospital Elche, Elche, Spain; ⁶Sandoval, Madrid, Spain; ⁷Hospital Virgen de la Victoria, Malaga, Spain; ⁸Hospital Ramón y Cajal, Madrid, Spain

291 The Clinical Impact of Viral Load Copy Years in Antiretroviral-Naïve HIV Seroconverters

Matthias an der Heiden¹, Alexander Zoufaly², Caroline Sabin³, Jan van Lunzen⁴, Hans-Jürgen Stellbrink⁵, Barbara Gensenheimer-Bartmeyer⁶, Philippe Vanhems⁷, Santiago Perez-Hoyos⁸, Geneviève Chêne⁹, Osamah Hamouda¹, on behalf of CASCADE Collaboration in EuroCoord

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292 Interleukin-32: Expression, Interaction With IFN, and Clinical Significance in HIV-1 Infection

Carolina Scagnolari¹, Katia Monteleone², Carla Selvaggi¹, Francesca Falasca³, Pierluigi Di Maio⁴, Ivano Mezzaroma⁵, Gabriella d'Ettore⁶, Ombretta Turriziani⁷, Guido Antonelli¹

¹Molecular Medicine, Sapienza University of Rome, Rome, Italy; ²Department of Clinical Medicine, Sapienza University of Rome, Rome, Italy; ³Department of Public Health and Infectious Diseases, Sapienza University of Rome, Rome, Italy

293 **TNF α in Viral Control and Early Disease Progression in Patients With HIV-1 Infection**

Sagar A. Vaidya^{1,2}, Christian Korner¹, Michael Sirignano¹, Molly Amero¹, Sue Bazner², Jenna Rychert², Todd Allen¹, Eric S. Rosenberg², Ronald J. Bosch³, Marcus Altfeld^{1,4}

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294 **Monocyte Activation Markers in HIV Infected Subjects: A Biomarker for HIV Immunotherapy**

Joumana Zeidan¹, Elizabeth Sinclair², Gary Lee³, Shelley Wang³, Martin Giedlin³, Geoff Nichol³, Winson Tang³, Steven Deeks⁴, Dale Ando³, Rafick-Pierre Sekaly¹

¹VGII Florida, Port St. Lucie, FL, United States; ²UCSF, San Francisco, CA, United States; ³Sangamo BioSciences, Richmond, CA, United States

295 **Down-Regulation of CD39/CD73 On B Cells of HIV Patients Coincides With a Disturbed Ig Class Switch**

Eun-Seong Kim¹, Ilona Tóth¹, Claudia Beisel¹, Johanna Eberhard¹, Silke Kummer¹, Ansgar W. Lohse¹, Friedrich Haag², Jan van Lunzen¹, Julian Schulz zur Wiesch¹

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Session P-C8 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A Elite Controllers

296 **Transcriptional Signatures of CD4 T Cell Subsets and Control of HIV Reservoirs in Elite Controllers**

Adele de Masson¹, Amos Kirilovsky¹, Rima Zoorob¹, Veronique Auvettand-Fenoe², Veronique Morin¹, Anne Oudin¹, Benjamin Descours¹, Christine Rouzioux², Brigitte Autran¹, the ALT ANRS-Co15 Study Group

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298 **Elite Suppressor CD4+ and CD8+ T Cells Suppress Viral Replication in Monocyte-Derived Macrophages**

Victoria E. K. Walker-Sperling¹, Robert W. Buckheit², Robert F. Siliciano^{3,4}, Joel N. Blankson³

¹Immunology Graduate Program, The Johns Hopkins School of Medicine, Baltimore, MD, United States; ²National Cancer Institute, Frederick, MD, United States; ³Department of Medicine, The Johns Hopkins School of Medicine, Baltimore, MD, United States; ⁴Howard Hughes Medical Institute, Chevy Chase, MD, United States

299 **Effective Control of Virus Replication in HIV-1 Elite Controllers by Active SAMHD1**

Eduardo Pauls¹, Alba Ruiz¹, Beatriz Mothe¹, Manel Crespo², Menéndez-Arias Luis³, Bonaventura Clotet¹, Oliver T. Keppeler⁴, Francesc Posas⁵, Christian Brander^{1,6}, José A. Esté¹

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Session P-C9 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A Pathogenesis: Insights From Clinical Trials

300 **Effect of Raltegravir Intensification in the Cytokine Profile of Treated HIV+ Individuals**

Marta Massanella¹, Josep M. Llibre², Silvia Marfil³, Maria C. Puertas³, Jordi Puig², Eugènia Negrodo², Douglas D. Richman^{4,5}, Javier Martínez-Picado³, Bonaventura Clotet^{2,3}, Julià Blanco³

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301 **Analyses of HIV-1 Viral Dynamics During Treatment With a Regimen Including an Integrase Inhibitor**

Jeremie Guedj¹, Ruy Ribeiro¹, Adriana Andrade², Susan L. Rosenkranz³, Darlene Lu², Douglas Richman⁴, Mathew Strain⁵, John Mellors⁶, Daniel R. Kuritzkes⁷, **Alan S. Perelson**²

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302 **Characterization of Functional Profile of HIV-Specific CD4+ T Cells in VISCONTI Group of Patients**

Assia Samri¹, Charline Bacchus², Laurent Hocqueloux³, Asier Saez-Cirion⁴, Amandine Emarre⁵, Christine Rouzioux⁶, Brigitte Autran¹, and VISCONTI ANRS Study

¹Immunology, UPMC Univ Paris 06, UMR-S945, Laboratory Immunity and Infection, Inserm, U945, Laboratory Immunity and Infection, Paris, F-75013, France, Paris, France; ²Immunology, Infectious and Tropical Diseases Department, Regional Hospital Center, Orléans, France, Orléans, France; ³Immunology, Institut Pasteur, Unité de Régulation des Infections Rétrovirales, Paris, France, Paris, France; ⁴Virology, Virology Laboratory, René Descartes University, EA 3620, Necker Enfants-Malades Hospital, Paris, France

303 **Immune Activation and Defective pTfHs Are Associated With Impaired Immunity in Aging HIV+ Persons**

Varghese K. George¹, Suresh Pallikuth¹, Anita Parmigiani², Maria L. Alcaide¹, Margaret Fischl¹, Savita Pathwa¹

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304 **Fresh Cohort: Acute HIV-1 Infection in Cohort of High Risk HIV Negative Women in KZN, South Africa**

Krista Dong^{1,2}, Amber Moodley¹, Thumbi Ndungu^{1,3}, Bruce Walker^{1,4}

¹Ragon Institute, Massachusetts General Hospital, Boston, MA, United States; ²Harvard Medical School, Boston, MA, United States; ³University of KwaZulu-Natal, Durban, South Africa; ⁴The Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States

305 **Vitamin D Significantly Changes the Immune Transcriptome and Augments CD4 Recall Responses in HIV**

Raskit Lachmann¹, Margaret-Anne Bevan², Sangmi Kim¹, Nishma Patel¹, Lichhima Banga¹, Nagasuma Chandra³, Sudha Rao⁴, Catherine Hawrylowicz⁵, Annapurna Vyakarnam¹, **Barry Peters**¹

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306 Impact of Methamphetamine Use On Immunologic and Virologic Markers During Suppressive ART

Marta Massanella¹, Sara Gianella¹, Douglas D. Richman^{1,2}, Susan J. Little¹, Constance B. Benson¹, Eric S. Daar³, Michael D. Dube⁴, Richard H. Haubrich¹, Davey M. Smith^{1,5}, Sheldon R. Morris¹, the CCG 592 Team

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307 Vitamin D-Receptor Gene Polymorphisms: Association With Virologic Failure and Mortality

Simbarashe Takuva^{1,2}, Lynne McNamara³, Tobias Chirwa⁴, Ian Sanne⁵, Adrian R. Martineau⁶, Patrick A. MacPhail³

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308 Statins Use Is Associated With Greater CD4 Gains in HIV-Infected US Veterans

Henning J. Drechsler^{1,2}, James Cutrell^{1,2}, Pablo Tebas³, Roger Bedimo^{1,2}

¹Medicine, North Texas VA Health Care System, Dallas, TX, United States; ²Medicine, UT Southwestern School of Medicine, Dallas, TX, United States; ³Medicine, University of Pennsylvania, Philadelphia, PA, United States

309 Maraviroc Intensification in HIV-Infected Patients Induces Increased CCR5 Expression On T Cells

Assia Samri¹, Gael Mouillot¹, Christina Pomas², Melanie Lavenu¹, Selma Trabelsi¹, Lise Cuzin¹, Pierre Corbeau³, Brigitte Autran¹, Philippe Flandre³

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Session P-C10 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Innate Immunity and Pathogenesis

237 CD161+Vα7.2+IL18R+ MAIT Cells Are Reduced in HIV Infection Regardless of the Disease Stage

Johanna M. Eberhard¹, Philip Hartjen^{1,2}, Ashwin Balagopal³, Clara Lehmann⁴, Dominik Ebert¹, Ilona Tóth¹, Silke Kummer¹, Reinhold E. Schmidt⁵, Jan van Lunzen¹, Julian Schulze zur Wiesch¹

¹Infectious Diseases Unit, University Medical Center Hamburg-Eppendorf, Hamburg, Germany; ²Department of Oral and Maxillofacial Surgery, University Medical Center Hamburg-Eppendorf, Hamburg, Germany; ³Department of Medicine, The Johns Hopkins University, Baltimore, MD, United States; ⁴Department of Medicine, University Medical School, Cologne, Germany; ⁵Clinic for Immunology and Rheumatology, Hannover Medical School, Hanover, Germany

238 HIV-1 Alters Plasmacytoid Dendritic Cell Phenotype and Function by Modulating ILT Receptors

Adel Benlahrech¹, Amina Yasmin, Peter Kelleher, Nesrina Imami, Steven Patterson

¹Immunology, Imperial College London, London, United Kingdom

239 Innate Immune Reconstitution With Viral Suppression in HIV-1 Infection

Eileen Scully^{1,2}, Ainsley Lockhart¹, Chelsey Musante¹, JJ Chang¹, Molly Amero¹, Eric Rosenberg³, Ronald J. Bosch⁴, Marcus Altfeld^{1,5}

¹Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States; ²Division of Infectious Disease, Brigham and Women's Hospital, Boston, MA, United States; ³Division of Infectious Disease, Massachusetts General Hospital, Boston, MA, United States; ⁴Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ⁵Heinrich-Pette-Institut, Leibniz Institute for Experimental Virology, Hamburg, Germany

Session P-C11 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
CD4/CD8, Aging, and Immune Senescence

240 CD4:CD8 Ratio Remains Significantly Depressed Despite Viral Suppression With Effective ART

Brinda Emu¹, Jeffrey Martin², Douglas Nixon³, Steven G. Deeks², Joseph M. McCune²

¹Yale University, New Haven, CT, United States; ²University of California, San Francisco, San Francisco, CA, United States

241 CMV Reactivation and Immune Aging in HIV-Infected Individuals Virologically Suppressed On ART

Helen M. McGuire¹, Philip M. Grant², Holden Maecker³, Jorg J. Goronzy⁴, Mark M. Davis^{3,5}, Andrew R. Zolopa²

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242 A Low CD4/CD8 Ratio During Effective ART Predicts Immunosenscence and Morbidity/Mortality

Sergio Serrano-Villar¹, Talia Sainz², Sulggi A. Lee³, Peter W. Hunt³, Elizabeth Sinclair⁴, April L. Ferre⁴, Vivek Jain², Frederick M. Hetch³, Santiago Moreno³, Steve G. Deeks³

¹Infectious Diseases, University Hospital Ramón y Cajal, Madrid, Spain; ²Infectious Diseases, University Hospital Gregorio Marañón, Madrid, Spain; ³University of California San Francisco, San Francisco, CA, United States; ⁴University of California Davis, Davis, CA, United States

243 CMV and HIV: A Double Hit On the CD4/CD8 Ratio

Talia Sainz¹, Sergio Serrano-Villar², Sulggi A. Lee³, Peter W. Hunt³, Elizabeth Sinclair⁴, Jeffrey N. Martin³, Joseph M. McCune³, Steven G. Deeks³

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Session P-C12 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Mucosal CD4 and Th17 Cells

244 Severe Depletion of Lung CD4 T Cells During HIV Infection Impairs Alveolar Macrophage Function

Bjorn Corlies¹, Maud Druetz², Melis N. Anahat¹, Gregory Olson¹, Brittany Bowman¹, Vladimir Vrbancac², Andrew M. Tager¹, Douglas S. Kwon¹

¹Ragon Institute of MGH, Harvard and MIT, Cambridge, MA, United States; ²Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States

245 Impaired IL-23 Signalling and Th17 Dysfunction in HIV Infection

Jason R. Fernandes¹, Ashok Kumar^{2,3}, Jonathan B. Angel^{1,3}

¹Chronic Diseases, The Ottawa Hospital Research Institute, Ottawa, ON, Canada; ²Pathology, Children's Hospital of Eastern Ontario Research Institute, Ottawa, ON, Canada; ³Faculty of Medicine, University of Ottawa, Ottawa, ON, Canada

246 Th17 and Tregs at Early HIV Infection Influence Disease Progression and HIV Specific CD8+ Responses

Juliana Falivene¹, Yanina A. Ghiglione¹, Natalia L. Laufer^{1,2}, Maria E. Socías³, María J. Ruiz¹, Pedro Cahn^{2,3}, Omar Sued^{2,3}, Horacio Salomón¹, Gabriela Turk¹, María M. Gherardi¹

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247 Profound Lung CD4+ T-Cell Depletion in HIV-Associated Chronic Obstructive Pulmonary Disease

Iulia Popescu¹, M. Bradley Drummond², Lucio Gama², Christian Merlo², Robert Wise², Janice Clements², Gregory D. Kirk³, John F. McDyer¹

¹Medicine, University of Pittsburgh, Pittsburgh, PA, United States; ²Medicine, The Johns Hopkins University, Baltimore, MD, United States; ³School of Public Health, The Johns Hopkins University, Baltimore, MD, United States

248 Site Specific HIV-Infection of Th17 Cells in the Human Female Reproductive Tract

Marta Rodriguez-Garcia, Fiona D. Barr, John V. Fahey, Charles R. Wira

Physiology and Neurobiology, Geisel School of Medicine at Dartmouth, Lebanon, NH, United States

249 Transcriptional Profiling Identifies New Mechanisms of HIV Permissiveness in Primary Th17 Cells

Aurélien Cleret-Buhot^{1,2}, Jean-Philippe Goulet^{3,4}, Patricia Monteiro^{1,2}, Annie Bernier^{1,2}, Annie Gosselin^{1,2}, Mohammad-Ali Jenabian⁵, Jean-Pierre Routy⁶, Elias Haddad⁶, Rafick Pierre Sekaly⁶, Cécile Tremblay^{1,2}, Petronela Ancuta^{1,2}

¹Microbiology, Infectiology and Immunology, Université de Montréal, Montréal, QC, Canada; ²CHUM-Research Centre, Montréal, QC, Canada; ³Ste-Justine Hospital Research Center, Université de Montréal, Montréal, QC, Canada; ⁴CARTAGENE, Montréal, QC, Canada; ⁵McGill University Health Centre, Montréal, QC, Canada; ⁶Vaccine and Gene Therapy Institute, Port St Lucie, FL, United States

Session P-C13 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall A**
In Vitro Studies

250 Elevated Soluble CD40 Ligand During HIV Infection Suppresses Dendritic Cell Function

Meagan O'Brien, Elizabeth Miller, Nina Bhardwaj

Mount Sinai School of Medicine, New York, NY, United States

251 Chronic Exposure To Type-I IFN Under Lymphopenic Conditions Alters CD4 T Cell Homeostasis

Cecile Le Saout¹, Rebecca B. Hasley¹, Hiromi Imamichi¹, Zonghui Hu², Megan A. Luckey³, Jung-Hyun Park³, Adam Rupert⁴, Michael Sneller¹, H. Clifford Lane¹, Marta Catalaño¹

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252 IL-15 Induces Id2 To Drive Effector Differentiation of CD8 TM and EM Cells While Maintaining CM Pools

Alessandra Noto¹, Francesco A. Procopio¹, Julien van Grevenynghe², Cheryl Cameron¹, Courtney Steel¹, Amit Sabinis¹, Hiroshi Takata¹, Franck Dupuy¹, Jeff Ahlers¹, Rafick-Pierre Sekaly¹

¹Vaccine and Gene Therapy Institute, PORT SAINT LUCIE, FL, United States; ²Lady Davis Institute, McGill University, Montreal, QC, Canada

253 Double Stranded RNA Stimulates IL-1 β Secretion in Cervical Epithelial Cells via the Inflammasome

Melis N. Anahtar, Maud Derauz, Andrew M. Tager, Douglas S. Kwon

Ragon Institute, Massachusetts General Hospital, Cambridge, MA, United States

254 Alpha-Defensins Modulate HIV Transcytosis: Role of ST1-Mediated Enhancement of HIV Transmembrane

Kimyata Valere¹, Aprille Rapista², Alison J. Quayle¹, Wuyan Lu⁴, Eliseo Eugenin¹, Theresa Chang¹

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255 Exposure To IFN α Leads To Generation of IL-10-Producing Tr1 Cells

Clara Lehmann¹, Kristina Koch¹, Nora Koch¹, Pia Hartmann^{1,2}, Gerd Fätkenheuer¹, Fabio Romero³

¹First Department of Internal Medicine, University of Cologne, Cologne, Germany; ²Institute for Medical Microbiology, Immunology and Hygiene, University of Cologne, Cologne, Germany; ³Institute of Human Virology, University of Maryland School of Medicine, Baltimore, MD, United States

256 TNF Drives Foam Cell Formation by Monocytes From HIV+ Donors in an In Vitro Atherosclerosis Model

Anna Maisa¹, Candida F. Pereira^{2,3}, Thomas A. Angelovich⁴, Jing-Ling Zhou¹, William A. Muller⁵, Anna C. Heaps^{1,6}, Suzanne M. Crowe^{1,3}, Anthony Jaworski^{1,3}

¹Burnet Institute, Melbourne, Australia; ²Centre for Biomedical Research, Burnet Institute, Melbourne, Australia; ³Department of Infectious Diseases, Monash University, Melbourne, Australia; ⁴School of Applied Sciences, RMIT University, Melbourne, Australia; ⁵Northwestern University, Chicago, IL, United States; ⁶Department of Infectious Diseases, Monash University, Melbourne, Australia

257 HIV-Altered mRNA Expressions of Type 1 IFN Pathway Related To Activation/Exhaustion in CD4+ T Cells

Chi-Lin Lee¹, Erik Serrao^{2,3}, Toni Frederick¹, Chia-Hao Wang¹, Andrea Kovacs¹

¹Department of Pediatrics, Keck School of Medicine, University of Southern California, Los Angeles, CA, United States; ²Medicine, Harvard University, Boston, MA, United States; ³Pharmacology and Pharmaceutical Sciences, University of Southern California, Los Angeles, CA, United States

258 Dysfunctional High Density Lipoprotein Directly Upregulates T Cell Activation in HIV-1 Infection

Theodoros Kesisidis, Judith Currier, Diana Huynh, Sangeun Park, Hwee Ng, Otto O. Yang

Medicine, David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, United States

259 Dysfunctional High Density Lipoprotein Directly Reduces HIV-1-Specific Antiviral Responses

Theodoros Kesisidis, Judith Currier, Diana Huynh, Sangeun Park, Hwee Ng, Otto Yang

Medicine, David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, United States

Session P-C14 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall A**
Genomics and Endogenous Retroviruses

260 HLA Gene Loci Associated With HIV Load in CSF and Blood Plasma in the CHARTER Cohort

Benjamin B. Gelman¹, Sunil K. Ahuja², Ronald J. Ellis³, Scott Letendreau⁴, Christina M. Marra⁵, Justin McArthur⁶, Susan Morgello⁷, David B. Clifford⁸, Igor Grant⁹, Florin Vaida¹⁰, The CHARTER Group

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- 261 GUAVA: A Compendium of Host Genetic Data in HIV Biology and Disease**
Istvan Bartha^{1,2}, Paul J. McLaren^{1,2}, Angela Ciuffi¹, Jacques Fellay^{1,2}, Arnaldo Telenti²

¹Ecole Polytechnique Fédérale De Lausanne, Lausanne, Switzerland; ²Institute of Microbiology, University Hospital Lausanne, Lausanne, Switzerland

- 262 HIV-1 Infection Leads To Increased Expression of HML-2 Proviruses In Vivo But Not Virion Production**
Neeru Bhardwaj¹, Frank Maldarelli², John Mellors³, John M. Coffin¹

¹Tufts University, Boston, MA, United States; ²National Cancer Institute, Frederick, MD, United States; ³University of Pittsburgh, Pittsburgh, PA, United States

- 263 Exome Sequencing To Evaluate the Impact of Rare Coding Variation On HIV-1 Control**

Paul J. McLaren¹, Patrick R. Shea², David B. Goldstein², Jacques Fellay¹

¹Life Sciences, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland; ²Center for Human Genome Variation, Duke University School of Medicine, Durham, NC, United States

Session P-D1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A
It's All About the Gut

- 310 Increased Immune Activation After Gut Permeabilization in SIV-Infected African Green Monkeys**
Jan Kristoff¹, Thaidra Gaufrin², Rajeev Gautam³, Dongzhu Ma¹, Jacob Estes⁴, Russell Tracy⁵, Cristian Apetrei¹, Steve Nelson⁶, Gregory Bagby⁶, Ivona Pandrea¹

¹Center for Vaccine Research, University of Pittsburgh, Pittsburgh, PA, United States; ²UCLA, Los Angeles, CA, United States; ³Center for Vaccine Research, NIAID/NIH, Bethesda, MD, United States; ⁴NCI/NIH, Frederick, MD, United States; ⁵University of Vermont, Colchester, VT, United States; ⁶Louisiana State University, New Orleans, LA, United States

- 311 Breaches in Colonic Claudin-4 Expression Correlate With T-Cell Activation in HIV-1 Infection**
Louise Greadhead¹, Anna Mroz², Hiromi Kudo³, Brian Gazzard⁴, Mark Nelson⁵, Robert D. Goldin¹, Alan Steel¹, Peter Kelleher¹

¹Imperial College, London, United Kingdom; ²Chelsea and Westminster Hospital NHS Trust, London, United Kingdom

- 312 Rapid Gut-Homing of Plasmacytoid Dendritic Cells During Acute SIV Infection**
Haiying Li, Jacqueline Gillis, R. Keith Reeves

NEPRC, Harvard Medical School, Southborough, MA, United States

- 313 CCR6+ and CD161+ CD4 T Cell Loss Contributes To the Pathogenesis of SIV Infection in Rhesus Macaques**
Colleen S. McGary¹, Luca Micci¹, Emily S. Ryan¹, Maria J. Buzon², Amy Shaw³, Mathias Lichterfeld¹, Guido Silvestri^{1,3}, Aftab A. Ansari¹, Mirko Paiardini^{1,3}

¹Department of Microbiology and Immunology, Emory University, Atlanta, GA, United States; ²Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States; ³Department of Pathology and Laboratory Medicine, Emory University, Atlanta, GA, United States

- 314 SIV Vaccine Controllers Prevent Aberrant Accumulation of Follicular CD4 T Cells in Rectal Mucosa**
Geetha H. Mylvaganam^{1,2}, Vijayakumar Velu^{1,2}, Jung-Joo Hong^{2,3}, Shanmugalakshmi Sadagopal^{1,2}, Suefen Kwa^{1,2}, Rahul Basu^{1,2}, Benton Lawson², Francois Villinger^{2,3}, Rama R. Amara^{1,2}

¹Microbiology and Immunology, Emory University School of Medicine, Atlanta, GA, United States; ²Emory Vaccine Center, Yerkes National Primate Center, Atlanta, GA, United States; ³Department of Pathology, Emory University School of Medicine, Atlanta, GA, United States

- 315 Decreased Diversity of Gut Microbiota Is Associated With Immune Status During HIV-1 Infection**

Piotr Nowak¹, Bablonia Barqasho¹, Ekatarina Avershina², Kajsa Noyan², Jan Vesterbacka¹, Marius Trossel¹, Knut Rudi¹, Anders Sonnerborg¹

¹Department of Infectious Diseases, Karolinska Institute, Huddinge, Sweden; ²Department of Laboratory Medicine, Karolinska Institute, Huddinge, Sweden; ³Department of Chemistry, Biotechnology and Food Science, Norwegian University of Life Sciences, Aas, Norway; ⁴Infectious Diseases, Oslo University Hospital, Oslo, Norway

- 316 Dysregulated miR-34a-SIRT1-Acetyl-p65 Axis Induces Immune Activation in Chronic SIV-Infection**
Mahesh Mohan, Andrew Alan Lackner, Xavier Alvarez

Comparative Pathology, Tulane National Primate Research Center, Covington, LA, United States

- 317 Dysbiotic Bacteria Translocate in Progressive SIV Infection**

Zachary Klase¹, Elias Schwartzman¹, Alexandra Ortiz¹, Lauren Canary¹, Mariam Quinones², Jason Brenchley¹

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Session P-D2 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
New SIV Models

- 318LB Viral Suppression Was Induced by Anti-PD-L1 Following ARV-Interruption in SIV-Infected Monkeys**
Stephen W. Mason¹, Srisowmya Sanisetty², Christa Osuna-Gutierrez³, So-Yon Lim³, Susan Chaniewski¹, Shalyn Campellone¹, Daniel Tenney¹, Scott Balsitis¹, James B. Whitney³

¹Discovery Virology, Bristol-Myers Squibb, Wallingford, CT, United States; ²Center for Virology and Vaccine Research, Bristol-Myers Squibb, Boston, MA, United States; ³Center for Virology and Vaccine Research, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, United States

- 319 A Novel HIV-1mt Encoding CCR5-Tropic Env Established Persistent Infection in Cynomolgus Macaques**
Akatsuki Saito^{1,2}, Kazuhiko Matsuo^{1,3}, Hirotaka Ode^{1,3}, Hiroyuki Otsuki¹, Takeshi Yoshida¹, Yasumasa Iwatani¹, Wataru Sugiyara², Tetsuro Matano³, Tomoyuki Miura⁴, Hirofumi Akari¹

¹Center for Human Evolution Modeling Research, Primate Research Institute, Kyoto University, Inuyama, Japan; ²Japan Foundation for AIDS Prevention, Chiyoda-ku, Japan; ³Clinical Research Center, National Nagoya Medical Center, Nagoya, Japan; ⁴Laboratory of Primate Model, Institute for Virus Research, Kyoto University, Kyoto, Japan; ⁵AIDS Research Center, National Institute of Infectious Diseases, Shinjuku-ku, Japan

- 320 New SIVsmm Strains To Achieve Control of Virus Replication With Conventional ART in Rhesus Macaques**

George Harel-Richter¹, Dongzhu Ma¹, Hui Li², Samantha Ross¹, Rachit Anand¹, Culling Xu¹, George M. Shaw², Beatrice H. Hahn², John W. Mellors³, Ivona Pandrea¹, Cristian Apetrei¹

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Session P-D3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
SCID Mice

- 321 Immune-Pathogenesis/-Therapy of Persistent HIV-1 Infection in Humanized Mice**

Lishan Su
Microbiology and Immunology, UNC-Chapel Hill, Chapel Hill, NC, United States

- 322 Dual Roles of Plasmacytoid Dendritic Cells in HIV-1 Infection and Pathogenesis**

Guangming Li¹, Menglian Cheng², Jun-ichi Nunoya¹, Liang Cheng¹, Haitao Guo¹, Haisheng Yu², Yong-jun Liu³, Ligu Zhang², Lishan Su¹

¹University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²Institute of Biophysics, Chinese Academy of Sciences, Beijing, China; ³Baylor Research Institute, Dallas, TX, United States

- 323 Characterizing the Acute Spread of Cell-Associated HIV in Humanized Mice**
Kenneth M. Law, Alice W. Yewdall, Benjamin K. Chen
Infectious Disease, Icahn School of Medicine at Mount Sinai, New York, NY, United States

Session P-D4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Non-Pathogenic vs Pathogenic Hosts

- 324 Differential TCR Activation and TRAIL Regulation in Sooty Mangabeys and Rhesus Macaques**
Shan Yu¹, Kenneth Rogers², Francois Villinger², Amitinder Kaur³
¹Division of Immunology, Harvard Medical School, Southborough, MA, United States; ²Division of Pathology, Emory University, Atlanta, GA, United States; ³Harvard Medical School, Southborough, MA, United States

- 325 Divergent CD4+ T Memory Stem Cell Dynamics in Pathogenic and Nonpathogenic SIV Infections**
Emily K. Cartwright¹, Colleen McGary¹, Barbara Cervasi¹, Benton Lawson¹, Steven E. Bosinger¹, Thomas H. Vanderford¹, Mirko Paiardini¹, Ann M. Chahroudi¹, Guido Silvestri¹
¹Yerkes National Primate Research Center, Emory Vaccine Center, Atlanta, GA, United States; ²Department of Pediatrics, Emory University, Atlanta, GA, United States

- 326 Double-Negative T Cells Are Functionally Distinct and Maintained in SIV-Infected Sooty Mangabeys**
Nimita Rout¹, James M. Billingsly¹, Shan Yu¹, Alexandra Grzywna², Premela A. Rajakumar¹, Arnaud Colantonio¹, Robert P. Johnson¹, Jim Else³, Amitinder Kaur¹
¹Immunology, NEPRC-HMS, Southborough, MA, United States; ²Wellesley College, Wellesley, MA, United States; ³Animal Resources, Yerkes National Primate Research Center, Atlanta, GA, United States

- 327 CD39/CD73/Adenosine Pathway in Progressive vs Non-Progressive Infections**
Tianyu He¹, Egidio Brocca-Cofano¹, Cuiling Xu², Jan Kristoff², Samantha Ross², Dongzhu Ma³, Charles R. Rinaldo⁴, Bernard J. C. Macatangay⁴, Cristian Apetrei³, Ivona Pandrea¹
¹Pathology, University of Pittsburgh, Pittsburgh, PA, United States; ²University of Pittsburgh, Pittsburgh, PA, United States; ³Microbiology and Molecular Genetics, University of Pittsburgh, Pittsburgh, PA, United States; ⁴Infectious Diseases and Microbiology, University of Pittsburgh, Pittsburgh, PA, United States

- 328 Dynamics of B Cell Subpopulations in Pathogenic and Nonpathogenic SIV Infections**
Egidio Brocca-Cofano¹, Basile Siewe², Dave Kurt³, Xu Cuiling¹, Jan Kristoff², Dongzhu Ma³, George S. Haret-Richter⁴, David C. Montefiori⁵, Alan Landy², Ivona Pandrea¹, Cristian Apetrei¹
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Session P-D5 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Compartmentalization

- 329 Transient Compartmentalization of SIV Variants in the Breast Milk of African Green Monkeys**
Carrie Ho
Human Vaccine Institute, Duke University Medical Center, Durham, NC, United States
- 330 HIV Migrates Bi-Directionally Between Blood and Cerebrospinal Fluid and Between Blood and Semen**
Antoine Chailion^{1,2}, Sara Gianella¹, Joel O. Wertheim¹, Sergei L. K. Pond¹, Douglas D. Richman^{1,3}, Sanjay R. Mehta^{1,3}, David M. Smith^{1,3}
¹Pathology, University of California San Diego, La Jolla, CA, United States; ²INSERM UMR U966, Tours, France; ³Veterans Affairs San Diego Healthcare System, San Diego, CA, United States

- 331 Pol Versus Env Genetics in SHIV-Infected Macaques Highlights Importance of Phylogenetic Signal**
Chad Coomer¹, Elizabeth M. Anderson¹, Luke Smith¹, Wei Shao¹, Jonathan Spindler¹, John W. Mellors¹, John M. Coffin¹, Zandra Ambrose¹, Mary F. Kearney¹

¹National Cancer Institute, NIH, Frederick, MD, United States; ²Division of Infectious Disease, Department of Medicine, University of Pittsburgh, Pittsburgh, PA, United States; ³Department of Molecular Biology and Microbiology, Tufts University, Boston, MA, United States; ⁴Division of Infectious Diseases, Department of Medicine, University of Pittsburgh, Pittsburgh, PA, United States

Session P-D6 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
New Themes in Host Control

- 333 Low Social Rank Prior To SIV or SHIV Infection Associates With Higher Viral Load in Chronic Infection**
Gretchen N. Neigh^{1,2}, Timothy Hayes^{2,3}, Ronald Trumble^{2,3}, Thomas H. Vanderford^{2,3}, Diane G. Carnathan^{2,3}, Constance S. Harrell¹, Kirk Easley¹, Mirko Paiardini^{2,3}, Guido Silvestri^{2,3}
¹Physiology, Emory University, Atlanta, GA, United States; ²Yerkes National Primate Research Center, Atlanta, GA, United States; ³Emory University, Atlanta, GA, United States; ⁴Biostatistics, Emory University, Atlanta, GA, United States

- 334 Modulation of Natural Killer Cell Activity by Simian Immunodeficiency Virus Peptides**
Jamie L. Schafer¹, Natasha Guha¹, Nancy A. Wilson², David T. Evans²

¹Harvard University, Southborough, MA, United States; ²University of Wisconsin, Madison, WI, United States

Session P-E1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Modulating Immune Activation

- 335 Rosuvastatin Reduces Immune Activation and Inflammation in Treated HIV Infection**
Nicholas Funderburg¹, Brian Clagett², Ying Jiang³, Sara M. Debanne⁴, Norma Storer⁴, Danielle Labbato⁴, Steven Juchnowski², Brian Ferrari¹, Michael Lederman¹, Grace A. McCormsey¹
¹Health and Rehabilitation Sciences, The Ohio State University, Columbus, OH, United States; ²Case Western Reserve University/Case Medical Center, Cleveland, OH, United States; ³Epidemiology and Biostatistics, Case Western Reserve University, Cleveland, OH, United States; ⁴University Hospitals Case Medical Center, Cleveland, OH, United States

- 336 Effects of Prednisolone On CD4 Counts and HIV Disease Progression: A Two-Year Clinical Trial**
Christa Kasang¹, Samuel Kalluvya², Charles Majinge³, Gilbert Kongola⁴, Mathias Mlewa⁴, Irene Massawe³, R. Kabanyera, K Magambo, H Klinker, E Koutsilieri, W Preiser, D Hofmann, J Hain, A Müller, Weissbrich, Albrecht Ulmer¹, Axel Rethwilm¹, August Stich¹, Carsten Scheller¹

¹Institute of Virology and Immunobiology, University of Würzburg, Würzburg, Germany; ²Institute of Virology and Immunobiology, Bugando Medical Centre, Mwanza, United Republic of Tanzania; ³Bugando Medical Centre, Mwanza, United Republic of Tanzania

- 337 Sevelamer Does Not Decrease Plasma LPS or sCD14 But Does Decrease Soluble Tissue Factor and LDL**
Netanya G. Sandler¹, Xinyan Zhang², Ronald J. Bosch¹, Nicholas T. Funderburg¹, Janet K. Robinson³, Daniel C. Douek⁴, Cara C. Wilson⁵, Steven G. Deeks⁶, Michael M. Lederman⁷, Rajesh T. Gandhi⁸, for the A5296 Study Team
¹Internal Medicine, University of Texas Medical Branch at Galveston, Galveston, TX, United States; ²Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ³Case Western Reserve University, Cleveland, OH, United States; ⁴NIH Vaccine Research Center, National Institutes of Health, Bethesda, MD, United States; ⁵Internal Medicine, University of Colorado, Aurora, CO, United States; ⁶San Francisco General Hospital, San Francisco, CA, United States; ⁷Massachusetts General Hospital and Ragon Institute, Boston, MA, United States

338 Reduction of sCD163, SP and PD1+ Th Cell Levels in a Phase 1B Trial of the NK1R Antagonist Aprepitant.

Pablo Tebas¹, Serguei Spitsin², Jeffrey Barrett², Florin Tuluc², Okan Elci³, James Korelitz³, Wayne Wagner⁴, Deborah Kim¹, Renae Catalano⁵, Steven D. Douglas²

¹University of Pennsylvania, Philadelphia, PA, United States; ²Children's Hospital of Philadelphia Research Institute, Philadelphia, PA, United States; ³Westat, Rockville, MD, United States

339 Rifaximin Has Marginal Impact On Immune Activation in Immune Non-Responders To ART - ACTG 5286

Allan R. Tenorio¹, Cara C. Wilson², Ellen S. Chan³, Ronald J. Bosch⁴, Bernard J. Macatangay⁵, Suria Yesmin⁶, Sarah W. Read⁷, David M. Margolis⁸, Jeffrey M. Jacobson⁹, Alan L. Landay¹⁰

¹Medicine, Rush University Medical Center, Chicago, IL, United States; ²Medicine, University of Colorado Health Sciences Center, Aurora, CO, United States; ³Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ⁴Center for Biostatistics Research in AIDS, Harvard School of Public Health, Boston, MA, United States; ⁵Medicine, University of Pittsburgh, Pittsburgh, PA, United States; ⁶Frontier Sciences, Amherst, NY, United States; ⁷Division of AIDS, National Institutes of Health, Bethesda, MD, United States; ⁸Medicine, University of North Carolina, Chapel Hill, NC, United States; ⁹Medicine, Drexel University, Philadelphia, PA, United States; ¹⁰Immunology and Microbiology, Rush University Medical Center, Chicago, IL, United States

340 Reduced Immune Activation During Tenofovir-Etricitabine Therapy in HIV-Negative Individuals

Jose R. Castillo-Mancilla¹, Amie Meditz², Sharon Seifert³, Jia-Hua Zheng⁴, Becky J. Kerr⁵, Edward M. Gardner⁶, Brent E. Palmer⁷, Lane Bushman⁸, Samantha MaWhinney⁹, Peter L. Anderson²

¹Infectious Diseases, University of Colorado, Aurora, CO, United States; ²Pharmaceutical Sciences, University of Colorado, Aurora, CO, United States; ³Infectious Diseases, Denver Health Hospital, Denver, CO, United States; ⁴Allergy and Immunology, University of Colorado, Aurora, CO, United States; ⁵Biostatistics and Informatics, University of Colorado, Aurora, CO, United States

341 Mesalamine To Reduce Immune Activation During HIV Infection: A Randomized Controlled Trial

Ma Somsouk, Richard M. Dunham, Michelle Cohen, Rebecca Albright, Teri Liegler, Yuaner Wu, Jeffrey N. Martin, Priscilla Y. Hsue, Steven G. Deeks, Joseph M. McCune, Peter W. Hunt

University of California San Francisco, San Francisco, CA, United States

342 Decreased Levels of D-Dimer After Probiotic Supplementation in Patients Receiving ART

Birgitte Stiksrud¹, Piotr Nowak², Dag Kvale³, Anders Thalmø⁴, Stein-Erik Birkeland⁵, Anders Dahm⁶, Anne Ma Dyrholm-Riise⁷, Marius Troseid¹

¹Oslo University Hospital, Oslo, Norway; ²Karolinska University Hospital, Stockholm, Sweden; ³TINE SA, Oslo, Norway

Session P-E2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A

Therapeutic Vaccines and Immunotherapies

343 Immune Function and Viral Load Post AGS-004

Administration To Chronic HIV Subjects Undergoing STI
Mark DeBenedette¹, Irina Tcherepanova¹, Alicia Gamble¹, Joe Horatinnovich¹, Jason Harris¹, Jean-Pierre Routy², Charles Nicolette³, AGS-004-001 Study Team

¹Immunology, Argos Therapeutics, Durham, NC, United States; ²McGill University Health Centre, Montreal, QC, Canada

344 Immunogenicity of AGS-004 Dendritic Cell Therapy in Patients Treated During Acute HIV Infection

Cynthia L. Gay¹, Nancie Archin¹, Irina Tcherepanova², Esther Villard³, Charles Hicks⁴, Mary Kearney⁵, John Coffin⁶, Mark DeBenedette³, Joseph Eron¹, Charles Nicolette³, David M. Margolis¹

¹Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²Research and Development, Argos Therapeutics, Inc, Durham, NC, United States; ³Argos Therapeutics, Inc, Durham, NC, United States; ⁴Medicine, Duke University, Durham, NC, United States

⁵Translational Research Unit, National Cancer Institute, Frederick, MD, United States; ⁶National Cancer Institute, Frederick, MD, United States

345 Immunogenicity and VL Rebound After ATI in Chronic HIV Infected Patients Receiving MVA-B

Beatriz Mothe¹, Miriam Rosas², Montserrat Plana³, Nuria Climent², Jose Luis Jimenez², Judith Pict⁴, Mariano Esteban⁴, Felipe Garcia⁴, Christian Brander¹

¹IrsiCaixa AIDS Research Institute-HIVACAT, Badalona, Spain; ²Hospital Clinic-HIVACAT, IDIBAPS, University of Barcelona, Badalona, Spain; ³Hospital Gregorio Marañón, Madrid, Spain; ⁴Centro Nacional de Biotecnología, Madrid, Spain; ⁵Hospital Clinic-HIVACAT, IDIBAPS, University of Barcelona, Barcelona, Spain

346 Dynamics of VL Rebound After cART Interruption in HIV Patients Receiving MVA-B Plus Disulfiram

Beatriz Mothe¹, Sonsoles Sanchez-Palominó², Jose Luis Jimenez³, Jose M. Gatell⁴, Bonaventura Clotet⁴, Mariano Esteban⁴, Montserrat Plana², Juan Carlos Lopez Bernaldo de Quirós⁵, Christian Brander¹, Felipe Garcia²

¹IrsiCaixa-HIVACAT, Hospital Germans Trias i Pujol, Badalona, Spain; ²Hospital Clinic-HIVACAT, IDIBAPS, University of Barcelona, Barcelona, Spain; ³Hospital Gregorio Marañón, Madrid, Spain; ⁴Centro Nacional de Biotecnología, Madrid, Spain

347 Vaccination With Autologous Dendritic Cells Pulsed With Autologous HIV-Infected Apoptotic Cells

Bernard J. Macatangay¹, Sharon A. Riddler², Nicole D. Wheeler¹, Mary J. Buffo³, Aarika Yates⁴, Luan Borowski³, Theresa L. Whiteside⁵, Charles R.inaldo⁶

¹Medicine, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ²University of Pittsburgh Cancer Institute, Pittsburgh, PA, United States; ³Infectious Disease and Microbiology, University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA, United States

Session P-E3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
New Technologies in Immunology

348 Systems Biology, HIV Disease, and RNAs Big and Small

Michael Katze

University of Washington, Seattle, WA, United States

349 CoRSeqV3: Novel Coreceptor Usage Prediction Algorithms for HIV-1 Subtypes B, C, D and CRF01_AE

Kieran Cashin^{1,2}, Lachlan R. Gray^{1,3}, Katherine Harvey^{1,2}, Danielle Perez-Bercoff⁴, Guinevere Q. Lee⁵, Jasminka Sterjovski¹, Michael Roche⁶, P. Richard Harrigan⁵, Melissa J. Churchill^{1,6}, Paul R. Gorry^{1,2}

¹Center for Biomedical Research, Burnet Institute, Melbourne, Australia; ²Department of Microbiology and Immunology, University of Melbourne, Melbourne, Australia; ³Department of Biochemistry and Molecular Biology, Monash University, Melbourne, Australia; ⁴Center Recherche Public de la Santé, Luxembourg, Luxembourg; ⁵BC Center for Excellence in HIV/AIDS, University of British Columbia, Vancouver, BC, Canada; ⁶Department of Microbiology and Immunology, Monash University, Melbourne, Australia

350 Identification of Novel B*57:01 Restricted Peptides From HIV gp140 Using Immunoepitomics

Sri H. Ramarathnam¹, Nadine L. Dudek¹, Robert J. Center², Damian F. J. Purcell³, Anthony W. Purcell¹

¹Department of Biochemistry and Molecular Biology, Monash University, Clayton, Australia; ²Department of Microbiology and Immunology, University of Melbourne, Parkville, Australia

351 New Summaries and Computational Tools at Los Alamos HIV Immunology Database

Karina Yusim¹, Shihai Feng¹, Hyejin Yoon¹, KumKum Ganguly¹, Jennifer Macke¹, James Szinger¹, Anthony P. West², Pamela Bjorkman³, Brian Foley¹, Bette T. Korber¹

¹HIV Database, T-6, Los Alamos National Laboratory, Los Alamos, NM, United States; ²California Institute of Technology, Pasadena, CA, United States

Session P-E4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall****Monocytes, Dendritic Cells, NK Cells**

- 352 Identification of Pattern Recognition Receptor for HIV-1 in Human Dendritic Cells**
Sunnie M. Yoh¹, Monika Schneider¹, Stephen Soonthornvacharin¹, Kevin Oliveri¹, Sourav Bandyopadhyay², Elisa Decastro³, Adolfo G. Sastre³, Sumit K. Chanda¹
¹Inflammatory Diseases, Sanford Burnham Medical Institute, La Jolla, CA, United States; ²Helen Diller Family Comprehensive Cancer Center, University of California San Francisco, San Francisco, CA, United States; ³Department of Microbiology, Mount Sinai School of Medicine, New York, NY, United States
- 353 Plasmacytoid Dendritic Cell Phagocytosis of IgG Anti-p24 Associates With Control of HIV Infection**
 Christian Tjiam¹, James Taylor¹, Mazmah A. Morshidi¹, Jeffrey N. Martin², Steven G. Deeks³, Dino Tan³, Silvia Lee¹, Sonia Fernandez², Martyn A. French¹
¹School of Pathology and Laboratory Medicine, University of Western Australia, Perth, Australia; ²School of Medicine, University California San Francisco, San Francisco, CA, United States; ³Lung Institute of Western Australia, University of Western Australia, Perth, Australia
- 354 Recruitment of Functionally Different NK Cells To the Rectal Mucosa in Vaccinated Macaques**
Namal P. M. Liyanage¹, Shari N. Gordon¹, Monica Vaccari¹, Poonam Pegu¹, Melvin Doster¹, David Venzon¹, James Tartaglia², Susan W. Barnett³, Nelson Michael⁴, Genoveffa Franchini¹
¹National Cancer Institute, National Institutes of Health, Bethesda, MD, United States; ²Department of Research and Development, Sanofi Pasteur, Swiftwater, PA, United States; ³45 Sidney Street, Novartis Vaccines & Diagnostics, Cambridge, MA, United States; ⁴U.S. Military HIV Research Program, Rockville, MD, United States
- 355 HIV Myeloid-Derived Suppressor Cells Inhibit the Protective Response To Cytomegalovirus**
Ankita Garg¹, Stephen A. Spector^{1,2}
¹Pediatrics, University of California San Diego, La Jolla, CA, United States; ²Rady Children's Hospital, San Diego, CA, United States

Session P-E5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall****Pre-Clinical Vaccine Studies**

- 356 Induction of Gut Anti-HIV Immune Response via Dendritic Cell Targeted Intranasal Vaccination**
Darren Ruane¹, Yoonkyung Do², Akash Greg¹, Haekyung Lee¹, Thomas Kraus³, Jordan Poles¹, Lucas Brane¹, Christine Trumpfpheller¹, Andres Salazar⁴, Ralph Steinman⁵, Saurabh Mehandru¹
¹Gastroenterology, Mt Sinai School of Medicine, New York, NY, United States; ²School of Nano-Bioscience and Chemical Engineering, Ulsan National Institute of Science and Technology, Korea, Republic of Korea; ³Mt Sinai School of Medicine, New York, NY, United States; ⁴Rockefeller University, New York, NY, United States; ⁵Oncovir, Inc, New York, NY, United States
- 357 Conserved Element DNA Vaccine based On HIV-1 or SIV sequences Increases T-Cell Breadth**
Barbara K. Felber
 NCI, Frederick, MD, United States
- 358 DNA and Protein Co-Immunization Improves the Magnitude and Longevity of Humoral Immune Responses**
George N. Paviakis
 National Cancer Institute, Frederick, MD, United States
- 359 The Adjuvant Used in an ALVAC-gp120 Regimen Alters Plasmablast Homing Markers in Macaque and Humans**
Luca Schifanello¹, Shari Gordon¹, Monica Vaccari¹, Georgia Tomaras², Mangala Rao³, David Venzon¹, Susan Barnett¹, James Tartaglia⁴, Silvia Ratto-Kim⁵, Genoveffa Franchini¹
¹National Cancer Institute, National Institutes of Health, Bethesda, MD, United States; ²Duke University, Durham, NC, United States; ³Walter

Reed Army Institute of Research, Rockville, MD, United States; ⁴Novartis Vaccines and Diagnostics, Cambridge, MA, United States; ⁵Sanofi Pasteur, Swiftwater, PA, United States; ⁶United States Military HIV Research Program, Walter Reed Army Institute of Research, Silver Spring, MD, United States

- 360 ALVAC-SIV/gp120 Efficacy Is Not Improved by the Increase of Anti-Envelope B and T-Cell Responses**
Monica Vaccari¹, Shari N. Gordon¹, Brandon F. Keeler², Georgia D. Tomaras³, Mangala Rao⁴, Mario Roederer⁵, Donald M. Stabilein⁶, Sanjay Phogat⁷, Susan W. Barnett¹, Genoveffa Franchini¹
¹NIH, NCI, Bethesda, MD, United States; ²Duke Human Vaccine Institute, Durham, NC, United States; ³USMHRP, Walter Reed Army Institute of Research, Silver Spring, MD, United States; ⁴NIH, NIAID, Bethesda, MD, United States; ⁵The EMMS Corporation, Rockville, MD, United States; ⁶Sanofi Pasteur, Swiftwater, PA, United States; ⁷Novartis Vaccines and Diagnostic, Cambridge, MA, United States
- 361 Altering the Prime Affects ALVAC-SIV/gp120 Immunogenicity and Efficacy**
Shari N. Gordon¹, Monica Vaccari¹, Georgia D. Tomaras², Mario Roederer³, David Venzon⁴, Dan H. Barouch⁵, Barbara Felber⁶, Nelson L. Michael⁷, James Tartaglia⁸, Genoveffa Franchini¹
¹Animal Models and Retroviral Vaccine Section, NCI, National Institutes of Health, Bethesda, MD, United States; ²Duke Human Vaccine Institute, Durham, NC, United States; ³Vaccine Research Center, NIAID, National Institutes of Health, Bethesda, MD, United States; ⁴BioStatistics and Data Management Section, NCI, National Institutes of Health, Bethesda, MD, United States; ⁵Center for Virology and Vaccine Research, Beth Israel Deaconess Medical Center, Boston, MA, United States; ⁶Human Retrovirus Pathogenesis Section, Vaccine Branch, NCI, National Institutes of Health, Bethesda, MD, United States; ⁷Walter Reed Army Institutes of Research, US Military HIV Research Program, Silver Spring, MD, United States; ⁸Sanofi Pasteur, Swiftwater, PA, United States
- 362 Immunization of Humanized BLT Mice Against HIV Influences Early Immune Responses and Viral Loads**
Timothy E. Dudek¹, Colby R. Maldini¹, Vladimir D. Vrbancac², Elizabeth F. Mellors³, Damien Tully⁴, Marcus Altfeld⁵, David M. Knipe³, Andrew M. Tager⁶, Todd M. Allen¹
¹Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States; ²Massachusetts General Hospital, Boston, MA, United States; ³Harvard Medical School, Boston, MA, United States

Session P-E6 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall****Human Vaccine Trial Results**

- 363 Antibody Responses in Anogenital Secretions of RV305, a Late Boost Vaccination of RV144 Volunteers**
Siriwat Akapirat¹, Chitraporn Karnasuta¹, Viseth Ngauy¹, Robert J. O'Connell¹, Punnee Pitisuthitum², Supachai Rerk-Ngarm³, Nelson L. Michael⁴, Mark S. De Souza⁵, Jerome H. Kim⁶, Nicos Karasavvas⁷
¹Retrovirology, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand; ²Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand; ³Disease Control, Ministry of Public Health, Nonthaburi, Thailand; ⁴Retrovirology, Walter Reed Army Institute of Research, Silver Spring, MD, United States
- 364 Divergent HIV-Specific CD4 T-Cell Response Profiles in HIV Vaccine Trials**
Franco Pissani¹, Sebastian Malveste¹, Bruce Shultz², Sorachai Nitayaphan³, Prasert Thongcharoen⁴, Punnee Pitisuthitum⁵, Michael Eller⁶, Silvia Ratto-Kim⁷, Mary Marovich⁸, Hendrick Streeck⁹
¹Cellular Immunology, Military HIV Research Program, Silver Spring, MD, United States; ²Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand; ³Department of Microbiology, Siriraj Hospital, Mahidol University, Bangkok Noi, Thailand; ⁴Clinical Tropical Medicine, Mahidol University, Nakhon Pathom, Thailand; ⁵Military HIV Research Program, Silver Spring, MD, United States; ⁶Division of AIDS, National Institutes of Health, Bethesda, MD, United States

- 365 Immunogenicity and Reactogenicity of Cervarix® Versus Gardasil® in HIV-Infected Adults: An RCT**
Lars Toft¹, Merete Storgaard¹, Martin Müller², Peter Sehn³, Jesper Bonde⁴, Martin Tolstrup¹, Lars Østergaard¹, **Ole S. Søgaard**¹
¹Department of Infectious Diseases, Aarhus University Hospital, Aarhus, Denmark; ²Research Program Infection and Cancer, German Cancer Research Center, Heidelberg, Germany; ³Chemical Biology Core Facility, European Molecular Biology Laboratory, Heidelberg, Germany; ⁴Department of Pathology, Copenhagen University Hospital, Hvidovre, Denmark
- 366 The Specificity of V3 Antibodies in RV144 Plasma Implicated in Reducing HIV Infection**
Susan Zolla-Pazner¹, Constance Williams², Morgane Rolland³, Paul Edlefsen⁴, Xiang-Peng Kong⁵, Arthur Nadas⁶, S. Tovanabutra⁶, Supachai Rerks-Ngarm⁷, Merlin Robb⁸, Nelson Michael⁹, Jerome Kim⁹
¹Pathology, VA and New York University Medical Centers, New York, NY, United States; ²Pathology, New York University Medical Center, New York, NY, United States; ³Military HIV Research Program, Bethesda, MD, United States; ⁴Fred Hutchinson Cancer Research Institute, Seattle, WA, United States; ⁵New York University Medical Center, New York, NY, United States; ⁶Military HIV Research Program and HM Jackson Foundation, Bethesda, MD, United States; ⁷Ministry of Public Health, Bangkok, Thailand
- Session P-E7 Poster Session**
Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall**
Immune Response To Infection
- 367 HIV Cell Tropism Dependent Impact of CTL Escape Mutations in Gag On Viral Replicative Capacity**
Benedikt Grandel¹, Sara Wennige¹, Franziska Winter¹, Sven Breitschwerdt¹, Bernd Salzberger¹, Arne Schneidewind²
¹Internal Medicine I, University of Regensburg, Regensburg, Germany; ²Internal Medicine I, University of Bonn, Bonn, Germany
- 368LB Epitope Targeting and the Antibody-Dependent Cellular Cytotoxicity Response Against HIV-1**
Priyamvada Acharya¹, William D. Tolbert^{2,3}, Lei Yu^{2,4}, James E. Robinson⁵, Fred Martin⁶, Peter D. Kwong⁷, Yongliu Guan⁸, Anthony L. DeVico⁹, George K. Lewis¹⁰, Marzena Pazgier^{2,3}
¹Vaccine Research Center, National Institutes of Health, Bethesda, MD, United States; ²Institute of Human Virology, Baltimore, MD, United States; ³Department of Biochemistry and Molecular Biology, University of Maryland School of Medicine, Baltimore, MD, United States; ⁴Department of Microbiology and Immunology, University of Maryland School of Medicine, Baltimore, MD, United States; ⁵Department of Pediatrics, Tulane University Medical Center, New Orleans, LA, United States; ⁶Service d'Ingénierie Moléculaire des Protéines, CEA, Gif-sur-Yvette, France; ⁷Department of Medicine, University of Maryland School of Medicine, Baltimore, MD, United States
- 369 Complex Impact of Reversion Mutations and CD8+ T Cell Escape Mutations On HIV-1 Fitness**
Hongshuo Song¹, Tammo Bhattacharya², Nilu Goonetilleke³, Kevin Wiehe⁴, Andrew McMichael⁵, George Shaw⁶, Beatrice Hahn⁴, Alan Perelson⁷, Barton Haynes⁸, Feng Gao¹
¹Duke Human Vaccine Institute, Duke University Medical Center, Durham, NC, United States; ²Los Alamos National Laboratory, Los Alamos, NM, United States; ³Weatherall Institute of Molecular Medicine, University of Oxford, Oxford, United Kingdom; ⁴Department of Microbiology, University of Pennsylvania, Philadelphia, PA, United States
- 371 Linkage Between Disease Status and a Naturally Arising Mutation in Functional Region of HIV-1 Nef**
Stanley C. Meribe¹, Zafur Hasan¹, Hiroyuki Gatnaga², Toshiyuki Miura^{3,4}, Ai Kawana-Tachikawa⁵, Aikichi Iwamoto⁶, Shinichi Oka², Takamasa Ueno¹
¹Center for AIDS Research, Kumamoto University, Kumamoto, Japan; ²AIDS Clinical Center, National Center for Global Health and Medicine, Tokyo, Japan; ³Institute of Medical Science, University of Tokyo, Tokyo, Japan; ⁴Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan
- 372 Characterizing Acute HIV-1B CTL Escape by Full-Genome "Deep" Sequencing**
Christian L. Boutwell¹, Damien Tully, Rebecca Batorsky, Karen Power, Aaron Seese, Michael Sirignano, Marcus Altfield, Todd M. Allen
Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States
- 373 HIV-1 gp120-Specific Antibody Dependent Cell-Mediated Cytotoxicity in HIV-1 Elite Controllers**
Mariana M. Mata¹, Fareeha Mahmood², Elizabeth T. Golub³, Ruth M. Greenblatt³, Kathryn Anastos⁴, Marek Nowicki⁵, Mary Young⁶, Helen Durkin⁷, Seema N. Desai¹, Linda L. Baum¹
¹Immunology/Microbiology, Rush University Medical Center, Chicago, IL, United States; ²Epidemiology, The Johns Hopkins University, Baltimore, MD, United States; ³Clinical Pharmacy, Medicine, Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA, United States; ⁴Medicine, Epidemiology and Population Health, Montefiore Medical Center, Bronx, NY, United States; ⁵Medicine, University of Southern California, Los Angeles, CA, United States; ⁶Medicine, Division of Infectious Disease, Georgetown University Medical Center, Washington, DC, United States; ⁷Pathology, SUNY Downstate Medical Center, Brooklyn, NY, United States
- 374 CD8 T Cell Responses Emerging During Acute HIV Infection Drive Long-Term Control**
Hendrik Streeck¹, Jean-Pierre Routy², Heiko Jessen³, Anthony Kelleher⁴, Frederick Hecht⁵, Rafick-Pierre Sekaly⁶, Eric Rosenberg⁷, Todd Allen⁸, Mary Carrington⁹, Marcus Altfield¹⁰
¹US Military HIV Research Program, Silver Spring, MD, United States; ²Chronic Viral Illness Service, McGill University Health Centre, Montreal, QC, Canada; ³Practice Jessen + Jessen, Berlin, Germany; ⁴Centre for Immunology, St. Vincent's Hospital, Darlinghurst, Australia; ⁵School of Medicine, University of California San Francisco, San Francisco, CA, United States; ⁶VGIT, Port St Lucie, FL, United States; ⁷Massachusetts General Hospital, Boston, MA, United States; ⁸Ragon Institute, Cambridge, MA, United States; ⁹National Cancer Institute, Frederick, MD, United States; ¹⁰Heinrich-Pette Institut, Hamburg, Germany
- 375LB Modification of Antibody 10E8 To Improve HIV-1 Neutralization**
Gilad Ofek¹, Gabriel Lu¹, Baoshan Zhang¹, Amy Bao¹, Yongping Yang¹, McKee Krishna¹, Brett Zirkle¹, Jinghe Huang², Mark Connors², John R. Mascola¹, Peter D. Kwong¹
¹Vaccine Research Center, National Institutes of Health, Bethesda, MD, United States; ²Laboratory of Immunoregulation, National Institutes of Health, Bethesda, MD, United States
- 376 Association of Gag-Specific CD28+CD95+ CD8+ T-Cell Responses in Lymph Nodes With Lower Viral Loads**
Hiroshi Ishii¹, Saori Matsuoka¹, Tetsuro Matano^{1,2}
¹AIDS Research Center, National Institute of Infectious Diseases, Tokyo, Japan; ²The Institute of Medical Science, The University of Tokyo, Tokyo, Japan
- 377 Distinct Functional Properties of HIV-Specific Cytolytic CD4 T Cells Compared To Th1 or CD8 T Cells**
Susan Johnson¹, Richard Lu¹, Alexander Oster¹, Franco Pissani¹, Mary A. Marovich², Diane L. Bolton¹, **Hendrik Streeck**¹
¹US Military HIV Research Program, Walter Reed Army Institute of Research, Silver Spring, MD, United States; ²Division of AIDS, NIH/NIAID, Bethesda, MD, United States
- 378 CD8+ T Cells From HLA-B*57 Elite Suppressors Inhibit Replication of HIV-1 Escape Mutants**
Christopher W. Pohlmeier¹, Robert W. Buckheit^{2,3}, Robert F. Siliciano⁴, Joel N. Blankson¹
¹School of Medicine, The Johns Hopkins Medical Institution, Baltimore, MD, United States; ²National Cancer Institute, Frederick, MD, United States; ³The Johns Hopkins Medical Institution, Baltimore, MD, United States; ⁴Howard Hughes Medical Institute, Baltimore, MD, United States

Session P-F1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM **Exhibit Hall A**

Mechanisms of HIV Latency

379LB The Tat Inhibitor, Cortistatin A, Suppresses

Transcription and Reactivation of HIV Latent Cells

Guillaume Mousseau¹, Remi Fromentin², Nicolas Chomont², Susana T. Valente¹¹The Scripps Research Institute, Jupiter, FL, United States; ²Vaccine and Gene Therapy Institute, Port Saint Lucie, FL, United States

380 Mechanisms by Which Negative Elongation Factor (NELF) Establishes and Maintains HIV Latency

Gillian M. Schiralli Lester¹, Malini Natarajan², Andrew J. Henderson¹¹Medicine, Infectious Disease, Boston University Medical Center, Boston, MA, United States; ²Stowers Institute for Medical Research, Kansas City, MO, United States

381 Differential Role of Bromodomain Proteins in HIV-1 Latency

Daniela Boehm, Pao-Chen Li, Hendrik Sy, Melanie Ott
Gladstone Institute of Virology and Immunology, Gladstone Institute/
University of California San Francisco, San Francisco, CA, United States

382 The NCOR2-Nurr1-CoREST Axis Impairs HIV Reactivation in Latently Infected Microglial Cells

David Alvarez, Biswajit Das, Yoelvis Garcia-Mesa, Curtis Dobrowski, Jonathan Karn
Molecular Biology and Microbiology, Case Western Reserve University, Cleveland, OH, United States

383 Repression of HIV Transcription in Memory CD4+ T Cells by Blimp-1

Katarzyna Kaczmarek¹, Malini Natarajan², Zeldia Euler³, Galit Alter³, Andrew J. Henderson¹¹Molecular and Translational Medicine, Boston University School of Medicine, Boston, MA, United States; ²Stowers Institute for Medical Research, Kansas City, MO, United States; ³Ragon Institute of MGH, MIT and Harvard, Boston, MA, United States

384 HIV-1 Reactivation and Autophagy Inhibition Synergize To Cell Death via Amino Acid Deprivation

Metodi V. Stankov¹, Diana Panayotova-Dimitrova², Georg M. N. Behrens¹¹Department for Clinical Immunology and Rheumatology, Hannover Medical School, Hannover, Germany; ²Department of Dermatology, Venerology and Allergy, Mannheim Clinic of University of Heidelberg, Mannheim, Germany

385 JAK Inhibitors Tofacitinib and Ruxolitinib Block T-Cell Activation Mediated HIV Replication

Franck P. Dupuy¹, Jessica Brehm¹, Christina Gavegnano^{2,3}, Raymond F. Schinazi^{2,3}, Rafick P. Sekaly¹¹Vaccine and Gene Therapy Institute VGTI-FL, Port Saint Lucie, FL, United States; ²Department of Pediatrics, Center for AIDS Research, Laboratory of Biochemical Pharmacology, Atlanta, GA, United States; ³Veterans Affairs Medical Center, Decatur, GA, United States

386LB Human Genome shRNA Screen Identifies Cellular Factors Controlling Latency

Shweta Hakre¹, Martin Kampmann², Nina N. Hosmane³, Michael C. Bassik⁴, Erik Verschueren⁵, Emilie Battifelli⁶, Robert F. Siliciano⁷, Nevan J. Krogan⁸, Jonathan S. Weissman⁹, Eric Verdin⁹¹Virology and Immunology, Department of Medicine, UCSF, Gladstone Institutes, UCSF, San Francisco, CA, United States; ²Cellular and Molecular Pharmacology, Howard Hughes Medical Institute, University of California, San Francisco, San Francisco, CA, United States; ³Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁴Genetics, Stanford University School of Medicine, Stanford, CA, United States; ⁵Cellular and Molecular Pharmacology, University of California, San Francisco, San Francisco, CA, United States; ⁶Virology and Immunology, Gladstone Institutes, UCSF, San Francisco, CA, United States; ⁷Medicine, Howard Hughes Medical Institute, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁸Virology and Immunology, Cellular and Molecular Pharmacology, UCSF, Gladstone Institutes, UCSF, San Francisco, CA, United States; ⁹Virology and Immunology, Department of Medicine, UCSF, Gladstone Institutes, UCSF, San Francisco, CA, United StatesUnited States; ⁹Virology and Immunology, Department of Medicine, UCSF, Gladstone Institutes, UCSF, San Francisco, CA, United States

Session P-F2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM **Exhibit Hall A**

Dynamics of Persistent and Rebound HIV

387 Incomplete Adherence To cART Is Associated With Higher Levels of Residual HIV-1 Viremia

Jonathan Z. Li¹, Sebastien Gallien², Heather Ribaud³, Andrea Heisey⁴, David R. Bangsberg⁵, Daniel R. Kuritzkes⁶¹Brigham and Women's Hospital, Harvard Medical School, Boston, MA, United States; ²Hôpital Saint Louis, Paris, France; ³Harvard School of Public Health, Boston, MA, United States; ⁴Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States

388 Viral Dynamics of HIV-1 Rebound Viremia

Benjamin Scheinfeld, Katharine J. Bar
Medicine, University of Pennsylvania, Philadelphia, PA, United States

389 Transcripts Associated With the HIV Reservoir Correlate With the Pool Size of Long-Lived CD4 T Cells

Maria J. Buzon^{1,2}, Ouyang Zhengyu¹, Amy Shaw¹, Hong Sun², Forencia Pareyra^{3,4}, Nadine Zangger⁵, Xu Yu¹, Amalio Telenti⁶, Eric S. Rosenberg⁷, Mathias Lichterfeld⁸¹Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States; ²Infectious Disease Division, Massachusetts General Hospital, Boston, MA, United States; ³AIDS Research Center, The First Affiliated Hospital of China Medical University, Shenyang, China; ⁴Infectious Disease Division, Brigham and Women's Hospital, Boston, MA, United States; ⁵Institute of Microbiology, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland

390 Massive Expansion of HIV Infected Cells With Identical Provirus in Patients On Suppressive ART

Mary Kearney¹, Luke Smith¹, Johnathan Spindler¹, Charles Coomer¹, Guillaume J. Besson², Elizabeth M. Anderson³, Wei Shao³, John M. Coffin¹, John W. Mellors³, Frank Maldarelli¹¹National Cancer Institute, NIH, Frederick, MD, MD, United States; ²University of Pittsburgh, Pittsburgh, PA, United States; ³Advanced Biomedical Computing Center, SAIC, Frederick, MD, MD, United States; ⁴Department of Molecular Biology and Microbiology, Tufts University, Boston, MA, United States; ⁵Department of Medicine, University of Pittsburgh, Pittsburgh, PA, United States

391 Effects of CCR5-Δ32 Heterozygosity On HIV-1 Reservoir Size and Immune Activation

Charlene Wang^{1,2}, Mohamed Abdel-Mohsen^{2,3}, Matthew C. Strain^{4,5}, Steven M. Lada^{4,5}, Leslie Cockerham³, Steven Yukl^{3,6}, Teri Liegler³, Douglas D. Richman^{4,5}, Steven G. Deeks³, Satish K. Pillai^{2,3}¹Emory University, Atlanta, GA, United States; ²Blood Systems Research Institute, San Francisco, CA, United States; ³University of California, San Francisco, San Francisco, CA, United States; ⁴University of California, San Diego, La Jolla, CA, United States; ⁵Veterans Affairs San Diego Healthcare System, San Diego, CA, United States; ⁶Veterans Affairs Medical Center, San Francisco, CA, United States

392 Seminal CMV Replication, Immune Activation, and Higher Proviral HIV DNA During Suppressive ART

Sara Gianella¹, Marta Massanella¹, Douglas D. Richman², Susan J. Little¹, Celsa A. Spina^{2,3}, Eric S. Daar⁴, Michael P. Dube⁴, Richard H. Haubrich⁵, Sheldon R. Morris⁶, Davey M. Smith^{1,2}, and the CCGT 592 Team.¹Medicine, University of California San Diego, La Jolla, CA, United States; ²Veterans Affairs San Diego Healthcare System, San Diego, CA, United States; ³Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center, Torrance, CA, United States; ⁴University of Southern California Keck School of Medicine, Los Angeles, CA, United States; ⁵Veterans Affairs San Diego Healthcare, San Diego, CA, United States

393 Persistent HIV in Plasma On During cART Can Lead To Rebound Viremia After Treatment Interruption

Junko Hattori¹, Wei Shao², Shawn Hill¹, Francesco R. Simonetti¹, Elizabeth M. Anderson³, Catherine A. Rehm³, Sara E. Jones⁴, Richard T. Davey⁵, Frank Maldarelli¹

¹HIV Drug Resistance Program, National Cancer Institute, Frederick, MD, United States; ²Advanced Biomedical Computing Center, SAIC-Frederick, Frederick National Laboratories for Cancer Research, Frederick, MD, United States; ³National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States; ⁴Clinical Research Directorate/CMRP, SAIC-Frederick, Inc., Frederick National Laboratory for Cancer Research, Frederick, MD, United States

Session P-F3 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Effect of ART Early in HIV Infection

- 394 How To Characterize Post-Treatment Controllers in Patients Treated During Primary HIV Infection?**
Eva Wolf¹, Johannes Bogner², Knud Schewe³, Véronique Avettand-Fenoel⁴, Christine Koegl¹, Ramona Pauli¹, Jürgen Brust⁵, Albrecht Ulmer⁶, Lothar Schneider⁸, Hans Jaeger⁹, New Era Study Group
¹MUC Research, Munich, Germany; ²Dept. of Infectious Diseases, University Munich, University Hospital, Munich, Germany; ³ICH Study Center, Hamburg, Germany; ⁴Hôpital Necker – Enfants malades, Laboratoire de Virologie, Hôpital Necker, Enfants malades, Paris, France; ⁵Isarpraxis – Private practice Dr. Becker/Dr. Pauli, Munich, Germany; ⁶Private practice Dr. Brust/Prof. Dr. Hensel/Dr. Ploeger/Dr. Schuster, Mannheim, Germany; ⁷Private practice Dr. Ulmer/Dr. Frietsch/Dr. Mueller, Stuttgart, Germany; ⁸Private practice Dr. Schneider, Fuerth, Germany; ⁹MVZ Karlsplatz – HIV Research and Clinical Care Centre, Munich, Germany
- 395 Loss of HIV Serological Markers Following Early Treatment of Acute HIV Infection**
Mark M. Manak¹, Sheila Peel², Jennifer Mallia², Ashley Shutt¹, Sriwat Akpirat³, Tippawan Pankam⁴, James Fletcher⁴, Merlin Robb¹, Jerome Kim², Jintanat Ananworanich⁴
¹US Military HIV Research Program, HJF, Silver Spring, MD, United States; ²US Military HIV Research Program, WRAIR, Silver Spring, MD, United States; ³Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand; ⁴Thai Red Cross AIDS Research Center, Bangkok, Thailand
- 396 Early Antiretroviral Therapy Prevents the Establishment of HIV-1 Infection in Humanized-BLT Mice**
Qingsheng Li¹, For Yue Tso², Guobin Kang¹, Wuxun Lu¹, Yue Li¹, Wenjin Fan¹, Chris J. Destache², Charles Wood¹
¹Nebraska Center for Virology & School of Biological Sciences, University of Nebraska-Lincoln, Lincoln, NE, United States; ²Pharmacy Practice, Creighton University School of Pharmacy & Health Professions, Omaha, NE, United States
- 397LB Lack of Detectable HIV DNA in a PreP Study Participant Treated During “Hyperacute” HIV Infection**
Hiroyu Hatano¹, Oliver Bacon^{1,2}, Stephanie Cohen^{1,2}, Albert Liu^{1,2}, Susan Buchbinder^{1,2}, Nicolas Chomont³, Mary Kearney⁴, Janet Siliciano⁵, Teri Liegler¹, Steven G. Deeks¹
¹Medicine, University of California, San Francisco, San Francisco, CA, United States; ²San Francisco Department of Public Health, San Francisco, CA, United States; ³Vaccine and Gene Therapy Institute of Florida, Fort Saint Lucie, FL, United States; ⁴National Cancer Institute, Frederick, MD, United States; ⁵Johns Hopkins University, Baltimore, MD, United States
- 398 Early HAART in Primary HIV Infection Protects TCD4 Central Memory Cells and Can Induce HIV Remission**
Antoine Chéret^{1,2}, Charline Bacchus³, Adeline Méliard⁴, Georges Nembot⁵, Catherine Blanc⁶, Assia Samri², Véronique Avettand-Fenoel¹, Asier Saez-Cirion², Brigitte Autran³, Christine Rouzioux⁴, OPTIPRIM ANRS-147 Study Group
¹EA 3620, Paris-Descartes University, Sorbonne Paris-Cité Virology Laboratory, Necker Enfants-Malades Hospital, Paris, France; ²Infectious Diseases Unit, Dron Hospital, Tourcoing, France; ³Pierre & Marie Curie University Paris VI, INSERM UMR-S 945 Immunity & Infection, Pitié-Salpêtrière Hospital, Paris, France; ⁴Epidemiology and Public Health Department, INSERM U1018, AP-HP Le Kremlin-Bicêtre, Paris, France; ⁵Unité de Régulation des Infections Rétrovirales, Institut Pasteur, Paris, France

Session P-F4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Methods for Measuring Reservoirs

- 399LB A Scalable RNA RT-PCR Based Assay To Quantify Latency Disruption in HIV-1 Infected Cells**
Jason M. Hataye¹, Joseph P. Casazza, David R. Ambrozak, Eli Boritz, Takuya Yamamoto, Daniel C. Douek, Richard A. Koup
Vaccine Research Center, National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States
- 400 HIV Antibody Characterization To Quantify Reservoir Size During Curative Interventions**
Peter D. Burbelo¹, Ahmad Bayat², Craig S. Rhodes³, Rebecca Hosh³, Jeffrey N. Martin³, Gero Hütter⁴, Joseph A. Kovacs⁵, **Steven G. Deeks¹**
¹NIDCR, NIH, Bethesda, MD, United States; ²Clinical Center, NIH, Bethesda, MD, United States; ³Dept. of Medicine, UCSF, San Francisco, CA, United States; ⁴Institute of Transfusion Medicine and Immunology, Heidelberg University, Mannheim, Germany; ⁵Critical Care Medicine Dept., Clinical Center, NIH, Bethesda, MD, United States
- 401 High-Throughput Analysis of Full-Length Proviral HIV-1 Genomes From PBMCs**
Hiromi Iamachi¹, Yan Guo², Collen Ludka³, Ellen E. Paxinos², H. Clifford Lane¹, Da Wei Huang¹, Clifford A. Lempicki³, Michael P. S. Brown²
¹NIAD, NIH, DHHS, Bethesda, MD, United States; ²Pacific Biosciences, Menlo Park, CA, United States; ³Leidos Biomedical Research, Inc., Frederick, MD, United States
- 402 Using Antibodies To Detect HIV Persistence in Treatment Intensification and Eradication Studies**
Sheila M. Keating^{1,2}, Christopher D. Pilcher², Gary Murphy³, Alex Welte⁴, Reshma Kassarjee⁴, David Matten⁵, Mila Lebedeva⁶, Shelley N. Facente², Steve G. Deeks⁷, Michael P. Busch^{1,2}, Consortium for Evaluation of Performance of HIV Incidence Assays (CEPIA)
¹Blood Systems Research Institute, San Francisco, CA, United States; ²UCSF, San Francisco, CA, United States; ³Public Health England, London, United Kingdom; ⁴SACEMA, Stellenbosch, South Africa; ⁵Medicine, UCSF, San Francisco, CA, United States
- 403LB HIV DNA in PHI Associates With T Cell Immunity and Predicts Disease Progression and Rebound Viraemia**
Jacob Hurst¹, James Williams¹, Elisabeth Hamlyn², Kersten Koelsch³, Sarah Fidler⁴, Abdel Babiker⁵, Jonathan Weber⁶, Tony Kelleher⁷, Rodney Phillips⁸, **John Frater¹**, Spartac Trial Investigators
¹University of Oxford, Oxford, United Kingdom; ²Imperial College, London, United Kingdom; ³University of New South Wales, Sydney, United Kingdom; ⁴MRC Clinical Trials Unit, London, United Kingdom; ⁵University of New South Wales, Sydney, Australia
- 404 Next Generation Plasma HIV-1 RNA Single Copy Assays**
Anthony R. Cillo¹, David Vagstad², Margaret Bedison³, Elizabeth Anderson⁴, Mary Kearney⁵, Elizabeth Fyne⁶, Dianna Koonz², John Coffin¹, Michael Platack¹, John Mellors⁷
¹School of Medicine, University of Pittsburgh, Pittsburgh, PA, United States; ²University of Pittsburgh, Pittsburgh, PA, United States; ³NCI-Frederick, Frederick, MD, United States; ⁴Tufts University, Boston, MA, United States
- 405 Assessment and Quantification of Cell Associate Unspliced HIV-1 RNA Using RT-ddPCR**
Zixin Hu¹, Carlos Becerril, Nina H. Lin, Jonathan Li, Andrea Heisey, Atthe M. Tszibris, Daniel R. Kuritzkes
Division of Infectious Diseases, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, United States
- 406 Measuring HIV Latency Over Time: Reservoir Stability and Assessing Interventions**
Nancie M. Archin¹, Amanda M. Crooks², Rosalie Bateson¹, Anna B. Cope², Noelle P. Dahl¹, Joseph J. Eron¹, Cynthia L. Gay¹, JoAnn D. Kuruc¹, David M. Margolis^{1,3}, **Ronald J. Bosch¹**
¹Department of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²Department of Epidemiology, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ³Department of Microbiology and Immunology, Department of

Epidemiology, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States;⁴Department of Biostatistics, Harvard School of Public Health, Boston, MA, United States

Session P-F5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
What and Where Is the Reservoir?

407LB The Role of HIV Integration Sites in Extensive Clonal Expansion of Infected Cells in Patients

Frank Maldarelli¹, Xiaolin Wu², Mary Kearney³, Ling Su², Wei Shao³, Shawn Hill¹, Francesco Simonetti¹, Jon Spindler¹, John Coffin⁴, Stephen H. Hughes¹

¹HIV Drug Resistance Program, NIH, Frederick, MD, United States;²Leidos, Inc, Frederick, MD, United States;³ISP/Advanced Biomedical Computing Center, Leidos, Inc., Frederick, MD, United States;⁴Department of Molecular Biology and Microbiology, Tufts University School of Medicine, Boston, MA, United States

408 Identification of a New Th17 Subset That Contributes To HIV-1 Persistence in ART-Treated Subjects

Vanessa S. Wacleche^{1,2}, Annie Gosselin¹, Patricia Monteiro¹, Aurélie Cleret-Buhot^{1,2}, Sandrine DaFonseca^{1,2}, Mohammad-Ali Jenabian³, Jean-Pierre Routy², Petronela Ancuta²

¹CR-CHUM, Montreal, QC, Canada;²Université de Montréal, Montreal, QC, Canada;³McGill University Health Centre, Montreal, QC, Canada

409 Identifying Defective and Identical Viral Genomes in HIV Reservoirs During Effective HIV Therapy

Susanne von Stockenström¹, Lina Odeval¹, Elizabeth Sinclair², Rui A. Raposo³, Douglas F. Nixon^{3,4}, Hiroyu Hatanō⁵, Peter Hunt⁶, Peter Bacchetti⁷, Steven G. Deeks⁸, Frederick M. Hecht⁹, Sarah Palmer¹⁰
¹Department of Microbiology, Tumor and Cell Biology, Karolinska Institutet, Stockholm, Sweden;²Department of Medicine, University of California San Francisco, San Francisco, CA, United States;³Division of Experimental Medicine, University of California San Francisco, San Francisco, CA, United States;⁴Department of Microbiology, Immunology and Tropical Medicine, The George Washington University, Washington, DC, United States;⁵Department of Epidemiology and Biostatistics, University of California San Francisco, San Francisco, CA, United States;⁶Centre for Virus Research, Westmead Millennium Institute for Medical Research and University of Sydney, Sydney, Australia

410 Healthy HIV-Infected Subjects Harbor HIV in Alveolar Macrophages, Which Can Impair Lung Function

Sushma K. Cribbs¹, David M. Guidot¹, Angela M. Caliendo², Lou Ann Brown³, Jeffrey Lennox⁴
¹Pulmonary/Critical Care Medicine, Emory University, Atlanta, GA, United States;²Brown University, Providence, RI, United States;³Pediatrics, Emory University, Atlanta, GA, United States;⁴Infectious Diseases, Emory University, Atlanta, GA, United States

411 Quantitative and Phylogenetic Analyses of Persistent HIV in Blood and GALT During Long-Term cART

Francesco R. Simonetti¹, Shawn Hill¹, Shao Wei², Robert Gorelick³, Michael Piatlak⁴, Mark Voellinger⁵, Stephen Wank⁶, Gabriella Diaz¹, Joe Kovacs⁵, Frank Maldarelli¹

¹HIV Drug Resistance Program, National Cancer Institute, Frederick, MD, United States;²Advanced Biomedical Computing Center SAIC-Frederick, Frederick National Laboratories for Cancer Research, Frederick, MD, United States;³AIDS and Cancer Virus Program, Frederick National Laboratories for Cancer Research, Frederick, MD, United States;⁴National Institute of Digestive and Kidney Diseases, Digestive Disease Branch, National Institutes of Health, Bethesda, MD, United States;⁵Critical Care Medicine Department, Clinical Center, National Institutes of Health, Bethesda, MD, United States

412 The Immune Checkpoint Blockers PD-1, LAG-3 and TIGIT Are Associated With HIV Persistence During ART

Remi Fromentin¹, Sandrine DaFonseca¹, Wendy Bakeman¹, Gabriela Khoury², Elizabeth Sinclair³, Frederick Hecht⁴, Steven G. Deeks⁵, Sharon R. Lewin^{2,4}, Rafick P. Sekaly¹, Nicolas Chomont¹

¹VGTI Florida, Port St Lucie, FL, United States;²Infectious Diseases, Alfred Hospital and Monash University, Melbourne, Australia;³Medicine, UCSF, San Francisco, CA, United States;⁴Centre for Biomedical Research, Burnet Institute, Melbourne, Australia

413 Distinct Patterns of TLR-Mediated HIV Reactivation in Latently-Infected Microglia vs Monocytes

David Alvarez¹, Yoelvis Garcia-Mesa, Biswajit Das, Curtis Dobrowolski¹, Stephanie Milne, Roxana Rojas, Jonathan Karn
¹Molecular Biology and Microbiology, Case Western Reserve University, Cleveland, OH, United States

414 CXCR3 and CCR5 Expression Are Associated With 2LTR Circles in Patients On Antiretroviral Therapy

Gabriela Khoury¹, Jenny Anderson^{1,2}, Rémi Fromentin³, Nicolas Chomont³, Elizabeth Sinclair⁴, Wendy Hartogensis⁵, Peter Bacchetti⁶, Frederick M. Hecht⁷, Steven G. Deeks⁸, Sharon R. Lewin^{1,2}

¹Infectious Diseases, Monash University & Alfred Hospital, Melbourne, Victoria, Australia;²Burnet Institute, Melbourne, Victoria, Australia;³Vaccine and Gene Therapy Institute of Florida, Port St Lucie, FL, United States;⁴Medicine, University of California San Francisco, San Francisco, CA, United States;⁵University of California San Francisco, San Francisco, CA, United States

415 CD4+ and CD8+ T Cell Activation Are Strongly Associated With HIV-1 DNA in Resting CD4+ T Cells

Leslie Cockerham¹, Janet D. Siliciano², Elizabeth Sinclair³, Una O'Doherty⁴, Sarah Palmer⁵, Steven A. Yukl⁶, Matt C. Strain⁷, Robert F. Siliciano⁸, Douglas R. Richman⁹, Steven G. Deeks¹

¹HIV/AIDS Division, University of California - San Francisco, San Francisco, CA, United States;²Department of Medicine, Johns Hopkins University, Baltimore, MD, United States;³Division of Experimental Medicine, University of California - San Francisco, San Francisco, CA, United States;⁴Pathology and Laboratory Medicine, University of Pennsylvania, Philadelphia, PA, United States;⁵The University of Sydney, Sydney, Australia;⁶San Francisco VA Medical Center, San Francisco, CA, United States;⁷University of California - San Diego, San Diego, CA, United States;⁸Johns Hopkins University, Baltimore, MD, United States

Session P-F6 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
What Can We Learn From Bone Marrow Transplantation?

416 Targeting SIV Reservoirs via Autologous Hematopoietic Stem Cell Transplant in Rhesus Macaques

Maud Mavigner¹, Benjamin Watkins^{2,3}, Benton O. Lawson¹, Ann Chahroudi^{1,2}, Leslie S. Kean^{2,3}, Guido Silvestri¹

¹Yerkes National Primate Research Center, Emory University, Atlanta, GA, United States;²Department of Pediatrics, Emory University, Atlanta, GA, United States;³Emory Transplant Center, Emory University, Atlanta, GA, United States

417 Dynamics of HSPC Repopulation in Non-Human Primates Revealed by a Decade-Long Clonal Tracking

Sangu Kim¹, Namshin Kim², Angela Presson¹, Dong Sung An¹, Robert E. Donahue³, Irvin S. Y. Chen¹

¹University of California, Los Angeles, Los Angeles, CA, United States;²Korean Bioinformatics Center, Daejeon, Republic of Korea;³National Heart, Lung and Blood Institute, Bethesda, MD, United States

418 Impact of Systemic Cytotoxic Chemotherapy for Malignancies On HIV-1 Reservoir Persistence

Timothy J. Henrich¹, Emily Hanhauser², Jonathan Z. Li¹, Andrea Heisey³, Jeremy S. Abramson³, Ayad Hamdan⁴, Philippe Armand⁵, Ann S. LaCasce⁶, Daniel R. Kuritzkes⁷

¹Brigham and Women's Hospital, Harvard Medical School, Cambridge, MA, United States;²Brigham and Women's Hospital, Cambridge, MA, United States;³Massachusetts General Hospital, Harvard Medical School, Boston, MA, United States;⁴Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, United States;⁵Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, United States

419 Modeling Functional Cure of HIV in Nonhuman Primates Using Gene-Modified Hematopoietic Stem Cells

Hans-Peter Kiem¹, Christopher W. Peterson¹, Patrick M. Younan¹, Shiu-Lok Hu², Patricia Polacino², Michael Holmes³, Philip Gregory³, Jianbin Wang³

¹Transplantation Biology, Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ²University of Washington, Seattle, WA, United States; ³Sangamo Biosciences, Richmond, CA, United States

Session P-F7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Effect of ART On Persistence

420 Patterns of Persistent Viremia After 10 Years of Suppressive ART: ACTG A5276s

Sharon A. Riddler¹, Evgenia Aga², Ronald Bosch², Joseph J. Eron², Rajesh Gandhi¹, Barbara Bastow², Margaret Bedison¹, David Vagrati¹, John W. Mellors¹, A5276s Protocol Team
¹University of Pittsburgh, Pittsburgh, PA, United States; ²Harvard School of Public Health, Boston, MA, United States; ³University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ⁴Massachusetts General Hospital, Boston, MA, United States; ⁵Social & Scientific Systems, Inc, Silver Spring, MD, United States

421LB Comparison of Combination ART Regimens for Viral Suppression in SIV-Infected Rhesus Macaques

G. Del Prete¹, R. Gelezianas², J. Hesselgeser², B. Li², J. Hattersley², B. Lu², J. Zheng², J. Smedley³, M. Platak, Jr.¹, **J. D. Lifson¹**
¹AIDS and Cancer Virus Program, Leidos Biomedical Research, Inc., Frederick, MD, United States; ²Gilead Sciences, Inc., Foster City, CA, United States; ³Laboratory Animal Sciences Program, Leidos Biomedical Research, Inc., Frederick, MD, United States

422 Impact of RAL/MVC Intensification With or Without HIV-RAd5 Vaccination On HIV DNA: ERAMUNE 02 Study

Chad Achenbach¹, Steven Deeks², Timothy Wilkin³, Balba Berzins¹, Joseph Casazza⁴, Sidonie Lambert⁵, Lambert Assoumou⁵, Christine Katlama^{5,6}, Brigitte Autran^{5,6}, **Robert Murphy¹**, the ERAMUNE 02 Study Group

¹Northwestern University, Chicago, IL, United States; ²University of California San Francisco, San Francisco, CA, United States; ³Cornell University, New York, NY, United States; ⁴National Institutes of Health/Vaccine Research Center, Bethesda, MD, United States; ⁵Hôpital Pitié-Salpêtrière, Paris, France; ⁶Université Pierre et Marie Curie (UPMC), Paris, France

423 Impact of Three Different ART Regimens On the GALT: A Randomized Clinical Trial

Sergio Serrano-Villar¹, Talia Sainz², Anthony Albanese³, Tammy Yotter³, Paolo Troia-Cancio³, Steve Deeks⁴, Elizabeth Sinclair⁴, Darin Lartimore⁵, Vera Go⁵, David Asmuth⁵
¹Infectious Diseases Department, Hospital General Ramon y Cajal, Madrid, Spain; ²Molecular Immune-Biology Laboratory, Hospital General Universitario Gregorio Marañón, Madrid, Spain; ³University of California Davis Medical Center, Sacramento, CA, United States; ⁴UCSF, San Francisco, CA, United States; ⁵UCDMC and VANCHCS, Sacramento, CA, United States

424 HIV Reservoir Changes in Resting CD4 Subsets in the IL7 Plus ART Intensification Eramune-01 Study

Manuela Pogliaghi^{1,2}, Sidonie Lambert^{3,4}, Lambert Assoumou⁵, Rima Zoorob¹, Laura Papagno¹, François Lecardonnel¹, Vincent Calvez^{2,4}, Christine Katlama^{5,7}, Brigitte Autran¹, the Eramune-01 Study Group

¹UPMC University Paris 06, UMR-S945, Laboratory of Immunity and Infection, Paris, France; ²Università Vita-Salute, San Raffaele Scientific Institute, Milan, Italy; ³UPMC University Paris 06, INSERM, UMR-S943, Epidemiology, Therapeutic Strategies and Clinical Virology in HIV Infection, Laboratory of Virology, Paris, France; ⁴AP-HP, Pitié-Salpêtrière Hospital, Department of Virology, Paris, France; ⁵UPMC University Paris 6, INSERM, UMR-S943, Epidemiology, Therapeutic Strategies and Clinical Virology in HIV Infection, Center of Methodology, Paris, France; ⁶ORVACS, Pitié-Salpêtrière Hospital, Paris, France; ⁷AP-HP, Pitié-Salpêtrière Hospital, Department of Infectious and Tropical Diseases, Paris, France

425LB Pre-ART HIV-1 RNA as well as On-Treatment CD8 Count and CD4/CD8 Ratio Predict Residual Viremia On ART

Sharon A. Riddler¹, Evgenia Aga², Ronald Bosch², Barbara Bastow³, Margaret Bedison¹, David Vagrati¹, Joseph J. Eron², Rajesh Gandhi¹, John W. Mellors¹, for the ACTG A5276s Protocol Team
¹Medicine/Infectious Diseases, University of Pittsburgh, Pittsburgh, PA, United States; ²Statistical & Data Analysis Center, Harvard School of Public Health, Boston, MA, United States; ³Social & Scientific Systems, Inc., Silver Spring, MD, United States; ⁴Medicine/Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ⁵Medicine/Infectious Diseases, Massachusetts General Hospital, Boston, MA, United States

Session P-F8 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Immunology for Cure

426 Eradication of HIV-1 Reservoirs With Antibody Mediated Killing

Zelda Euler¹, Seav H. Ly¹, Matthew Hurton¹, Athe M. N. Tsisris^{2,3}, Galit Auler¹

¹Ragon Institute of MGH, MIT and Harvard, Cambridge, MA, United States; ²Division of Infectious Diseases, Brigham and Women's Hospital, Boston, MA, United States; ³Harvard Medical School, Boston, MA, United States

427LB Maraviroc Reverts Latent HIV-1 in ART Suppressed Patients Through NfKb Without Viral Load Increase

Nadia Madrid-Elena¹, Beatriz Hernández-Novoa¹, Beatriz Saestre Turrión¹, Sergio Serrano-Villar¹, Ajantha Solomon², Carolina Gutierrez³, Javier Zamora³, Laura García-Bermejo³, Sharon R Lewin⁴, **Santiago Moreno¹**

¹Infectious Diseases, Hospital Ramón y Cajal, Madrid, Spain; ²Burnet Institute, Melbourne, Australia; ³Hospital Ramón y Cajal, Madrid, Spain; ⁴Infectious Diseases, Monash University, Burnet Institute and Alfred Hospital, Melbourne, Australia

428 Regulatory B cells Attenuate Anti-HIV CTL Responses After Reactivation of Latent Reservoirs

Basile Siewe¹, Jennillee Wallace¹, Sonya Rygielski¹, Jack T. Stapleton¹, Jeffrey Martin², Steven G. Deeks³, Alan Landay¹
¹Rush University Medical Center, Chicago, IL, United States; ²Iowa City Veterans Affairs Medical Center and the University of Iowa, Iowa City, IA, United States; ³Rush University Medical Center, San Francisco, CA, United States; ⁴HIV/AIDS Division, San Francisco General Hospital, University of California, San Francisco, CA, United States

429 Evaluation of HIV-1 Reservoir Characteristics in a Therapeutic HIV-1 Gag Vaccine Trial

Jonathan Z. Li¹, Andrea Heisey¹, Hayat Ahmed¹, Michael M. Lederman², Hongying Wang³, Lu Zheng³, Robert T. Schooley⁴, Daniel R. Kuritzkes⁵, the ACTG A5197 Study Team
¹Brigham and Women's Hospital, Harvard Medical School, Boston, MA, United States; ²Case Western Reserve University, Cleveland, OH, United States; ³Harvard School of Public Health, Boston, MA, United States; ⁴University of California San Diego, La Jolla, CA, United States

430LB Engineered TCR-Redirected Clearance of Gag-Positive Reservoir Cells From ART-Treated Subjects

Hongbing Yang¹, Sandrine Buisson², Gemma Hancock¹, Rebecca Ashfield¹, Annelise Vuidepot¹, Tara M. Mahon², Peter E. Molloy², Namin Hassan¹, Bent K. Jakobsen³, **Lucy Dorrell¹**
¹University of Oxford, Oxford, United Kingdom; ²Immunocore Ltd, Abingdon, Oxon, United Kingdom

431 Cross-Clade Inhibition of HIV On Primary Cells by CXCR4 or CCR5 Fused To the C34 Peptide From gp41 HR2

George J. Leslie¹, Jianbin Wang², Max W. Richardson³, Andrea P. O. Jordon¹, Philip D. Gregory², James L. Riley³, Michael C. Holmes², James A. Hoxie¹
¹Medicine, University of Pennsylvania, Philadelphia, PA, United States; ²Sangamo Bioscience, Inc, Richmond, CA, United States; ³Microbiology, University of Pennsylvania, Philadelphia, PA, United States

Session P-F9 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Toward A Cure...

432LB Ing-B a Potential PKC Activator for HIV Eradication Is Active in SiVmac251-Infected Macaques

Amilcar Tanuri^{1,2}, Lucio Gama³, Renato Santana^{1,2}, Mark Lewis⁴, Andrea Savarino⁵, Iart Shytaj⁶, Janice E. Clements⁷, Luiz F. Pianowski⁸

¹Genetics, UFRJ, Rio de Janeiro, Brazil; ²UFRJ, Rio de Janeiro, Brazil; ³Johns Hopkins School of Medicine, Baltimore, MD, United States; ⁴BioQual, Inc, Rockville, MD, United States; ⁵Istituto Superiore di Sanità, Rome, Italy; ⁶KyoLab, Valinhos, Brazil

434 SAHA Dampens TCR-Mediated Reactivation of Latently Infected Cells

Pejman Mohammadi^{1,2}, Julia di Iulio^{2,3}, Miguel Munoz², Niko Beerenwinkel^{1,2}, Amalio Telenti⁴, Angela Ciuffi⁵

¹Department of Biosystems Science and Engineering, ETH Zurich, Basel, Switzerland; ²Swiss Institute of Bioinformatics, Basel and Lausanne, Switzerland; ³Lausanne University Hospital and University of Lausanne, Institute of Microbiology, Lausanne, Switzerland

435LB HIV-1 Expression Within Resting CD4 T-Cells Following Multiple Doses of Vorinostat In Vivo

Yang Kuo-Hsiung¹, Nancie M. Archin², Christopher H. Woelke³, Matthew C. Strain⁴, Douglas D. Richman⁵, JoAnn D. Kuruc⁶, Richard J. O. Barnard⁷, Daria J. Hazuda⁸, Joseph J. Eron⁹, David M. Margolis¹⁰

¹School of Pharmacy, UNC Chapel Hill, Chapel Hill, NC, United States; ²School of Medicine, UNC Chapel Hill, Chapel Hill, NC, United States; ³University of Southampton, Southampton, United Kingdom; ⁴School of Medicine, UCSF and San Diego VAMC, San Diego, CA, United States; ⁵Merck Research Laboratories, White Horse Junction, PA, United States

436 Autophagy Induction by Histone Deacetylase Inhibitors Inhibits HIV-1 Infection in Macrophages

Grant R. Campbell, Rachel S. Bruckman, Stephen A. Spector
 University of California San Diego, La Jolla, CA, United States

437 An In Vitro Compound Screen for Selective Apoptosis Induction in HIV-1 Infected Resting CD4+ T Cells

Adam M. Spivak¹, Alberto Bosque², Vicente Planelles³
¹Medicine, University of Utah School of Medicine, Salt Lake City, UT, United States; ²Pathology, University of Utah School of Medicine, Salt Lake City, UT, United States

438LB Panobinostat Induces HIV Transcription and Plasma Viremia in HIV Patients on Suppressive cART

Thomas Rasmussen, and the CLEAR study group
 Dept. of Infectious Diseases, Aarhus University Hospital, Aarhus, Denmark

439 Failure of HIV-1 To Replicate in Human T Cells Expressing a Tat Mutant

David Harrich, Hongping Jin, Lina Rustanti, Ann Apolloni, Haran Sivakumaran, Min-Hsuan Lin, Dongsheng Li, Ting Wei
 Cell and Molecular Biology, QIMR Berghofer, Herston, QLD, Australia

440 Hepatitis C Therapy Reduces CD4 T-Cell-Associated HIV-1 DNA in HIV-1/HCV Coinfected Patients

Hong Sun^{1,2}, Maria Buzon^{1,3}, Amy Shaw¹, Randi Berg⁴, Xu G. Yu¹, Sara Ferrando-Martinez^{5,6}, Manuel Leal^{5,7}, Ezequiel Ruiz-Mateos^{5,7}, Matthias Lichterfeld⁸

¹Ragon Institute of MGH, MIT, and Harvard, Boston, MA, United States; ²Key Laboratory of AIDS Immunology, Department of Laboratory Medicine, First Affiliated Hospital of China Medical University, Shenyang, China; ³Infectious Disease Division, Massachusetts General Hospital, Boston, MA, United States; ⁴Infectious Disease Division, Aarhus University Hospital Skejby, Aarhus, Denmark; ⁵Laboratory of Immunovirology, Biomedicine Institute of Seville, Division of Infectious Diseases, Microbiology and Preventive Medicine, Virgen del Rocio University Hospital, University of Seville, Seville, Spain; ⁶Laboratorio Inmunobiología Molecular, Hospital General Universitario Gregorio Marañón, Madrid, Spain; ⁷Consejo Superior de Investigaciones Científicas, Madrid, Spain

441 HIV-1 Nef Inhibits Autophagy in Macrophages Through Transcription Factor EB Sequestration

Grant R. Campbell, Pratima Rawat, Rachel S. Bruckman, Stephen A. Spector
 University of California San Diego, La Jolla, CA, United States

Session P-G1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall A
CNS Viral Escape and Neuroinflammation On ART

442 HIV-1 RNA Detection in CSF in ART-Treated Subjects With Incomplete Viral Suppression in Plasma

Sam Nightingale, the PARTITION Study Group
 Institute of Infection and Global Health, University of Liverpool, Liverpool, United Kingdom

443 CSF Viral Escape in Patients Without Neurological Disorders: Prevalence and Associated Factors

Carmela Pinnetti¹, Patrizia Lorenzini¹, Federica Forbici¹, Adriana Ammassari¹, Raffaella Libertone¹, Maria Letizia Giancola¹, Maria Rosaria Capobianchi¹, Carlo Federico Perno², Andrea Antinori¹
¹National Institute for Infectious Disease, Rome, Italy; ²University of Rome, Rome, Italy

444 Early Monocyte Inflammation Among Treatment-Naïve Acute HIV-Infected Thai Subjects

Lishomwa C. Ndhlovu¹, Mary Margaret Byron¹, Guangxiang Zhang², Duangthai Sutthichom³, Somprathana Rattanamane³, Rapee Trichavaraj⁴, Nittaya Phanuphak⁵, Victor Valcour⁶, Merlin Robb⁶, Jintanat Ananworanich⁷

¹Hawaii Center for AIDS, University of Hawaii, Honolulu, HI, United States; ²University of Hawaii, Honolulu, HI, United States; ³SEARCH, The Thai Red Cross AIDS Research Center, Bangkok, Thailand; ⁴Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand; ⁵University of California San Francisco, San Francisco, CA, United States; ⁶US Military HIV Research Program, Walter Reed Army Institute of Research, Silver Spring, MD, United States; ⁷SEARCH, HIV-NAT, The Thai Red Cross AIDS Research Center, Bangkok, Thailand

445 Cerebrospinal Fluid Viral Blips and Persistent Escape in HIV-Infected Patients On ART

Arvid Eden¹, Lars-Magnus Andersson¹, Dietmar Fuchs², Lars Hagberg³, Staffan Nilsson³, Bo Svennerholm¹, Aylin Yilmaz⁴, Henrik Zetterberg⁵, Magnus Gisslen¹
¹University of Gothenburg, Gothenburg, Sweden; ²Innsbruck Medical University, Innsbruck, Austria; ³Chalmers University of Technology, Gothenburg, Sweden

446 Mitochondrial DNA Is Associated With Inflammation and Neurocognitive Deficits in HIV Infection

Josué Pérez-Santiago¹, Sanjay R. Mehta¹, Sara Gianella¹, Rachel D. Schrier¹, Mariana Cherner¹, Susanna R. Var¹, Tyler R. C. Day¹, Miguel Ramirez-Gaona², Davey M. Smith^{1,3}, Scott L. Letendre⁴
¹Medicine, University of California San Diego, La Jolla, CA, United States; ²Bioinformatics, University of Alberta, Edmonton, AB, Canada; ³Veterans Administration San Diego Healthcare System, San Diego, CA, United States

447 CNS Outcomes of cART vs. cART plus Maraviroc and Raltegravir Intensification During Acute HIV

Victor Valcour¹, Serena Spudich², Napaporn Sailasuta³, Sukalaya Lerdlum⁴, James L. K. Fletcher⁵, Eugene D. M. B. Kroon⁶, Peeriya Mangy⁷, Bonnie Slike⁸, Jerome Kim⁹, Jintanat Ananworanich⁷, on behalf of the SEARCH 010/RV254 Study Group
¹Memory and Aging Center, UCSF, San Francisco, CA, United States; ²Neurology, Yale University, New Haven, CT, United States; ³Huntington Medical Research Institutes, Pasadena, CA, United States; ⁴Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ⁵SEARCH, The Thai Red Cross AIDS Research Center, Bangkok, Thailand; ⁶U.S. Military HIV Research Program, Walter Reed Army Institute of Research, Silver Springs, MD, United States; ⁷Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Session P-G2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM **Exhibit Hall A****HAND in Aging Populations****448 The Effects of Age and Study Cohort On Brain Structure Among Men With HIV Disease**James T. Becker¹, Lawrence A. Kingsley², Mikhail Popov³, Nisha Shah⁴, Andrew J. Levine⁵, Eileen M. Martin⁶, Eric N. Miller⁷, Cynthia A. Munro⁸, Ann Ragin⁹, Ned Sacktor¹⁰¹Psychiatry, Neurology and Psychology, University of Pittsburgh, Pittsburgh, PA, United States; ²Infectious Diseases and Microbiology, Epidemiology, University of Pittsburgh, Pittsburgh, PA, United States; ³Psychiatry, University of Pittsburgh, Pittsburgh, PA, United States; ⁴Epidemiology, The John Hopkins Bloomberg School of Public Health, Baltimore, MD, United States; ⁵Neurology, University of California Los Angeles, Los Angeles, CA, United States; ⁶Psychiatry, Rush University School of Medicine, Chicago, IL, United States; ⁷Psychiatry, University of California Los Angeles, Los Angeles, CA, United States; ⁸Psychiatry, The Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁹Radiology, Northwestern University, Evanston, IL, United States; ¹⁰Neurology, The Johns Hopkins University School of Medicine, Baltimore, MD, United States**449 fMRI Reveals Asymptomatic Deficits Among HIV+ Older Adults On cART When Compared To HIV- Controls**Manya Magnus¹, Rebecca Baraskey¹, Halli Olsen¹, Xiong Jiang²¹Epidemiology and Biostatistics, George Washington University, Washington, DC, United States; ²Georgetown University, Washington, DC, United States**450 Longitudinal Progression of Cortical Atrophy in HIV- Patients On Stable Treatment**Michael R. Nowak¹, Bradford Navia², Jaroslaw Harezlak³, Constantine Yiannoutsos⁴, Charles Guttman⁵, Elyse Singer⁶, Thomas Campbell⁷, Eric Daar⁸, Giovanni Schifitto⁹, David Tate⁹¹Department of Computer Science and Engineering, Texas A&M University, College Station, TX, United States; ²Tufts University Medical School, Boston, MA, United States; ³Indiana University School of Medicine, Indianapolis, IN, United States; ⁴Brigham and Women's Hospital, Boston, MA, United States; ⁵University of California Los Angeles, Los Angeles, CA, United States; ⁶University of Colorado, Denver, CO, United States; ⁷University of Rochester Medical Center, Rochester, NY, United States; ⁸HIV for the Advancement of Military Medicine, San Antonio, TX, United States**451 fMRI Evidence for HIV-Induced Acceleration of Aging in Middle-Aged Women**Xiong Jiang¹, Chenglong Liu², Matthew Leclair², Cuiwei Wang², Xiaohan Xu², Pilar Hamilton², Lakshmi Goparaju², Mary Young²¹Neuroscience, Georgetown University Medical Center, Washington, DC, United States; ²Georgetown University Medical Center, Washington, DC, United States**452 Factors Related To Brain Atrophy in a Cohort of HIV Infected Patients: ANRS C03 Aquitaine Cohort**Carole Dufouil¹, Laura Richert¹, Rodolphe Thiébaud¹, Mathias Bruyant¹, Frédéric Dauchy², Michèle Allard², Didier Neau³, François Dabis⁴, Fabrice Bonnet⁴, Geneviève Chêne⁵¹HIV and associated disease team, INSERM Centre 897, Bordeaux, France; ²Services de Maladies Infectieuses et Tropicales, Bordeaux Hospital, Bordeaux, France; ³Bordeaux Hospital, Bordeaux, France**453 Hyperphosphorylated Tau in Cerebrospinal Fluid: A Biomarker for Neurological Aging in HIV-?**Jan J. Krut¹, Magnus Gisslén¹, Lars Hagberg², Henrik Zetterberg², Richard W. Price³, Staffan Nilsson⁴, Paola Cinque⁵¹Infectious Diseases, Sahlgrenska Academy, Gothenburg, Sweden; ²Psychiatry and Neurochemistry, Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden; ³Neurology, University of California San Francisco, San Francisco, CA, United States; ⁴Mathematical Sciences, Chalmers University of Technology, Gothenburg, Sweden; ⁵Infectious Diseases, San Raffaele Hospital, Milan, Italy

Session P-G3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall A****Neuropathogenesis****454 Efavirenz Produces a Differential Bioenergetic Response in Neurons and Glial Cells**Haryes A. Funes¹, Nadezda Apostolova¹, Fernando Alegré², Miriam Polo³, Ana Blas-García⁴, Juan V. Esplugues¹¹Departamento de Farmacología, Facultad de Medicina, Universidad de Valencia, Valencia, Spain; ²University Hospital Dr. Peset, Valencia, Spain; ³University Hospital Dr. Peset, Valencia, Spain**455 Corneal Sensory Nerve Fiber Loss in SIV-Infected Macaques: Tracking HIV PNS Damage**Jamie Dorsey¹, Lisa Mangus¹, Jonathan Oakley², Joseph Mankowski^{1,3}¹Molecular and Comparative Pathobiology, Johns Hopkins University, Baltimore, MD, United States; ²Voxelator, Pleasanton, CA, United States; ³Neurology, Johns Hopkins University, Baltimore, MD, United States**456 HIV-Tat Protein in Inflammatory Infiltrates of CNS-IRIS and in CSF of Patients On ART**Gloria von Geldern¹, Tory P. Johnson¹, Richa Tyagi¹, Ned Sacktor², Justin C. McArthur³, Scott Letendre⁴, Avindra Nath¹¹NINDS, NIH, Bethesda, MD, United States; ²Dept. of Neurology, Johns Hopkins University, Baltimore, MD, United States; ³Dept. of Neurology, Johns Hopkins University, Baltimore, MD, United States; ⁴Dept. of Neurology, University of California, San Diego, San Diego, CA, United States**457 Central Nervous System Demyelination in Pediatric SIV Infection**Herman Kamboj¹, Kimberly Curtis¹, Heather Carryl¹, Hayford Agyemang¹, Koen Van Rompay², Kristina Abel³, Mark Burke¹¹Physiology & Biophysics, Howard University, Washington, DC, United States; ²University of California Davis, Davis, CA, United States; ³University of North Carolina at Chapel Hill, Chapel Hill, NC, United States**458 Brain Iron Transport Is Associated With Neurocognitive Performance in HIV/AIDS**Asha R. Kallianpur¹, James R. Connor², Christopher C. Coe³, Benjamin B. Gelman⁴¹Genomic Medicine, Cleveland Clinic Foundation/Lerner Research Institute, Cleveland, OH, United States; ²Neurosurgery, Penn State Milton S. Hershey Medical Center, Hershey, PA, United States; ³Psychology, University of Wisconsin, Madison, WI, United States; ⁴Pathology, University of Texas Medical Branch, Galveston, TX, United States**461 Cognitive and Brain Microstructure Abnormalities in HIV-1 Infected Humanized Mice**Prasanta K. Dash¹, Michael D. Boska², Sidra P. akhter¹, Jaclyn S. Knibbe¹, Adrian A. Epstein¹, Robin R. High¹, Harris A. Gelbard³, Larisa Y. Poluektova⁴, Howard E. Gendelman¹, Santhi Gorantla¹¹Pharmacology and Expt. Neuroscience, University of Nebraska Medical Center, Omaha, NE, United States; ²Radiology, University of Nebraska Medical Center, Omaha, NE, United States; ³University of Rochester Medical Center, NY, NY, United States**462 SIV Dynamics in the CD8-Depleted vs Non-CD8-Depleted Rhesus Macaque Model for NeuroAIDS**Susanna L. Lamers¹, David J. Nolan², Brittany D. Rife³, Gary B. Fogel⁴, Tricia Burdo⁵, Kenneth C. Williams⁶, Marco Salemi⁷¹BioInfectors, LLC, Thibodaux, LA, United States; ²Department of Pathology, Immunology, and Laboratory Medicine, University of Florida, Gainesville, FL, United States; ³University of Florida, Gainesville, FL, United States; ⁴National Selection, San Diego, CA, United States; ⁵Boston College, Boston, MA, United States

463 Vascular Endothelium and Neurological Performance During Primary HIV Infection

Sebastian Urdary¹, Kevin Robertson², Fang-yong Li¹, Felicia C. Chow³, Julia Peterson³, Elaine M. Nitta³, Richard W. Price³, Priscilla Y. Hsue³, Serena Spudich¹

¹Yale University, New Haven, CT, United States; ²University of North Carolina, Chapel Hill, NC, United States; ³University of California, San Francisco, San Francisco, CA, United States

Session P-G4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
Host Genetics in HAND

464 Heme Oxygenase-1 Polymorphism and Protein Deficiency Associate With Neurological Disease in HIV

Alexander J. Gill¹, Suren S. Ambegaokar¹, Colleen E. Kovacsics¹, Stephanie A. Cross¹, Benjamin B. Gelman², Dennis L. Kolson¹

¹Department of Neurology, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, United States; ²Department of Pathology, University of Texas Medical Branch, Galveston, TX, United States

465 Mitochondrial DNA Haplogroups and Neurocognitive Impairment in the CHARTER Cohort

Todd Hulgan¹, David Samuels¹, William Bush¹, Ronald Ellis², Scott Letendre³, Peter Straub¹, Deborah Murdoch⁴, Donald Franklin², Igor Grant², Asha Kallianpur³, for the CNS HIV Antiretroviral Therapy Research (CHARTER) Group

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466 MBL2 Promoter Polymorphism rs7096206 Predicts Brain Metabolite Anomalies in HIV-Infected Adults

Kumud K. Singh, Qianqian Deng, Christine Fennema-Notestine, Florin Vaida, Ronald J. Ellis, Scott L. Letendre, Donald Franklin, Debralee Rosario, Robert K. Heaton, Igor Grant, and CHARTER Group

University of California San Diego, La Jolla, CA, United States

Session P-G5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
PML and Other CNS Infections

467 Pathogenesis of JC Virus Reactivation During Natalizumab Treatment

Spyridon Chalkias¹, Xin Dang¹, Evelyn Bord¹, Marion Stein², Philip Kinkel³, Jacob Sloan², Maria Houtchens³, Guy Buckle⁴, Carolina Ionete⁴, Igor Koralnik¹

¹Harvard Medical School, Center for Virology and Vaccine Research, Boston, MA, United States; ²Department of Neurology BIDMC, Boston, MA, United States; ³Department of Neurology BWH, Boston, MA, United States; ⁴Department of Neurology Umass, Worcester, MA, United States

468 Impaired *T. pallidum* Opsonic Antibody Function in HIV-Infected Patients With Neurosyphilis

Christina Marra, Lauren Tantalò, Sharon Sahi, Emily Ho, Sheila Dunaway, Trudy Jones, Sheila Lukehart

University of Washington, Seattle, WA, United States

469 Significance of Plasma JCV-DNA in HIV Progressive Multifocal Leukoencephalopathy (PML)

Francesca Ferretti¹, Manuela Testa¹, Valeria Longo¹, Constantino Theodore Yannoutsos², Beverly Sue Musick², Annamaria Pazzi¹, Antonio Boschini³, Simona Bossolasco⁴, Adriano Lazzarini¹, Paola Cinque¹

¹San Raffaele Scientific Institute, Milan, Italy; ²Department of Biostatistics, Indiana University, Indianapolis, IN, United States; ³S. Patrignano Medical Centre, Ospitaletto di Rimini, Italy

Session P-G6 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall A
CNS Viral Genetics

470 CD4-Independent Infection in the CNS of R5 SHIV+ Macaques Is Associated With Severe Neuropathology

Ana Rachel Leda^{1,2}, Ke Zhuang¹, Lily Tsai¹, Agegnehu Gettie¹, Heather Knight³, Carole Harbison³, Susan Westmoreland³, Cecilia Cheng-Mayer¹

¹Aaron Diamond AIDS Research Center, New York, NY, United States; ²Federal University of Sao Paulo, Sao Paulo, Brazil; ³New England Primate Research Center, Southborough, MA, United States

471 HIV-Associated Neurocognitive Disorder Is Associated With HIV-1 Dual Infection

Gabriel A. Wagner¹, Antoine Chailion², Donald R. Franklin², Gemma Caballero³, Sergei L. Kosakovsky Pond², Robert K. Heaton², Douglas D. Richman^{2,3}, Davey M. Smith^{2,3}, CHARTER Group

¹Infectious Diseases, University of California San Diego, La Jolla, CA, United States; ²University of California San Diego, La Jolla, CA, United States; ³Veterans Affairs San Diego Healthcare System, San Diego, CA, United States

472 Single Genome Analysis Reveals Genetic Characteristics of Neuroadaptation Across HIV-1 Envelope

Teresa H. Evering, Leslie St. Bernard, Charles Farmer, Martin Markowitz

The Aaron Diamond AIDS Research Center, New York, NY, United States

Session P-G7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
ART Effects On HAND and CNS Reservoirs

473 HIV-1 Replication in Central Nervous System Increases Over Time On Protease Inhibitor Only Therapy

Christoph Stephan¹, Maximilian Donath¹, Timo Wolf¹, Annette Haberl¹, Markus Bickel¹, Siri Göpel¹, Pavel Khaykin¹, Annemarie Berger², Dimitria Bon², Reinhard Brodt¹

¹Infectious Diseases, Goethe-University Hospital, Frankfurt, Germany; ²Medical Virology Institute, Goethe-University Hospital, Frankfurt, Germany; ³Biostatistics, Goethe-University Hospital, Frankfurt, Germany

475 Novel Method for More Reliably Estimating the Burden of Cognitive Impairment in HIV

Tanja Su¹, Judith Schouten^{2,3}, Gert J. Geurtsen², Ferdinand W. Wit^{3,4}, Ineke G. Stolle⁵, Peter Portegies^{2,6}, Matthian W. A. Caan¹, Peter Reiss^{3,4}, Charles B. Majoie¹, Ben A. Schmand^{2,7}, on behalf of the AGEHIV Cohort Study Group

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476 Improvement of Depression and Anxiety After Discontinuation of Long-Term Efavirenz Treatment

Khusno M. Mopatho¹, Arnt Schellekens², Reinout van Crevel¹, Karin Grintjes-Huisman¹, Monique Keuter¹, Peter Koopmans¹, Andre van der Ven¹

¹Internal Medicine and Nijmegen Institute for Infection, Inflammation and Immunity, Radboud University Medical Center, Nijmegen, Netherlands; ²Psychiatry, Radboud University Medical Center, Nijmegen, Netherlands

477 New Advanced EEG Technique To Monitor Early Brain Damage in Naïve HIV and Its Recovery During ART

Massimo Andreoni¹, Claudio Babiloni^{2,3}, Paolo Maria Rossini⁴, Paolo Onorati^{3,5}, Stefano Ferracuti⁶, Francesco Di Campli⁷, Antonio Aceti⁸, Elisabetta Teti⁹, Alfredo Pennica⁹

¹Clinical Infectious Diseases, Tor Vergata University, Rome, Italy; ²Department of Clinical and Experimental Medicine, University of Foggia, Foggia, Italy; ³Department of Neuroscience, San Raffaele Pisana, Rome, Italy; ⁴Institut of Neurology - Department of Geriatrics, Catholic University "Sacro Cuore," Rome, Italy; ⁵Physiology and Pharmacology, Sapienza University of Rome, Rome, Italy; ⁶Psychiatry, Sapienza University of Rome - S. Andrea Hospital, Rome, Italy; ⁷Sapienza University of Rome, Rome, Italy; ⁸Clinical Infectious Diseases, Sapienza University of Rome - S. Andrea Hospital, Rome, Italy

478 HIV-Replication Control Rates Needed To Prevent Neurocognitive Performance (NP) Decline

Ignacio Pérez-Valero¹, Robert Heaton², Donald Franklin³, Scott Letendre², Reena Deutsch², Bernard Gelman⁴, David Simpson⁵, Ann Collier⁶, Igor Grant⁷, and the CHARTER Group
¹Hospital Universitario La PAZ, Madrid, Spain; ²University of California, San Diego, San Diego, CA, United States; ³University of California, San Diego, San Diego, CA, United States; ⁴Hospital Universitario La Paz, Galdakao, TX, United States; ⁵Mount Sinai Hospital, New York, NY, United States; ⁶University of Washington, Seattle, WA, United States

479 CSF Biomarker Profile in HIV Patients With and Without CSF Viral Escape

Ignacio Pérez-Valero¹, Scott Letendre², Robert Heaton³, Ronald Ellis⁴, Allen McCutchan⁵, David Simpson⁶, Reena Deutsch³, Igor Grant⁷, and the CHARTER Group
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480 Accuracy of NEU Screen for Detecting Cognitive Impairment in Virologically Suppressed HIV Patients

Jose A. Muñoz-Moreno¹, Anna Prats¹, Núria Pérez-Álvarez¹, Inmaculada Nieto-Verdugo¹, Carmina R. Fumaz², Maria J. Ferrer¹, Maite Garolera², Bonaventura Clotet^{1,3}
¹Lluita contra la SIDA Foundation - Germans Trias i Pujol University Hospital, Badalona, Barcelona, Catalonia, Spain; ²Consorci Sanitari - Terrassa Hospital, Terrassa, Barcelona, Catalonia, Spain; ³Institut per la Recerca de la SIDA IrsiCaixa, Badalona, Barcelona, Catalonia, Spain

481 Determinants of Cognitive Impairment in HIV-Positive Men On cART and Uninfected Controls

Judith Schouten^{1,2}, Tanja Su³, Ferdinand W. Wit^{2,4}, Neeltje A. Kootstra⁵, Matthán W. A. Caan³, Gert J. Geurtsen¹, Ben A. Schmand^{1,6}, Charles B. Majole¹, Peter Portegies^{1,7}, Peter Reiss^{2,4}, on behalf of the AGEHIV Cohort Study Group
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482 HIV Reactivation by the Histone Deacetylase Inhibitor Panobinostat: Effects On CNS

Thomas A. Rasmussen¹, Ole S. Sogaard¹, Holger J. Møller², Christel R. Brinkmann¹, Rikke Olesen¹, Alex L. Laursen¹, Lars Østergaard¹, Martin Tolstrup¹
¹Infectious Diseases, Aarhus University Hospital, Aarhus, Denmark; ²Clinical Biochemistry, Aarhus University Hospital, Aarhus, Denmark

Session P-G8 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall A
CNS Inflammation, Immune Activation, and HAND Biomarkers

484 Differences Between Cerebrospinal Fluid and Blood Biomarkers of Inflammation in HIV Infection

Julia Peterson¹, Sheila Keating², Dietmar Fuchs³, Phillip Norris², Henrik Zetterberg⁴, Barbara Shacklett⁵, Serena Spudich⁶, Magnus Gisslén¹, Richard W. Price¹

¹Neurology, University of California San Francisco, San Francisco, CA, United States; ²Blood Systems Research Institute, San Francisco, CA, United States; ³Center for Chemistry and Biomedicine, Innsbruck Medical University, Innsbruck, Austria; ⁴Sahlgrenska Academy at University of Gothenburg, Gothenburg, Sweden; ⁵University of California Davis, Davis, CA, United States; ⁶Neurology, Yale University, New Haven, CT, United States

486LB Neuroinflammation in Asymptomatic HIV-Infected Subjects On Effective cART

Jaime H. Vera¹, Qi Guo², Ilan Rabiner³, Paul Matthews⁴, Roger Gunn⁵, Alan Winston¹

¹Infectious Diseases, Imperial College London, London, United Kingdom; ²Institute of Psychiatry, King's College London, London, United Kingdom; ³Imanova Centre for Imaging Sciences, London, United Kingdom; ⁴Division of Brain Sciences, Imperial College London, London, United Kingdom

487 CSF Biomarkers Correlate With Magnetic Resonance Spectroscopy Metabolites During HIV Disease

Albert M. Anderson¹, Christine Fennema-Notestine², Anya Umlauf³, David Clifford⁴, Christina Marra⁴, Benjamin Gelman⁵, Justin McArthur⁶, Allen McCutchan², Susan Morgello⁷, Scott Letendre², for the CHARTER group
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488 Abdominal Obesity, Inflammation, Immune Activation and Neurocognitive Impairment

Fred R. Sattler¹, Jiaxiu He², Scott Letendre³, Cara Wilson⁴, Chelsea Sanders⁵, Robert K. Heaton⁶, Ronald Ellis⁷, Donald Franklin⁸, Igor Grant⁹, J. Allen McCutchan³, for the CHARTER Group
¹Medicine, University of Southern California, Los Angeles, CA, United States; ²Preventive Medicine, University of Southern California, Los Angeles, CA, United States; ³Medicine, University of California San Diego, La Jolla, CA, United States; ⁴Medicine, University of Colorado at Denver, Denver, CA, United States; ⁵Medicine, University of California San Diego, La Jolla, CA, United States; ⁶Psychiatry, University of California San Diego, La Jolla, CA, United States; ⁷Neurology, University of California San Diego, La Jolla, CA, United States

489 Blood Cell Indices and Neurocognitive Impairment in the HAART Era: A CHARTER Study

Asha R. Kallianpur¹, Quan Wang², Peilin Jia³, Justin C. McArthur³, Susan Morgello⁴, Ann C. Collier⁵, Benjamin B. Gelman⁶, David B. Clifford⁷, J. Allen McCutchan⁸, Igor Grant⁹, the CHARTER Study Group
¹Genomic Medicine, Lerner Research Institute, Medicine Institute, Cleveland, OH, United States; ²Biomedical Informatics, Vanderbilt University School of Medicine, Nashville, TN, United States; ³Neurology, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁴Neurology/Pathology, Mount Sinai School of Medicine, New York, NY, United States; ⁵Medicine/Allergy and Infectious Diseases, University of Washington, Seattle, WA, United States; ⁶Pathology, University of Texas Medical Branch, Galveston, TX, United States; ⁷Neurology, Washington University School of Medicine, St. Louis, MO, United States; ⁸Medicine/Infectious Diseases, University of California San Diego, La Jolla, CA, United States; ⁹Psychiatry, University of California San Diego, La Jolla, CA, United States

490 CNS Immunoactivation in HIV Patients On ART With HIV-Associated Mild Neurocognitive Impairment

Arvid Eden¹, Donald R. Franklin², Dietmar Fuchs³, Igor Grant⁴, Scott Letendre⁵, Thomas Marcotte², Staffan Nilsson⁶, Richard W. Price⁵, Henrik Zetterberg¹, Magnus Gisslén¹
¹University of Gothenburg, Gothenburg, Sweden; ²University of California San Diego, La Jolla, CA, United States; ³Innsbruck Medical University, Innsbruck, Austria; ⁴Chalmers University of Technology, Gothenburg, Sweden; ⁵University of California San Francisco, San Francisco, CA, United States

491 CNS Inflammation During Treatment-Induced Viral Suppression

Julia Peterson¹, Sheila M. Keating², Viktor Dahl³, Phillip J. Norris², Sarah Palmer^{3,4}, Dietmar Fuchs⁵, Henrik Zetterberg⁶, Magnus Gisslén⁷, Richard W. Price⁸

¹Neurology, University of California San Francisco, San Francisco, CA, United States; ²Blood Systems Research Institute, San Francisco, CA, United States; ³Karolinska Institute, Stockholm, Sweden; ⁴Westmead Millennium Institute for Medical Research and University of Sydney, Westmead NSW, Australia; ⁵Innsbruck Medical University, Innsbruck, Austria; ⁶Sahlgrenska Academy at University of Gothenburg, Gothenburg, Sweden

492 CSF Viremia and Inflammatory Markers in Pts With NCI On TDF/FTC/EFV and After Switch to ABC/3TC/MVC

Juan M. Tiraboschi¹, Jose Muñoz-Moreno², MC Puertas³, Carlos Alonso⁴, Anna Prats-Paris⁵, Elena Ferrer⁶, Nerea Rozas⁷, Marga Maso-Serra⁸, Javier Martínez-Picado⁹, Daniel Podzamczar¹

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Session P-H1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Clinical Pharmacology of TB and HCV Coinfection

493 Rifapentine Once-Weekly Dosing Effect On Efavirenz, Emtricitabine and Tenofovir PKs

Christine Farenc¹, Severine Doroumi², Cathy Cantalloube¹, Laurent Perrin², Virginie Esposito³, Isabelle Cierien-Puiseux⁴, Xavier Bouleuc⁵, Marilyn Maroni¹

¹Disposition Safety Animal Research, Sanofi, Montpellier, France; ²Clinical Exploratory Pharmacology, Sanofi, Montpellier, France; ³Clinical Exploratory Pharmacology, Sanofi, Paris, France; ⁴Access To Medicines, Sanofi, Paris, France

494 Relationship Between Efavirenz Trough & CYP2B6 Genotypes With Rifampin-Based TB Therapy in STRIDE

Anne Luetkemeyer¹, Susan L. Rosenkranz², Darlene Lu³, Beatrix Grinsztajn⁴, Jorge Sanchez⁵, Michael Ssemmanda⁶, Ian Sanne⁷, Helen McIlerron⁸, Diane Havlir⁹, David Haas⁹, ACTG A5221 & A5243 Study Teams

¹HIV/AIDS Division, San Francisco General Hospital, University of California, San Francisco, San Francisco, CA, United States; ²Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ³HIV/AIDS Division, Center for Biostatistics in AIDS Research, Harvard School of Public Health, San Francisco, CA, United States; ⁴Instituto de Pesquisa Clínica Evandro Chagas, Fundacao Oswaldo Cruz, Rio de Janeiro, Brazil; ⁵Asociación Civil Impacta Salud y Educación, Lima, Peru; ⁶Joint Clinical Research Center, Kampala, Uganda; ⁷Clinical HIV Research Unit, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa; ⁸Division of Clinical Pharmacology, University of Cape Town, Cape Town, South Africa; ⁹Vanderbilt University School of Medicine, Nashville, TN, United States

495 Concentrations of Nevirapine or Efavirenz On and Off Anti-Tuberculosis Therapy (ANRS12214)

Nilesch Bhatt¹, Elisabeth Baudin², Bindya Meggi³, Carlota Silva², Valerie Furlan³, Aurelie Barrail-Tran^{3,4}, Maryline Bonnet⁵, Anne-Marie Taburet³

¹Instituto Nacional de Saúde, Ministry of Health, Maputo, Mozambique; ²Clinical Research Department, Epicentre, MSF, Paris, France; ³Clinical Pharmacy, Hospital Bicêtre, Paris-Sud University, Kremlin Bicêtre, France; ⁴Ea4123, Faculty of Pharmacy, Paris-Sud University, Chateaufort Malabry, France

496 Pharmacokinetics of Raltegravir 400 vs 800 mg BID With Intermittent Rifampicin Dosed Three Weekly

Helen E. Reynolds¹, Deirdre Egan², Laura Eise³, Mas Chaponada⁴, Ales Chrdle⁵, David J. Back¹, Saye H. Khoo¹

¹University of Liverpool, Liverpool, United Kingdom; ²Royal Liverpool University Hospital, Liverpool, United Kingdom

497 Pharmacokinetics of Faldaprevir and Antiretrovirals in Patients With HIV/HCV Coinfection

Jürgen K. Rockstroh¹, Marc-Antoine Valantin², Josep Mallolas³, Massimo Puoti⁴, Juan Antonio Pineda⁵, Patrick Ingiliz⁶, Marina Núñez⁷, Fenglei Huang⁸, Richard Vinisko⁹, Douglas Dieterich⁹

¹Department of Medicine I, University of Bonn, Bonn, Germany; ²Service des Maladies Infectieuses et Tropicales, Hôpital Pitié-Salpêtrière, Paris, France; ³Hospital Clinic-University of Barcelona, Barcelona, Spain; ⁴Department of Infectious Diseases, AO Ospedale Niguarda Ca' Granda Milano, Milan, Italy; ⁵Unit of Infectious Diseases and Microbiology, Hospital Universitario de Valme, Seville, Spain; ⁶Medical Center for Infectious Diseases, Berlin, Germany; ⁷Wake Forest University Health Sciences, Winston-Salem, NC, United States; ⁸Boehringer Ingelheim Pharmaceutical, Inc, Ridgefield, CT, United States; ⁹Mount Sinai Medical Center, New York, NY, United States

498 Pharmacokinetic Interactions Between the HCV NS5A Inhibitor MK-8742 and Efavirenz

Wendy Yeh¹, William Marshall¹, Eric Mangini¹, Xiaobi Huang¹, Yali Zhu¹, Susanne Langley¹, Patricia James¹, Stephen Youngberg², Joan Butters¹

¹Merck, Sharpe and Dohme, Whitehouse Station, NJ, United States; ²Celerion, Lincoln, NE, United States

499 Effect of Faldaprevir On Atazanavir Pharmacokinetics in Patients With HIV/HCV Coinfection

Mark Nelson¹, Kelkawas Arastéh², Mamta K. Jain³, Vicente Soriano⁴, José Valdez Madruga⁵, Juvencio Furtado⁶, Manuel Battagay⁷, Fenglei Huang⁸, Montserrat Manero⁹, Douglas Dieterich¹⁰

¹Chelsea and Westminster Hospital, London, United Kingdom; ²EPIMED/Vivantes Auguste-Viktoria-Klinikum, Berlin, Germany; ³UT Southwestern Medical Center, Dallas, TX, United States; ⁴Hospital Carlos III, Madrid, Spain; ⁵Centro de Referencia e Treinamento DST/AIDS, Sao Paulo, Brazil; ⁶Faculdade de Medicina do ABC and Hospital Heliópolis, Sao Paulo, Brazil; ⁷University Hospital Basel, Basel, Switzerland; ⁸Boehringer Ingelheim Pharmaceuticals Inc, Ridgefield, CT, United States; ⁹Boehringer Ingelheim España, Barcelona, Spain; ¹⁰Mount Sinai Medical Center, New York, NY, United States

500 No Meaningful PK Interaction Between HCV Protease Inhibitor MK-5172 and Tenofovir or Raltegravir

Wendy W. Yeh¹, Iain P. Fraser², Luzelena Caro³, Jennifer Talaty³, Zifang Guo⁴, Henry Davis⁵, Stephen P. Youngberg⁶, Joan R. Butters¹

¹Clinical Pharmacology/Clinical Research, Merck Research Laboratories, Boston, MA, United States; ²Clinical Pharmacology/Clinical Research, Merck Research Laboratories, Rahway, NJ, United States; ³Clinical Drug Metabolism, Merck Research Laboratories, West Point, PA, United States; ⁴Statistics, Merck Research Laboratories, Upper Gwynedd, PA, United States; ⁵Clinical Pharmacology/Clinical Research, Merck Research Laboratories, Upper Gwynedd, PA, United States; ⁶Celerion, Lincoln, NE, United States

501 Effect of Faldaprevir On Raltegravir Pharmacokinetics in Healthy Volunteers

David Joseph¹, Peter Rose², Natalja Strelkowa², Armin Schultz², Jeanette Garcia¹, Mabrouk Elgadi¹, Fenglei Huang¹

¹Boehringer Ingelheim Pharmaceuticals, Inc, Ridgefield, CT, United States; ²Boehringer Ingelheim Pharma GmbH & Co KG, Biberach, Germany; ³CRS Clinical Research Services Mannheim GmbH, Mannheim, Germany; ⁴Boehringer Ingelheim (Canada), Ltd, Burlington, ON, Canada

502 No Clinically Relevant Interactions Between Daclatasvir and Cyclosporine or Tacrolimus

Marc Bifano¹, Robert Adamczyk¹, Carey Hwang¹, Hamza Kandoussi², Alan Marion³, Richard J. Bertz¹

¹Research and Development, Bristol-Myers Squibb, Hopewell, NJ, United States; ²Research and Development, Bristol-Myers Squibb, Lawrenceville, NJ, United States; ³ICON Development Solutions, Omaha, NE, United States

Session P-H2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM **Exhibit Hall B****Pharmacogenetics: Drug Disposition To Therapeutics****503 ABCCA4 3348 T>C SNP Affects Tenofovir Urinary Output in HIV-Positive Patients**

Andrea Calcagno, Jessica Cusato, Letizia Marinaro, Marco Simiele, Alice Trentalange, Chiara Montuccchio, Chiara Alcantarin, Antonio D'Avolio, Giovanni Di Perri, Stefano Bonora
Unit of Infectious Diseases, Department of Medical Sciences, University of Torino, Torino, Italy

504 Relative Genetic Contribution To the Pharmacokinetics of Commonly Prescribed Antiretrovirals

Marco S. Siccardi¹, Adeniyi Olagunju^{1,2}, Marco Simiele³, Antonio D'Avolio³, Andrea Calcagno³, Giovanni Di Perri³, Stefano Bonora³, Andrew Owen¹
¹Department of Molecular and Clinical Pharmacology, University of Liverpool, Liverpool, United Kingdom; ²Faculty of Pharmacy, Obafemi Awolowo University, Ile-Ife, Nigeria; ³Amedeo di Savoia Hospital, University of Turin, Turin, Italy

505 Leveraging Genomics in HIV Treatment Decisions

Paul J. McLaren¹, Margalida Rotger¹, Manel Aouni¹, Huldrych Günthard², Catia Marzolini², Laurent Decosterd², Amalio Telenti¹
¹The Swiss HIV Cohort, Lausanne, Switzerland; ²The Swiss HIV Cohort, Zurich, Switzerland; ³The Swiss HIV Cohort, Basel, Switzerland

506 Contribution of CYP2A6, UGT2B7, and Other Non-CYP2B6 Polymorphisms To Plasma Efavirenz Exposure

David Haas¹, Awewura Kwara², Danielle M. Richardson³, Paxton Baker¹, Ioannis Papageorgiou¹, Edward P. Acosta⁴, Gene D. Morse⁵, Michael Court⁶, the AIDS Clinical Trials Group (ACTG)
¹Vanderbilt University, Nashville, TN, United States; ²Brown University, Providence, RI, United States; ³Washington State University, Pullman, WA, United States; ⁴University of Alabama at Birmingham, Birmingham, AL, United States; ⁵State University of New York at Buffalo, Buffalo, NY, United States

Session P-H3 Poster Session

Wednesday April 3, 2014, 2:30 PM–4:00 PM **Exhibit Hall B****ARV Pharmacokinetics, Drug Interactions, and Pharmacodynamics****507 Rilpivirine With Darunavir/Ritonavir: Pharmacokinetics & Safety in HIV Therapy-Naïve Patients**

Akil G. A. Jackson¹, Laura J. Else², Christopher Higgs³, Zeenat Karolia¹, Saye Khoo⁴, David Back⁵, Andrew Murungi⁶, Emma Devitt¹, Anton Pozniak¹, Marta Boffito¹
¹St Stephen's AIDS Trust, St Stephen's Centre, Chelsea & Westminster Hospital, London, United Kingdom; ²Department of Molecular and Clinical Pharmacology, University of Liverpool, Liverpool, United Kingdom; ³Infectious Diseases, Janssen UK, High Wycombe, United Kingdom

508 Rilpivirine Pharmacokinetics With/Without Darunavir/r in Adolescents and Young Adults

Marc Foca¹, Ram Yogev², Andrew Wiznia³, Rohan Hazra⁴, Patrick Jean-Philippe⁵, Bobbie Graham⁶, Paula Britto⁷, Vincent J. Carey⁸, Jennifer King⁹, Tim R. Cressey¹⁰, for the IMPAACT P1058A team
¹Pediatrics, Columbia University Medical Center, New York, NY, United States; ²Pediatrics, Lurie Children's Hospital of Chicago, Northwestern University Feinberg School of Medicine, Chicago, IL, United States; ³Pediatrics, Jacobi Medical Center, Bronx, NY, United States; ⁴National Institutes of Health, Eunice Kennedy Shriver National Institute of Child Health and Human Development, Maternal and Pediatric Infectious Disease Branch, Bethesda, MD, United States; ⁵Henry Jackson Foundation, National Institutes of Health, Division of Acquired Immunodeficiency Syndrome, International Maternal Adolescent Pediatric Branch, Bethesda, MD, United States; ⁶Frontier Science & Technology, Amherst, NY, United States; ⁷Harvard School of Public Health, Boston, MA, United States; ⁸The University of Alabama at Birmingham, Birmingham, AL, United States; ⁹Faculty of Associated Medical Sciences, Chiang Mai University, Chiang Mai, Thailand

509 The Cerebrospinal Fluid HIV Risk Score for Assessing Central Nervous System HIV Activity

Edward R. Hammond¹, Rosa M. Crum¹, Glenn J. Treisman¹, Shruti H. Mehta¹, David B. Clifford², David M. Simpson³, Benjamin B. Gelman⁴, Ronald J. Ellis⁵, Scott L. Letendre⁶, Justin C. McArthur¹
¹Johns Hopkins University, Baltimore, MD, United States; ²Washington University, St. Louis, MO, United States; ³Cahn School of Medicine at Mount Sinai, New York, NY, United States; ⁴University of Texas, Medical Branch, Galveston, TX, United States; ⁵University of California, San Diego, CA, United States

510 Efavirenz (EFV) 400 Versus 600 mg Daily: Results of the ENCORE1 Intensive PK Substudy

Laura Dickinson¹, Rebekah Puls², on behalf of ENCORE1 Pharmacokinetics Substudy Group
¹Department of Molecular and Clinical Pharmacology, University of Liverpool, Liverpool, United Kingdom; ²University of New South Wales, Sydney, Australia

511 Correlation Between Atazanavir Concentrations, Clinical Covariates and Side Effects

Cristina J. P. Gervasoni, Paola Meraviglia, Simona Landonio, Valeria Cozzi, Agostino Riva, Nitin Charbe, Laurenza Ferraris, Giuliano Rizzardini, Massimo Galli, Dario Cattaneo
Luigi Sacco University Hospital, Milan, Italy

512 Tenofovir Diphosphate Concentration-Response Relationship for HIV Prevention in Vaginal Tissue

Melanie R. Nicol¹, Cindi W. Emerson², Julie A. Nelson³, Craig Sykes⁴, Heather MA Prince⁴, Kristine B. Patterson⁴, Angela D. M. Kashuba⁵
¹School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²Center for AIDS Research, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ³Microbiology and Immunology, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ⁴Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

513 A Pharmacokinetic Drug-Drug Interaction Study Between Raltegravir and Atorvastatin

Maren Blomk¹, Michiel van Beek², Angela Colbers¹, Monique Roukens¹, Bas Schouwenaar², David Burger¹
¹Department of Pharmacy, Radboud University Medical Center, Nijmegen, Netherlands; ²Department of Pharmacology and Toxicology, Radboud University Medical Center, Nijmegen, Netherlands

514LB PK Study of Depot Medroxyprogesterone Acetate in HIV+ Women On Lopinavir/Ritonavir: ACTG 5283

Susan E. Cohn¹, **Amneris E. Luque**², Jeong-Gun Park³, Yoninah Cramer⁴, Francesca Aweeka⁵, Adriana Weinberg⁶, Elizabeth Livingston⁷, Karin L. Klingman⁸, Barbara Bastow⁹, Heather Watts¹⁰
¹Medicine, Northwestern University, Chicago, IL, United States; ²Medicine, University of Rochester Medical Center, Rochester, NY, United States; ³Biostatistics, Statistical and Data Analysis Center, Boston, MA, United States; ⁴Biostatistics, Statistical and Data Analysis Center, Boston, IL, United States; ⁵Clinical Pharmacy, University of California San Francisco, San Francisco, CA, United States; ⁶Medicine, University of Colorado Health Sciences Center, Denver, CO, United States; ⁷Pediatrics, Duke University, Durham, NC, United States; ⁸AIDS, Division of AIDS, Bethesda, MD, United States; ⁹Social and Scientific Systems, Inc., Silver Spring, MD, United States; ¹⁰Maternal and Pediatric Infectious Disease Branch, National Institute of Child Health and Human Development, Bethesda, MD, United States

515 Multi-System Investigation of the Mechanisms for Raltegravir Association With Intestinal Tissue

Darren Michael Moss¹, Paul Curley¹, Alison Shone², Marco Siccardi¹, Andrew Owen¹
¹Molecular and Clinical Pharmacology, Translational Medicine, Liverpool, United Kingdom; ²Parasitology, Liverpool School of Tropical Medicine, Liverpool, United Kingdom

516 Tenofovir DF 150 mg Once Daily in HIV-Infected Adults With Moderate Renal Impairment

Tim R. Cressey^{1,2}, Anchalee Avihingsanon^{3,4}, Guttiga Halue⁵, Prattana Leenasirimakul⁶, Pra-onnase Sukrakanchana⁷, Nicole Ngo-Giang-Huong^{1,2}, Achara Eksaengsu⁸, Gonzague Jourdain^{1,2}, Virat Klinbuayame⁹, Chureeratana Bowonwatanuwong¹⁰

¹Faculty of Associated Medical Sciences, PHPT/IRD 174, Chaing Mai University, Chiang Mai, Thailand; ²Department of Immunology & Infectious Diseases, Harvard School of Public Health, Boston, MA, United States; ³HIV Netherlands Australia Thailand (HIV-NAT) Research Collaboration, Bangkok, Thailand; ⁴Division of Allergy and Immunology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ⁵Phayao Hospital, Phayao, Thailand; ⁶Nakomping Hospital, Chiang Mai, Thailand; ⁷Institut de Recherche pour le Développement (IRD), Marseille, France; ⁸The Government Pharmaceutical Organization, Bangkok, Thailand; ⁹Sanpatong Hospital, Sanpatong, Thailand; ¹⁰Internal Medicine, Hospital, Chonburi, Thailand

- 517 Tenofovir Concentrations and Prophylactic Effect in a Macaque Model of Rectal SHIV Transmission**
Peter L. Anderson¹, David V. Glidden², Lane R. Bushman¹, Jia-Hua Zheng¹, L. Anthony Guida¹, Walid Heneine³, J. Gerardo Garcia-Lerma³
¹Pharmaceutical Sciences, University of Colorado Denver, Aurora, CO, United States; ²University of California San Francisco, San Francisco, CA, United States; ³Centers for Disease Control and Prevention (CDC), Atlanta, GA, United States

Session P-H4 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B

New Clinical and Preclinical Formulations

- 518 Optimisation of Intramuscular Sustained Release Nano-Formulations Using In Silico Modelling**
Rajith Kumar Reddy Rajoli¹, David Back¹, Steve Rannard², Andrew Owen¹, Marco Siccardi¹
¹Department of Clinical & Molecular Pharmacology, University of Liverpool, Liverpool, United Kingdom; ²Department of Chemistry, University of Liverpool, Liverpool, United Kingdom
- 519 Macrophage Targeted Nanomedicines for Mycobacterial Infections**
Benson Edagwa¹, Dongwei Guo², Pavan Puligujja¹, JoElynn McMillan¹, Xinming Liu¹, Howard Gendelman¹, Prabagaran Narayanasamy¹
¹University of Nebraska Medical Center, Omaha, NE, United States; ²Pharmaceutical Science, University of Nebraska Medical Center, Omaha, NE, United States
- 520 Fluorescent Magnetic Nanoparticle as Anti-HIV Drug Carrier for Rodent Brain Targeting**
Upal Roy¹, Hong Ding¹, Sudheesh P. Kanthikeel¹, Elena M. Kaptanovskaya², Andrea Raymond¹, Karla Munoz-Caamano¹, Madhavan Nair¹
¹Immunology, Florida International University, Miami, FL, United States; ²Department of Human and Molecular Genetics, Florida International University, Miami, FL, United States
- 521LB A Novel Anti-HIV Particle Provides Sustained Plasma and Cell Drug Levels in Lymph Nodes in Primates**
Jennifer Freeling¹, Josefina Koehn, Culling Shu, **Rodney JY Ho^{2,3}**
¹Pharmaceutics, University of Washington, Seattle, WA, United States; ²Pharmaceutics, University of Washington, Seattle, WA, United States; ³Clinical Pharmacology, Fred Hutchinson Cancer Research Center, Seattle, WA, United States
- 522 NanoART Facilitated HIV-1 Clearance by a Mixed-Lineage Kinase 3 Inhibitor**
Gang Zhang¹, Prasanta K. Dash¹, Dongwei Guo¹, Jayme L. Wiederin¹, Pawel S. Ciborowski¹, Val S. Goodfellow², JoElynn M. McMillan¹, Santhi Gorantla¹, Harris A. Gelbard³, Howard E. Gendelman¹
¹Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE, United States; ²Calixa Bio, San Diego, CA, United States; ³University of Rochester Medical Center, Rochester, NY, United States
- 523 A Multiple Dose Study of Raltegravir (RAL) Formulations**
Matthew L. Rizk, Rajesh Krishna, Valerie Schulz, Jolanda ten Bruggencate-Broeders, Patrick Larson, Larissa Wenning
 Merck & Co., Inc., West Point, PA, United States

- 524 In Vivo Effects of Solid Drug Nanoparticle and Conventional Efavirenz On Angiogenesis in Rodents**
Paul Curley¹, Marco Giardiello¹, Neill Liptrott¹, Philip Martin¹, Tom McDonald², Marco Siccardi¹, Juliet McAdams³, Steve Rannard², Tim Kirkham³, Andrew Owen¹
¹Molecular and Clinical Pharmacology, University of Liverpool, Liverpool, United Kingdom; ²Chemistry, University of Liverpool, Liverpool, United Kingdom; ³Institute of Psychology, Health and Society, University of Liverpool, Liverpool, United Kingdom
- 525 Atazanavir/Cobicistat Fixed-Dose Combination Is Bioequivalent To the Separate Agents**
Xiaolu Tao¹, Heather Sevinsky¹, Reena Wang¹, Palanikumar Ravindran², Karen Sims³, Xiaohui Xu⁴, Navin Jariwala¹, Richard Bertz¹
¹Bristol-Myers Squibb, Pennington, NJ, United States; ²Bristol-Myers Squibb, Princeton, NJ, United States

Session P-I1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B

Preclinical Studies of Novel ART Approaches: Entry

- 526 Non-Integrating Lentivirus Delivered CCR5-ZFNs Can Inhibit HIV-1 Infection in Humanized Mice**
Guohua Yi¹, Jang-Gi Choi, Preeti Bharaj, Sojan Abraham, Manjunath Swamy, Premalata Shankar
 Department of Biomedical Sciences, Center of Excellence in Infectious Disease, Texas Tech University Health Sciences Center, El Paso, TX, United States
- 527 Role of Sulfhydryl in Causing Lytic Inactivation of HIV- 1 by Env Targeting Peptide Triazole Thiols**
Lauren D. Bailey¹, Caitlin Duffy¹, Huiyuan Li², Ali Emileh³, Arangassery R. Bastian⁴, Irwin Chaiken¹
¹Biochemistry and Molecular Biology, Drexel University College of Medicine, Philadelphia, PA, United States; ²West Virginia University, Morgantown, WV, United States; ³Dartmouth College, Hanover, NH, United States; ⁴Biomedical Engineering, Drexel University College of Medicine, Philadelphia, PA, United States
- 528 eCD4-Ig Is a Highly Potent HIV-1 Entry Inhibitor**
Matthew Gardner¹, Lisa Kattenhorn², Jessica Chiang³, Michael Farzan¹
¹Department of Infectious Diseases, The Scripps Research Institute, Jupiter, FL, United States; ²Division of Comparative Pathology, Harvard Medical School, Southborough, MA, United States; ³Department of Microbiology and Immunobiology, Harvard Medical School, Boston, MA, United States
- 529 Computational Design of Novel Potent Inhibitors of HIV-1 Entry**
Marina Tuiyishime, Simon Cocklin
 Biochemistry, Drexel College of Medicine, Philadelphia, PA, United States
- 530 Cenicriviroc Achieves High CCR5 Receptor Occupancy at Low Nanomolar Concentrations**
Emilie Jalbert¹, Mary Margaret Byron¹, Cecilia Shikuma¹, Helen Jenkins¹, Eric Lefebvre², **Jason D. Barbour¹**
¹University of Hawaii Manoa, Honolulu, HI, United States; ²Tobira Therapeutics, South San Francisco, CA, United States

Session P-I2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B

Preclinical Studies of Novel ART Approaches: Post-Entry

- 531 Identification of a Novel HIV-1 Inhibitor Targeting Vif-Dependent Degradation of Human APOBEC3G**
Erez Pery^{1,2}, Andrew Jay Brazier¹, Ann Sheehy³, Vikas Misra¹, Kartampatt S. Rajendran^{1,2}, Marie K. Mankowski⁴, Lynn Rasmussen⁵, E. Lucile White⁶, Roger G. Ptak⁶, Dana Gabuzda^{1,6}
¹Cancer Immunology and AIDS, Dana Farber Cancer Institute, Boston, MA, United States; ²Department of Pathology, Harvard Medical School, Boston, MA, United States; ³Department of Biology, College of the Holy Cross, Worcester, MA, United States; ⁴Department of Infectious Diseases Research, Southern Research Institute, Frederick, MD, United States

United States;³High Throughput Screening Center, Southern Research Institute, Birmingham, AL, United States;⁴Department of Neurology (Microbiology), Harvard Medical School, Boston, MA, United States

- 532 Drugging HIV Vif as a Rational Approach To Eradication**
Harold C. Smith, Ryan P. Bennett
OyaGen, Inc, Rochester, NY, United States

- 533 A Novel Class of Multimerization Selective Inhibitors of HIV-1 Integrase**

Amit Sharma¹, Alison P. Slaughter¹, Nivedita Jena¹, Lei Feng¹, Jacques J. Kessi¹, Li Wu², James R. Fuchs³, Mamuka Kvaratskhelia¹
¹College of Pharmacy, The Ohio State University, Columbus, OH, United States;²Center for Retrovirus Research, The Ohio State University, Columbus, OH, United States

- 534 PF74 Inhibits Multiple HIV Capsid Functions Independent of Host Cyclophilin A and CPSF6**

Stephen R. Yant¹, Luong Tsai¹, Debi Jin¹, Rujuta A. Bam¹, Andrew Mulato¹, Magdeleine Hung¹, Chien-hung Chou¹, Randall Halcomb², Tomas Cihlar¹

¹Biology, Gilead Sciences, Foster City, CA, United States;²Medicinal Chemistry, Gilead Sciences, Foster City, CA, United States

- 536 Recent Progress in Developing Potent and Broadly Active HIV-1 Maturation Inhibitors**

Emiko Urano¹, Sherimay D. Ablan¹, David Martin², Ritu Gaur³, Paul W. Keller⁴, Alasdair C. Steven⁴, Theodore Nitz², Carl Wild², Eric O. Freed¹
¹HIV Drug Resistance Program, NCI-Frederick, Frederick, MD, United States;²DFH Pharma, Inc, Galthersburg, MD, United States;³South Asian University, New Delhi, India;⁴National Institute of Arthritis and Musculoskeletal and Skin Diseases/NIH, Bethesda, MD, United States

Session P-J1 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
RCTs in Second-Line ART and Virologic Failure

- 537 Mortality Among HIV+ Participants Randomized To Omit NRTIs vs. Add NRTIs in OPTIONS (ACTG A5241)**
Karen Tashima¹, Laura Smeaton², Karin Klingman³, Adriana Andrade⁴, Joseph Eron⁵, Carl Fichtenbaum⁶, Rajesh Gandhi⁷, Victoria Johnson⁸, Richard Haubrich⁹

¹Medicine, Warren Alpert Medical School of Brown University, Providence, RI, United States;²Center for Biostatistics in AIDS Research, Boston, MA, United States;³HIV Research Branch, TRP, DAIDS, NIAID, NIH, Bethesda, MD, United States;⁴Medicine, Johns Hopkins University, Baltimore, MD, United States;⁵Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States;⁶Medicine, University of Cincinnati, Cincinnati, OH, United States;⁷Medicine, Massachusetts General Hospital and Ragon Institute, Boston, MA, United States;⁸Medicine, Birmingham VA Medical Center and University of Alabama at Birmingham School of Medicine, Birmingham, AL, United States;⁹Medicine, University of California at San Diego, San Diego, CA, United States

- 538 Partner-Based Intervention for Adherence To Second-Line ART: A Multinational Trial (ACTG A5234)**

Robert Gross¹, Lu Zheng², Alberto La Rosa³, Xin Sun⁴, Susan Rosenkranz⁵, Sandra Cardoso-Wagner⁶, Francis Ssali⁷, Robert Camp⁸, Catherine Godfrey⁹, Ann Collier¹⁰, ACTG Team A5234
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- 539 Predictors of Late Virological Failure After Initial Successful Suppression On EFV-Based ART**

Isaac Singini¹, Thomas Campbell², Laura Smeaton³, Nagalingeswaran Kumarasamy⁴, Karin Klingman⁵, Sineenart Taejaroenkul⁶, Timothy Flanagan⁷, Alberto La Rosa⁸, James Hakim⁹, Michael Hughes³, for the ACTG A5175/PEARLS Study Team
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Centre, Chennai, India;⁵NIH, NIAID, DAIDS, Bethesda, MD, United States;⁶Chiang Mai University, Chiang Mai, Thailand;⁷Miriam Hospital, Brown University, Providence, RI, United States;⁸Asociación Civil Impacta Salud y Educación, Lima, Peru;⁹University of Zimbabwe College of Health Sciences, Harare, Zimbabwe

- 540 Raltegravir Non-Inferior To Standard of Care in SECOND-LINE Therapy Over 96 Weeks**

Janaki Amin, on behalf of the SECOND-LINE study team
The Kirby Institute, University of New South Wales, Sydney, Australia

- 541LB Randomized Comparison of Three Second Line ART Regimens in Africa: The 2 Lady/ANRS/EDCTP Study**

Sinatou Koulla-Shiro^{1,2}, Laura Claffi³, Vincent Le Moing⁴, Cheikh Tidiane Ndour⁵, Adrien Sawadogo⁶, Sabrina Eymard-Duvernay⁷, Avelin Aghokeng⁸, Jacques Reynes⁹, Alexandra Calmy¹⁰, Eric Delaporte¹¹, on behalf of the 2LADY study group
¹Service Maladies Infectieuses, Central Hospital Yaounde, FMSB/UYI, Yaounde, Cameroon;²Site ANRS Cameroon, Yaounde, Cameroon;³UMI233, IRD, Montpellier, France;⁴Service Maladies Infectieuses, Hôpital de Fann, RCFC, Dakar, Senegal;⁵CHU Sanou Soro, HDJ, Bobo Dioulasso, Burkina Faso;⁶UMI233/IRD, IMPM/CREMER, Yaounde, Cameroon;⁷Infectious Diseases, University Hospital Geneva, Geneva, Switzerland

Session P-J2 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
RCTs in First-Line ART in Treatment Naïve Patients

- 542 First-Line Therapy With LPV/r vs NVP and 2 NRTIs in a Developing Country: W144 of a Randomized Trial**

Nathan Clumeck¹, Claude Mwamba², Kabamba Kabeya³, Serge Matanda⁴, Dolores Vaira⁵, Eric Kasamba⁶, Coca Necso⁷, David Kadiebwé⁸, Chantal Milolo⁹, Joe Ilunga¹⁰, Lievin Kapend¹¹
¹Infectious diseases, CHU Saint-Pierre, Brussels, Belgium;²Lubumbashi Network & PNMLS, Lubumbashi, Congo, Democratic Republic of the;³CHU Liège, Liège, Belgium

- 543 Dolutegravir Regimen Statistically Superior To Tenofvir/Emtricitabine/Efavirenz: 96-Week Data**

Sharon Walmsley¹, Juan Berenguer², Marie-Aude Khuong-Josses³, Michael Kilby⁴, Thomas Lutz⁵, Daniel Podzamczar⁶, Norman Roth⁷, Catherine Granier⁸, Brian Wynne⁹, Keith Pappa¹⁰
¹University Health Network, Toronto, ON, Canada;²Hospital General Universitario Gregorio Marañón, Madrid, Spain;³CHG – Hôpital Delafontaine, Paris, France;⁴Medical University of South Carolina, Charleston, SC, United States;⁵Infectiologikum, Frankfurt, Germany;⁶Bellvitge University Hospital, Barcelona, Spain;⁷Prahan Market Clinic, Melbourne, Australia;⁸GSK, London, United Kingdom;⁹GSK, Philadelphia, PA, United States;¹⁰GSK, Research Triangle Park, NC, United States

- 544LB A Randomized, Placebo-Controlled, Double-Blind Study of VM-1500 in HIV-Naïve Patients**

Winai Ratanasuwarn¹, Peerawong Werarak¹, Robert L. Murphy², Vadim Bichko³

¹Preventive and Social Medicine, Faculty of Medicine Siriraj Hospital, Bangkok, Thailand;²Northwestern University, Chicago, IL, United States;³ChemDiv, Inc, San Diego, CA, United States

- 545 The Oral Exam: A Simple Tool To Identify HIV-Infected Patients in Need of Antiretroviral Therapy**

Ashita S. Batavia¹, Rode Secours², Patrice Espinosa³, Marc A. Jean-Juste⁴, Patrice Severe⁵, Jean W. Pape⁶, Daniel W. Fitzgerald⁷
¹Department of Medicine, New York Presbyterian Hospital, New York, NY, United States;²The GHESKIO Center, Port-au-Prince, Haiti;³University of California San Francisco Medical Center, San Francisco, CA, United States

- 546 Efficacy of First-Line ARV Regimens: An Exploratory "Target Not Detected" Analysis**

Kirsten L. White¹, Xuelian Wei¹, Lijie Zhong¹, Martin S. Rhee¹, Marshall W. Fordyce², Javier Szwarcberg³, John Mellors⁴, Michael D. Miller¹

¹Clinical Virology, Gilead Sciences, Inc, Foster City, CA, United States;²University of Pittsburgh, Pittsburgh, PA, United States

547 Randomized Comparison of Anthropometric Outcomes On EFV-Based Antiretroviral Therapies

Sineenart Taejaroenkul¹, Thomas Campbell¹, Laura Smeaton³, Amita Gupta⁴, Nagalingeswaran Kumarasamy⁵, Karin Klingman⁶, Isaac Singini⁷, Javier R. Lama⁸, Rosie Mngqibisa⁹, **Michael Hughes⁸**, for ACTG A5175/PEARLS Study Team

¹Chiang Mai University, Chiang Mai, Thailand; ²University of Colorado Denver, Aurora, CO, United States; ³Harvard School of Public Health, Boston, MA, United States; ⁴Johns Hopkins University, Baltimore, MD, United States; ⁵YRG CARE Medical Center, Chennai, India; ⁶NIH, NIAID, DAIDS, Bethesda, MD, United States; ⁷Johns Hopkins Research Project, Blantyre, Malawi; ⁸San Miguel CRS, Lima, Peru; ⁹University of KwaZulu Natal, Durban, South Africa

548 NEGR1 Genetic Variants and Risk for Virological Failure With Genotypic Resistance in Botswana

Sophie Limou¹, Cheryl A. Winkler², Hermann Bussmann^{2,3}, Vladimir Novitsky^{2,3}, Sikhulile Moyo⁴, Max Essex^{2,3}, Richard G. Marlink^{2,3}, C. William Wester^{2,4}

¹Center for Cancer Research, Basic Science Program, Frederick National Laboratory, Leidos BioMedical Research for the National Cancer Institute, Frederick, MD, United States; ²Department of Immunology and Infectious Diseases, Harvard School of Public Health, Boston, MA, United States; ³Botswana-Harvard School of Public Health AIDS Initiative Partnership for HIV Research and Education (BHP), Gaborone, Botswana; ⁴Vanderbilt Institute for Global Health (VIGH), Vanderbilt University School of Medicine, Division of Infectious Diseases, Nashville, TN, United States

Session P-J3 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B

ART Simplification, Intensification, and Switch Studies

549LB Paradoxical Impact of Maraviroc/Raltegravir Added To HAART in Acute HIV Infection: ANRS 147 Trial

Antoine Chéret^{1,2}, Georges Nembou³, Adeline Melard¹, Camille Lécroux⁴, Caroline Lascoux⁵, Isabelle Ravau⁶, Jacques Reynes⁷, Patrick Mialhes⁸, Laurence Meyer⁹, Christine Rouzioux¹
¹EA 3620 Virology Laboratory, Université Paris-Descartes Sorbonne Paris Cité, Paris, France; ²Department of Infectious Diseases, DRON Hospital, Tourcoing, France; ³INSERM U1018, APHP Bicêtre Hospital, Faculty of Medicine Univ Paris-Sud, Le Kremlin-Bicêtre, Paris, France; ⁴INSERM U1012, Univ Paris-Sud, Paris, France; ⁵Department of Infectious Diseases, AP-HP, Saint-Louis Hospital, Paris, France; ⁶Department of Infectious Diseases, La Timone Hospital, Marseille, France; ⁷Department of Infectious Diseases, Guy de Chauliac Hospital, Montpellier, France; ⁸Department of Infectious Diseases, Croix Rousse Hospital, Lyon, France; ⁹INSERM U1018, Univ Paris-Sud, Paris, France

550LB Randomised Controlled Trial of a PI Monotherapy Switch Strategy for Long-Term HIV Management

Nicholas Paton^{1,2}, Wolfgang Stohr², Alejandro Arenas-Pinto³, David Dunn², the PIVOT Trial Group

¹National University of Singapore, Singapore, Singapore; ²MRC Clinical Trials Unit at UCL, London, United Kingdom

551LB Simplification of PI+RTV+FTC/TDF To E/C/F/TDF Maintains HIV Suppression and Is Well Tolerated

Jose Arribas¹, Gilles Pialoux², Joseph Gathe³, Giovanni Di Perri⁴, Jacques Reynes⁵, Pablo Tebas⁶, Thai Nguyen⁷, Ramin Ebrahimi⁷, Kirsten White⁷, David Piontkowsky⁸

¹Hospital La Paz, Madrid, Spain; ²UPMC, Hôpital Tenon APHP, Paris, France; ³Baylor College of Medicine, Houston, TX, United States; ⁴University of Torino, School of Medicine, Torino, Italy; ⁵Guy de Chauliac University Hospital, Montpellier, France; ⁶University of Pennsylvania, Philadelphia, PA, United States; ⁷Gilead Sciences, Inc., Foster City, CA, United States

552LB Effect of Selenium Supplementation On CD4 Depletion in Rwandan HIV Patients: A Randomized Trial

Julius Kamwesiga¹, Vincent Mutabazi², Jean-Claude Tayeri², Heather Fay², Dugald Seely³, Cara Silva³, Steve Kanters⁴, Douglas J. McCready⁴, Don Warren⁴, **Edward Mills⁴**

¹Stanford Prevention Research Center, Rwanda Biomedical Centre, Kigali, Rwanda; ²Rwanda Biomedical Center, Kigali, Rwanda; ³Rwanda Supplementation Study Team, Kigali, Rwanda; ⁴University of British Columbia, Vancouver, BC, Canada; ⁵Wilfrid Laurier University, Windsor, ON, Canada; ⁶Stanford Prevention Research Center, Stanford University, Stanford, CA, United States

553LB Switch From NNRTI plus FTC/TDF To E/C/F/TDF Maintains HIV Suppression and Is Well Tolerated

Anton Pozniak¹, Martin Markowitz², Anthony Mills³, Hans-Juergen Stellbrink⁴, Antonio Antela⁵, Pere Domingo⁶, Pierre-Marie Girard⁷, Keith Henry⁸, Will Garner⁹, Bill Guyer⁹

¹Chelsea and Westminster NHS Foundation Trust Hospital, London, United Kingdom; ²Aaron Diamond AIDS Research Center, New York, NY, United States; ³Anthony Mills MD Inc., Los Angeles, CA, United States; ⁴ICH Study Center, Hamburg, Germany; ⁵Hospital Clínico Universitario, Santiago de Compostela, Spain; ⁶Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; ⁷Hôpital Saint-Antoine, Paris, France; ⁸HIV Program Hennepin County Medical Center, Minneapolis, MN, United States; ⁹Gilead Sciences, Inc., Foster City, CA, United States

Session P-K1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B

Viral Set Point and Elite Controllers

554 Blunted Response To cART in Elite Controllers

Faroudy Boufassa¹, Jerome Le Chenadec², Laurence Meyer³, Dominique Costagliola⁴, Peter W. Hunt⁵, Florencia Pereyra⁶, Steve Deeks⁷, Gianfranco Pancino⁸, Olivier Taulera⁹, Mathias Lichterfeld⁹, Pierre Delobel¹⁰, Asier Saez-Cirion¹¹, Olivier Lambotte¹²

¹Epidemiology, INSERM CESP U1018, Univ Paris Sud, Le Kremlin-Bicêtre, France; ²Epidemiology, INSERM CESP U1018, Le Kremlin-Bicêtre, France; ³Epidemiology, INSERM CESP U1018, AP-HP, Univ Paris Sud, Le Kremlin-Bicêtre, France; ⁴UPMC Univ Paris 06, INSERM UMR85 943, Paris 75013, France; ⁵Department of Medicine, University of California San Francisco, San Francisco, CA, United States; ⁶The Ragon Institute, Cambridge, MA, United States; ⁷Institut Pasteur, Paris 75015, France; ⁸Hôpital Saint-Louis, Paris 75010, France; ⁹Division of Infectious Diseases, Massachusetts General Hospital, Boston, MA, United States; ¹⁰Service des Maladies Infectieuses et Tropicales, INSERM UMR1043, Toulouse, France; ¹¹Service de Médecine Interne, AP-HP, Le Kremlin-Bicêtre, France

555 Viral Set Point After Cessation of Antiretroviral Therapy Initiated in Acute Primary HIV Infection

Christine Durier¹, Cécile Goulard^{2,3}, Caroline Roussillon^{4,5}, Isabelle Fournier⁶, Catherine Fagard^{4,5}, Isabelle Charreau⁷, Gilles Pialoux⁸, Bruno Hoën⁹, Christine Rouzioux^{10,11}, Jean-Pierre Aboulker¹, ANRS 100 PRIMSTOP & ANRS 112 INTERPRIM study groups

¹INSERM SC10-US019, Villejuif, France; ²Hôpital Bicêtre, Kremlin-Bicêtre, France; ³Université Paris-Sud, Kremlin-Bicêtre, France; ⁴Université de Bordeaux, Bordeaux, France; ⁵INSERM U897, Bordeaux, France; ⁶Hôpital Tenon, Paris, France; ⁷Université Pierre et Marie Curie Paris 06, Paris, France; ⁸Université Antilles-Guyane, Pointe-à-Pitre, France; ⁹University Hospital of Guadeloupe, Pointe-à-Pitre, France; ¹⁰Hôpital Necker, Paris, France; ¹¹Université Paris Descartes Paris 05, Paris, France

556 HIV Elite Controllers Are Hospitalized More Often Than Persons With Medically Controlled HIV

Trevor A. Crowell¹, Kelly A. Gebo¹, Joel N. Blankson¹, Baligh R. Yehia², Richard M. Rutstein³, Stephen A. Berry⁴

¹Division of Infectious Diseases & HIV Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ²Division of Infectious Diseases, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, United States; ³Division of General Pediatrics, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, United States

Session P-K2 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B

ART Initiation, Monitoring, and Outcomes

557 CD4 Cell Count Monitoring Frequency Among HIV+ Persons in New York City (NYC), 2007-2011

Julie E. Myers^{1,2}, Qiang Xia¹, Lucia V. Torian¹, Mary K. Irvine¹, Blayne H. Cutler¹, Graham Harriman¹, Kent A. Sepkowitz³, Colin W. Shepard¹

- ¹Bureau of HIV/AIDS Prevention and Control, New York City Department of Health and Mental Hygiene, Queens, NY, United States; ²Department of Medicine, Division of Infectious Diseases, Columbia University Medical Center, New York, NY, United States; ³Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, United States
- 558 Value of Viremia Copy Years in Deciding Optimal Timing of ART Initiation in Adults With HIV**
Ashley Olson¹, Sarah Walker¹, Amitabh Suthar², Caroline Sabin³, Heiner Bucher⁴, Inma Jarrin⁵, Santiago Moreno⁶, Santiago Perez-Hoyos⁷, Kholoud Porter¹, Deborah Ford¹, CASCADE Collaboration in EuroCoord
¹MRC CTU UCL, London, United Kingdom; ²World Health Organization, Geneva, Switzerland; ³University College, London, London, United Kingdom; ⁴University Hospital Basel, Basel, Switzerland; ⁵Instituto de Salud Carlos III, Madrid, Spain; ⁶Instituto Ramón y Cajal de Investigación Sanitaria, Madrid, Spain; ⁷Universidad Autónoma de Barcelona, Barcelona, Spain
- 559 Expansion of ART and Progressive Declines in All-Cause Mortality in British Columbia, Canada**
Christopher Cheung¹, Erin Ding², Julia Zhu², Benita Yip¹, Lillian Lourenco³, Rolando Barrios², Julio Montaner^{1,2}, Robert S. Hogg^{2,3}, Viviane Lima^{1,2}, David M. Moore^{1,2}
¹University of British Columbia, Vancouver, BC, Canada; ²BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; ³Simon Fraser University, Burnaby, BC, Canada
- 560 Higher CD4 at ART Initiation Predicts Greater Long Term Likelihood of CD4 Normalization**
Frank J. Palella¹, Carl Armon², Joan S. Chmiel³, John T. Brooks⁴, Rachel Debes⁵, Richard Novak⁶, Bienvenido Yango⁷, Kathy Wood², Marcus Durham¹, Kate Buchacz²
¹Infectious Diseases, Northwestern University Feinberg School of Medicine, Chicago, IL, United States; ²Cerner Corporation, Vienna, VA, United States; ³Preventive Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL, United States; ⁴Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States; ⁵Infectious Diseases, University of Illinois College of Medicine at Chicago, Chicago, IL, United States; ⁶Infectious Disease, Infectious Disease Specialists, Tampa, FL, United States; ⁷HIV Epidemiology Research Team, Centers for Disease Control and Prevention, Atlanta, GA, United States; ⁸Centers for Disease Control and Prevention, Atlanta, GA, United States
- 561 Is CD4 Monitoring Needed Among Ugandan Clients Achieving Virologic Response To Treatment?**
Steven J. Reynolds^{1,2}, Joseph Sempa³, Agnes N. Kiraggwa³, Kevin Newell¹, Gertrude Nakigizi⁴, Larry Chang⁵, Ronald M. Galiwango⁶, Ronald Gray⁶, Thomas C. Quinn^{2,7}, David Serwadda^{3,8}
¹Division of Intramural Research, NIAID/NIH, Kampala, Uganda; ²Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ³Infectious Diseases Institute, Kampala, Uganda; ⁴Clinical Research Directorate/CMRP, Leidos Biomedical Research, Inc (formerly SAIC-Frederick Inc), Frederick, MD, United States; ⁵Rakai Health Sciences Program, Kalisizo, Uganda; ⁶Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States; ⁷Division of Intramural Research, NIAID/NIH, Bethesda, MD, United States; ⁸School of Public Health, Makerere University College of Health Sciences, Kampala, Uganda
- 562 Long Term Effects of Treatment Interruptions in Adults and Children**
Lindsay C. Thompson¹, Deborah Ford¹, James Hakim², Paula Munderi³, Adeodata Kekitiinwa⁴, Victor Musime⁵, Mutswashe Bwakura-Dangarembizi⁶, Charles F. Gilks⁶, Diana M. Gibb¹, A. Sarah Walker¹
¹Medical Research Council Clinical Trials Unit at University College London, London, United Kingdom; ²University of Zimbabwe, Harare, Zimbabwe; ³Medical Research Council/Uganda Virus Research Institute Uganda Research Unit on AIDS, Entebbe, Uganda; ⁴Baylor College of Medicine Children's Foundation-Uganda, Mulago, Uganda; ⁵Joint Clinical Research Centre, Kampala, Uganda; ⁶Imperial College London, London, United Kingdom; ⁷Medical Research Council Clinical Trials Unit at University College London, London, United Kingdom
- 563 Failure of Initial HAART in Caribbean, Central and South America**
Carina Cesar¹, Bryan E. Shepherd², Cathy A. Jenkins³, Beatriz Grinsztejn⁴, Marcelo Wolff⁵, Jean W. Pape⁶, Denis Padgett⁷, Juan Sierra Madero⁸, Eduardo Gotuzzo⁹, Pedro E. Cahn¹, CCASANet
¹Investigaciones Clínicas, Fundación Huesped, Buenos Aires, Argentina; ²Biostatistics, Vanderbilt University, Nashville, TN, United States; ³Statistics, Vanderbilt University, Nashville, TN, United States; ⁴Instituto de Pesquisa Clínica Evandro Chagas, Fundação Oswaldo Cruz, Rio de Janeiro, Brazil; ⁵Fundación Amrián, Universidad de Chile, Santiago, Chile; ⁶Le Groupe Haitien d'Etude du Sarcome de Kaposi et des Infections Opportunistes in Port-au-Prince (GHESKIO), Port-au-Prince, Haiti; ⁷Instituto Hondureño de Seguridad Social and Universidad Autónoma de Honduras, Tegucigalpa, Honduras; ⁸Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico; ⁹Instituto de Medicina Tropical Alexander von Humboldt, Universidad Peruana Cayetano Heredia, Lima, Peru
- 564 The HIV Treatment Cascade: Is There More To The Story?**
Baligh R. Yehia¹, Alisa J. Stephens¹, Allison L. Agwu², Stephen A. Berry³, Joshua P. Metlay³, Kelly A. Gebo²
¹University of Pennsylvania, Philadelphia, PA, United States; ²Johns Hopkins University, Baltimore, MD, United States; ³Massachusetts General Hospital, Boston, MA, United States
- 565 Cumulative Viral Load Predicts All-Cause and AIDS-Related Mortality After Initiation of ART**
Michael J. Mugavero¹, Andrew O. Westfall², M. John Gill³, Michael Saag¹, Stephanie Abgrall^{4,5}, Gerd Fätkenheuer⁶, Peter Reiss⁷, Suzanne M. Ingle⁸, Margaret T. May⁹, Jonathan A. C. Sterne¹⁰, on behalf of ART-CC
¹Division of Infectious Diseases, Department of Medicine, University of Alabama at Birmingham, Birmingham, AL, United States; ²School of Public Health, Department of Biostatistics, University of Alabama at Birmingham, Birmingham, AL, United States; ³Division of Infectious Diseases, University of Calgary, Calgary, AB, Canada; ⁴INSERM, UMR_S 1136, Institut Pierre Louis d'Epidémiologie et de Santé Publique, Paris, France; ⁵AP-HP, Hôpital Avicenne, Service des Maladies Infectieuses et Tropicales, Bobigny, France; ⁶Department of Internal Medicine, University of Cologne, Cologne, Germany; ⁷Academic Medical Center, University of Amsterdam, Amsterdam, Netherlands; ⁸School of Social and Community Medicine, University of Bristol, Bristol, United Kingdom

Session P-K3 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM

Exhibit Hall B

ART: Adherence and Retention

- 566 Measures of ART Adherence Associated With Virological Failure in Rakai, Uganda**
Anthony Ndyanaabo¹, Fred Mukumbi², Gertrude Nakigizi¹, David Serwadda², Steven J. Reynolds^{1,3}, Larry Chang⁴, Mary Grabowski⁵, Maria Wawer^{1,3}, Ronald Gray^{1,5}, Xiangrong Kong⁶
¹Rakai Health Sciences Program, Kalisizo, Uganda; ²Makerere University School of Public Health, Kampala, Uganda; ³Division of Intramural Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States; ⁴School of Medicine, Johns Hopkins University, Baltimore, MD, United States; ⁵Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD, United States
- 567 Measures of Retention in HIV Care Differ in Their Associations With Clinical HIV Outcomes**
Baligh R. Yehia¹, Peter Rebeiro², Keri Althoff³, Stephen Gange², Hasina Samji³, Michael Horberg⁴, Sonia Napravnik⁵, Kelly Gebo²
¹University of Pennsylvania, Philadelphia, PA, United States; ²Johns Hopkins University, Baltimore, MD, United States; ³British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; ⁴Kaiser Permanente Mid-Atlantic States, Rockville, MD, United States; ⁵University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
- 568 Immune, Virologic and Adherence Measures as Time-Dependent Predictors of Loss To Follow-Up**
Seema T. Meloni¹, Charlotte Chang¹, Doug Hoi Cheung¹, Beth Chaplin¹, Holly Rawizza², Oluwatoyin Jolayemi³, Bolanle Banigbe³, Prosper Okonkwo³, Phyllis Kanki¹

Immunology & Infectious Diseases, Harvard School of Public Health, Boston, MA, United States; Brigham & Women's Hospital, Boston, MA, United States; AIDS Prevention Initiative in Nigeria, Ltd./Gte., Abuja, Nigeria

Session P-K4 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Second-Line ART

569 Virologic Suppression With Second-Line Therapy: Does the Initial Regimen Matter?

Kevin L. Ard¹, Lei Hua², Camlin Tierney², Eric S. Daar³, Paul E. Sax¹
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570 Favorable Long-Term Outcomes of 2nd-Line ART Despite Drug-Resistant HIV-1 in Sub-Saharan Africa

Tamara S. Boender¹, Kim C. E. Sigaloff², Raph L. Hamers², Cissy Kityo³, Margaret Siwale⁴, Mariette E. Botes⁵, Kishor Mandaliya⁶, Maureen Wellington⁷, Suleiman Akannu⁸, Tobias F. Rinke de Wit¹
¹Department of Global Health, Amsterdam Institute for Global Health and Development, Amsterdam, Netherlands; ²Department of Global Health, Department of Internal Medicine, Amsterdam Institute for Global Health and Development, Amsterdam, Netherlands; ³Joint Clinical Research Centre, Kampala, Uganda; ⁴Lusaka Trust Hospital, Lusaka, Zambia; ⁵Muelmed Hospital, Pretoria, South Africa; ⁶Coast Province General Hospital, Mombasa, Kenya; ⁷Newlands Clinic, Harare, Zimbabwe; ⁸Lagos University Teaching Hospital, Lagos, Nigeria

571 Predictors of Time To Switch To Second Line ART After First Line Failure in Johannesburg South Africa

Julia K. Rohr¹, Prudence Iwe², Rebecca Berhanu³, Kate Shearer⁴, Mhairi Maskew⁵, Lawrence Long⁶, Ian Sanne^{3,4}, Matthew P. Fox^{1,4}
¹Center for Global Health and Development, Boston University, Boston, MA, United States; ²Department of Internal Medicine, School of Clinical Medicine, Faculty of Health Sciences, Clinical HIV Research Unit, Johannesburg, South Africa; ³Right to Care, Johannesburg, South Africa; ⁴Department of Internal Medicine, School of Clinical Medicine, Faculty of Health Sciences, Health Economics and Epidemiology Research Office, Johannesburg, South Africa

Session P-K5 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HIV-2

572 Dolutegravir in the French Early Access Program in Integrase HIV-2-Resistant Infected Patients

Diane Descamps^{1,2}, Gilles Peytavin^{3,4}, Florence Damond^{1,2}, Roland Tubiana⁵, Pauline Campa⁶, Marie-Aude Khuong⁷, Claudine Duvivier⁸, Marina Karmochkine⁹, Tuna Lukiana¹⁰, Sophie Matheron¹¹
¹Virology, APHP-Hôpital Bichat-Claude Bernard, Paris, France; ²IAUME UMR 1137 INSERM and Paris Diderot University, Paris, France; ³Pharmacology, APHP-Hôpital Bichat-Claude Bernard, Paris, France; ⁴Service des Maladies Infectieuses et Tropicales, APHP-Groupe Hospitalier Pitié-Salpêtrière, Paris, France; ⁵Service des Maladies Infectieuses et Tropicales, APHP-Hôpital Saint-Antoine, Paris, France; ⁶Service des Maladies Infectieuses et Tropicales, Hôpital Delafontaine, Saint-Denis, France; ⁷Infectious Diseases Department, Necker-Pasteur Infectious Diseases Center, APHP-Necker Hospital, Paris, France; ⁸Medical Care Center, Necker-Pasteur Infectious Diseases Center, Pasteur Institut, Medical Care Center, Necker-Pasteur Infectious Diseases Center, Paris, France, Paris, France; ⁹Service d'Immunologie Clinique, APHP-Hôpital Européen Georges Pompidou, Paris, France; ¹⁰Medical Affairs, VIV Healthcare, Mary Le Roi, France; ¹¹Service des Maladies Infectieuses et Tropicales, APHP-Hôpital Bichat-Claude Bernard, Paris, France

573 Long Term Outcomes of ART in HIV-2 Infection in Senegal, West Africa

Selly Ba¹, Robert A. Smith², Dana N. Raugi³, Macoumba Toure¹, Alassane Niang¹, Ibrahima Sali¹, Ousseynou Cisse³, Moussa Seydi¹, Papa Salif Sow¹, **Geoffrey S. Gottlieb²**, University of Washington—Dakar HIV-2 Study Group

574 Raltegravir-Associated Mutations in HIV-2 Confer Cross-Resistance To Dolutegravir In Vitro

Robert A. Smith¹, Dana Raugi¹, Charlotte Pan¹, Saif Sow², Moussa Seydi³, James Mullins⁴, **Geoffrey Gottlieb⁵**, the University of Washington-Dakar HIV-2 Study Group
¹Allergy and Infectious Diseases, University of Washington, Seattle, WA, United States; ²Bill and Melinda Gates Foundation, Seattle, WA, United States; ³Allergy and Infectious Diseases, Clinique des Maladies Infectieuses Ibrahima DIOP Mar, Dakar, Senegal; ⁴Microbiology, Medicine and Laboratory Medicine, University of Washington, Seattle, WA, United States

575 Predicting the Extinction of HIV-2 in Guinea-Bissau

Helen Fryer¹, **Carla van Tienen^{2,3}**, Maarten Schim van der Loeff^{4,5}, Matthew Cotten⁶, Hilton Whittle^{7,8}, Peter Aaby⁹, Sarah Rowland-Jones¹⁰, Thushan de Silva^{10,11}
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576 HIV-2 X4 Tropism Is Associated With Lower CD4 Cell Count in Treatment-Experienced Patients

Benoît Viseux^{1,2}, Charlotte Charpentier^{1,2}, Caroline Rouard¹, Catherine Fagard³, David Glohi⁴, Roland Tubiana⁵, Florence Damond^{1,2}, Françoise Brun-Vézinet^{1,4}, Sophie Matheron^{1,4}, Diane Descamps^{1,2}, the French HIV-2 ANRS Cohort C05
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Session P-L1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Primary HIV Drug Resistance

577 Current First-Line Regimens Are Effective in Patients With Single Transmitted TAM

Claire M. F. Van Nispen tot Panmerden¹, Abdellah El Barzouhi², Arnd I. van Sighem³, Jan M. Prins⁴, Suzanne Jurriaans⁵, Nicole K. Back⁶, Kees Brinkman⁶, Charles A. Boucher⁷, Marchina E. Van der Ende⁸, Martin Schutten⁹
¹Medical Microbiology and Infectious Diseases, Erasmus Medical Center, Rotterdam, Netherlands; ²Erasmus Medical Center, Rotterdam, Netherlands; ³Sichting HIV Monitoring, Amsterdam, Netherlands; ⁴Department of Internal Medicine, Division of Infectious Diseases, Amsterdam Medical Center, Amsterdam, Netherlands; ⁵Department of Virology, Academic Medical Center, Amsterdam, Netherlands; ⁶Department of Internal Medicine, Onze Lieve Vrouwe Gasthuis, Amsterdam, Netherlands; ⁷Department of Virology, Erasmus Medical Center, Rotterdam, Netherlands; ⁸Department of Internal Medicine, Erasmus Medical Center, Rotterdam, Netherlands

578 Drug Resistance Mutations in Treatment-Naïve HIV-Infected Patients 2000–2013

Nicolas A. Margot¹, Ross Martin, Michael D. Miller, Christian Callebaut
¹Clinical Virology, Gilead Sciences Inc., Foster City, CA, United States

- 579 Transmitted HIV-1 Drug Resistance Among Men Who Have Sex With Men, 11 US Jurisdictions, 2008–2011**
M. Cheryl Bañez Ocfemia¹, Neeraja Saduvala², Alexandra M. Oster¹, David Kim¹, Richard Kline¹, Magan Pearson¹, Angela L. Hernandez¹, H. Irene Hall¹

¹National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States; ²ICF International, Atlanta, GA, United States

- 580 Primary Resistance To Integrase Strand-Transfer Inhibitors in Europe**
Maria Casadellà¹, Petra M. Ham², Marc Noguera-Julian¹, Christian Pou¹, Daniel Struck³, Bonaventura Clotet^{1,4}, Charles Boucher⁵, Roger Paredes^{1,4}, Annemarie M. J. Wensing⁶, SPREAD programme
¹IrsiCaixa AIDS Research Institute, Universitat Autònoma de Barcelona, Badalona, Spain; ²Utrecht Medical Centre, Utrecht, Netherlands; ³Centre de Recherche Public - Santé, Luxembourg, Luxembourg; ⁴HIV Unit, Hospital Universitari Germans Trias i Pujol, Universitat Autònoma de Barcelona, Badalona, Spain; ⁵Erasmus Medical Center, Rotterdam, Netherlands

- 581 Antiretroviral Drug Resistance Among HIV-Infected Black Men Who Have Sex With Men in the US**
Iris Chen¹, Vanessa Cummings¹, Lei Wang², Matthew B. Connor², Mark A. Marzinko³, Sheldon D. Fields⁴, Darrell P. Wheeler⁴, Kenneth H. Mayer^{5,6}, Beryl A. Koblin⁷, Susan H. Eshleman¹, for the HPTN 061 Study Team

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- 582 Impact of Transmitted Drug Resistance On Susceptibility To First-Line HAART in France (2010–2012)**

Marie-Laure Chaix¹, Lambert Assoumou², Pierre Frange¹, Antoine Cheret¹, Laurence Morand-Joubert³, Jean-Christophe Plantier⁴, Marc Wirden⁵, Florence Nicot⁶, Diane Descamps⁷, Laurence Meyer⁸, the ANRS AC-11 Resistance Group, the ANRS PRIMO Cohort Study and the OPTIPRIM-ANRS 147 Study Group

¹Université Paris Descartes, Paris, France; ²INSERM, UMR-S 943, UPMC Université Paris 6, Paris, France; ³Laboratoire de Virologie, CHU Saint-Antoine, Paris, France; ⁴Laboratoire de Virologie, CHU Rouen, Rouen, France; ⁵Laboratoire de Virologie, CHU La Pitié Salpêtrière, Paris, France; ⁶Laboratoire de Virologie, CHU Toulouse, Toulouse, France; ⁷Laboratoire de Virologie, AP-HP GHU Bichat-Claude Bernard and EA 4409 Université Paris-Diderot, Paris 7, PRES Sorbonne Paris Cité, Paris, France; ⁸INSERM, CESP U1018, Université Paris 11, Faculté de Médecine Paris-Sud, Service d'Epidémiologie et de Santé Publique, AP-HP, Hôpital Bicêtre, Le Kremlin-Bicêtre, France

- 583 Persistence of Transmitted HIV-1 Drug Resistance Mutations Associated With Fitness Costs**

Wan-Lin Y. Yang¹, Roger Kouyos¹, Jürg Böni², Sabine Yerly³, Thomas Klimkait⁴, Vincent Aubert⁵, Christos Petropoulos⁶, Moïgan Haddad⁶, Sebastian Bonhoeffer⁷, Huldrych F. Günthard¹, Swiss HIV Cohort Study (SHCS)

¹University Hospital of Zurich, Zurich, Switzerland; ²University of Zurich, Zurich, Switzerland; ³University of Geneva, Geneva, Switzerland; ⁴University of Basel, Basel, Switzerland; ⁵Lausanne University Hospital, Lausanne, Switzerland; ⁶Monogram Biosciences, San Francisco, CA, United States; ⁷ETH, Zurich, Switzerland

Session P-L2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Acquired HIV Drug Resistance

- 584 High HIV Resistance and Mutation Accrual at Low Viral Loads Upon 2nd-Line Failure in Western Kenya**

Lameck Diero^{1,2}, Allison DeLong³, Leean Schreier⁴, Emmanuel Kembu², Millicent Orido², Mary Rono², Marissa Reitsma¹, Wilfred Emory², Nathan Buziba², Joseph Hogan³, Rami Kantor⁴
¹Medicine, Moi University, College of Health Sciences, School of Medicine, Eldoret, Kenya; ²Academic Model Providing Access to Healthcare, Eldoret, Kenya; ³Center for Statistical Sciences, Brown University, Providence, RI, United States; ⁴Medicine, Brown University, Providence, RI, United States

- 585 Drug Resistance After 2nd-Line Failure Can Be Managed Using WHO-Recommended Regimens in Nigeria**

Ericase Ndemi¹, Rawlings W. Datir¹, Danjuma Sanda¹, David A. M. C. van de Vijver², Christopher Akolo³, Alash'le G. Abimiku³, William A. Blattner³, Obinna Ogbanufe⁴, Okey C. Nwanyanwu¹, Patrick Dakum¹
¹Institute of Human Virology Nigeria, Abuja, Nigeria; ²Virology, Erasmus Medical Center, Erasmus University, Rotterdam, Netherlands; ³Epidemiology and Prevention, Institute of Human Virology, Baltimore, MD, United States; ⁴US Centers for Disease Control and Prevention, Abuja, Nigeria

- 586 Sociodemographic Determinants of HIV Drug Resistance in British Columbia, Canada**

Chanson J. Brumme¹, Melanie Rusch^{2,3}, Keith Chan¹, Dmitry Shopin¹, Guillaume Colley¹, Zabrina L. Brumme^{1,4}, Robert S. Hogg^{1,4}, Julio S. G. Montaner^{1,5}, P. Richard Harrigan^{1,5}
¹BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; ²Vancouver Island Health Authority, Victoria, BC, Canada; ³School of Public Health and Social Policy, University of Victoria, Victoria, BC, Canada; ⁴Faculty of Health Sciences, Simon Fraser University, Burnaby, BC, Canada; ⁵Division of AIDS, University of British Columbia, Vancouver, BC, Canada

- 587 Week 144 Resistance Analyses of the Phase 3 EVG/COBI/FTC/TDF Studies**

Rima Kulkarni, Michael E. Abram, Martin S. Rhee, Marshall W. Fordyce, Javier Schwarczberg, Michael D. Miller, **Kirsten L. White**
 Clinical Virology, Gilead Sciences, Inc., Foster City, CA, United States

- 588 Emergent and Detectable Proviral DNA Drug Resistance in a Community Treatment Program**

Anne Derache¹, Hyoung Shik Shin², Elizabeth White¹, Dennis Israelski¹, Jeffrey D. Klausner³, David Katzenstein¹, Peninsula AIDS Research Collaboration
¹Medical School / Infectious Diseases, Stanford University, Stanford, CA, United States; ²Center for Infectious Disease, National Medical Center, Seoul Korea, Seoul, Republic of Korea; ³David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, United States

- 589 Acquired Drug-Resistance Mutations and Mortality Among HIV Patients On First-Line ART**

Julia W. Wu¹, Hui Xing², Eric Tchetgen Tchetgen^{1,3}, Lingjie Liao², Shahin Lockman^{1,5}, Yuhua Ruan⁴, Victor De Gruttola², Marc Lipsitch^{1,5}, George R. Seage¹, Yiming Shao²
¹Department of Epidemiology, Harvard School of Public Health, Boston, MA, United States; ²National Center for AIDS/STD Control and Prevention, Chinese Center for Disease Control and Prevention, Beijing, China; ³Department of Biostatistics, Harvard School of Public Health, Boston, MA, United States; ⁴Brigham and Women's Hospital, Boston, MA, United States; ⁵Department of Immunology and Infectious Diseases, Harvard School of Public Health, Boston, MA, United States

- 590LB PrEP Exposure and the Risk of Low-Frequency Drug Resistance**

Dara A. Lehman¹, Jared Baeten², Connor McCoy³, Julie F. Weis¹, Dylan Peterson¹, Connie Celum², Nelly Mugo¹, Julie Overbaugh¹, Frederick Matsen³, the Partners PrEP Study Team

¹Human Biology, Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ²Department of Global Health, University of Washington, Seattle, WA, United States; ³Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, WA, United States; ⁴Department of Obstetrics and Gynaecology, University of Nairobi, Nairobi, Kenya

- 591 Rilpivirine-Associated Resistance in HIV-1 DNA in Suppressed Patients Pretreated by NNRTIs**
Sébastien Gallien¹, Isabelle Charreau², Marie-Laure NERE³, Nadia Mahjoub⁴, Nathalie de Castro¹, Jean-Pierre Aboulker⁴, Jean-Michel Molina¹, Constance Delaugerre³
¹Infectious Diseases, Hôpital Saint Louis, Paris, France; ²Essais Thérapeutiques et Maladies Infectieuses, INSERM SC10 - US019, Villejuif, France; ³Virology, Hôpital Saint Louis, Paris, France; ⁴INSERM SC10 - US019, Villejuif, France
- 592 Etravirine/Rilpivirine-Specific Mutations Selected by EFV and NVP in Kenyan Patients Failing ART**
Keith W. Crawford¹, Dorothy Njeru², Jonah Maswa³, Milton Omondi⁴, Jane Kinetto⁵, Duncan Apollo⁶, Appolonia Aoko⁶, Raphael Langat³, Lawrence Gitano⁶, Jemutai Tarus⁶, Tiffany E. Hamm¹
¹Global Health Programs, US Military HIV Research Program, Bethesda, MD, United States; ²US Army Military Research Unit-Kenya (USAMRU-K), Nairobi, Kenya; ³US Army Military Research Unit-Kenya (USAMRU-K), Kericho, Kenya; ⁴US Army Military Research Unit-Kenya (USAMRU-K), Kisumu, Kenya
- 593 Detection of NNRTI Resistance Mutations After Interrupting NNRTI-Based Regimens**
Valentina Cambiano¹, Hannah Castro², David Chadwick³, Erasmus Smit⁴, Anna M. Geretti⁵, David Dunn⁶, Andrew Phillips⁷, on behalf of UK HIV Drug Resistance Database & UKCHIS study
¹UCL, London, United Kingdom; ²Medical Research Council Clinical Trials Unit, London, United Kingdom; ³University of Newcastle, Newcastle, United Kingdom; ⁴HPA Heartlands Hospital, Birmingham, United Kingdom; ⁵University of Liverpool, Liverpool, United Kingdom
- 594 HIV-1 Resistance Outcomes in Seroconverters From MTN 003 (VOICE)**
Urvi M. Parikh¹, Krista A. Eskay¹, Russell L. Hardesty¹, Cliff Kelly², Craig A. Magaret³, Cindy Molitor⁴, Zvavahera M. Chirenje⁵, Jeanne Marrazzo⁶, John W. Mellors⁷, on behalf of the VOICE Study Team
¹Division of Infectious Diseases, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ²Fred Hutchinson Cancer Research Center/SCHARP, Seattle, WA, United States; ³Population Sciences, Fred Hutchinson Cancer Research Center/Vaccine and Infectious Disease Institute, Seattle, WA, United States; ⁴UZ-UCSF Collaborative Research Programme in Women's Health, Harare, Zimbabwe; ⁵Division of Allergy & Infectious Diseases, University of Washington, Seattle, WA, United States

Session P-L3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Mechanisms of HIV Drug Resistance

- 595 Impact of Raltegravir/Elvitegravir Selected Mutations On Dolutegravir Cross-Resistance**
Wei Huang, Arne Frantzel, Jeannette M. Whitcomb, Christos J. Petropoulos
 Monogram Biosciences, South San Francisco, CA, United States
- 596 N348I in HIV-1 RT Confers Resistance To Etravirine and Rilpivirine But Restricts the Advent of E138K**
Veronica Zanichelli, Hong-Tao Xu, Susan Colby-Germinario, Maureen Oliveira, Yingshan Han, Yudong Quan, Mark Wainberg, Chen Liang
 McGill AIDS Centre, Lady Davis Institute, Montreal, QC, Canada
- 597 Analyses of Accessory Mutations in HIV-1 Protease Reveal Interdependent Mechanisms of Resistance**
Debra A. Ragland, Madhavi N.L. Nalam, Aysegül Ozen, Yufeng Cai, Hong Cao, Celia A. Schiffer
 Biochemistry and Molecular Pharmacology, University of Massachusetts Medical School, Worcester, MA, United States

598LB Two Distinct Mechanisms of Resistance To Allosteric HIV-1 Integrase Inhibitors

Alison Slaughter¹, Kellie Jurado², Lei Feng¹, Nanjie Deng³, Nivedita Jena⁴, Jacques J. Kessl⁵, James R. Fuchs⁶, Ronald M. Levy³, Alan Engelman⁷, Mamuka Kvaratskhelia¹
¹Ohio State University, Columbus, OH, United States; ²Harvard University, Boston, MA, United States; ³Temple University, Philadelphia, PA, United States

- 599 Impact of CD4 Mimetics-Resistant Mutations On Susceptibilities To Anti-Env nMAbs**
Shigeyoshi Harada¹, Samatchaya Boonchawalit^{1,2}, Tetsuo Narumi³, Hirokazu Tamamura⁴, Shuzo Matsushita⁵, Kazuhisa Yoshimura¹
¹AIDS Research Center, National Institute of Infectious Diseases, Shinjuku, Tokyo, Japan; ²Kumamoto University, Kumamoto, Japan; ³Tokyo Medical and Dental University, Tokyo, Japan
- 600 M184I and M230I Minority Variants in ART-Naïve Patients Are Linked To APOBEC3G/ Activity**
Marc Noguera-Julian¹, Alessandro Cozzi-Leperi², Francesca di Giallonardo³, Rob Schuurman⁴, Martin Daumer⁵, Sue Aitken⁶, Huidryck F. Günthard⁷, Françoise Brun-Vezinet⁸, Roger Paredes⁹, Karin J. Metzner⁹, CHAIN Minority HIV-1 Variants Working Group
¹IrsiCaixa Retrovirology Lab, Badalona, Spain; ²University College, London, United Kingdom; ³Division of Infectious Diseases and Hospital Epidemiology, University Hospital Zurich, Zurich, Switzerland; ⁴Utrecht Medical Centre, Utrecht, Netherlands; ⁵Institut für Immunologie und Genetik, Kaiserlautern, Germany; ⁶Association de Recherche en Virologie et Hematologie, Paris, France
- 601 Characterising the Complex Mutational Pathways Associated With Maraviroc-Resistant HIV-1**
Xiaowei Jiang¹, Felix Feyerherg², Conor Meehan³, Simon Travers⁴, Charles Craig^{5,6}, Mike Westby⁶, Marilyn Lewis^{5,6}, David L. Robertson⁷
¹Department of Genetics, University of Cambridge, Cambridge, United Kingdom; ²Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom; ³National University of Ireland Galway, Galway, Ireland; ⁴South African National Bioinformatics Institute, Bellville, South Africa; ⁵The Research Network, Sandwich, United Kingdom; ⁶Pfizer R&D, Sandwich, United Kingdom

Session P-L4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HIV Drug Resistance Variants

- 602 Impact of Minority Drug-Resistant and X4 Variants in Naïve Patients Starting ART With <100 CD4+/mm³**
Maria Casadellà¹, Christian Manzardo², Susana Pérez-Álvarez³, Daniel Podzamczar³, Pere Domingo⁴, Christian Pou⁵, Marc Noguera-Julian¹, Josep M. Gatell⁶, Josep M. Miró⁶, Roger Paredes^{1,5}
¹IrsiCaixa AIDS Research Institute, Universitat Autònoma de Barcelona, Badalona, Spain; ²Hospital Clinic-IDIBAPS, University of Barcelona, Barcelona, Spain; ³Hospital Bellvitge-IDIBELL, University of Barcelona, Barcelona, Spain; ⁴Hospital de Sant Pau, Universitat Autònoma de Barcelona, Barcelona, Spain; ⁵HIV Unit, Hospital Universitari Germans Trias i Pujol, Universitat Autònoma de Barcelona, Badalona, Spain
- 603 Antiretroviral-Naïve and -Treated Patients Can Harbor Viruses in CSF More Resistant Than in Plasma**
Cathia Soulie¹, Diane Descamps², Maxime Grude³, Véronique Schneider⁴, Mary-Anne Traubad⁵, Laurence Morand-Joubert⁶, Constance Delaugerre⁷, Vincent Calvez⁸, Philippe Flandre⁹, Anne-Généviève Marcelin¹, ANRS Resistance AC11 Group
¹U943, Virology Laboratory Pitié Salpêtrière Hospital, Paris, France; ²Virology Laboratory Bichat Hospital, Paris, France; ³U943, INSERM-UPMC, Paris, France; ⁴Virology Laboratory Tenon Hospital, Paris, France; ⁵Virology Laboratory Centre de Biologie Nord Croix Rousse Hospital, Lyon, France; ⁶U943, Virology Laboratory Saint Antoine Hospital, Paris, France; ⁷Virology Laboratory Saint Louis Hospital, Paris, France
- 604 Retention and Decay of HIV-1 Drug Resistance Mutations in Proviral DNA**
Justin De La Cruz¹, Saran Vardhanabhat², Robert M. Rowner¹, Benjamin Pinsky³, Ronald Bosch², David Katzenstein¹

¹Medicine, Infectious Diseases, Stanford University, Stanford, CA, United States;²Biostatistics, Harvard University, Cambridge, MA, United States;³Pathology, Stanford University, Stanford, CA, United States

605 Prevalence of Minority Resistant Variants To ETR, DRV, and RAL at Baseline in the ANRS 139 TRIO Trial

Charlotte Charpentier^{1,2}, Lee O. Guinevere³, Christophe Rodriguez¹, Benoit Visseaux^{1,2}, Catherine Fagard¹, Jean-Michel Molina¹, Christine Kallama¹, Yazdan Yazdanpanah^{1,2}, Richard P. Harrigan¹, Diane Descamps^{1,2}

¹Laboratoire de Virologie, Hôpital Bichat-Claude Bernard, Paris, France;²IAIME-UMR 1137, Université Paris 7, Paris, France;³BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada;⁴Laboratoire de Virologie, Hôpital Henri Mondor, Créteil, France;⁵CMG-EC de l'INSERM U897, Université Bordeaux Segalen, Bordeaux, France;⁶Service de Maladies Infectieuses et Tropicales, Hôpital St Louis, Paris, France;⁷Service de Maladies Infectieuses et Tropicales, Hôpital Pitié-Salpêtrière, Paris, France;⁸Service de Maladies Infectieuses et Tropicales, Hôpital Bichat-Claude Bernard, Paris, France

Session P-L5 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B

Laboratory Detection of Drug Resistance and Tropism

606 Pan Degenerate Amplification and Adaptation for Highly Sensitive Detection of ARV Drug Resistance

Iain J. MacLeod^{1,2}, Christopher F. Rowley^{1,3}, M. Essex^{1,2}

¹Department of Immunology and Infectious Diseases, Harvard School of Public Health, Boston, MA, United States;²Botswana-Harvard AIDS Institute, Gaborone, Botswana;³Beth Israel Deaconess Medical Center, Boston, MA, United States

607 Genotypic Tropism Testing of Proviral DNA To Guide Maraviroc Initiation in Aviremic Subjects

Federico García¹, Eva Poveda², Maria Angels Ribas³, Maria Jesús Pérez-Ellias⁴, Onofre J. Martínez-Madrid⁵, Jordi Navarro⁶, Antonio Ocampo⁷, Félix Gutiérrez⁸, Miguel García-Del Toro⁹, **Roger Paredes**¹⁰, PROTEST Study Group

¹Hospital Universitario San Cecilio, Granada, Spain;²INIBIC-Complejo Hospitalario Universitario de A Coruña, A Coruña, Spain;³Hospital Son Espases, Palma de Mallorca, Spain;⁴Hospital Ramón y Cajal, Madrid, Spain;⁵Hospital General Universitario Santa Lucía, Cartagena, Spain;⁶Hospital Universitari Vall d'Hebron, Barcelona, Spain;⁷Hospital Xeral de Vigo, Vigo, Spain;⁸Hospital de Elche, Elche, Spain;⁹Hospital General Universitario de Valencia, Valencia, Spain;¹⁰Hospital Universitari Germans Trias i Pujol, Badalona, Spain

608 Characterization of NNRTI Mutations in HIV-1 RT Using Single Molecule, Real-Time SMRT® Sequencing

Anand Sethuraman¹, Michael P. S. Brown², Colleen Ludka¹, Yan Guo¹, Ellen E. Paxinos¹

¹Applications and Collaborations, Pacific Biosciences, Menlo Park, CA, United States;²Bioinformatics, Pacific Biosciences, Menlo Park, CA, United States

609 Celera RUO Integrase Resistance Assay Performs Well Across Several Subtypes

Carole L. Wallis¹, Raquel V. Viana¹, Elias Konstantine Halvas², John W. Mellors²

¹Molecular Pathology, Lancet Laboratories, Johannesburg, South Africa;²Division of Infectious Diseases, University of Pittsburgh, Pittsburgh, PA, United States

610 Feasibility and Clinical Utility of HIV-1 Genotype Testing in the Setting of Low-Level Viremia

Maria Mercedes Santoro¹, Daniele Armenia¹, Claudia Alteri¹, Lavinia Fabeni¹, Domenico Di Pinto¹, Federica Forbici¹, Ada Bertoli^{1,3}, Caterina Gori¹, Andrea Antinori¹, Carlo Federico Perno¹

¹University of Rome Tor Vergata, Rome, Italy;²L. Spallanzani Hospital, Rome, Italy;³University Hospital Tor Vergata, Rome, Italy

611 Tropism Testing by MiSeq Is Comparable To 454-Based Methods But Exhibits Contamination Issues

Luke C. Swenson, Winnie Dong, Celia K. S. Chui, Conan K. Woods, Marjorie Robbins, Alejandro Gonzalez-Serna, Aram Karakas, Art Poon, Chanson J. Brumme, P. Richard Harrigan
BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada

612 A Proposed HIV Reference Sample Characterized by Three Next-Generation Sequencing Platforms

Alejandro Gonzalez-Serna¹, Chanson J. Brumme¹, Winnie Dong¹, Eric Cai¹, Art F. Y. Poon¹, Kelly D. Huber², Nicolas Sluis-Cremer³, Ellen E. Paxinos⁴, Luke C. Swenson¹, Paul Richard Harrigan^{1,5}

¹British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada;²School of Medicine, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States;³Medicine, Division of Infectious Diseases, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States;⁴Applications and Collaborations, Pacific BioSciences, Menlo Park, CA, United States;⁵Department of Medicine, Division of AIDS, Vancouver, BC, Canada

Session P-L6 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B

Cost Effectiveness Studies of ART and Drug Resistance Testing

613 Antiretroviral Switch Strategies for Lowering Costs of Therapy: 48-Week Cost-Efficacy Analysis

Josep M. Llibre¹, Gloria Cardona², Jose R Santos³, Angels Andreu², Xavier Bonafont², Bonaventura Clotet¹

¹HIV Unit, University Hospital Germans Trias i Pujol, Badalona, Spain;²Pharmacy, University Hospital Germans Trias i Pujol, Badalona, Spain;³University Hospital Germans Trias i Pujol, Badalona, Spain

614 The Cost-Effectiveness of Genotype Testing for Primary Resistance in Brazil

Paula M. Luz¹, Bethany L. Morris¹, Beatriz Grinsztejn¹, Kenneth A. Freedberg^{2,3}, Valdílea G. Veloso¹, Rochelle P. Walensky^{2,4}, Yoriko M. Nakamura², Paul E. Sax^{5,6}, Claudio J. Struchiner¹, A. David Paltiel⁷

¹Fundação Oswaldo Cruz, Instituto de Pesquisa Clínica Evandro Chagas, Rio de Janeiro, Brazil;²Massachusetts General Hospital, Medical Practice Evaluation Center, Boston, MA, United States;³Massachusetts General Hospital, Division of General Medicine, Boston, MA, United States;⁴Massachusetts General Hospital, Division of Infectious Disease, Boston, MA, United States;⁵Harvard Medical School, Boston, MA, United States;⁶Brigham and Women's Hospital, Division of Infectious Disease, Boston, MA, United States;⁷Yale School of Public Health, New Haven, CT, United States

Session P-M1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B

HIV Early Detection: Application of New Assays

615 Application of the Genieus™ HIV1/2 Supplemental Assay for Detection of Recent HIV Infections

Sheila M. Keating^{1,2}, Gary Murphy³, Alex Wette⁴, Reshma Kassarjee⁴, David Matten⁴, Shelley N. Facente¹, Mila Lebedeva¹, Michael P. Busch^{1,2}, Christopher D. Pilcher¹, Consortium for Evaluation of Performance of HIV Incidence Assays (CEPIA)

¹Blood Systems Research Institute, San Francisco, CA, United States;²University of California San Francisco, San Francisco, CA, United States;³Public Health England, London, United Kingdom;⁴SACEMA, Stellenbosch, South Africa;⁵Medicine, University of California San Francisco, San Francisco, CA, United States

616 Cost Effectiveness of Adding 4th-Generation Immunoassay Screening After a Negative Rapid HIV Test

Angela B. Hutchinson¹, Stephanie Cohen², Emily Westheimer³, Cynthia Gay⁴, Elliott Marselle⁵, Laura Hall¹, Lisa Hightow-Weidman⁶, Benjamin Tsoti⁷, Mark Pandori¹, Philip J. Peters¹

¹Centers for Disease Control and Prevention, Atlanta, GA, United States;²San Francisco Department of Public Health, San Francisco, CA, United States;³New York City Department of Health and Mental Hygiene, New York, NY, United States;⁴University of North Carolina at Chapel Hill, Chapel Hill, NC, United States;⁵Health Strategies International, Oakland, CA, United States;⁶ICF International, Atlanta, GA, United States;⁷San Francisco Department of Public Health Laboratory, San Francisco, CA, United States

617 Performance of HIV Rapid Tests To Identify Seroconverters in MTN 003 (VOICE)

Urvi M. Parikh¹, **Edward Livant**², Cliff Kelly³, Rashika Maharaj⁴, Marshall W. Munjoma⁵, Patrick Karugaba⁶, Natasha Samsunder⁴,

Rosetta Lindiwe Nhlangulela⁸, Jeanne Marrazzo⁹, Zvavahera M. Chirenje⁵, on behalf of the VOICE Study Team

¹University of Pittsburgh School of Medicine, Division of Infectious Diseases, Pittsburgh, PA, United States; ²Magee-Womens Research Institute & Foundation, University of Pittsburgh Medical Center, Pittsburgh, PA, United States; ³Fred Hutchinson Cancer Research Center/SCHARP, Seattle, WA, United States; ⁴Medical Research Council of South Africa HIV Prevention Research Unit, Durban, South Africa; ⁵UZ-UCSF Collaborative Research Programme in Women's Health, Harare, Zimbabwe; ⁶Core Laboratory, MU-JHU Research Collaboration, Kampala, Uganda; ⁷Centre for the AIDS Programme of Research in South Africa (CAPRISA), Durban, South Africa; ⁸Laboratory, Aurum Institute, Klerksdorp, South Africa; ⁹University of Washington Division of Allergy & Infectious Diseases, Seattle, WA, United States

618 Algorithms and Acute Infections: Innovations in Routine HIV Screening

Kara I. Geren¹, Eric O. Moore², Robert E. Fromm³, Dan Hobohm⁴, Joy Jenkins⁵, Heather L. Jordan⁶, Frank LoVecchio⁷, Nancy Lowman⁸, Robert McGuire⁹, Cheri K. Tomlinson⁹

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619 Evaluation of the Proposed US CDC Algorithm for Detection of Acute HIV Infection in Serial Samples

Leigh Anne Eller¹, Mark Manak¹, Ashley Shutt¹, Rapee Trichavaroj², Joseph Qundo³, Cornelia Luefer⁴, Fatim Jallow⁵, Jerome Kim⁶, Merlin Robb⁷, Sheila Peel⁸

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Session P-M2 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HIV Diagnostics

620 Evaluation of the Hologic Aptima HIV-1 Quant Dx Assay With HIV-1 Subtypes

Mark M. Manak¹, Holly Hack¹, Tracy Trsic², Sangeetha Nair², Andrew Worlock², Sheila A. Peel³, Jennifer Malia⁴, Linda Jagodzinski⁵

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621 CAP/CTM V. 2.0 Using Dried Blood Spots Ineffective at Diagnosing Antiretroviral Treatment Failure

Souleymane Sawadogo¹, Andreas Shiningavamwe², Joy Chang³, Maher Andrew⁴, Chunfu Yang⁵, Esegel Gaeb⁶, Harold Kaura⁷, Dennis Ellenberger⁸, David Lowrance⁹

¹CDC-Namibia, Windhoek, Namibia; ²Namibia Institute of Pathology, Windhoek, Namibia; ³DGHA/CGH/CDC, Atlanta, GA, United States

622 Reliable and Accurate CD4 T Cell Count and Percent of the New Portable Flow Cytometer CyFlow MiniPOC

Milena Nasi¹, Sara De Biasi¹, Elena Bianchini¹, Lara Gibellini¹, Marcello Pintì¹, Tiziana Scacchetti², Tommaso Trenti³, Vanni Borghi³, Cristina Mussini³, Andrea Cossarizza⁴

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623LB A Recombinant HIV-1 Gag Virus Panel for the Evaluation of p24-Antibodies and HIV Diagnostic Tests

Beatrice N. Vetter, Vanessa Orlowski, Cyril Shah, Jürg Böni, Jörg Schüpbach

National Center for Retroviruses, Zurich University, Zurich, Switzerland

624 Evaluation of Pima CD4 Point-Of-Care Device in Western Kenya for Potential Use in Field Settings

Clement Zeh¹, Seth C. Inzaule¹, Fredrick Otieno², Boaz Oyaror³, Richard Ndiwo⁴, Rose CE⁵, Mitesh Desai⁶, Robert Chen⁷, Lisa A. Mills⁸, Taraz Samandari⁹

¹CDC, Kisumu, Kenya; ²KEMRI/CDC, Kisumu, Kenya; ³CDC, Atlanta, GA, United States

625 Comparison of Central and Local HIV-1 RNA

Quantification From Two International Clinical Trials

Janaki Amin, Matthew Law, Anthony Kelleher, Rebekah Puls, David Cooper, Sean Emery

The Kirby Institute, University of New South Wales, Sydney, Australia

626 HIV-1 Can Be Confirmed by Bio-Rad Genieus™ HIV 1/2 Confirmatory Assay Using Dried Blood Spots

Carolina Fernández McPhee¹, Patricia Alvarez², Luis Prieto³, Jacinta Obiang⁴, Pedro Avedillo⁴, Antonio Vargas⁴, Pablo Rojo⁵, José Tomás Ramos⁶, África Holguin¹

¹Microbiology and Parasitology, Hospital Ramón y Cajal, Madrid, Spain; ²Hospital de Getafe, Madrid, Spain; ³Ministerio de Sanidad y Bienestar Social, Hospital Provincial de Bata, Bata, Equatorial Guinea; ⁴Instituto de Salud Carlos III-Madrid, RICET, Centro Nacional de Medicina Tropical, Madrid, Spain; ⁵Hospital Doce de Octubre, Madrid, Spain

627 Standard Diagnostics Biotest HIV/Syphilis Duo Test: Multi-Site Laboratory Evaluation

Claire C. Bristow¹, Yaw Adu-Sarkodie², Raphael O. Ondo³, Elizabeth Anne Bukusi⁴, Claver Anoumou Dagnra⁵, Khin Yi Oo⁶, Jeffrey D. Klausner⁷

¹Fielding School of Public Health, University of California Los Angeles, Los Angeles, CA, United States; ²Department of Clinical Microbiology, School of Medical Science, College of Health Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana; ³Kenya Medical Research Institute, Kisumu, Kenya; ⁴Centre National de Référence des Tests VIH, Laboratoire de Microbiologie, Lomé, Togo; ⁵Virology Section, National Health Laboratory, Yangon, Myanmar; ⁶Department of Medicine, University of California Los Angeles, Los Angeles, CA, United States

Session P-N1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HCV Testing and Epidemiology

628 High Hepatitis C Infection Rate in Birth Cohort Testing of an Urban, Primary Care Clinic Population

Alexander G. Geboy¹, Sandeep Mahajan², Allison P. Daly¹, Candice F. Sewell², Won K. Cho², Carmella A. Cole², Dawn A. Fishbein²

¹MedStar Health Research Institute, Washington, DC, United States; ²MedStar Washington Hospital Center, Washington, DC, United States

629 Prevalence and Risk Factors of Hepatitis C Virus Infection in China's National Methadone Program

Cynthia X. Shi^{1,2}, Aozhou Wu^{3,4}, Keming Rou¹, Enwu Liu¹, Yan Zhao¹, Xiaobin Cao¹, Changhe Wang¹, Wei Luo¹, Zunyuo Wu¹

¹National Center for AIDS/STD Control and Prevention, Chinese Center for Disease Control and Prevention, Beijing, China; ²Epidemiology, Harvard University, Boston, MA, United States; ³Health Science Center, Peking University, Beijing, China; ⁴Epidemiology, Johns Hopkins University, Baltimore, MD, United States

630 The Burden of Hepatitis C Infection in Pennsylvania State Prisons and Implications for Treatment

Madeline Mahowald¹, Sarah Larnay^{1,2}, Nicholas Scharff¹, Curt Beckwith^{1,4}, Lynn E. Taylor^{1,4}, Nick Zaller^{1,4}, Timothy Flanagan^{1,4}

¹The Warren Alpert Medical School at Brown University, Providence, RI, United States; ²National Drug and Alcohol Research Centre, Sydney, Australia; ³Bureau of Health Care Services, Mechanicsburg, PA, United States; ⁴Division of Infectious Diseases, The Miriam Hospital, Providence, RI, United States

- 631 Impact of Rapid Hepatitis C Testing On Receipt of Hepatitis C Results in a Public STD Clinic**
Oluwaseun Falade-Nwulia^{1,2}, Shruti Mehta³, Mark Sulkowski¹, Jackie Lasola¹, Khalil Ghanem¹, Patrick Chauk², David Thomas¹
¹Division of Infectious Diseases, Johns Hopkins University, Baltimore, MD, United States; ²Baltimore City Health Department, Baltimore, MD, United States; ³Department of Epidemiology, Johns Hopkins University, Baltimore, MD, United States

- 632 Hepatitis C Antigen Testing: A Reliable Alternative for Diagnosing Acute HCV Infection**
Simon George Shaw, Fiona Cresswell, Gary Homer, Mohammed Hassan-Ibrahim, Martin Fisher
 HIV Medicine, Brighton and Sussex University Hospitals NHS Trust, Brighton, United Kingdom

Session P-N2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HCV Pre-Clinical Studies and Pharmacology

- 635 Longitudinal Analysis of RAVs by Primer1D 454-Sequencing in the Boceprevir P-05063 Study**
Richard J. O. Barnard¹, Abha Chopra², Mark Watson³, Don Cooper², Cassandra Jabara², Daria Hazuda¹, Stanley Lemon³, Simon Mallat³
¹Infectious Disease, Merck and Co, West Point, PA, United States; ²Institute for Immunology & Infectious Diseases, Murdoch, Australia; ³University of North Carolina, Chapel Hill, NC, United States
- 636 ABT-493, a Potent HCV NS3/4A Protease Inhibitor With Broad Genotype Coverage**
Teresa Ng¹, Thomas Reisch¹, Tim Middleton¹, Keith McDaniel¹, Dale Kempf¹, Liangjun Lu¹, Guoqiang Wang¹, Lijuan Jiang², Yat Sun Or², Tami Pilot-Matias¹
¹AbbVie Inc., North Chicago, IL, United States; ²Enanta Pharmaceuticals Inc., Watertown, MA, United States
- 637 Use of Dried Blood Spots for Measuring Intracellular Ribavirin-Triphosphate**
Leah C. Jimmerson, Jia-Hua Zheng, Lane R. Bushman, Kyle P. Hammond, Peter L. Anderson, Jennifer J. Kiser
 Pharmaceutical Sciences, University of Colorado, Denver, Aurora, CO, United States
- 638 Ritonavir-Boosted Atazanavir, Lopinavir, & Darunavir Increase HCV NS5A Inhibitor MK-8742 Levels**
Wendy Y. Yeh¹, William Marshall¹, Joanne Ma¹, Eric Mangini¹, Xiaobi Huang¹, Patricia Jumes¹, Stephen Youngberg², Joan Butters¹
¹Merck, Sharp and Dohme, Whitehouse Station, NJ, United States; ²Celerion, Lincoln, NE, United States
- 639 ABT-530, an HCV NS5A Inhibitor With Potent Pangenotypic Activity and High Barrier To Resistance**
Teresa Ng, Preethi Krishnan, Warren Kati, Thomas Reisch, Liangjun Lu, Tanya Dekhtyar, Akhter Molla, Christine Collins, Tami Pilot-Matias
 AbbVie Inc., North Chicago, IL, United States

Session P-N3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HCV: Prognosis and Impact of Treatment Including Liver Transplantation

- 640 FIB-4 Outperforms Liver Biopsy in the Assessment of Prognosis in HIV/HCV Coinfection**
Juan Berenguer¹, Francisco X. Zamora², Ana Carrero³, Miguel Angel von Wichmann⁴, José López-Aldeguer⁵, María J. Téllez⁶, José Sanz², Herminia Esteban⁷, José M. Bellón⁸, Juan González-García², and GESIDA 3603 Study Group
¹Hospital General Universitario Gregorio Marañón, Madrid, Spain; ²Hospital Universitario La Paz, Madrid, Spain; ³Hospital Donostia, San Sebastián, Spain; ⁴Hospital La Fe, Valencia, Spain; ⁵Hospital Clínico San Carlos, Madrid, Spain; ⁶Hospital Príncipe de Asturias, Alcalá de Henares, Spain; ⁷Fundación SEIMC/GESIDA, Madrid, Spain
- 641 Sustained Virologic Response and the Risk of Liver Decompensation in HCV and HIV/HCV Patients**
Temitope O. Olufade¹, Li Wang², Scott Devine¹, Onur Baser², Vincent Lo Re³

¹US Outcomes Research, Merck Sharpe & Dohme, North Wales, PA, United States; ²STATinMED Research, Dallas, TX, United States; ³Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, United States

- 642LB GWAS Reveals New Genetic Associations With Liver Fibrosis Progression**

Stephanie Dominguez^{1,2}, Sigrid Le Clerc³, Damien Ulveling³, Taoufik Labib⁴, Maria Winnock⁵, Ioannis Theodorou⁶, Laurent Abel⁷, Yves Levy^{1,2}, Dominique Salmon¹, Jean Francois Zagury³
¹Clinical Immunology and infectious disease, Henri Mondor Hospital, Paris, France; ²INSERM U955, Creteil, France; ³Chaire de Bioinformatique, Conservatoire des Arts et Métiers, Paris, France; ⁴INSERM U 987 ISPED, Bordeaux Segalen University, Bordeaux, France; ⁵INSERM U 945, Pierre et Marie Curie University, Paris, France; ⁶Laboratory of Human Genetics of Infectious Diseases INSERM U980, University Paris Descartes Imagine Institute, Paris, France; ⁷Infectious and Tropical diseases, Cochin Hospital, Paris, France

- 643 Incident HCV Infections in the Swiss HIV Cohort Study: Natural History and Treatment Outcomes**

Gilles Wandeler^{1,2}, Janine Rohrbach³, Karin Metzner⁴, Jan Fehr⁵, Marcel Stöckle⁶, Matthias Cavassini⁷, Juan Ambrosioni⁸, Olivia Keiser⁹, Hansjakob Furrer¹, Andri Rauch¹
¹Bern University Hospital, Bern, Switzerland; ²University of Bern, Bern, Switzerland; ³University Hospital Zurich, Zurich, Switzerland; ⁴University Hospital Basel, Basel, Switzerland; ⁵University Hospital Lausanne, Lausanne, Switzerland; ⁶University Hospital Geneva, Geneva, Switzerland

- 644 Is There Long-Term Evidence of Advanced Liver Fibrosis After Acute Hepatitis C in HIV Coinfection?**

Christoph Boesecke¹, Patrick Ingiliz², Mattias Mandorfer³, Carolyne Schwarze-Zander⁴, Florian Berger⁵, Marc-Antoine Valantin⁶, Jan-Christian Wasmuth⁷, Thomas Reiberger⁸, Stefan Mauss⁹, Juergen K. Rockstroh¹, and the NEAT study group
¹Department of Internal Medicine I, Bonn University Hospital, Bonn, Germany; ²MB, Berlin, Germany; ³Medical University of Vienna, Vienna, Austria; ⁴Center for HIV and Hepatogastroenterology, Duesseldorf, Germany; ⁵Hôpital La Pitié Salpêtrière, AP-HP, Paris, France

- 645 Hepatic Decompensation in HIV/HBV/HCV Patients and the Impact of HBV Therapy**

Temitope O. Olufade¹, Li Wang², Scott Devine¹, Onur Baser², Vincent Lo Re³
¹US Outcomes Research, Merck Sharpe & Dohme, North Wales, PA, United States; ²STATinMED Research, Dallas, TX, United States; ³Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, United States

- 646 Short-Term Risk of Decompensation Among HIV/HCV-Coinfected Patients With Significant Fibrosis**

Juan Macías¹, Manuel Márquez², Dolores Merino³, Francisco Téllez⁴, Antonio Rivero⁵, Luis López Cortés⁶, María Mancoabo⁷, Juan A. Pineda⁸
¹Hospital Universitario de Valme, Seville, Spain; ²Hospital Universitario Virgen de la Victoria, Málaga, Spain; ³Hospital Juan Ramón Jiménez, Huelva, Spain; ⁴Hospital La Linea, La Linea de la Concepción, Spain; ⁵Hospital Universitario Reina Sofía, Córdoba, Spain; ⁶Hospital Universitario Virgen del Rocío, Seville, Spain

- 647 Differential Immune Marker Levels Linked To Liver Fibrosis in HIV/Hepatitis C (HCV) Coinfection**

Nasheed Moqueet¹, Cynthia Kanagaratham², Danuta Radzioch², Sahar Saeed², Marina B. Klein¹, Canadian Co-infection Cohort
¹Epidemiology, Biostatistics, and Occupational Health, McGill University, Montreal, QC, Canada; ²McGill University, Montreal, QC, Canada

- 648 Outcome of 215 HCV/HIV-Coinfected Liver Transplant Recipients: A Prospective Multicenter Study**

Jose M. Miro¹, Miguel Montejó², Marino Blanes³, Abradelo Manuel⁴, Santos del Campo⁵, Lluís Castells⁶, Antoni Rafeecas⁷, **Christian Manzardo¹**, Ifaiki Perez¹, Antoni Rimola¹, and FIPSE investigators
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649 Liver Fibrosis Progression Among Persons With Recently Acquired HCV Infection

Adeel A. Butt^{1,2}, Peng Yan³, Vincent Lo Re⁴, Marina B. Klein⁵, Matthew B. Goetz², David Leaf⁶, Matthew S. Freiberg¹, Kenneth E. Sherman⁷

¹University of Pittsburgh, VA Pittsburgh Healthcare System, Pittsburgh, PA, United States; ²Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates; ³University of Pittsburgh, Pittsburgh, PA, United States; ⁴University of Pennsylvania, Philadelphia, PA, United States; ⁵McGill University Health Center, Montreal, QC, Canada; ⁶VA Greater Los Angeles Healthcare System, Los Angeles, CA, United States; ⁷University of Cincinnati School of Medicine, Cincinnati, OH, United States

650 Predicting Risk of ESLD in HIV/HCV Patients for Individualized HCV Therapy Decisions

Vincent Lo Re¹, Janet P. Tate², Adeel A. Butt³, Marina B. Klein⁴, Cynthia Gilbert⁵, David Rimland⁶, Matthew B. Goetz⁷, Jay R. Kostman¹, Amy C. Justice⁸, Russell Localio⁹

¹University of Pennsylvania, Philadelphia, PA, United States; ²VA Connecticut Healthcare System, West Haven, CT, United States; ³University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ⁴McGill University Health Center, Montreal, QC, Canada; ⁵Washington DC VA Medical Center, Washington, DC, United States; ⁶Atlanta VA Medical Center, Atlanta, GA, United States; ⁷VA Greater Los Angeles Healthcare System, Los Angeles, CA, United States

651 Level of Alcohol Use and Advanced Hepatic Fibrosis in HIV-Infected and Uninfected Patients

JP Tate¹, JK Lim², KJ Bryant³, CL Gilbert⁴, D. Rimland⁵, Mb Goetz⁶, MB Klein⁷, DA Fiellin⁸, AC Justice⁹, V. Lo Re¹⁰

¹Yale University School of Medicine, New Haven, CT, United States; ²National Institute on Alcohol Abuse and Alcoholism (NIAAA), Washington, DC, United States; ³George Washington University School of Medicine, Washington, DC, United States; ⁴Emory School of Medicine, Atlanta, GA, United States; ⁵David Geffen School of Medicine, University of California Los Angeles, Los Angeles, CA, United States; ⁶Department of Medicine, McGill University, Montreal, QC, Canada; ⁷University of Pennsylvania School of Medicine, Philadelphia, PA, United States

652 Liver-Related Death in HIV/HCV Coinfected Individuals: Who Should Be Targeted for HCV Treatment?

Daniel Grint¹, Lars Peters², Juergen K. Rockstroh³, Aza Rakhmanova⁴, Igor Karpov⁵, Massimo Galli⁶, Pere Domingo⁷, Ole Kirk⁸, Jens D. Lundgren⁹, Amanda Mocroft¹⁰

¹University College London, London, United Kingdom; ²Copenhagen HIV Programme, Copenhagen, Denmark; ³University of Bonn, Bonn, Germany; ⁴Medical Academy Botkin Hospital, St. Petersburg, Russian Federation; ⁵Belarus State Medical University, Minsk, Belarus; ⁶Luigi Sacco Hospital, Milan, Italy; ⁷Hospital de Sant Pau, Barcelona, Spain

653 Significant Decrease of Liver Fibrosis in HIV-HCV Coinfected Patients Treated for HCV Infection

Marc Arthur Loko¹, Camille Gilbert¹, Karine Lacombe², Caroline Lascoux-Combe³, Gilles Plouffe⁴, Linda Wittkop⁵, Christine Katlama⁶, François Dabis⁷, Dominique Salmon⁸

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Session P-N4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HCV Treatment: Real-World Experience

654LB On-Treatment Viral Response To MK-572/MK-8742 ± RBV for 12 Weeks in HCV/HIV-Coinfected Patients

Mark Sulkowski¹, Josep Mallolas², Marc Bourliere³, Jan Gerstoft⁴, Oren Shibolet⁵, Ronald Nahass⁶, Edwin DeJesus⁷, Melissa Shaughnessy⁸, Peggy Hwang⁹, Barbara Hader¹⁰

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United States; ⁷Orlando Immunology Center, Orlando, FL, United States; ⁸Merck & Co. Inc., Whitehouse Station, NJ, United States

655 Slow HCV-RNA Decay and Early Resistance Predict the Risk of Failure To TVR/BOC Treatment

Francesca Ceccherini-Silberstein¹, Valeria Cento¹, Velia Chiara Di Maio¹, Daniele Di Paolo², Sergio Babudieri³, Antonio Di Biagio⁴, Massimo Andreoni⁵, Giustino Parruti⁶, Giuliano Rizzardini⁷, Carlo Federico Perno⁸

¹Department of Experimental Medicine and Surgery, University of Rome Tor Vergata, Rome, Italy; ²Hepatology Unit, University Hospital of Rome Tor Vergata, Rome, Italy; ³Infectious Diseases Unit, Department of Clinical and Experimental Medicine, University of Sassari, Sassari, Italy; ⁴S. Martino Hospital, Genoa, Italy; ⁵Infectious Diseases Unit, University Hospital of Rome Tor Vergata, Rome, Italy; ⁶Infectious Diseases Unit, Pescara General Hospital, Pescara, Italy; ⁷Division of Infectious Diseases, Hospital Sacco di Milan, Milan, Italy

656LB Global Origin of HCV NS3 Substitution Q80K That Is Associated With Lower Simeprevir Susceptibility

Art F. Poon¹, Richard H. Liang², Jeffrey B. Joy³, Thuy Nguyen⁴, Rosemary M. McCloskey⁵, Mel Krajden⁶, Julio S. G. Montaner⁷, P. Richard Harrigan⁸

¹BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; ²BC Centre for Disease Control, Vancouver, BC, Canada

658 Protease Inhibitors To Treat Hepatitis C in the Swiss HIV Cohort Study: High Efficacy But Low Uptake

Sebastian Haubitz¹, Verena Schaefer², Juan Ambrosioni³, Matthias Cavassini⁴, Marcel Stoeckle⁵, Patrick Schmid⁶, Laurent Decosterd⁷, Karin Metzner⁸, Jan Fehr⁹, Andri Rauch¹⁰

¹Division of Infectious Diseases, Bern, Switzerland; ²Division of Infectious Diseases, Zurich, Switzerland; ³Division of Infectious Diseases, Geneva, Switzerland; ⁴Division of Infectious Diseases, Lausanne, Switzerland; ⁵Division of Infectious Diseases, Basel, Switzerland; ⁶Division of Infectious Diseases, St Gallen, Switzerland

659LB Boceprevir for Previously Treated HIV-HCV Coinfected Patients: The ANRS-HC27 Boceprevir Trial

Isabelle Poizat-Martin^{1,2}, Eric Bellissant^{3,4}, Philippe Colson^{5,6}, Alain Renaul^{7,8}, Lionel Piroth⁹, Caroline Solas⁹, Marc Bourliere¹⁰, Rodolfo Garraffo¹¹, Philippe Halfon¹², Jean-Michel Molina^{13,14}, and the ANRS HC27 BOCEPREVIR Study Group.

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660 Boceprevir/Telaprevir-Based Therapy in HIV-Infection: Interim Analysis of a Multicenter Cohort

Karin Neukam^{1,2}, Daniela Munteanu^{3,4}, Antonio Rivero⁵, Annette Haber⁶, Manuel Márquez⁷, Patrick Ingiliz⁸, Ignacio de los Santos-Gil⁹, Thomas Lutz¹⁰, Juergen K. Rockstroh¹¹, Juan A. Pineda¹²

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661 Favorable Adverse Event Profile of Sofosbuvir/Ribavirin Versus Standard of Care for Hepatitis C

Kerry Townsend¹, Shivakumar Narayanan², Amy Nelson¹, Adrian Majid², Luciano Kapelusznik², Robert R. Redfield², Shyamansundaran Kottitil¹, Rohit Talwani², Anuluwapo Osinusi^{1,2}

¹LIR, NIAID, NIH, Bethesda, MD, United States; ²Institute of Human Virology, Div. of Infectious Diseases, University of Maryland School of Medicine, Baltimore, MD, United States

662LB IFN-Free 3 DAA Regimen in HCV Genotype 1-Infected Patients On Methadone or Buprenorphine

Jacob Lalezari¹, J Greg Sullivan², Peter Varunok³, Edward Galen⁴, Kris V. Kowdley⁵, Vinod Rustgi⁶, Humberto Aguilar⁷, Franco Felizarta⁸, Daniel Cohen⁹, Hui Tang⁹

¹Quest Clinical Research, San Francisco, CA, United States; ²Parkway Medical Center, Birmingham, AL, United States; ³Premier Medical Group of the Hudson Valley, PC, Poughkeepsie, NY, United States; ⁴Northwest Gastroenterology Clinic, Portland, OR, United States; ⁵Digestive Disease Institute, Seattle, WA, United States; ⁶Metropolitan Research, Fairfax, VA, United States; ⁷Louisiana Research Center, LLC, Shreveport, LA, United States; ⁸Private practice, Bakersfield, CA, United States; ⁹AbbVie Inc., North Chicago, IL, United States

663 Telaprevir Treatment of HIV/HCV G1 Patients With Severe Fibrosis: Efficacy Results To Week 16

Andrea Gori¹, Manuela Doroana², Oksana Chernova³, Jürgen Rockstroh⁴, Denes Bánhegyi⁵, Colm Bergin⁶, Gabriella Verucchi⁷, Andrew Hill⁸, Blanca Hadacek⁹, Mark Nelson¹⁰

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664LB Telaprevir Increases Ribavirin Toxicity Through eGFR Decrease in HIV-HCV Coinfected Patients

Laurent Cotte^{1,2}, Aurélie Barrail-Tran^{3,4}, Corine Vincent⁵, Marc-Antoine Valantin^{6,7}, Isabelle Fournier⁸, Karine Lacombe⁹, Stéphane Chevaliez^{2,10}, Jean-Pierre Aboulker⁹, Anne-Marie Taburet^{1,4}, Jean-Michel Molina^{11,12}

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665LB Safety and Efficacy of IFN-Free, Sofosbuvir/RBV Therapy in HIV/HCV Liver Transplanted Patients

Ana Moreno¹, María J. Pérez-Elias¹, Rafael Bárcena², Carmen Quereda¹, Jose L. Casado¹, Fernando Dronida¹, Santos del Campo¹, María L. Mateos³, Alberto Diaz¹, Santiago Moreno¹

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666 ss469415590 Variant Is a Better Predictor Than IL28B rs12979860 of PegIFN- α /RBV Therapy Failure

Sandra Franco¹, Ester Aparicio¹, Mariiona Parera¹, Bonaventura Clotet^{1,2}, Cristina Turat^{1,2}, Miguel Angel Martinez¹

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667 Pill Burden & Treatment Length Reduce Adherence To IFN-Free Hepatitis C Therapy in an Urban Cohort

Tess Petersen¹, Lori A. Gordon², Kerry Townsend², Monica Calderon², Sreetha Sidharthan¹, Rachel Silk¹, Anu Osinusi^{2,3}, Henry Masur¹, Shyam Kottitil¹, Anita Kohli^{1,4}

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668 Telaprevir in Treatment-Experienced HIV-HCV G1 Coinfected Patients (ANRS HC26 TelaprevirVH)

Laurent Cotte^{1,2}, Corine Vincent³, Philippe Sogni^{4,5}, Isabelle Fournier⁶, Hugues Aumaitre⁷, Pierre De Truchis¹, Isabelle Rosa⁸, Stéphane Chevaliez^{2,9}, Jean-Pierre Aboulker¹⁰, Jean-Michel Molina^{4,11}

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Session P-N5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall B**
HCV: The Cascade

669 The Treatment Cascade for People With Chronic Hepatitis C Virus Infection in the United States

Baligh R. Yehia¹, Asher Schranz², Craig Umscheid¹, Vincent Lo Re¹

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670 Initial Results of a Community-Based Rapid Hepatitis C Testing and Linkage To Care Program

Christian B. Ramers¹, Robert Lewis¹, Letty Reyes¹, Alexander Kuo², David L. Wyles³

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671 The CORE HCV Cascade a Decade Later: Looking Ahead To an IFN-Free Era

Oluwatoyin M. Adeyemi¹, Stephon Efflinger, Benjamin Go, Sonia Vibhakar, Maureen Gallagher, Deborah Wolen, Becky Goldberg, Mike Demetria, David Barker, Gregory Huhn

Ruth M Rothstein CORE Center, Cook County Health and Hospitals System, Chicago, IL, United States

672 The Hepatitis C Cascade of Care Among HIV-Infected Patients Following Diagnosis of HCV Infection

Edward R. Cachay¹, Lucas Hill², David Wyles¹, Francesca Torriani¹, Bradford Colwell¹, Craig Ballard¹, William Christopher Matthews¹

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Session P-N6 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall B**
Acute HCV Infection: Pathogenesis

673 Hepatitis C Virus Incidence in the Amsterdam Cohort Study Among Men Who Have Sex With Men: 1984-2011

Joost W. Vanhommerig^{1,2}, Ineke G. Stolle¹, Femke A. E. Lambers¹, Ronald B. Geskus^{1,3}, Thijs J. W. van de Laar¹, Martien W. Borgdorff^{1,3}, Sylvia M. Bruisten¹, Janke Schinkel², Maria Prins^{1,5}

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Academic Medical Center, Amsterdam, Netherlands;³Department of Clinical Epidemiology, Biostatistics and Bioinformatics, Academic Medical Center, Amsterdam, Netherlands;⁴Department of Blood-borne Infections, Sanquin Blood Supply Foundation, Amsterdam, Netherlands;⁵Department of Internal Medicine, Center of Infectious diseases and Immunology Amsterdam (CINIMA), Academic Medical Center, Amsterdam, Netherlands

- 674 Assessing HCV Acquisition Routes in HIV-Infected MSM Using Single Genome Sequencing-A Pilot Study**
Daniel S. Fierer¹, Andrew H. Tala², Kristen M. Marks³, Wouter O. van Seggelen¹, Andrea D. Branch⁴, Shirish Huprikar¹, Shuyi Wang⁵, George M. Shaw⁵, Hui Li⁵
¹Infectious Diseases, Mount Sinai School of Medicine, New York, NY, United States; ²Gastroenterology, University of Buffalo School of Medicine, Buffalo, Buffalo, NY, United States; ³Infectious Diseases, Weill Cornell Medical College, New York, NY, United States; ⁴Liver Diseases, Mount Sinai School of Medicine, New York, NY, United States; ⁵Microbiology, University of Pennsylvania, Philadelphia, PA, United States
- 675 Higher Risk of Sexually Acquired HCV Coinfection in MSM With Wide HIV Transmission Bottleneck**
Roger D. Kouyos¹, Andri Rauch², Dominique Braun³, Sabine Yerly³, Jürg Böni⁴, Thomas Klimkait⁵, Vincent Aubert⁶, Bruno Ledergerber⁷, Huldrych Günthard⁸, The Swiss HIV Cohort Study (SHCS)
¹University Hospital Zurich, University of Zurich, Zurich, Switzerland; ²Inselspital Bern, Bern, Switzerland; ³University of Geneva, Geneva, Switzerland; ⁴University of Zurich, Zurich, Switzerland; ⁵University of Basel, Basel, Switzerland; ⁶University of Lausanne, Lausanne, Switzerland
- 676 Seminal HCV RNA Level May Mirror Dynamics of Plasma HCV RNA in HIV-Positive Men With Acute HCV**
Daniel Bradshaw¹, Francois Lamoury², Beth Cattlett³, Tanya L. Applegate⁴, John McAllister⁵, Gregory J. Dore⁶, Gail Matthews⁷, Mark Danta³
¹Kirby Institute, University of New South Wales, Sydney, Australia; ²St Vincent's Hospital, Sydney, Australia; ³Faculty of Medicine, University of New South Wales, Sydney, Australia
- 677 HCV Viral Load Kinetics During Acute Hepatitis C in HIV-Infected Patients: A Model-Based Analysis**
 Romain Ragonnet¹, Christoph Boesecke², Marguerite Guiguet³, Karine Lacombe^{4,5}, Jeremie Guedj⁶, Jürgen K. Rockstroh⁷, Yazdan Yazdanpanah^{1,8}, Sylvie Deuffic-Burban⁷
¹INSERM U1137, Paris, France; ²Department of Internal Medicine I, Bonn University Hospital, Bonn, Germany; ³INSERM U943, Paris, France; ⁴INSERM UMR S 707, Paris, France; ⁵Service de Maladies Infectieuses et Tropicales, Hôpital Saint-Antoine, Paris, France; ⁶Service des Maladies Infectieuses et Tropicales, Hôpital Bichat Claude Bernard, Paris, France; ⁷INSERM U995, Lille, France

Session P-N7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HCV Infection and Cellular and Humoral Immune Responses

- 678 Impaired CD8+ T Cell IL-7 Activity in HCV Infection: Implications for HIV-HCV Co-Infection**
Stephanie C. Burke^{1,2}, Lorna Carrasco-Medina², Curtis L. Cooper^{2,3}, Angela M. Crawley^{1,2}
¹Department of Biochemistry, Microbiology and Immunology, University of Ottawa, Ottawa, ON, Canada; ²Ottawa Hospital Research Institute, Ottawa, ON, Canada; ³Department of Epidemiology and Community Medicine, University of Ottawa, Ottawa, ON, Canada
- 679 HCV and GBV-C NS5A Proteins Inhibit TCR-Mediated Activation of Human CD4+ T Cells**
 Nirjal Bhattarai, Bennett E. Thompson, James H. McLinden, Jinhua Xiang, Jack T. Stapleton
 University of Iowa and Iowa City VA, Iowa City, IA, United States
- 680 Impact of HCV Coinfection on T-Cell Dynamics in Long-Term HIV Suppressors Under cART**
 Olivia Zaegel¹, Sylvie Bregigoeon², Carla E. Cano³, Véronique Obry-Roguet¹, Corinne Nicolino-Brunet⁴, Catherine Tamalet^{3,4}, Françoise Dignat-George², Isabelle Poizat-Martin^{1,5}

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- 681 CD3+CD56+ Natural Killer-Like T Cells in HIV(+) Patients With Acute Hepatitis C**
Pavlos Kokorellis^{1,2}, Benjamin Krämer^{1,2}, Christoph Boesecke^{2,3}, Esther Voigt³, Patrick Ingiliz⁴, Andreas Gläsner^{1,2}, Ulrich Spengler^{1,2}, Jürgen K. Rockstroh^{1,2}, Jacob Nattermann¹
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- 682 The Effect of Hepatitis C (HCV) Clearance On Macrophage Activation in HIV/HCV Coinfection**
Kara W. Chew¹, Lei Hua², Debika Bhattacharya³, Adeel A. Butt³, Martha Lewis⁴, Raymond T. Chung⁴, Janet W. Andersen³, Judith S. Currier¹
¹David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, United States; ²Harvard School of Public Health, Boston, MA, United States; ³University of Pittsburgh School of Medicine, Pittsburgh, PA, United States; ⁴Harvard Medical School, Boston, MA, United States
- 683 HIV Patients Develop High Levels of Broadly Neutralizing Antibodies Against Hepatitis C Virus**
 Quentin Lepillier^{1,2}, Catherine Fauvel³, Laura Heydmann³, Christiane Moog³, David Rey³, Olivier Lambotte³, Nicolas Meyer^{3,6}, Heidi Barth^{2,7}, Françoise Stoll-Keller^{1,2}, Samira Fati-Kremer^{1,2}
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- 684 Activation and Senescence Markers in HCV-Infected Patients On PegIFN/RBV/Telaprevir Triotherapy**
Isabelle Pellegrin¹, Céline Cognet², Pascale Trimoulet³, Juliette Foucher⁴, Julien Vergnol⁵, Wassil Merrouche³, Jean-Luc Taupin⁴, Linda Wittkop³, Jean-François Moreau³, Victor de Ledinghen³
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Session P-N8 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HCV-Related Outcomes: Cardiac and Non-Liver

- 685 HCV Viremia and the Risk of Acute Myocardial Infarction at Various Lipid Levels**
Adeel A. Butt^{1,2}, Kara W. Chew³, Kathleen Corey⁴, Raymond T. Chung⁴, Javed Butler⁵, Kenneth E. Sherman⁶, Matthew S. Freiberg¹, Sebahat Erqu¹
¹University of Pittsburgh School of Medicine and VA Pittsburgh Healthcare System, Pittsburgh, PA, United States; ²Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates; ³David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, United States; ⁴Harvard Medical School and Massachusetts General Hospital, Boston, MA, United States; ⁵Emory University, Atlanta, GA, United States; ⁶University of Cincinnati, Cincinnati, OH, United States; ⁷Weill Cornell Medical Center, New York, NY, United States

686 Association of Coinfection With HBV, HCV, or Both On Survival Among HIV-Infected Adults

Tanyaporn Wansom¹, Catherine G. Sutcliffe², Shruti H. Mehta², Carleigh L. Benton¹, Richard C. Moore², David T. Thomas², Mark S. Sulkowski¹

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687 Incidence Rates and Risk Factors for Severe Bacterial Infections in HIV/HCV-Coinfected Patients

Kathleen C. Rollet¹, John Gill², Curtis Cooper³, Mark Hull⁴, Joseph Cox⁵, Bryan Conway⁶, Neora Pick⁷, Marie-Louise Vachon⁸, Marina B. Klein¹

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688 Association of HIV and HCV Coinfection With Cardiovascular Disease Outcomes Among US Veterans

Sebahat E. Ergou¹, Arpan Mohanty², Adeel A. Butt³

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689 Performance of the Framingham Risk Score in Hepatitis C-infected Persons

Kara W. Chew¹, Debika Bhattacharya², Kathleen McGinnis², Judith S. Currier¹, Adeel A. Butt³

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690 HCV Accelerates Non-Liver Mortality in HIV-Infected Patients: A Nationwide Cohort Study

Vincent Mallet^{1,2}, Sophie Thiébaud³, Yazdan Yazdanpanah^{4,5}, Stanislas Pol^{1,2}, Michael Schwarzwinger^{3,5}

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Session P-N9 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
HBV and HDV

691 The Role of HBV Quasispecies Diversity & Other Factors in Residual HBV Viremia On TDF-Based cART

Jennifer Audsley^{1,2}, Anshalee Avihingsanon¹, Gail Matthews⁴, Margaret Littlejohn⁵, Stephen Bent⁶, Lily Yuen⁷, Fabio Luciani⁷, Stephen Locarnini⁸, Sharon Lewin^{1,2}, Joe Sasadeusz²

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692 Therapeutic Management and Evolution of Chronic Hepatitis B: Does HIV Coinfection Still Matter?

Lionel Piroth¹, Stanislas Pol², Patrick Mialhes³, Karine Lacombe⁴, Amanda Lopes⁵, Françoise Borsa-Lebas⁶, Dominique Salmon⁷, Eric Rosenthal⁸, Fabrice Carrat⁹, Patrice Cacoub¹⁰

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693 Increased Hepatitis B Virus Coinfection Screening Following a Change in Zambian HIV Guidelines

Kaio Musukuma¹, Arianna Zanolini^{1,2}, Lloyd Mulenga^{1,3}, Carolyn Bolton-Moore⁴, Samuel Zuercher⁵, Izukanji Sikazwe⁶, Aggrey Mwemba⁷, Gilles Wandeler⁸, Benjamin H. Chi^{1,4}, **Michael J. Vinikoor²**

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694 HBSAg Genetic Elements Critical for Immune Escape Drive HBV Reactivation Upon Immunosuppression

Romina Salpini¹, Claudia Alteri¹, Maria-Concetta Bellocchio¹, Emanuela Balestra¹, Claudio Mastroianni², Aldo Marrone³, Massimo Andreoni¹, Mario Angelico¹, Carlo-Federico Perno¹, **Valentina Svicher¹**

¹University of Rome Tor Vergata, Rome, Italy; ²Spaziozia University of Rome, Rome, Italy; ³Second University of Naples, Naples, Italy

695 Isolated Hepatitis B Core Antibody Is Associated With Advanced Hepatic Fibrosis

Debika Bhattacharya¹, Chi-hong Tseng¹, Jan Tate^{2,3}, Vincent Lo Re^{4,5}, Cynthia Gilbert^{6,7}, Joseph K. Lim^{2,8}, Maria Rodriguez-Barradas^{9,9}, David Rimland^{10,11}, Amy C. Justice^{2,3}, Matthew B. Goetz^{12,13}

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696 Isolated Hepatitis B Core Antibody and Hepatic Fibrosis in HIV/HCV-Coinfected Women

Audrey L. French^{1,2}, Anna Hottot³, Mary Young⁴, Marek Nowicki⁵, Michael Augenbraun⁶, Kathryn Anastos⁷, Marion Peters⁸

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697 Effectiveness of Taiwan Nationwide HBV Vaccination in Persons at Risk for HIV Infection

Hsin-Yun Sun¹, Chia-Jui Yang², Nan-Yao Lee³, Shiou-Haur Liang⁴, Chien-Ching Hung¹

¹National Taiwan University Hospital, Taipei, Taiwan; ²Far Eastern Memorial Hospital, New Taipei City, Taiwan; ³National Cheng Kung University Hospital, Tainan, Taiwan; ⁴E-Da Hospital, Kaohsiung, Taiwan

698 Hepatitis B Virus Mother-To-Child-Transmission Among HIV-Infected Pregnant Women in Kenya

Timothy D. Minnien^{1,2}, Alex Morwabe³, Sonali Girde^{1,4}, Fredrick Harrison³, Frank Angira³, Boaz Oyaro⁵, Lisa A. Mills^{1,3}, Clement Zeh^{1,3}, Philip J. Peters¹

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699 Vaccine Escape Mutants and Suboptimal Hepatitis B Virus Response in HIV HBV Coinfected Patients

Anders Boyd¹, Raoul Moh², Paul Dénys³, Mariama Issoufou³, Christine Danef¹, Xavier Aholiaret¹, Serge Eholié¹, Pierre-Marie Girard¹, Fabien Zoulim³, Karine Lacombe⁴

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700 Long-Term Benefit of Tenofovir On Hepatitis Delta

Rocio Sierra-Enguita, Zulema Plaza, Eugenia Vispo, Pablo Barreiro, Pablo Labarga, José Vicente Fernández-Montero, Carmen De Mendoza, **Vicente Soriano**
Infectious Diseases, Hospital Carlos III, Madrid, Spain

Session P-N10 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B HEV

633 Chronic Hepatitis E Virus Infection Is Uncommon in HIV-Infected Patients

Antonio Rivero-Juárez¹, Loreto Martínez-Dueñas¹, Antonio Martínez-Peinado², Angela Camacho³, Celia Cifuentes³, Ana Gordon¹, Mario Frias¹, Julian Torre-Cisneros¹, Juan A. Pineda³, Antonio Rivero¹
¹Infectious Diseases, Instituto Maimonides de Investigación Biológica de Córdoba (IMIBIC), Córdoba, Spain; ²Clinical Analysis, Instituto Maimonides de Investigación Biológica de Córdoba (IMIBIC), Córdoba, Spain; ³Infectious Diseases, Hospital Universitario de Valme, Córdoba, Spain

634 High Frequency of HEV Seropositivity in HIV-Infected Patients in Southern Spain

J. A. Pineda, M. Parra, C. Cifuentes, K. Neukam, J. C. Palomares, E. Pérez-Navarro, L. M. Real, N. Merchante, F. Lozano, J. Macias
Unit of Infectious Diseases and Microbiology, Hospital Universitario de Valme, Seville, Spain

Session P-01 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B Lymphoma/Liver/Gammopathy

701 Monoclonal Gammopathy and HIV-1 Infection: Evolution With Highly Active Antiretroviral Therapy

Marie-Laure Casanova¹, **Alain Makinson²**
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702 Predicting Survival of HIV-Infected Patients With Liver Cancer: The SHILCA Score and Staging Model

Nicolas Merchante¹, Ting-Yi Chen², Eugenia Vispo³, Mamta Jain², Emma Page⁴, Pablo Barreiro³, Mark Nelson⁵, Judith Aberg⁵, Juan A. Pineda¹, Jorge Marrero⁶, Norbert Bräu^{6,7}
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States; ⁶Infectious Disease Section, James J. Peters VA Medical Center, Bronx, NY, United States; ⁷Divisions of Infectious Diseases & Liver Diseases, Icahn School of Medicine at Mount Sinai, New York, NY, United States

703 Different Immunologic and Virologic Contexts for HIV-Associated Lymphoma in the CNICS Cohort

Satish Gopal¹, Monita Patel¹, Chad Achenbach², Elizabeth Yanik¹, Stephen Cole¹, Sonia Napravnik¹, Kristy Richards¹, Joseph Eron¹, for the CNICS Investigators
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Session P-02 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B Cancer: Natural History and Epidemiology

704 Risk of Cancer Among HIV Patients Compared To the Background Population: Impact of Smoking and HIV

Marie Helleberg¹, Jan Gerstoft¹, Shoaib Afzal², Gitte Kronborg³, Carsten S. Larsen⁴, Stig E. Bojesen², Court Pedersen⁵, Børge G. Nordestgaard⁶, Niels Obel¹

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705 Cancer Stage at Diagnosis in HIV-Infected Individuals and Transplant Recipients

Meredith S. Shiels¹, Glenn Copeland², Marc Goodman³, Charles F. Lynch⁴, Karen Pawlish⁵, Ruth M. Pfeiffer¹, Jon J. Snyder⁶, Eric A. Engels¹

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706 Cancer Incidence in a Nationwide HIV/AIDS Patient Cohort in Taiwan in 1998-2009

Yi-Ming A. Chen¹, Marcelo Chen², Ian Jen³, Matthew G. Law⁴, Kishor Bhatia⁵, Gerald B. Sharp⁶

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707 Excess Burden of Cancer Among HIV-Infected Persons in the United States

Hilary A. Robbins¹, Meredith S. Shiels¹, Ruth M. Pfeiffer¹, Jianmin Li², H. Irene Hall³, Eric A. Engels¹
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Session P-04 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B Kaposi Sarcoma, PEL, and KSHV

708 The Effect of Protease Inhibitor Use On Kaposi Sarcoma Incidence in a CART-Experienced Cohort

Elizabeth Chiao, Marc Kowalkowski
Baylor College of Medicine, Houston, TX, United States

709 Guidelines On Kaposi's Sarcoma Treatment: Results From Two Cochrane Systematic Reviews

Esther E. Freeman¹, Charles Okwundu², Oluwatoyin Gbabe³, Miriam Laker⁴, Philippa Easterbrook⁵, Toby Maurer⁶, Jeffrey Martin⁷

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710 Randomized Trial of Protease Inhibitor-Based Antiretroviral Therapy for Kaposi Sarcoma in Africa

Jeffrey Martin¹, Miriam Laker-Oketta^{1,2}, Victoria Walusansa³, Jackson Orem⁴, John Bennett¹, Adrienne Mocello¹, Toby Maurer⁵, Peter Hunt¹, Andrew Kambugu⁶, Edward Mbidde⁴

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711 Kaposi Sarcoma in the Era of Combination Antiretroviral Therapy

Natascha Wyss, **Matthias Egger**, Julia Bohlius, Malignancy Working Group for COHERE in EuroCoord
Institute of Social and Preventive Medicine, University of Bern, Bern, Switzerland

712 Vitamin D Insufficiency in AIDS-Associated Kaposi Sarcoma in Zimbabwe

Kristine M. Erlandson¹, Ivy Gudza², Suzanne Fiorillo¹, Buxton Ndemera², Robert T. Schooley³, Lovemore Gwanzura⁴, Margaret Borok², Thomas B. Campbell¹

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713 Primary Effusion Lymphoma and HIV Infection: 51 Patients From a Single Institution

Stephanie Guillet¹, **Laurence Gerard^{1,2}**, Veronique Meignin³, Felix Agbalika⁴, Wendy Cucchini⁵, Lionel Galicier^{1,2}, Eric Oksenhendler^{1,2}

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714 Indoleamine 2,3-Dioxygenase (IDO) Activity as a Determinant of Kaposi Sarcoma in Africa

Helen Byakwaga^{1,2}, Peter W. Hunt¹, Miriam Laker-Oketta^{1,3}, David V. Glidden¹, Yong Huang¹, Mwebesa Mwebesa², Victoria Walusansa⁴, David R. Bangsberg⁵, Edward Mbidde⁶, Jeffrey N. Martin¹

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Session P-05 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Cervical Cancer, HPV, and HPV Vaccine

715 Epidemiology and Dynamics of HPV Infection in Romanian Women Infected With HIV in Early Childhood

Sanjay R. Mehta¹, Lumi Ene², Cristina Voinea², Claudia Stefanescu², Diana Sima², Dan Duiculescu^{2,3}

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Diseases, Bucharest, Romania; ³Titu Maiorescu University, Bucharest, Romania

716 Baseline Data of a Phase 3 Trial of the Quadrivalent HPV Vaccine in HIV+ Males and Females: ACTG 5298

Ross Cranston¹, Ming Yang², Pawel Paczuski², Michelle Cespedes³, Elizabeth Chiao⁴, Jennifer Webster-Cyriaque⁵, Catherine Godfrey⁶, Timothy Wilkin¹

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717 Cervical Abnormalities in HIV-Infected South African Women With High Screening and Referral Rates

Ingrid T. Katz^{1,2}, Alexi A. Wright^{2,3}, Tamaryn L. Crankshaw^{4,5}, Janet Giddy^{4,6}, Sean Mould^{4,7}, Lisa M. Butler^{2,8}

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Session P-06 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Anal Cancer and HPV

718 Prevalence of Anal Dysplasia in HIV-Infected Women From Johannesburg, South Africa

Brigitte Goeleman^{1,2}, Cynthia Firnhaber^{1,2}, Pamela Michelow^{1,3}, Avril Swarts¹, Jennifer S. Smith⁴, Timothy Wilkin⁵

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719 Mucosal and Systemic Immune Responses in HIV/HPV Co/Infected Males

LAURA COMI¹, **Camilla Tincati¹**, Giusi Maria Bellistri¹, Alessandro Pandolfo¹, Javier Sanchez Martinez², Veronica Rainone³, Marco Rovati³, Daria Trabattini³, Antonella d'Arminio Monforte³, Giulia Marchetti¹

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720 Natural History of HIV-Related Anal Dysplasia: A Multi-State Modeling Analysis

Wolelaw W. Agmas¹, Edward R. Cachay¹, Christopher Jackson², Wm. Christopher Mathews¹

¹Internal Medicine, University of California San Diego, La Jolla, CA, United States; ²Public Health, Medical Research Council Biostatistics Unit, Cambridge, United Kingdom

721 Antiretroviral Therapy as Protector Factor of Anal Dysplasia in HIV-Infected MSM

Carmen Hidalgo Tenorio¹, Concepcion Gil Anguita¹, Jessica Ramirez Taboada¹, Juan Gabriel Martinez Cara², Javier Esquivias³, Pablo Palma⁴, Mar Rivero¹, Rosario Javier Martinez², Miguel Angel Lopez Ruz¹, Juan Pasquau Liao¹

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722 HPV16-Specific T-Cell Responses and Spontaneous Regression of Anal Intraepithelial Neoplasia

Winnie W. Y. Tong¹, Kelsey Shepherd¹, Fengyi Jin², John Zauders^{1,2}, Richard J. Hillman¹, Andrew E. Grulich², Anthony Kelleher^{1,2}, Andrew Carr¹

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Session P-P1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Heart Failure, Cardiac Steatosis, and HIV

723 Elevated NT-proBNP Levels Predict Mortality in HIV-Infected Women

Matthew R. Gingo¹, Kidane Ghebrehawariat¹, Jong-Hyeon Jeong¹, Yanxia Chu¹, Quanwei Yang¹, Lorrie Lucht¹, David Hanna², Jason Lazaar², Mark Gladwin¹, Yingze Zhang¹, Alison Morris¹
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724 Cardiac Steatosis Increased in HIV: Related To Gender, Visceral Fat and ARV Exposure

Julia B. Purdy¹, Chia-Ying Liu², Sabrina Mangat³, Horacio Duarte⁴, Diana Thiar⁵, Nancyanne Schmidt⁶, Jamie Hur⁷, Christopher T. Sibley², David A. Bluemke², Colleen Hadigan³
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725 ST2 and GDF-15 Are Associated With Structural Heart Disease and Mortality in HIV

Eric Secemsky¹, Rebecca Scherzer², Elaine Nitta², Alan Wu², David Lange², Steven Deeks², Jeffrey Martin², James Snider², Peter Ganz², Priscilla Hsue²
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726 Depression and HIV Are Risk Factors for Incident Heart Failure Among Veterans

Jessica R. White¹, Chung-Chou H. Chang^{1,2}, Adeel A. Butt^{2,3}, Hilary A. Tindle², Maria C. Rodriguez Barradas^{4,5}, David Rimland^{6,7}, David Lea^{8,9}, Matthew Budoff^{10,11}, Amy C. Justice^{12,13}, Matthew S. Freiberg^{2,3}
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Session P-P2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Immune Activation, Immunodeficiency, and CVD

727 Impact of Low CD4 Count and HIV Persistence On Endothelial Function in Patients With Low Plasma RNA

Amanda Schnell Heringer¹, Hiroyu Hatano², Peter W. Hunt², Yuaner Wu¹, Yifei Ma², Rebecca Scherzer^{2,3}, Jeffrey N. Martin^{2,3}, Peter Ganz², Steven G. Deeks², Priscilla Y. Hsue²

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728 Carotid Distensibility and Immune Activation in HIV-Infected Patients Without Coronary Calcium

Chris T. Longenecker^{1,2}, Ying Jiang¹, Sara Debanne¹, Grace A. McComsey^{1,2}
¹Case Western Reserve University, Cleveland, OH, United States; ²University Hospitals Case Medical Center, Cleveland, OH, United States

729 Microvascular Disease in Controllers Is Mediated by HIV DNA and Immune Dysfunction

Hiroyu Hatano¹, Yifei Ma², Rebecca Scherzer^{1,3}, Yuaner Wu¹, Elaine Nitta¹, Kara Harvill¹, Elizabeth Sinclair¹, Michael P. Busch^{1,5}, Steven G. Deeks¹, Priscilla Y. Hsue¹
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730 Monocyte But Not Cellular Activation Is Associated With Coronary Atherosclerosis in the MACS

Eric S. Daar¹, Wendy S. Post², Annie T. Darilay², Peter W. Hunt³, Todd T. Brown⁴, Rebecca McKibben², Beth Jamieson⁴, Matthew J. Budoff¹, Mallory D. Witt¹
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Session P-P3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Alcohol, Smoking, and Atherosclerosis

731 The J-Curve in HIV: Better Cardiovascular-Disease-Free Survival With Moderate Alcohol Intake

Gilles Wandeler^{1,2}, David Kraus¹, Jan Fehr¹, Anna Conen⁴, Alexandra Calmy⁵, Christina Orasch⁶, Manuel Battegay⁷, Patrick Schmid⁸, Enos Bernasconi⁹, Hansjakob Furrer², Swiss HIV Cohort Study
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732 Soluble CD14 and D-Dimer Are Associated With Smoking and Heavy Alcohol Use in HIV-Infected Adults

Patricia A. Cioe¹, Jason Baker², John Hammer³, Erna M. Kojic⁴, Nur Onen⁵, Pragna Patel⁶, Christopher W. Kahler⁷
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733 Antiviral Therapy and Smoking Associated With Coronary Vessel Thickening in HIV-Infected Youth

Aylin Unsai¹, Khaled T. Abd-Elmoniem², Sarah Eshera², Julia B. Purdy², Rohan Hazra⁴, Colleen Hadigan¹, Ahmed M. Gharib²

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Session P-P4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall B

Risk Factors and Incidence: MI and Stroke

734 HIV Infection and the Risk of Cardiovascular Disease in Women

Julie A. Womack¹, Chung-Chou H. Chang^{2,3}, Kaku A. Armah³, Kathleen McGinnis⁴, Matthew B. Goetz^{5,6}, Cynthia L. Gilbert^{7,8}, Sheldon T. Brown^{9,10}, Alberta L. Warner⁵, Amy C. Justice^{4,11}, Matthew S. Freiberg^{12,13}, for the VACS Project Team

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735 Depression Predicts Incident Myocardial Infarction in HIV+ Veterans: Veterans Aging Cohort Study

Tasneem Khambaty¹, Jesse C. Stewart², Samir K. Gupta², Chung-Chou H. Chang³, Adeel A. Butt⁴, Cynthia L. Gilbert⁴, Hilary A. Tindle⁵, Heidi Crane⁶, Roger Bedimo⁶, Matthew S. Freiberg³, on behalf of the VACS project team

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736 HIV Infection, Cardiovascular Risk Factor Profile, and Risk for Acute Myocardial Infarction

Anne-Lise Paisible¹, Joyce Chang², Kaku Armah³, Matthew B. Goetz⁴, Adeel A. Butt^{5,6}, Maria C. Rodriguez-Barradas^{7,8}, David Rimland^{9,10}, Sheldon T. Brown^{11,12}, Amy C. Justice^{13,14}, Matthew S. Freiberg¹, the VACS Project Team

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737 No Difference in Incidence of Myocardial Infarction for HIV+ and HIV- Individuals in Recent Years

Daniel B. Klein¹, Wendy A. Leyden², Chun R. Chao³, Michael A. Horberg⁴, William J. Towner⁵, Leo B. Hurley⁶, Charles P. Quesenberry⁷, Michael J. Silverberg⁸

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738 MACE Incidence Among HIV- and Non-HIV-Infected Patients in a Clinical Care Cohort

Virginia A. Triant, Susan Regan, Steven Grinspoon
Massachusetts General Hospital, Boston, MA, United States

739 Lower CD4 Count and Higher Viral Load Are Associated With Increased Risk of Myocardial Infarction

Daniel R. Drozd¹, Robin M. Nance¹, Joseph A. C. Delaney¹, Greer A. Burkholder², William C. Mathews³, Richard D. Moore⁴, Joseph J. Eron⁵, Peter W. Hunt⁶, Mari M. Kitahata⁷, Heidi M. Crane⁸, Centers for AIDS Research Network of Integrated Clinical Systems (NICS) Cohort

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740 Long-Term Effects of Nitrite Inhalants On Cardiovascular and Renal Outcomes in the MACS Cohort

Alex Holman, Anupriya Dutta, **Dana Gabuzda**
Dana-Farber Cancer Institute, Boston, MA, United States

741 HIV Infection and Immunodeficiency as Risk Factors for Ischemic Stroke

Julia L. Marcus¹, Wendy A. Leyden², Chun R. Chao³, Felicia C. Chow³, Michael A. Horberg⁴, Leo B. Hurley⁵, Daniel B. Klein⁶, Charles P. Quesenberry⁷, William J. Towner⁸, Michael J. Silverberg⁹

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Session P-P5 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B

Antiretroviral Therapy, Lipids, and CVD

742 Antiretroviral Therapy Is Associated With Significant Changes in Plasma Lipidome

Janine M. Trevillian^{1,2}, Gerard Wong³, Rebekah Puls⁴, Kathy Petomenos⁴, Sean Emery⁴, Natalie Mellett⁵, Peter J. Meikle⁵, Jennifer F. Hoy^{1,2}

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743 Rosuvastatin Lowers Cystatin C in HIV-Infected Subjects On Antiretroviral Therapy: SATURN-HIV

Chris T. Longenecker^{1,2}, Corri Lynn O. Hilemani^{1,3}, Norma J. Storer^{1,2}, Dani E. Labatto^{1,2}, Grace A. McComsey^{1,2}

¹Case Western Reserve University, Cleveland, OH, United States; ²University Hospitals Case Medical Center, Cleveland, OH, United States; ³MetroHealth Medical Center, Cleveland, OH, United States

744 Abacavir Induces Leukocyte Accumulation Through the Interaction of ATP and P2X₂ Receptors

Carmen de Pablo^{1,2}, Samuel Orden¹, Cesar Ruiz-Navarro¹, Maria Angeles Martinez-Cuesta¹, Juan V. Esplugues^{1,3}, **Angeles Alvarez^{1,4}**

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- 745 LDL Particles and Lipoprotein-Phospholipase A2 in Naive HIV+ Patients Randomized To DRV/r vs ATV/r**
Maria Saumoy¹, Jordi Ordoñez-Llanos², Esteban Martínez³, Elena Ferrer⁴, Gracia Mateo⁴, Esteban Ribera⁴, Eugenia Negrodo⁴, Iñaki Perez², Daniel Podzamczar¹
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- 746 Darunavir or Atazanavir vs Raltegravir Lipid Changes Are Unlinked To Ritonavir Exposure: ACTG 5257**
Ighowwerha Ofotokun¹, Heather Ribaud², Lumine Na³, Grace McComsey³, Susan E. Cohn⁴, Catherine Godfrey⁵, Manish Sagar², Frances Aweeka⁶, Jeffrey Lennox¹, Jeffrey Currier¹
¹Department of Medicine, Emory University School of Medicine, Atlanta, GA, United States; ²Harvard University, Boston, MA, United States; ³Case Western University, Cleveland, OH, United States; ⁴Northwestern University, Chicago, IL, United States; ⁵National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States; ⁶University of California San Francisco, San Francisco, CA, United States; ⁷University of California Los Angeles, Los Angeles, CA, United States

- 747LB Is There Continued Evidence for an Association Between Abacavir and Myocardial Infarction Risk?**
Caroline Sabin¹, Peter Reiss², Lene Ryom³, Stephane de Wit⁴, Ole Kirk⁵, Rainer Weber⁶, Christian Pradier⁶, Matthew Law⁷, Andrew Phillips¹, Jens Lundgren⁸, DAD Study Group
¹UCL, London, United Kingdom; ²Academic Medical Center, University of Amsterdam, Amsterdam, Netherlands; ³Copenhagen HIV Programme, University of Copenhagen, Copenhagen, Denmark; ⁴Department of Infectious Diseases, St Pierre University Hospital, Brussels, Belgium; ⁵Division of Infectious Diseases, University Hospital Zurich, Zurich, Switzerland; ⁶Nice Hospital, Nice, France; ⁷The Kirby Institute, Sydney, Australia

- 748 Lipidomic Profiling in HIV: Implications for Risk-Prediction Models**
 Gerard Wong¹, **Janine M. Trevillyan^{2,3}**, Benoit Fatou¹, Michelle Cimeff¹, Jacqui Weir¹, Jennifer F. Hoy^{2,3}, Peter J. Meikle¹, Peter J. Meikle¹
¹Metabolomics, Baker IDI Heart and Diabetes Institute, Melbourne, Australia; ²Infectious Diseases Unit, Alfred Health, Melbourne, Australia; ³Department of Infectious Diseases, Monash University, Melbourne, Australia

- 749LB Effect of Switch From Abacavir To Tenofovir DF On Platelet Function Markers: A SWIFT Trial Substudy**
Jane A. O'Halloran¹, Eimear Dunne², Willard Tinago³, Stephanie Denieffe⁴, Dermot Kenny², Patrick W. G. Mallon¹
¹HIV Molecular Research Group, University College Dublin, Dublin, Ireland; ²Cardiovascular Biology Group, Royal College of Surgeons in Ireland, Dublin, Ireland

Session P-P6 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall B
Statins and ARV Effects in HIV

- 750 Rosuvastatin Lowers Oxidative LDL in HIV-Infected Persons On Antiretroviral Therapy: SATURN-HIV**
Corrilynn O. Hieman^{1,2}, Richard D. Semba³, Randi Turner³, Danielle E. Labbato^{1,4}, Norma J. Storer^{1,4}, Grace A. McComsey^{1,4}
¹Case Western Reserve University School of Medicine, Cleveland, OH, United States; ²MetroHealth Medical Center, Cleveland, OH, United States; ³Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁴University Hospitals Case Medical Center, Cleveland, OH, United States

- 751LB After 52 Weeks, Pitavastatin Is Superior To Pravastatin for LDL-C Lowering in Patients With HIV**

Craig A. Sponseller¹, Judith Aberg², INTREPID Team
¹Medical Affairs, Kowa Pharmaceuticals America, Inc., Montgomery, AL, United States; ²Chief, Division of Infectious Diseases, ICAHN School of Medicine at Mount Sinai, New York, NY, United States

- 752 Endothelial Progenitor Cells Increase in Older HIV-Infected Patients Receiving Telmisartan**

Jordan E. Lake¹, Theodoros Kesisidis², Diana H. Liao³, Judith S. Currier⁴, Otto O. Yang⁵
¹University of California Los Angeles, Los Angeles, CA, United States

Session P-Q1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Biomarkers and Non-AIDS Events

- 753 Incidence of CD4/CD8 Ratio Normalization and Its Role in the Onset of Non-AIDS-Related Events**

Cristina Mussini¹, Patrizia Lorenzini², Alessandro Cozzi-Lepri³, Giuseppe Lapadula⁴, Giulia Marchetti⁵, Emanuele Nicastrì⁶, Antonella Cingolanti⁷, Miriam Lichtner⁸, Andrea Antinori⁹, Antonella d'Arminio Monforte¹⁰, for the ICONA Foundation Study Group
¹University of Modena and Reggio Emilia, Modena, Italy; ²INMI L. Spallanzani, Rome, Italy; ³University College London, London, United Kingdom; ⁴San Gerardo Hospital, Monza, Italy; ⁵University of Milan, Milan, Italy; ⁶Catholic University, Rome, Italy; ⁷La Sapienza University, Polo Pontino, Rome, Italy

- 754 Longitudinal Changes in Free Testosterone Among Older HIV-Infected and HIV-Uninfected Men**

Laurence Slama^{1,2}, Lisa P. Jacobson³, Xuhong Li⁴, Frank J. Palella⁵, Joseph B. Margolick⁶, Lawrence Kingsley⁷, Dorothy Wiley⁸, Gilles Pialoux⁹, Adrian Dobs¹⁰, Todd T. Brown¹¹
¹Infectious Diseases, Tenon Hospital, Paris, France; ²Infectious Diseases, Northwestern University, Feinberg School of Medicine, Chicago, IL, United States; ³Epidemiology, Johns Hopkins University, Baltimore, MD, United States; ⁴Infectious Diseases, Johns Hopkins University, Baltimore, MD, United States; ⁵Infectious Diseases, University of Pittsburgh, Pittsburgh, PA, United States; ⁶School of Nursing, University of California, Los Angeles, CA, United States; ⁷Endocrinology, Diabetes, and Metabolism, Johns Hopkins University, Baltimore, MD, United States

- 755 Inflammatory Biomarkers in Chronic HIV Disease Predominantly Associate With Monocyte Activation**

Eleanor M. P. Wilson¹, Amrit Singh¹, Kathy Huppler Hullsiek², Keith Henry^{2,3}, Ken Lichtenstein⁴, Pragna Patel⁵, John T. Brooks⁶, Irini Sereti⁷, Jason V. Baker^{2,3}
¹Lab of Immunoregulation, NIAID, NIH, Bethesda, MD, United States; ²University of Minnesota, Minneapolis, MN, United States; ³Hennepin County Medical Center, Minneapolis, MN, United States; ⁴National Jewish Health, Denver, CO, United States; ⁵CDC, Atlanta, GA, United States

- 756 Extrinsic Pathway Coagulation Factors Are Associated With Mortality During Treated HIV Disease**

Jason V. Baker¹, Kathleen Brummel-Ziedins², Jacqueline Neuhaus³, James D. Neaton⁴, Russell P. Tracy², INSIGHT SMART and ESPRIT Study Groups
¹Infectious Diseases, University of Minnesota, Minneapolis, MN, United States; ²Biochemistry, University of Vermont, Burlington, VT, United States; ³Biostatistics, University of Minnesota, Minneapolis, MN, United States

- 757 Correlates of Inflammatory Markers After One Year of Suppressive Antiretroviral Treatment (ART)**

Supriya Krishnan¹, Ronald J. Bosch², Benigno Rodriguez², Peter W. Hunt³, Cara Wilson⁴, Steven G. Deeks⁵, Michael M. Lederman⁶, Alan L. Landay⁶, Allan R. Tenorio⁶
¹Harvard School of Public Health, Center for Biostatistics in AIDS Research, Boston, MA, United States; ²Division of Infectious Diseases and HIV Medicine, Case Western Reserve University School of Medicine, Cleveland, OH, United States; ³Positive Health Program, Department of Medicine, San Francisco General Hospital, University of California, San Francisco, CA, United States; ⁴Division of Infectious Diseases, University of Colorado Hospital, Denver, CO, United States

States;²Department of Immunology and Microbiology, Rush University Medical Center, Chicago, IL, United States;³Department of Medicine, Rush University Medical Center, Chicago, IL, United States

758 **Pro12Ala Polymorphism Is Associated With Metabolic Disturbance in HIV/HCV Coinfected Patients**

Pilar García-Broncano¹, Juan Berenguer^{2,3}, Amanda Fernández-Rodríguez², Daniel Pineda-Tenor², María A Jiménez-Sousa², Mónica García-Alvarez², Teresa Aldámiz-Echevarría^{2,3}, Juan Carlos López², Dariaela Micheloud², Salvador Resino²

¹Unidad de Infección Viral e Inmunidad, Centro Nacional de Microbiología, Instituto de Salud Carlos III, Majadahonda, Spain, ²Unidad de Enfermedades Infecciosas/VIH, Hospital General Universitario "Gregorio Marañón," Madrid, Spain; ³Instituto de Investigación Sanitaria Gregorio Marañón (IISGM), Madrid, Spain; ⁴Servicio de Medicina Interna, Hospital General Universitario "Gregorio Marañón," Madrid, Spain; ⁵Unidad de Infección Viral e Inmunidad, Centro Nacional de Microbiología, Instituto de Salud Carlos III, Universitario Majadahonda, Spain

759 **Predictors of Incident Hypertension in HIV-Positive Adults Over 24 Months On ART in South Africa**

Alana T. Brennan^{1,2}, Matthew P. Fox^{1,2}, Mhairi Maskew², Ian Sanne^{1,2}, Prudence Ivo³, Julia Rohr^{1,2}, Lawrence Long³, Sydney Rosen^{1,2}

¹Center for Global Health & Development, Boston University, Boston, MA, United States; ²Department of Internal Medicine, School of Clinical Medicine, Faculty of Health Sciences, Health Economics and Epidemiology Research Office, Johannesburg, South Africa; ³Department of Internal Medicine, School of Clinical Medicine, Faculty of Health Sciences, Clinical HIV Research Unit, Johannesburg, South Africa

Session P-Q2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D

Frailty: Physical Function and Telomeres

762 **Frailty, Inflammation and Mortality Among Aging HIV-Infected and At-Risk Injection Drug Users**

Damani A. Piggett, Ravi Varadhan, Shruti H. Mehta, Todd T. Brown, Sean X. Leng, Gregory D. Kirk
Johns Hopkins University, Baltimore, MD, United States

763 **Brisk Walking Improves Inflammatory Markers in cART-Treated Patients**

Valeria Longo¹, Matteo Bonato², Simona Bossolasco¹, Laura Galli¹, Andrea Caumo², Gaspare Pavei³, Adriano Lazzarin¹, Giampiero Merati¹, Antonio La Torre¹, Paola Cinque¹
¹Infectious Diseases, San Raffaele Scientific Institute, Milano, Italy; ²Biomedical Sciences for Health, Università degli Studi di Milano, Milano, Italy; ³Pathophysiology and Transplantation Department, Università degli Studi di Milano, Milano, Italy

764 **Cell-Mediated CMV Responses in HIV-Infected Persons With Impaired Physical Function**

Kristine M. Erlandson, Amanda A. Allshouse, Rick Rapaport, Brent E. Palmer, Cara C. Wilson, Samantha MaWhinney, Thomas B. Campbell
University of Colorado Anschutz Medical Campus, Aurora, CO, United States

765 **Presence of the Immune Risk Phenotype and Telomere Shortening Among HIV Treated Patients**

Patricia Ndumbi, Julian Falutz, Jason Szabo, Orin Rosengren, Christos M. Tsoukas
Immune Deficiency Treatment Centre, McGill University Health Centre, Montreal, QC, Canada

766 **Geriatric Syndromes Are Common Among Older HIV-Infected Adults**

Meredith Greene^{1,2}, Victor Valcour^{1,3}, Yinghui Miao^{2,4}, Ken Covicinsky^{1,2}, Joy Madamba², Monica Mattes², Harry Lampiris^{2,7}, Jeffrey Martin⁸, Steven Deeks⁵
¹Medicine-Geriatrics, University of California San Francisco, San Francisco, CA, United States; ²San Francisco VA Medical Center, San Francisco, CA, United States; ³Neurology, University of California San Francisco, San Francisco, CA, United States; ⁴NCIRE, San Francisco,

CA, United States; ⁵Medicine-HIV/AIDS, University of California San Francisco, San Francisco, CA, United States; ⁶University of Central Florida College of Medicine, Orlando, FL, United States; ⁷Medicine-Infectious Diseases, University of California San Francisco, San Francisco, CA, United States; ⁸Epidemiology & Biostatistics, University of California San Francisco, San Francisco, CA, United States

767 **Physical Function Impairment On Quality of Life Among Persons Aging With HIV Infection**

Kristine M. Erlandson, Amanda A. Allshouse, Catherine M. Jankowski, Samantha MaWhinney, Wendy M. Kohrt, Thomas B. Campbell
University of Colorado Anschutz Medical Campus, Aurora, CO, United States

Session P-Q3 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D

Diabetes and Insulin Resistance

768 **IL-6, hsCRP, and the Development of Type 2 Diabetes Among HIV Positive Patients Taking ART**

Claude L. Béténé A Dooko
School of Public Health, University of Minnesota, St Paul, MN, United States

769 **HbA1c Is A Poor Predictor of Fasting Glycemia in HIV-Infected Men With Low CD4 Count, High MCV and MCH**

Laurence Slama^{1,2}, Frank J. Palella², Alison G. Abraham³, Xiuhong Li³, Corinne Vigouroux^{4,5}, Gilles Piauxou¹, Lawrence Kingsley⁶, Jordan E. Lake⁷, Todd T. Brown⁸
¹Infectious Diseases, Tenon Hospital, Paris, France; ²Infectious Diseases, Feinberg School of Medicine, Northwestern University, Chicago, IL, United States; ³Epidemiology, Johns Hopkins University, Baltimore, MD, United States; ⁴Biochimie et Homéologie, Tenon Hospital, Paris, France; ⁵UPMC Paris 6, UMR_S938, Paris, France; ⁶University of Pittsburgh, Pittsburgh, PA, United States; ⁷Infectious Diseases, University of California Los Angeles, Los Angeles, CA, United States; ⁸Endocrinology and Metabolism, Johns Hopkins University, Baltimore, MD, United States

770 **Triglycerides/HDL Ratio and Risk of Developing Diabetes Mellitus During Antiretroviral Therapy**

Nicola Squillace¹, Patrizia Lorenzini², Giuseppe Lapadula¹, Alessandro Cozzi-Leperi³, Stefano Rusconi⁴, Massimo Puoti⁵, Antonella Castagna⁶, Andrea Antinori⁷, Andrea Gori¹, Antonella d'Arminio Montforte¹, for the Icona Foundation Study Group
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771 **Measuring Physical Activity and its Impact On Insulin Resistance in MACS Men**

Anne K. Monroe¹, Todd T. Brown², Christopher Cox², Dorothy Wiley³, Frank Palella⁴, Lawrence Kingsley⁵, Michael Plankey⁶
¹Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ²Epidemiology, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, United States; ³UCLA School of Nursing, Los Angeles, CA, United States; ⁴Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL, United States; ⁵Department of Infectious Diseases and Microbiology, School of Public Health, University of Pittsburgh, Pittsburgh, PA, United States; ⁶Medicine, Georgetown University School of Medicine, Washington, DC, United States

772 **Impact of Randomized Antiretroviral Therapy (ART) Initiation On Glucose Metabolism: ACTG A5224s**

Kristine M. Erlandson¹, Douglas Kitch², Paul E. Sax³, Eric S. Daar⁴, Camlin Tierney², Kathleen M. Melbourne⁵, Belinda Ha⁶, Grace A. McComsey⁷

¹University of Colorado Anschutz Medical Campus, Aurora, CO, United States; ²Harvard School of Public Health, Boston, MA, United States; ³Brigham and Women's Hospital, Boston, MA, United States; ⁴Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center, Torrance, CA, United States; ⁵Gilead Sciences, Foster City, CA, United States; ⁶VIIH Healthcare, Research Triangle, NC, United States; ⁷Case Western Reserve University, Cleveland, OH, United States

Session P-Q4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D Lung Disease and HIV

773 HIV Infection Increases Risk of Acute Exacerbations of COPD

Allison A. Lambert, Gregory D. Kirk, Jacquie Astemborski, Shruti H. Mehta, M. Bradley Drummond
Johns Hopkins University, Baltimore, MD, United States

774 Association of HIV Infection and Immune Activation With Decline in Lung Function

Kristina Crothers¹, Carla V. Rodriguez², Cherry Wongtrakool³, Guy Soo Hoo³, Joon Kim⁴, Sheldon T. Brown⁴, David Rimland², Maria C. Rodriguez-Barradas⁵, Matthew B. Goetz⁶, Amy C. Justice⁶
¹Department of Medicine, University of Washington, Seattle, WA, United States; ²Department of Medicine, Atlanta Veterans Affairs Medical Center and Emory University, Atlanta, GA, United States; ³Department of Medicine, West Los Angeles Veterans Affairs Medical Center and David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA, United States; ⁴Department of Medicine, James J. Peters Bronx Veterans Affairs Medical Center and Icahn School of Medicine at Mt Sinai, New York, NY, United States; ⁵Department of Medicine, Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine, Houston, TX, United States; ⁶Department of Medicine, Veterans Affairs Connecticut Healthcare System and Yale University, New Haven, CT, United States

775 HIV Infection and Related Biomarkers Are Independent Risk Factors for Radiographic Emphysema

Engi F. Attia¹, Matthew B. Goetz², Maria C. Rodriguez-Barradas³, David Rimland⁴, Sheldon T. Brown⁴, Guy Soo Hoo⁵, Joon Kim⁶, Cherry Wongtrakool⁷, Kathleen Akun⁸, Kristina Crothers¹
¹Medicine, University of Washington, Seattle, WA, United States; ²Medicine, West Los Angeles Veterans Affairs Medical Center and David Geffen School of Medicine at University of California, Los Angeles, Los Angeles, CA, United States; ³Medicine, Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine, Houston, TX, United States; ⁴Medicine, Atlanta Veterans Affairs Medical Center and Emory University, Atlanta, GA, United States; ⁵Medicine, James J. Peters Veterans Affairs Medical Center and Icahn School of Medicine at Mt. Sinai, Bronx and NYC, NY, United States; ⁶Medicine, West Haven Veterans Affairs Medical Center and Yale University, West Haven, CT, United States

776 Factors Associated With Chronic Obstructive Pulmonary Disease in a High Risk HIV-Infected Cohort

Alain Makinson¹, Maurice Hayot², Sabrina Eymard-Duvernay³, François Raffi⁴, Laurence Thirard⁵, Fabrice Bonnet⁶, Pierre Tattevin⁷, Sophie Abgrall⁸, Jacques Reynes⁹, Vincent Le Moing¹, ANRS EP48 HIV CHEST Study Team
¹Infectious and Tropical Diseases Department, University Hospital Montpellier 1, UMI 233, Montpellier, France; ²Department of Clinical Physiology, INSERM U1046, University Hospital Montpellier, Montpellier, France; ³UMI 233, IRD, University Montpellier 1, Montpellier, France; ⁴Infectious and Tropical Diseases Department, Nantes University Hospital, Nantes, France; ⁵Tourcoing University Hospital, Tourcoing, France; ⁶Internal Medicine and Infectious Diseases Department, University Hospital Bordeaux, INSERM U897, Bordeaux, France; ⁷Infectious Diseases and ICU, Pontchillou University Hospital, Rennes, France; ⁸INSERM, UMR S 1136^a at the "Institut Pierre Louis d'Epidémiologie et de Santé Publique, Paris, France; ⁹AP-HP, Hôpital Avicenne, Service des Maladies Infectieuses et Tropicales, Bobigny, France

Session P-Q5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D Bone Disease: Osteopenia, Fracture Risk, and Osteoarthritis

777 Minimal Change in Bone Density and No Association With HIV Factors Over 12 Months in HIV-Infected Men Anding Samarawickrama¹, Sophie Jose², Caroline Sabin³, Karen Walker-Bone⁴, Martin Fisher⁴, Yvonne Gillette⁵

¹Clinical Investigation and Research Unit, Brighton and Sussex Medical School, Brighton, United Kingdom; ²Research Department of Infection and Population Health, University College London, London, United Kingdom; ³MRC Lifecourse Epidemiology Unit, University of Southampton, Southampton, United Kingdom; ⁴Department of Infection and Immunity, Brighton and Sussex Medical School, Brighton, United Kingdom; ⁵Department of HIV and Sexual Health, Brighton and Sussex University Hospitals, Brighton, United Kingdom

778 New Fracture Risk and FRAX 10-Year Probability of Fracture in HIV-Infected Adults

Linda A. Battalora¹, Kate Buchacz², Carl Armon³, Edgar T. Overton⁴, John Hammer⁵, Pragna Patel⁶, Joan Chmiel⁶, Kathy Wood³, John T. Brooks², Benjamin Young⁷
¹Colorado School of Mines, Golden, CO, United States; ²Centers for Disease Control and Prevention, Atlanta, GA, United States; ³Cerner Corporation, Vienna, VA, United States; ⁴University of Alabama School of Medicine, Birmingham, AL, United States; ⁵Denver Infectious Disease Consultants, Denver, CO, United States; ⁶Feinberg School of Medicine, Northwestern University, Chicago, IL, United States; ⁷International Association of Providers of AIDS Care, Washington, DC, United States

779LB Bone Density Changes After Antiretroviral Initiation With Protease Inhibitors or Raltegravir

Todd Brown¹, Carlee Moser², Judith Currier³, Heather Ribaud⁴, Jennifer Rothenberg⁴, Michael Dube⁵, Robert Murphy⁶, James Stein⁷, Grace McCormsey⁸
¹Johns Hopkins University, Baltimore, MD, United States; ²Harvard University, Boston, MA, United States; ³UCLA, Los Angeles, CA, United States; ⁴Social & Scientific Systems, Silver Spring, MD, United States; ⁵University of Southern California, Los Angeles, CA, United States; ⁶Northwestern University, Chicago, IL, United States; ⁷University of Wisconsin, Madison, WI, United States; ⁸Case Western Reserve University, Cleveland, OH, United States

780 Hand Osteoarthritis, a Joint Disorder Frequent and More Severe in HIV-1 Patients: METAFIB-0A Study

Anne-Laurence Tomi¹, Jeremy Sellam², Karine Lacombe³, Manuela Sebire⁴, Caroline Rey-Jouvin², Anne-Laurence Miquel⁵, Emmanuel Maheu¹, Francis Berenbaum¹, Pierre-Marie Girard⁶, Jean-Luc Meynard⁶
¹Rheumatology Unit, AP-HP, Hôpital Saint-Antoine, Paris, France; ²AP-HP, Hôpital Saint-Antoine, Paris, France; ³AP-HP, Université Pierre et Marie Curie, Paris, France; ⁴Service de Maladies Infectieuses, AP-HP, Hôpital Saint-Antoine, Paris, France; ⁵Radiology, AP-HP, Hôpital Saint-Antoine, Paris, France; ⁶Maladies infectieuses, AP-HP, Hôpital Saint-Antoine, Paris, France

781 Low Bone Mineral Density Is Associated With Increased Risk of Incident Fracture in HIV+ Adults

Linda A. Battalora¹, Kate Buchacz², Carl Armon³, Edgar T. Overton⁴, John Hammer⁵, Pragna Patel⁶, Joan S. Chmiel⁶, Tim Bush², John T. Brooks², Benjamin Young⁷
¹Colorado School of Mines, Golden, CO, United States; ²Centers for Disease Control and Prevention, Atlanta, GA, United States; ³Cerner Corporation, Vienna, VA, United States; ⁴University of Alabama School of Medicine, Birmingham, AL, United States; ⁵Denver Infectious Disease Consultants, Denver, CO, United States; ⁶Feinberg School of Medicine, Northwestern University, Chicago, IL, United States; ⁷International Association of Providers of AIDS Care, Washington, DC, United States

782 A Randomized Open Label Study for Comparing Two Doses of Zoledronic Acid in HIV Infected Patients

Eugénia Negredo¹, Anna Bonjoch¹, Nuria Pérez-Alvarez^{1,2}, Arrelly Ornellas^{1,3}, Jordi Puig¹, Cristina Herrero¹, Patricia Echeverría¹, Bonaventura Clotet^{1,4}

¹Lluita Contra la Sida Foundation, Germans Trias i Pujol University Hospital, Badalona, Spain; ²Statistics and Operations Research Department, Universitat Politècnica de Catalunya, Barcelona, Spain; ³Department of Economics, University of Barcelona, Barcelona, Spain; ⁴Irsicaixa Foundation, Germans Trias i Pujol University Hospital, Badalona, Spain

783 Mechanism of Bone Disease in HIV and HCV: Impact of Tenofovir Exposure and Severity of Liver Disease

James Cutrell¹, Naim M. Maalouf², Song Zhang³, Henning Drechsler¹, Ang Gao⁴, Pablo Tebas³, Roger Bedimo¹
¹Infectious Diseases, VA North Texas Health Care System, Dallas, TX, United States; ²Center for Mineral Metabolism, University of Texas Southwestern Medical Center, Dallas, TX, United States; ³Clinical Sciences, University of Texas Southwestern Medical Center, Dallas, TX, United States; ⁴Internal Medicine, University of Texas Southwestern Medical Center, Dallas, TX, United States; ⁵Infectious Diseases, University of Pennsylvania, Philadelphia, PA, United States

784 Low Bone Mineral Density (BMD) Among Ugandan HIV-Infected Patients On Failing First-Line ART

Bonnie Wandera^{1,2}, Fred Ssemitala³, Agnes Kiraggwa³, Jayne Ellis³, Cissy Kityo³, Robert Colebunders⁴, Nicholas Paton¹, Andrew Kambugu¹, Philippa Easterbrook¹
¹Epidemiology and Biostatistics, Makerere University School of Public Health, Kampala, Uganda; ²Infectious Diseases Institute, Kampala, Uganda; ³Makerere University College of Health Sciences, Kampala, Uganda; ⁴Epidemiology and Biostatistics, Infectious Diseases Institute, Kampala, Uganda; ⁵Joint Clinical Research Center, Kampala, Uganda; ⁶Institute of Tropical Medicine, Antwerp, Belgium; ⁷Medical Research Council, Clinical Trials Unit, London, United Kingdom

Session P-Q6 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Hepatic Fibrosis and Other Hepatic Complications

785 Abacavir and Didanosine Enhance Susceptibility To Acetaminophen-Induced Hepatotoxicity

Ana Blas-García^{1,2}, Victor M. Victor^{2,3}, Alberto Martí-Rodrigo¹, Lara Millán-Medina^{1,2}, Nadezda Apostolova^{3,4}, **Juan V. Esplugues^{1,2}**
¹Pharmacology, Faculty of Medicine, University of Valencia, Valencia, Spain; ²FISABIO, Valencia, Spain; ³CIBERehd, Valencia, Spain; ⁴Unidad Predepartamental de Medicina, Universidad Jaime I, Castellón de la Plana, Spain

786 Liver Fibrosis Is Not Uncommon in HIV-Infected Patients Without Viral or Alcoholic Hepatitis

Anchalee Avihingsanon^{1,2}, Salyavit Jitmitrapap³, Vorapot Sapsirissavat¹, Tanakorn Apornpong¹, Tawan Mengthong¹, Stephen Kerr^{1,4}, Gail V. Matthews¹, Sharon R. Lewin^{1,6}, Kiat Ruxrungtham^{1,7}, and the HIV-NAT 006 study team.

¹HIV-NAT, TRCARC, Bangkok, Thailand; ²Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ³Department of Biochemistry, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ⁴Kirby Institute, University of New South Wales, Sydney, Australia; ⁵Infectious Diseases, Alfred Hospital and Monash University, Melbourne, Australia; ⁶Centre for Biomedicine, Burnet Institute, Melbourne, Australia; ⁷Medicine, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

787 Association Between Dideoxynucleoside Analogues (d-Drugs) and End-Stage Liver Disease (ESLD)

Lene Ryom¹, Caroline A. Sabin², Peter Reiss³, Wafaa El-Sadr⁴, Antonella D. A. Monforte⁵, Stephane De Wit⁶, Matthew Law⁷, Ole Kirk¹, Andrew N. Phillips⁸, Jens D. Lundgren⁹, on behalf of the D:A:D Study Group
¹Copenhagen HIV Programme and Epidemiklinikken M5132, Rigshospitalet, Copenhagen University Hospital and University of Copenhagen, Faculty of Health and Medical Sciences, Copenhagen, Denmark; ²Research Department of Infection and Population Health, University College London, London, United Kingdom; ³Division of Infectious Diseases and Department of Global Health, Academic Medical Center, University of Amsterdam, Amsterdam, Netherlands; ⁴ICAP-Columbia University/Harlem Hospital, New York City, NY, United States; ⁵Hospital San Paolo, University of Milan, Milan, Italy; ⁶Infectious Diseases, CHU Saint-Pierre, Brussels, Belgium; ⁷Kirby Institute, University of New South Wales, Sydney, Australia

788 Microbial Translocation, Immune Activation, Apoptosis and Liver Fibrosis in the MASH Cohort

Marianna K. Baum¹, Kenneth E. Sherman², Sabrina S. Martinez¹, Pedro Greer³, Tiffanie Stewart¹, Christina Jacobs¹, Sonya Luisi¹, Kimberly Dizon¹, Adriana Campa¹

¹Stempel College of Public Health and Social Work, Florida International University, Miami, FL, United States; ²Division of Digestive Disease, University of Cincinnati, Cincinnati, OH, United States; ³College of Medicine, Florida International University, Miami, FL, United States

789 Cumulative Exposure To Ritonavir-Boosted Atazanavir Is Associated With Cholelithiasis

Takeshi Nishijima^{1,2}, Hiroyuki Gatanaga^{1,2}, Takuro Shimbo³, Yohei Hamada⁴, Junko Tanuma¹, Kunihisa Tsukada¹, Katsuji Teruya¹, Yoshimi Kikuchi¹, Shinichi Oka¹

¹AIDS Clinical Center, National Center for Global Health and Medicine, Tokyo, Japan; ²Center for AIDS Research, Kumamoto University, Kumamoto, Japan; ³Department of Clinical Study and Informatics, Center for Clinical Sciences, National Center for Global Health and Medicine, Tokyo, Japan

790 Prevalence of Liver Fibrosis Based On Non-Invasive Markers Among HIV-Infected Patients in Zambia

Michael J. Vinikoor^{1,2}, Kalo Musukuma³, Gilles Wandeler³, Arianna Zanolin^{1,2}, Aggrey Mweemba⁴, Carolyn Bolton-Moore^{1,5}, Izukanji Sikazwe¹, Benjamin H. Chi^{1,5}, Lloyd Mulenga^{1,4}

¹Centre for Infectious Disease Research in Zambia, Lusaka, Zambia; ²Institute of Global Health and Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ³Institute of Social and Preventive Medicine, University of Bern, Bern, Switzerland; ⁴University Teaching Hospital, Lusaka, Zambia; ⁵Obstetrics and Gynecology, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

791 Significance of Alcohol Abuse Diagnosis vs Other Risk Factors for Advanced Liver Fibrosis by FIB-4

H. Nina Kim¹, Heidi M. Crane¹, Carla V. Rodriguez², Stephen Van Rompaey¹, W. Christopher Mathews², Michael Mugavero³, Kenneth H. Mayer¹, Katerina Christopoulos³, Sonia Napravnik⁴, Mari M. Kitahata¹
¹University of Washington, Seattle, WA, United States; ²University of California San Diego, La Jolla, CA, United States; ³University of Alabama at Birmingham, Birmingham, AL, United States; ⁴Fenway Health, Harvard University, Boston, MA, United States; ⁵University of California San Francisco, San Francisco, CA, United States; ⁶University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

Session P-Q7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Renal Disease: ART, Genetic Factors, and Long Term Outcomes

792 Predictors of Progression, Stabilisation, or Improvement of eGFR After Chronic Renal Impairment

Lene Ryom¹, Amanda Mocroft², Ole Kirk¹, Peter Reiss³, Michael Ross⁴, Olivier Moranne⁵, Philippe Morlat⁶, Colette Smith⁷, Christoph A. Fux⁸, Jens D. Lundgren⁹, on behalf of the D:A:D Study Group
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793 Spectrum of HIV-Associated Kidney Disease in the Era of Combination Antiretroviral Therapy

John Booth¹, Lisa Hamzah¹, Sophie Jose¹, Stephen Mcadoo², Emil Kumar³, Catherine Horsfield⁴, Patrick O'Donnell⁴, Rachael Jones⁵, Caroline Sabin¹, Frank A. Post²

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United Kingdom; ⁴Guy's and St Thomas' NHS Foundation Trust, London, United Kingdom; ⁵Chelsea and Westminster NHS Foundation Trust, London, United Kingdom

794 Renal and Metabolic Safety of Initial HIV-1 Therapy in Resource-Limited Settings

Francine Touzard Romo¹, Laura M. Smeaton², Thomas B. Campbell³, Cynthia Riviere⁴, Rosie Mngqibisa⁵, Khuanchai Supparatpinoy⁶, Johnstone Kumwenda⁷, Nagalingeswaran Kumarasamy⁸, James G. Hakim⁹, Timothy Flanagan¹⁰
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795 Risk Factors for Atazanavir (ATV)-Associated Urolithiasis: A Case-Control Study

Barbara De Sousa¹, Diane Ponscarne², Nathanael Lapidus³, Michel Daudon⁴, Laurence Weiss⁵, Christophe Rioux⁶, Erwan Fourn⁶, Christine Katiama⁷, **Jean-Michel Molina¹**, Matthieu Lafaurie⁸
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796 Single Nucleotide Polymorphisms in UGT1A1 Associate With Atazanavir-Related Nephrolithiasis

Takeshi Nishijima¹, Kiyoto Tsuchiya, Akane Joya, Yohei Hamada, Junko Tanuma, Kunihiisa Tsukada, Katsuji Teruya, Yoshiaki Kikuchi, Shinichi Oka, Hiroyuki Gatanaga
 AIDS Clinical Center, National Center for Global Health and Medicine, Tokyo, Japan

797 Atazanavir and Tenofovir Attenuate the Benefit of Antiretroviral Therapy On Cystatin C: ACTG A5224

Chris T. Longenecker^{1,2}, Douglas Fitch³, Paul Sax^{4,5}, Eric Daar^{6,7}, Camlin Tones⁸, Grace A. McComsey^{1,2}
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798 A Chronic Kidney Disease Risk Score To Determine Tenofovir Safety Among HIV+ Male Veterans

Rebecca Scherzer¹, Monica Gandhi², Michelle Estrella³, Phyllis Tien⁴, Steven Deeks⁵, Carl Grunfeld⁶, Carmen Peralta⁷, Michael Shlipak⁸
¹University of California San Francisco, San Francisco, CA, United States; ²Johns Hopkins University, Baltimore, MD, United States

799 Genetic Variants of ABC2C and ABC2C Are Associated With TFV-Induced Proximal Tubular Dysfunction

Anchalee Avihingsanon^{1,2}, Baralee Punyawudho³, Kearkiat Praditpornsilpa⁴, Yingyos Avihingsanon⁴, Wirach Maek-a-nantawat¹, Jiratchaya Sophonphan¹, Sasiwimol Ubolym², Stephen Kerr^{1,5}, David Burger⁶, Kiat Ruxruntham^{1,7}, and HIV-NAT 114 study team
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800 End-Stage Kidney Disease and Kidney Transplantation in HIV-Positive Patients

Esther N. Gathogo¹, Sophie Jose², John Booth², Stephen P. McAdoo³, Emil A. Kumar³, Michael Rayment⁴, Clifford Leen⁵, Deborah Williams⁶, Caroline Sabin⁷, Frank Post¹
¹Renal Sciences, King's College London, London, United Kingdom; ²University College London, London, United Kingdom; ³Imperial College London, London, United Kingdom; ⁴Chelsea and Westminster Hospital, London, United Kingdom; ⁵Western General Hospital, Edinburgh, United Kingdom; ⁶Brighton and Sussex University Hospitals, Brighton, United Kingdom

Session P-Q8 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D Obesity: ART and Animal Models

801 Maraviroc, a CCR5 Antagonist, Alters Gut Microbiota Composition in a Mouse Model of Obesity

Patricia Pérez-Matute¹, Laura Pérez-Martínez¹, José R. Blanco², José A. Oteo²
¹Infectious Diseases, CIBIR, Logrono, Spain; ²Infectious Diseases, Hospital San Pedro-CIBIR, Logrono, Spain

802 Low Pre-ART CD4+ T Cells, Female Sex, and Atazanavir Use Increase Obesity Risk After Starting ART

Benjamin Atkinson¹, Supriya Krishnan², Ann C. Collier^{1,3}
¹Harborview Medical Center, Seattle, WA, United States; ²Statistical and Data Analysis Center, Harvard School of Public Health, Boston, MA, United States; ³University of Washington School of Medicine, Seattle, WA, United States

803 Obesity or Hypertension at ART Initiation and Outcomes Amongst HIV Patients in South Africa

Alana T. Brennan^{1,2}, Matthew P. Fox^{1,2}, Mhairi Maskew³, Ian Sanne^{1,2}, Prudence Ive⁴, Julia Rohr^{1,2}, Lawrence Long⁵, Sydney Rosen^{1,2}
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Session P-Q9 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D Genetic Factors and ART Outcomes

804 Specific Binding Characteristics of HLA Alleles Associate With Nevirapine Hypersensitivity

Rebecca Pavlos¹, Craig Rive¹, Elizabeth McKinnon¹, David Ostrov², Bjørn Peters³, Jing Yuan⁴, Silvana Gaudier^{1,5}, David Haas⁴, Simon Mallat^{1,6}, **Elizabeth J. Phillips^{1,6}**
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805 Large-Scale Gene-Centric Exploration of Risk for NRTI/NNRTI-Associated Toxicities in Botswana

C. William Wester^{1,2}, **Sophie Limou³**, Hermann Bussmann^{2,4}, Vladimir Novitsky^{2,4}, Sikhulile Moyo⁴, Max Essex^{2,4}, Richard G. Marlink^{2,4}, Cheryl A. Winkler³
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Session P-Q10 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
ART and Suicidality

- 760 Suicide Rates Decrease Among HAART Initiators From 1996 To 2012 in British Columbia, Canada**
Silvia Guillemi^{1,2}, Erin Ding¹, Jasmine Gurm¹, Julia Zhu¹, Verena Strehlau^{1,3}, Julio S. G. Montaner^{1,2}, Robert S. Hogg^{1,4}
¹BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; ²University of British Columbia, Faculty of Medicine, Vancouver, BC, Canada; ³University of British Columbia, Department of Psychiatry, Vancouver, BC, Canada; ⁴Simon Fraser University, Faculty of Health Sciences, Burnaby, BC, Canada
- 761 Disproportionality Analysis of Antiretrovirals With Suicidality Using FDA AERS Data**
Andrew Napoli¹, John Coumbis², Jennifer Wood², Amit Soitkar², Daniel Seekins¹
¹Bristol-Myers Squibb, Plainsboro, NJ, United States; ²Bristol-Myers Squibb, Hopewell, NJ, United States

Session P-R1 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
Epidemiology and Transmission of TB

- 806 High Clonality of *M. tuberculosis* Strains Among MDR-TB Patients in Gauteng, South Africa**
Dorothy A. Fallows¹, Nicole Kushner¹, Amanda Axcell¹, Lynsey Stewart-Isherwood³, Pamela Deniso³, Francesca Conradie³, Gerrit Coetzee², Hendrik Koornhof², Nazir Ismail¹, Gilla Kaplan¹
¹PHRI, NJMS-Rutgers University, Newark, NJ, United States; ²Centre for Tuberculosis, Johannesburg, South Africa; ³Department of Clinical Medicine, University of the Witwatersrand, Johannesburg, South Africa
- 807 Identifying Location of Recent TB Transmission in Rural Uganda: A Multidisciplinary Approach**
Gabriel Chamie¹, Bonnie Wandera², Carina Marquez¹, Midori Kato-Maeda², Moses R. Kanya⁴, Diane V. Havlir¹, Edwin D. Charlebois⁵
¹Division of HIV/AIDS, San Francisco General Hospital, University of California San Francisco, San Francisco, CA, United States; ²Makerere University-University of California San Francisco Research Collaboration, Kampala, Uganda; ³Division of Pulmonary & Critical Care Medicine, San Francisco General Hospital, University of California San Francisco, San Francisco, CA, United States; ⁴Department of Medicine, Makerere University College of Health Sciences, Kampala, Uganda; ⁵Center for AIDS Prevention Studies, University of California San Francisco, San Francisco, CA, United States
- 808 Timing of TB Episodes After the End of Isoniazid Preventive Therapy: Reinfection or Reactivation?**
Sabine Hermans¹, Alison Grant², Violet Chihota³, James Lewis¹, Gavin Churchyard³, Katherine Fielding¹
¹Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, London, United Kingdom; ²Clinical Research, London School of Hygiene and Tropical Medicine, London, United Kingdom; ³Aurum Institute for Health Research, Johannesburg, South Africa
- 809 HIV and Tuberculosis in Kenya, 2012-2013: Results From a National Survey**
Agneta Mbiti¹, Anthony Gichangi², Herman Wyenga^{2,3}, John Williamson², Tom Oluch², Katherine Robinson², Timothy Kellogg⁴, Andrea A. Kim², **William Maina**¹, Kevin M. De Cock²
¹National AIDS and STI Control Programme, Ministry of Health, Nairobi, Kenya; ²Division of Global HIV/AIDS-Kenya, US Centers for Disease Control and Prevention, Nairobi, Kenya; ³Division of Leprosy, Tuberculosis and Lung Diseases, Ministry of Health, Nairobi, Kenya; ⁴Global Health Sciences, University of California San Francisco, San Francisco, CA, United States

Session P-R2 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
TB Screening and Diagnosis

- 810 Screening for Tuberculosis in HIV-Infected Nigerian Children With a Urinary Antigen Assay**
Holly E. Rawizza^{1,2}, Stephen Oguche³, Godwin Imade⁴, Oche Agbaji⁴, David Olaleye⁵, Georgina Odaibo⁶, Kike Osinus⁶, Isaac Adewole⁶, Prosper Okonkwo⁶, Phyllis Kanki²
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- 811LB Massive Diagnostic Yield of HIV-Associated Tuberculosis Using Rapid Urine Assays in South Africa**
Stephen D. Lawn¹, Andrew Kerkhoff², Rosie Burton³, Charlotte Schutz³, Gavin van Wyk⁴, Monica Vogt⁴, Pearl Pahlana⁵, Mark Nicol⁶, Graeme Meintjes³
¹Department of Clinical Research, London School of Hygiene & Tropical Medicine, London, United Kingdom; ²University of Cape Town, Cape Town, South Africa; ³Department of Medicine, University of Cape Town, Cape Town, South Africa; ⁴Department of Clinical Research, University of Cape Town, Cape Town, South Africa; ⁵Desmond Tutu HIV Centre, University of Cape Town, Cape Town, South Africa; ⁶Division of Medical Microbiology, University of Cape Town, Cape Town, South Africa
- 812 Symptom-Based Screening for Tuberculosis Among Pregnant Women Living With HIV in Kenya**
Surbhi Modi¹, Joseph S. Cavanaugh², Ray W. Shiraiishi¹, Barbara Burnen³, Heather Alexander¹, Kimberly McCarthy², Hellen Muttai⁴, Kevin P. Cain²
¹Division of Global HIV/AIDS, Centers for Disease Control and Prevention, Atlanta, GA, United States; ²Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, Atlanta, GA, United States; ³Kenya Medical Research Institute/Centers for Disease Control and Prevention Public Health Collaboration, Kisumu, Kenya; ⁴Division of Global HIV/AIDS, Centers for Disease Control and Prevention, Kisumu, Kenya; ⁵Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, Kisumu, Kenya
- 813 Highly Multiplexed Detection of Antibodies in Whole Blood During Tuberculosis Infection**
Charles Greef¹, Greg Husar¹, Christen Gray², David Danks³, Pamela Nabeta³, Mark Perkins³, **Michael Lochhead**¹
¹MBio Diagnostics, Inc, Boulder, CO, United States; ²FINO, Geneva, Switzerland; ³Carnegie Mellon University, Pittsburgh, PA, United States
- 814 Performance of the World Health Organization Algorithm for Tuberculosis Screening in Kenya**
Surbhi Modi¹, Joseph S. Cavanaugh², Ray W. Shiraiishi¹, Barbara Burnen³, Heather Alexander¹, Kimberly McCarthy², Hellen Muttai⁴, Kevin Cain²
¹Division of Global HIV/AIDS, Centers for Disease Control and Prevention, Atlanta, GA, United States; ²Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, Atlanta, GA, United States; ³Kenya Medical Research Institute/Centers for Disease Control and Prevention Public Health Collaboration, Kisumu, Kenya; ⁴Division of Global HIV/AIDS, Centers for Disease Control and Prevention, Nairobi, Kenya; ⁵Division of Tuberculosis Elimination, Centers for Disease Control and Prevention, Kisumu, Kenya
- 815 Diagnosing Extra Pulmonary Tuberculosis Using Xpert MTB/RIF: A Laboratory Algorithm**
Lesley E. Scott¹, Natalie Beylis², Mark Nkomo³, Tintswalo Nkuna¹, Sebaka Molapo¹, Leigh Berrie¹, Adriano Duse², Wendy S. Stevens¹
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Session P-R3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Latent TB Screening and Treatment

816 Rifampentine Safety and PK With Novel Dosing Strategies To Increase Drug Exposures for TB: ACTG A5311

Kelly E. Dooley¹, Rada Savic², Jeong-Gun Park³, Yoninah Cramer³, Richard Hafner¹, Jennifer Janik⁴, Mark A. Marzinko¹, Marc Weiner⁵, Susan Dorman¹, David W. Haas⁶, and the A5311 Study Team
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817 Three Months of Weekly Rifampentine + INH for *M. tuberculosis* Infection in HIV-Infected Persons

Timothy Sterling¹, Connie Benson², Nigel Scott³, Jose Miro⁴, Guilherme Calvet⁵, Richard Chaisson⁶, Alberto La Rosa⁷, Rosa Infante⁸, Michael Chen⁹, Elsa Villalino⁹, TBTC / ACTG
¹Medicine/Infectious Diseases, Vanderbilt University, Nashville, TN, United States; ²University of California at San Diego, San Diego, CA, United States; ³Centers for Disease Control and Prevention, Atlanta, GA, United States; ⁴Barcelona Department of Health, Barcelona, Spain; ⁵Instituto de Pesquisa Clínica Evandro Chagas, Rio de Janeiro, Brazil; ⁶The Johns Hopkins University, Baltimore, MD, United States; ⁷Impacta, Lima, Peru

818 Effect of HIV On Latent TB Screening of Pregnant Women in Pune, India

Jyoti S. Mathad¹, Ramesh Bhosale², Savita Kanade³, Prasad Deshpande³, Vandana Kulkarni³, Neetal Nevrekar³, Vidya Mave³, Nishi Suryavanshi³, Nikhil Gupte⁴, Amita Gupta⁴
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Session P-R4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Inflammatory and Immune Activation Markers in TB

819 Baseline Inflammatory and Immune Activation Markers Predictive of TB After ART Initiation

Mark Tenforde¹, Nikhil Gupte¹, David Dowdy², David Asmuth³, Ashwin Balagopal¹, Richard Pollard⁴, James Hakim¹, Richard Semba⁵, Thomas Campbell⁶, Amita Gupta¹, for the ACTG A5175 (PEARLS) and NWCS 319 Study Group
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820 MAIT Cells Are Highly Enriched in the Bronchoalveolar Lavage Fluid of Patients With TB

Emily B. Wong^{1,2}, Zuri Sullivan¹, Marielle C. Gold^{3,4}, Umesh G. Lalloo⁵, Anish Ambaram⁶, Prinita Bajinath⁶, Leon Naidoo⁶, Thumbi Ndung'u^{1,2}, William R. Bishai^{1,4}, David M. Lewinsohn^{3,4}
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KwaZulu Natal, South Africa; ⁸Division of Infectious Diseases, Johns Hopkins School of Medicine, Baltimore, MD, United States

821 Vitamin D and TMEM16J Host Variants Associated With TB or Death in HIV-Infected and -Exposed Infants

Amita Gupta¹, Jennifer Jubulis², Bret Zeldow³, Grace Montepiedra³, Barbara Detrick⁴, Avy Violar⁵, Shabir A. Madhri⁶, Charles Mitchell⁷, Stephen A. Spector⁸, for the IMPAACT NWCS113 and P1041 Study Team
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822 Latent and Active TB Infection Increase Harmful Immune Activation in Those Co-Infected With HIV

Zuri A. Sullivan¹, Emily B. Wong¹, Thumbi Ndung'u¹, Victoria O. Kaspronic², William R. Bishai²
¹KwaZulu-Natal Research Institute for Tuberculosis and HIV, Durban, South Africa; ²School of Medicine, Johns Hopkins University, Baltimore, MD, United States

823 Ex Vivo Fitness of MTB Correlates With Lysozyme Sensitivity in the East-African Indian lineage

Claire Pardieu¹, Nicola Casali¹, Simon Clark², Ann Rawkins³, Richard Hooper⁴, Preya Velji⁴, Ximena Gonzalo⁴, Jane R. Deayton⁵, Francis A. Drobniewski¹
¹Clinical TB and HIV Group, Queen Mary University of London, London, United Kingdom; ²TB Research Group, Public Health England, Salisbury, United Kingdom; ³Centre for Primary Care and Public Health, Barts and The London School of Medicine and Dentistry, London, United Kingdom; ⁴National Mycobacterium Reference Laboratory, Public Health England, London, United Kingdom; ⁵Centre for Immunology and Infectious Disease, Barts and The London School of Medicine and Dentistry, London, United Kingdom

824 Polyfunctionality of TB-Specific CD4+ T-Cells in HIV-TB Co-Infection in Latent and Pulmonary TB

Puja Van Epps^{1,2}, Sankar Sridaran¹, Htin Aung¹, Michael R. Betts³, Zahra Toossi¹, David H. Canaday^{1,2}
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Session P-R5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Impact of ART On TB Risk and Disease

825 Increased Risk of TB and Persistent Immune Deficit With Delayed ART: A Randomized Trial From Haiti

Sean E. Collins¹, Marc Antoine Jean Juste², Patrice Severe³, Serena P. Koenig³, Rod Secours², Oksana Ocheretina⁴, Daphne Bernard², Allison Dunning⁴, Sandra M. Hurtado Rúa⁴, Jean W. Pape^{1,2}
¹Center for Global Health, Department of Medicine, Weill Cornell Medical College, New York, NY, United States; ²Groupe Haitien d'Etude du Sarcome de Kaposi et des Infections Opportunistes, Port au Prince, Haiti; ³Division of Global Health Equity, Brigham and Women's Hospital, Boston, MA, United States; ⁴Department of Public Health, Weill Cornell Medical College, New York, NY, United States

826 Viral Suppression in HIV-Infected Pregnant Women With and Without TB, South Africa

Jennifer Hoffmann¹, Silvia Cohn¹, Fildah Mashabela², Reginah Msandwa², Richard Chaisson³, Neil Martinson², Tshesipo Study Team
¹The Johns Hopkins University, Baltimore, MD, United States; ²Perinatal HIV Research Unit, Soweto, South Africa

- 827 Depleted DHEA-S Reserves Are Associated With Early Mortality After ART Initiation in HIV/TB**
Shruthi Ravimohan^{1,2}, Neo Tamuhla², Andrew P. Steenhoff^{2,3}, Rona Lethogile², Kebabshile Nfanyana², Tumelo Rantleru², Michael Adu¹, Drew Weissman^{2,4}, Gregory P. Bisson^{2,4}
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- 829 Impacts of National ART Initiation Policy Change On Integrated TB HIV Practice in Zomba, Malawi**
 Kevin D. Bezanson¹, **Adrienne K. Chan¹**, Monique van Lettow², Jean Bourgeois³, Edson Mwiniwa², Harry Mbewe², Martin Kachingwe², Donald Cole⁴, Sumeet Sodhi¹
¹Dignitas International, Toronto, ON, Canada; ²Dignitas International, Zomba, Malawi; ³Zomba Central Hospital, Zomba, Malawi; ⁴Dalla Lana School of Public Health, Toronto, ON, Canada
- 830 Does Long-Term ART Reduce TB Rates To Background Population Levels? Data From a National HIV Cohort**
Rishi K. Gupta^{1,2}, Marc Lipman¹, Alison Brown², Brian Rice², Anton Pozniak², Dominik Jenner², Lucy Thomas², Ibrahim Abubakar^{1,2}, Valerie Delpech²
¹University College London, London, United Kingdom; ²Public Health England, London, United Kingdom; ³Chelsea and Westminster NHS Foundation Trust Hospital, London, United Kingdom
- 831 Development of Tuberculosis in HIV-Infected Patients Receiving Successful TARGA**
 Esteban Martin-Echevarria¹, Sergio Serrano Villar², Talia Sainz², Ana Moreno², Jose Luis Casado², Fernando Dronda², Maria Jesus Perez Elias², Enrique Navas², Manuel Rodriguez Zapata¹, **Santiago Moreno²**
¹Hospital Universitario Guadalajara, Guadalajara, Spain; ²Hospital Universitario Ramón y Cajal, Madrid, Spain
- 832 Timeliness of ART Initiation Among HIV-Infected Patients With TB in Sub-Saharan Africa**
Suzue Saito^{1,2}, Wafaa El-Sadr^{1,2}, Yael Hirsch-Moverman¹, Faiz A. Khan¹, Veronica Mugisha¹, Zulmira de Silva¹, Batyia Eliut¹, Andrea Howard^{1,2}
¹ICAP, Columbia University, New York, NY, United States; ²Department of Epidemiology, Columbia University, New York, NY, United States
- 833 Antiretroviral Therapy Initiation and Tuberculosis (TB) Risk in the United States (US) and Canada**
April Pettit¹, Adell Mendes², Sonia Napravnik³, Aimee Freeman², Bryan Shepherd¹, David Dowdy², Anita Rachlis¹, Richard Moore², Timothy Sterling¹, for the North American AIDS Cohort Collaboration on Research and Design (NA-ACCORD)
¹Vanderbilt University, Nashville, TN, United States; ²Johns Hopkins University, Baltimore, MD, United States; ³University of North Carolina, Chapel Hill, NC, United States; ⁴Sunnybrook Health Sciences Center, Toronto, ON, Canada
- Session P-R6 Poster Session**
Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Cryptococcal Disease
- 834 Prevalence of Cryptococcal Antigen Positivity Among AIDS Patients, United States From 1986-2012**
Jennie L. McKenney¹, Sean Bauman², Brandon Neary³, Roger Detels¹, Audrey French¹, Joseph Margolick², Jeffrey D. Klausner⁴
¹Epidemiology, University of California, Los Angeles, Los Angeles, CA, United States; ²Immu-Mycologies, Inc., Norman, OK, United States; ³Immu-Mycologies, Inc., Norman, OK, USA; ⁴Infectious Diseases, John H. Stroger, Jr. Hospital, Chicago, IL, United States; ⁵Molecular Microbiology and Immunology, Johns Hopkins University, Baltimore, MD, United States; ⁶Infectious Diseases, University of California, Los Angeles, Los Angeles, CA, United States
- 835 High Prevalence of Undiagnosed *Cryptococcus* at HIV Diagnosis Across the CD4 Spectrum in Durban**
Paul K. Drain¹, Julia M. Kleene², Elena Losina¹, Sharon M. Coleman³, Janey Giddy⁴, Douglas Ross⁵, Jeffrey Katz⁶, Rochelle P. Walensky¹, Kenneth A. Freedberg¹, Ingrid V. Bassett¹
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- 836 Monocyte Dysfunction Is Associated With 14-Day Mortality in Cryptococcal Meningitis**
James Scriven¹, Lisa Graham¹, Charlotte Schuetz², Robert Wilkinson¹, Britta Urban², Graeme Meintjes¹, David Lalloo²
¹Institute of Infectious Diseases and Molecular Medicine, University of Cape Town, Cape Town, South Africa; ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom
- 837 Serum Biomarkers Following Induction Therapy for Cryptococcal Meningitis Predict Survival**
Josua Rhein¹, James Scriven², Kathy Huppler Hulsiek³, Maximilian von Hohenberg³, David B. Meyer⁴, Conrad Muzora², Graeme Meintjes², David R. Boulware⁵, COAT Trial Team
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- 838 Cryptococcal Antigenemia in Severely Immunocompromised HIV Patients in Rural Tanzania**
Matthias C. Müller¹, Alex J. Ntamatungiro², Namvua Kimera², Hansjakob Furrer³, Manuel Battegay⁴, Marcel Tanner¹, Christoph Hatz¹, David R. Boulware⁵, Tracy R. Glass⁶, Emilio Letang¹
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- Session P-R7 Poster Session**
Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Os Other Than TB and Cryptococcal Disease
- 839 HSV-2 Serostatus Is Not Associated With Inflammatory or Metabolic Markers in ART-Treated HIV**
Darrell Tan¹, Janet Raboud², Leah Szadkowski³, Tae Joon Yi⁴, Brett Shannon⁵, Rupert Kaul⁴, W. Conrad Liles⁵, Sharon Wamsley³
¹St. Michael's Hospital, Toronto, ON, Canada; ²Toronto General Research Institute, Toronto, ON, Canada; ³University Health Network, Toronto, ON, Canada; ⁴University of Toronto, Toronto, ON, Canada; ⁵University of Washington, Seattle, WA, United States
- 840 Latent, Acute, or Neuro-Syphilis Does Not Increase HIV-1 Replication in Central Nervous System**
Maximilian Donath¹, Timo Wolf², Annette Haber², Markus Bickel², Siri Göpel², Annemarie Berger³, Dimitria Bon¹, Claudia Brandt³, Christoph Stephan¹
¹Goethe University Hospital, Frankfurt, Germany; ²Infectious Diseases, Goethe University Hospital, Frankfurt, Germany; ³Medical Virology Institute, Goethe University Hospital, Frankfurt, Germany; ⁴Biomathematics, Goethe University Hospital, Frankfurt, Germany; ⁵Medical Microbiology Institute, Goethe University Hospital, Frankfurt, Germany
- 841 Early Impact of cART On the Risk of Herpes Zoster: Results From the FHDH-ANRS C04**
Sophie Grabar^{1,2}, Pierre Tattevin³, Hana Selinger-Leneman¹, Arnaud de la Blanchardière⁴, Christian Rabaud⁵, David Rey⁶, Vincent Daneluzzi⁷, Samuel Ferret⁸, Dominique Costagliola¹, Odile Launay⁹

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842 Antigen-Presenting Cells Ingest Malaria Parasites and Cause an Increase in HIV-1 Replication

Marika Orlov¹, Florin Valda¹, Kathryn Williamson², Qianqian Deng¹, David Smith¹, Patrick Duffy³, Robert Schooley⁴
¹School of Medicine, University of California San Diego, La Jolla, CA, United States; ²Seattle Biomedical Research Institute, Seattle, WA, United States; ³NIAID, NIH, Rockville, MD, United States

843 Incidence of AIDS-Defining Opportunistic Illnesses (ADOLs) Among Patients in North America

Kate A. Buchacz¹, Bryan Lau², Yuezhou Jing², Stephen J. Gange², John T. Brooks¹
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Session P-S1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Reproductive Hormones in Women: Impact On Risk and Barrier Dysfunction

844 Depot-Medroxyprogesterone Acetate Does Not Increase Genital SHIV Shedding in Macaques

Jessica Radzio¹, Kristina Hanley¹, Debra Hanson¹, James Mitchell¹, Leecresia Jenkins¹, Shanon Ellis¹, Frank Deyoungs¹, Walid Heneine¹, J. Gerardo Garcia-Lerma¹
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845 Dysregulation of Estradiol Signaling Contributes To Mucosal Barrier Dysfunction HIV+ Women

Sumathi Sankaran-Walters¹, Anne Fenton¹, Chris Gaulke¹, Lauren Nagy¹, Irina Grishina¹, Jason Flamm², Thomas Prindiville³, Satya Dandekar¹
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846 Hormonal Contraceptives Increase Innate Immune Effector Molecules in Cervicovaginal Secretions

Brandon L. Guthrie¹, Robert Y. Choi¹, Alison C. Roxby¹, Rose Bosire¹, Barbara Lohman-Payne^{1,2}, Taha Hirbod¹, Carey Farquhar^{1,2}, Kristina Brodier¹
¹Department of Global Health, University of Washington, Seattle, WA, United States; ²Department of Medicine, University of Washington, Seattle, WA, United States; ³Center for Public Health Research, Kenya Medical Research Institute, Nairobi, Kenya; ⁴Department of Medicine Solna, Karolinska Institutet, Stockholm, Sweden

847 Injectable Contraception and HIV Acquisition in the VOICE Study (MTN-003)

Lisa M. Noguchi^{1,2}, Barbara Richardson³, Z. Mike Chirenje⁴, Gita Ramjee⁵, Gonasagrie Nair⁶, Thesla Palanee⁷, Pearl Selepe⁸, Ravindra Panchia⁹, Kailazard Gomez¹⁰, Jeanne Marrazzo¹¹, on behalf of the VOICE Study Team
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Session P-S2 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
HIV in Women: Pregnancy, Progression, Pap, and Bones

848 Rapid Disease Progression in HIV-1 Subtype C Infected South African Women

Nigel J. Garrett¹, Lise Werner¹, Koleka Mlisana^{1,2}, Lyle McKinnon¹, Francois van Loggerenberg^{1,3}, Thambi Ndung'u⁴, Clive Gray⁵, Lynn Morris⁶, Carolyn Williamson⁷, Salim Abdoal Karim¹
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849 Pregnancy Intentions Among HIV-Infected Women Seeking Antenatal Care in Cape Town, South Africa

Tammy Phillips¹, Allison Zerbe², James McIntyre³, Greg Petro⁴, Elaine Abrams⁵, Landon Myer¹
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850 Effect of Antiretroviral Regimens On Bone Mineral Density of HIV Infected Lactating Ugandan Women

Carolyn Onyango-Makumbi¹, Mike Mubiru¹, Prossy Ethel Namuli¹, Jane Ssebaggala¹, Joyce Matovu Namale¹, Mary Glenn Fowler^{1,2}
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851 Visual Inspection With Acetic Acid Is Good for Follow-Up After Cryotherapy in HIV-Infected Women

Elkanah O. Omengo¹, Peter M. Itsura¹, Tao Liu², Hillary Mabeya¹, Astrid Christoffersen-Deb³, Sierra Washington¹, Susan Cu-Uvin¹
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Session P-S3 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Immune Mediators and Immune Activation in Women

852 HIV Inhibition and Variation in Anti-Microbial Peptides Associated With Intercourse

J. D. Fortenberry¹, Mary A. M. Rogers², Krystle Fordyce², Steven R. King³, David M. Aronoff⁴, Sari M. Van Anders⁵
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853 Sex-Related Inflammatory Marker Changes Pre- and Post-ART Initiation

Jyoti S. Mathad¹, Nikhil Gupta², Ashwin Balagopal², David Asmuth³, James Hakim⁴, Nagalingeswaran Kumarasamy⁵, Thomas Campbell⁶, Judith S. Currier⁷, Susan E. Cohn⁸, Amita Gupta², for the NWCS319 and ACTG 5175 PEARLS Study Teams
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854 Influence of RAL vs Boosted ATZ-based Regimens On Cervical Immune Reconstitution and Activation

Amie L. Meditz¹, Claire Palmer², Julie Predhomme³, Kristina Searls³, Becky Kerr³, Patricia Caraway⁴, Edward M. Gardner³, Samantha MaWhinney², Peter L. Anderson³

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Session P-S4 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Immune Response To Vaccination in HIV+ Women

855 AMC Q54: Safety and Immunogenicity of the Quadrivalent HPV Vaccine in Indian HIV-Infected Women

Joel Palefsky¹, Selvamuthu Poongali², Shelly Lensing³, Joannette Lee³, Maria Da Costa⁴, Arumugham Jeeva², Syed Iqbal², Nagalingeswaran Kumarasamy²

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²YRG CARE Medical Centre, Chennai, India; ³University of Arkansas for Medical Sciences, Little Rock, CA, United States

856 B and T Cell Immune Responses To pH1N1 Monovalent Vaccine in HIV+ Pregnant Women in IMPAACT P1086

Adriana Weinberg¹, Petronella Muresan², Kelly Richardson¹, Terrence Fenton³, Teresa Dominguez⁴, Anthony Bloom³, Mark Abzug⁴, Myron Levin¹, Sharon Nachman⁵

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Session P-T1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Clinical Outcomes of HIV-Exposed Uninfected Infants

857 Maternal CD4 and Infectious Risk for Uninfected Infants Born To HIV+ Mothers in a European Country

Clement Taron-Brocard¹, Jerome Le Chenadec², Albert Faye^{2,3}, Catherine Dollfus⁴, Laurent Mandelbrot⁵, Vincent Gajdos^{6,7}, Anais Perillou⁸, Jean-Marc Labaune⁹, Stephane Blanche^{9,10}, Josiane Warszawski¹¹, and the ANRS French Perinatal Cohort (ANRS C01/C011)

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¹¹AP-HP Hôpital Bicêtre, Paris, France

858 Effect of Breastfeeding On Mortality and Morbidity in HIV-Exposed Un-Infected Children in Uganda

Carina Marquez¹, Jaffer Okiring², Gabriel Chamie¹, Jane Achan^{2,3}, Theodore Ruel¹, Abel Kakuru², Moses R. Kamya^{2,3}, Edwin D. Charlebois¹, Grant Dorsey¹, Diane V. Havil¹

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859 Growth Differences in Infants Born To Perinatally vs. Non-Perinatally HIV-Infected Women

Jennifer Jao¹, Allison Agwu², Grace Mhango³, Annie Kim⁴, Kaye Park⁵, Roberto Posada⁶, Elaine J. Abrams⁷, Nancy Hutton⁸, Rhoda S. Sperling⁹

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860LB Four Year Cotrimoxazole Prophylaxis Prevents Malaria in HIV-Exposed Children: A Randomized Trial

Jaco Homsy¹, Grant Dorsey², Emmanuel Arinaitwe³, Humphrey Wanzira⁴, Abel Kakuru⁵, Victor Bigira⁶, Mary Muhindo⁷, Moses R. Kamya⁸, Taylor G. Sandison⁹, Jordan W. Tappero⁶

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861 No Evidence of Neurodevelopmental Delay in HEU Infants Exposed To cART In Utero and Breastfeeding

Mary Ngoma¹, Jessica Harper², Jennifer Hunter³, Paige Church⁴, Helene Cote⁵, Chisomo Selemani¹, Mulla Chandwe¹, Arianne Albert³, Marylou Smith¹, Michael Silverman²

¹University of Zambia, Lusaka, Zambia

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Session P-T2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Neonatal Sequelae of In Utero ART Exposure

862 In Utero Exposure To Zidovudine and Neonatal Heart Abnormalities in the ANRS-EPF/PRIMEVA Studies

Jeanne Sibiude^{1,2}, Jérôme Le Chenadec³, Damien Bonnet^{3,4}, Roland Tubiana^{5,6}, Laurent Mandelbrot^{1,7}, Sandrine Delmas⁸, Camille Runel Bellard⁹, Babak Khoshnood⁹, Josiane Warszawski^{10,11}, Stéphane Blanche^{12,13}, for the ANRS-French Perinatal Cohort/PRIMEVA

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863LB Congenital Anomalies and In Utero Antiretroviral Exposure in HIV-Exposed Uninfected Children

Paige L. Williams¹, Cenik Yildirim², Marilyn Crain³, Rohan Hazra⁴, Russell B. VanDyke⁵, Kenneth Rich⁶, Jennifer S. Read⁷, Emma Stuard⁸, Mobeen Rathore⁹, D. Heather Watts¹⁰, for the Pediatric HIV/AIDS Cohort Study

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⁷Department of Pediatrics, George Washington University School of Medicine, Washington, DC, United States

⁸Department of Pediatric Infectious Disease, Bronx-Lebanon Hospital, Bronx, NY, United States

⁹University of Florida at Jacksonville, Jacksonville, FL, United States

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865 Abnormal Fatty-Acid Oxidation in HIV-Exposed Uninfected Neonates in the United States

Brian Kirmse¹, Tzy-Jyun Yao², Sean Hoffert³, Paige Williams², Deborah Kacanek², Rohan Hazra², William Borkowsky⁴, Russell Van Dyke⁴, Marshall Summar¹

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866 Comparative Genotoxic Signatures in Cord Blood Cells From Neonates Exposed To AZT or TDF In Utero

Alexandre Vivanti^{1,2}, Wendy Cuccini^{1,3}, Sonia Luce¹, Tayebah Soheil¹, Laurent Mandelbrot^{4,5}, Josiane Warszawski¹, Jean Soulier^{2,6}, Marina Cavazzana^{1,7}, Isabelle André-Schmutz¹, Stéphane Blanche^{2,8,9}
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867 Risk Factors for Preterm Birth in Pregnant Women Randomized To Lopinavir- or Efavirenz-Based ART

Catherine A. Koss¹, Paul Natureeba², Albert Plenty³, Flavia Luwede², Julia Mwesigwa², Edwin Charlebois³, Tamara Clark¹, Bridget Nzurubara², Moses Kamya¹, Diane Havlir¹, Deborah Cohan⁵
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Session P-T3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Pregnancy Incidence and Outcomes Among Women in ART Programs

868 Incidence and Predicting Factors of Pregnancy Post-ART Initiation in 9 West African Countries

Juan Burgos-Soto^{1,2}, Eric Balestre^{1,2}, Albert Minga³, Samuel Ajayi⁴, Adrien Sawadogo⁵, Marcel D. Zannou⁶, Valérie Leroy^{1,2}, Didier K. Ekouevi^{2,7}, François Dabis^{1,2}, Renaud Becquet^{1,2}, IDeA West Africa Collaboration
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869 Pregnancy and Retention or Progression To AIDS/Death Post-ART in 9 West African Countries

Albert Minga¹, **Juan Burgos-Soto^{2,3}**, Eric Balestre^{2,3}, Benson Okwara⁴, Moussa Y. Maiga⁵, Akouda Patassi⁶, Eugène Messou⁷, Christian Weste⁸, François Dabis^{2,3}, Renaud Becquet^{2,3}, IDeA West Africa Collaboration
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Lomé, Togo; ⁷Programme PAC-CI, CHU de Treichville, Abidjan, Côte d'Ivoire; ⁸Bandim Health Project, INDEPTH Network, Bissau, Guinea-Bissau

Session P-T4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Cellular and Immune Correlates of MTCT

870 Maternal HIV Envelope V3-Specific IgG Responses Are a Correlate of Risk of Perinatal Transmission

Sallie P. Permar¹, Youyi Fong², Genevieve Fouda³, Nathan A. Vandergrift¹, Peter Gilbert¹, Guido Ferrari¹, Munir Alam¹, Georgia D. Tomaras¹, Thomas N. Denny¹, Barton F. Haynes¹, Women and Infant Transmission Study Group
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871 Ontogeny of HIV-Targeted CD4+ T Cells During Exclusive and Non-Exclusive Breastfeeding

Elizabeth J. McFarland¹, Tina Powell¹, Weiming Zhang², Carolyn Onyango-Makumbi^{3,4}, Kelsey Melander⁵, Prossy Naluyima⁶, Samuel Okurut⁷, Michael A. Eller^{8,9}, Mary Glenn Fowler^{10,11}, Edward N. Janoff¹²
¹Pediatric Infectious Diseases, University of Colorado School of Medicine, Aurora, CO, United States; ²Biostatistics and Informatics, Colorado School of Public Health, Aurora, CO, United States; ³MU-JUH Care LTD, Makerere University, Kampala, Uganda; ⁴Johns Hopkins University School of Medicine, Baltimore, MD, United States; ⁵Skags School of Pharmacy and Pharmaceutical Sciences, University of Colorado AMC, Aurora, CO, United States; ⁶Mulago Hospital Complex, Makerere University Walter Reed Project, Kampala, Uganda; ⁷Mulago Hospital Complex, Makerere University Walter Reed Project, Kampala, Uganda; ⁸US Military HIV Research Program, Walter Reed Army Institute of Research, Silver Spring, MD, United States; ⁹Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, MD, United States; ¹⁰Department of Pathology, Johns Hopkins University School of Medicine, Baltimore, MD, United States; ¹¹Johns Hopkins University Research Collaboration, Makerere University, Kampala, Uganda; ¹²Mucosal and Vaccine Research Colorado (MAVRC), Division of Infectious Diseases, University of Colorado School of Medicine, Aurora, CO, United States

872 Infant Variants Require More CD4 for Entry Than Maternal Variants Regardless of Transmission Route

Kyle J. Nakamura¹, Edwin R. Sobrera², Vicken Khatchadourian³, Moses Sinkala⁴, Chilpepo Kankasa⁵, Donald M. Thea⁶, James I. Mullins⁶, Louise Kuhn⁶, Grace M. Aldrovandi¹
¹Infectious Diseases, Children's Hospital Los Angeles, Los Angeles, CA, United States; ²Catholic Medical Missions Board, Lusaka, Zambia; ³University Teaching Hospital, Lusaka, Zambia; ⁴Boston University School of Public Health, Boston, MA, United States; ⁵Department of Microbiology, University of Washington, Seattle, WA, United States; ⁶Epidemiology, Columbia University, New York, NY, United States

Session P-T5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Characteristics of Pregnant Women in PMTCT

873 HIV Viral Load and CD4 Cell Count in Untreated Pregnant Women Entering Care in Cape Town, South Africa

Landon Myer¹, Tamsin Phillips¹, Marvin Hsiao², Allison Zerbe³, James McIntyre⁴, Linda-Gail Bekker⁵, Elaine Abrams³
¹Division of Epidemiology & Biostatistics, University of Cape Town, Cape Town, South Africa; ²Division of Virology, University of Cape Town, Cape Town, South Africa; ³ICAP, Columbia University, New York, NY, United States; ⁴Anova Health Institute, Johannesburg, South Africa; ⁵Desmond Tutu HIV Centre, University of Cape Town, Cape Town, South Africa

874 Detectable Viraemia Among Pregnant Women On Antiretroviral Therapy Initiating Antenatal Care

Landon Myer¹, Tamsin Phillips¹, Allison Zerbe², Marvin Hsiao³, James McIntyre⁴, Elaine Abrams⁵

¹Division of Epidemiology & Biostatistics, University of Cape Town, Cape Town, South Africa; ²ICAP, Columbia University, New York, NY, United States; ³Division of Virology, University of Cape Town, Cape Town, South Africa; ⁴Anova Health Institute, Johannesburg, South Africa

- 875 Steady Decline: Temporal Changes in Substance Use by HIV-Positive Pregnant Women in the US**
Kathryn Rough¹, Katherine Tassiopoulos², Deborah Kacanek², Raymond Griner³, Ram Yogue⁴, Kenneth C. Rich³, George R. Seage¹, for the Pediatric HIV/AIDS Cohort Study
¹Department of Epidemiology, Harvard School of Public Health, Boston, MA, United States; ²Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ³Department of Epidemiology, Biostatistics, and Occupational Health, McGill University School of Medicine, Montreal, QC, Canada; ⁴Ann & Robert H. Lurie Children's Hospital, Chicago, IL, United States; ⁵University of Illinois at Chicago, Chicago, IL, United States

Session P-T6 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Early Infant HIV Diagnosis

- 876 Modeling the Performance and Cost of Early Infant HIV Diagnosis at Birth**
Intira J. Collins¹, Martina Penazzato², Dick Chlam³, Anisa Ghadrshenas⁴, Teri Roberts⁵, Jennifer Cohn⁶, Nicole Ngo-Giang-Huong⁷, Nathan Shaffer⁸, Meg Doherty⁹, Lisa J. Nelson¹⁰
¹MRC Clinical Trials Unit, London, United Kingdom; ²HIV Department, World Health Organization, Geneva, Switzerland; ³UNICEF, New York, NY, United States; ⁴Clinton Health Access Initiative, Nairobi, Kenya; ⁵Médecins sans Frontières, Geneva, Switzerland; ⁶Programs for HIV Prevention and Treatment (IRD-PHPT), Chiang Mai, Thailand
- 877 Access To Early Infant Diagnosis and Antiretroviral Therapy in Abidjan, Côte d'Ivoire, 2011-2013**
Divine Aivi¹, Madeleine Folquet-Amorissani², Clarisse Amani-Bosse³, Jeanne Eliam-Kouakou⁴, Véronique Méa-Assandé⁵, Edmond Aka⁶, Irma Ahoba⁷, Didier K. Ekouévi⁸, Marguerite Timité-Konan⁹, **Valériane Leroy^{6,8}**, for the MONOD ANRS 12206 Study Group
¹Programme PACC1, Site ANRS, Projet Monod, Abidjan, Côte d'Ivoire; ²Service de Pédiatrie, Centre Hospitalier Universitaire (CHU) Cocody, Abidjan, Côte d'Ivoire; ³FSU Abobo-Avocater, Programme PACC1, Site ANRS, Projet Monod, Abidjan, Côte d'Ivoire; ⁴Centre de Prise en Charge, de Recherche et de Formation (CePReF), Site Aconda-vs, Yopougon, Abidjan, Côte d'Ivoire; ⁵National Program of HIV Care, Abidjan, Côte d'Ivoire; ⁶Programme PACC1, Site ANRS, Abidjan, Côte d'Ivoire; ⁷Service de Pédiatrie, Centre Hospitalier Universitaire (CHU) Yopougon, Abidjan, Côte d'Ivoire; ⁸Insem U897, Bordeaux, France; ⁹Bordeaux University, Bordeaux, France

Session P-T7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Risk Factors for MTCT

- 878 Impact of Maternal Incident HIV Infection On Early HIV Vertical Transmission, South Africa in 2011**
Thu-Ha Dinh¹, Kevin Delaney², Debra Jackson³, Selam Woldeabnet⁴, Yogan Pillay⁴, Ameena Goga⁵
¹Centers for Disease Control and Prevention, Atlanta, GA, United States; ²School of Public Health, University of the Western Cape, Cape Town, South Africa; ³South Africa Medical Research Council, Cape Town, South Africa; ⁴National Department of Health, Pretoria, South Africa; ⁵South Africa Medical Research Council, Pretoria, South Africa
- 879 Syphilis in HIV-Infected Mothers and Infants: Results From the NICHD/HPTN 040 Study**
Nava Yeganeh¹, Heather Watts², Margaret Camarca³, Esau Joao⁴, Jose Henrique Pilotto⁵, Glenda Gray⁶, Gerhard Theron⁷, Valdiea G. Veloso⁸, Lynne M. Mofenson⁹, Karin Nielsen-Saines¹⁰, NICHD HPTN 040/P1043 Study Team
¹Department of Pediatrics, David Geffen School of Medicine, Los Angeles, CA, United States; ²Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD, United States; ³Westat, Rockville, MD, United States; ⁴Hospital Federal dos Servidores do Estado, Rio De Janeiro, Brazil; ⁵Hospital Geral de Nova Iguaçu, Nova Iguaçu and Laboratório

de AIDS e Imunologia Molecular, Instituto Oswaldo Cruz, Rio de Janeiro, Brazil; ⁶Perinatal HIV Research Unit, Johannesburg, South Africa; ⁷Stellenbosch University, Cape Town, South Africa; ⁸Fundacao Oswaldo Cruz, Rio De Janeiro, Brazil

- 880 Antiretroviral Adherence Associated With Reduced Breastmilk HIV-1 Transmission: The BAN Study**
Nicole L. Davis¹, William C. Miller², Michael G. Hudgens³, Charles S. Chasela⁴, Dorothy S. Sitchai⁵, Dumbani Kayira⁶, Athena P. Kourtis⁷, Sascha R. Ellington⁸, Denise J. Jamieson⁹, Charles M. van der Horst⁸
¹Epidemiology, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²Epidemiology, Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ³Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ⁴University of North Carolina Project, Lilongwe, Malawi; ⁵Division of Reproductive Health, Centers for Disease Control and Prevention, Atlanta, GA, United States; ⁶Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States
- 881 Cytomegalovirus and Possibly Epstein-Barr Virus in Breast Milk May Facilitate HIV-1 Transmission**
Johannes Viljoen¹, Edouard Tualion², Nicolas Nagot³, Siva Danaviah¹, Marianne Peries⁴, Prevasheene Padayachee⁵, Vincent Foulongne⁶, Ruth Bland⁷, Nigel Rollins⁸, Marie-Louise Newell¹, **Philippe Van de Perre¹**
¹Africa Centre for Health and Population Studies, University of KwaZulu-Natal, Durban, South Africa; ²CHRU de Montpellier, Département de Bactériologie-Virologie, Université Montpellier 1, Montpellier, France; ³Department of Paediatrics & Child Health, University of KwaZulu-Natal, Durban, South Africa

Session P-T8 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
PMTCT Approaches: Implementation and Outcome

- 882 Programmatic Implementation of WHO Option B in Botswana Associated With Increased Projected MTCT**
Scott Dryden-Peterson^{1,2}, Sajini Souda³, Rebecca Zash^{2,4}, Jennifer Chen⁵, Chipo Pello⁶, Eldah N. Dintwa⁶, Refeltsetse Lebelonyane⁶, Mompoti Mmalane⁶, Shahin Lockman^{1,2}, Roger L. Shapiro^{2,4}
¹Department of Medicine, Brigham & Women's Hospital, Boston, MA, United States; ²Botswana Harvard AIDS Institute, Gaborone, Botswana; ³University of Botswana, Gaborone, Botswana; ⁴Department of Medicine, Beth Israel Deaconess Medical Center, Boston, MA, United States; ⁵Department of Medicine, Massachusetts General Hospital, Boston, MA, United States; ⁶Ministry of Health, Gaborone, Botswana
- 883 Impact of Option B+ On Uptake, Retention, and Transmission: A Pre/Post Study in Lilongwe, Malawi**
Maria H. Kim^{1,2}, Saeed Ahmed^{1,2}, Peter N. Kazembe³, Mina C. Hosseini⁴, Thomas P. Giordano⁵, Elizabeth Y. Chiao⁶, Xiaoying Yu⁶, Debora Nanthuru², Mary E. Paul⁷, Elaine J. Abrams⁸
¹Baylor College of Medicine, Texas Children's Hospital, Houston, TX, United States; ²Baylor College of Medicine-Abbott Fund Children's Clinical Center of Excellence, Lilongwe, Malawi; ³UNC Project, Lilongwe, Malawi; ⁴University of North Carolina School of Medicine, Chapel Hill, NC, United States; ⁵Department of Medicine, Baylor College of Medicine, Houston, TX, United States; ⁶Department of Pediatrics, Epidemiology Center, Baylor College of Medicine, Houston, TX, United States; ⁷ICAP, Mailman School of Public Health, Columbia University, New York, NY, United States
- 884 Home, Antenatal Clinic or VCT: Preferences of Pregnant Women and Their Partners for Male HIV Testing**
Alfred Osofi^{1,2}, Grace John-Stewart¹, James Kairie¹, John Kinuthia^{4,5}, Barbra Richardson¹, Daisy Krakowiak¹, Carey Farquhar⁶
¹Epidemiology, University of Washington, Seattle, WA, United States; ²Obstetrics and gynecology, University of Nairobi, Nairobi, Kenya; ³Epidemiology, Pediatrics, Medicine, Global Health, University of Washington, Seattle, WA, United States; ⁴Obstetrics and Gynecology, University of Nairobi, Nairobi, Kenya; ⁵Research, Kenya National Hospital, Nairobi, Kenya; ⁶Epidemiology, Medicine, Global Health, University of Washington, Seattle, WA, United States

885 Early Infection Among Ugandan HIV-Exposed Infants Whose Mothers Received Option B+ vs Option A

Julie N. Mugerwa¹, Zikula Namukwaya¹, Adeodata Kekitiinwa^{2,3}, Albert Maganda², Racheal Ayanga¹, Ayoub Kakande¹, Joyce Matovu¹, Josephat Byamugisha⁴, Godfrey Esiru⁵, Mary G. Fowler^{1,6}

¹PMCT, Makerere University-Johns Hopkins Research Collaboration (MU-JHU), Kampala, Uganda; ²Baylor College of Medicine Children's Foundation-Uganda, Kampala, Uganda; ³Pediatrics and Child Health, Makerere University College of Health Sciences, Kampala, Uganda; ⁴Obstetrics and Gynaecology, Makerere University College of Health Sciences, Kampala, Uganda; ⁵PMCT, Ministry of Health, Kampala, Uganda; ⁶Johns Hopkins University School of Medicine, Baltimore, MD, United States

886 Lay Health Worker Support To Strengthen PMTCT: A Randomised Controlled Trial in South Africa

Kathryn Stinson¹, Debbie van Zyl¹, Hlengiwe Mdebuka¹, Jean-Pierre Zeelie², Christopher J. Colvin¹, Leigh F. Johnson¹, David Coetzee¹, Helen Schneider³

¹Centre for Infectious Disease Epidemiology & Research, University of Cape Town, Observatory, South Africa; ²Community Media Trust, Cape Town, South Africa; ³University of the Western Cape, Cape Town, South Africa

Session P-T9 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D

ART Pharmacokinetics During Pregnancy and Breast-Feeding

887 Low Darunavir Exposure During Pregnancy With 800/100 mg Darunavir/r QD Dosing

Angela Colbers¹, José Moltó², Jelena Ivanovic³, David Hawkins⁴, Tariq Sadiq⁵, Kabamba Kabeya⁶, Andrea Gimgelmaier⁷, Katharina Weizsäcker⁸, Graham Taylor⁹, David Burger¹

¹Department of Pharmacy, Radboud University Medical Center, Nijmegen, Netherlands; ²"Luita contra la Sida" Foundation, Hospital Universitari Germans Trias i Pujol, Badalona, Spain; ³National Institute for Infectious Diseases "L. Spallanzani", Rome, Italy; ⁴Chelsea & Westminster Hospital, London, United Kingdom; ⁵St George's Hospital, London, United Kingdom; ⁶Saint-Pierre University Hospital, Brussels, Belgium; ⁷Frauenklinik Innenstadt, Klinikum der Universität München, München, Germany; ⁸Klinik für Geburtsmedizin, Charité Universitätsmedizin, Berlin, Germany; ⁹Imperial College Healthcare NHS Trust, London, United Kingdom

888 Pharmacogenetics of Efavirenz Excretion Into Human Breast Milk and Transfer To Breastfed Infants

Adeyini Olagunju^{1,2}, Marco Siccardi¹, Ogechi Okafor³, Oluseye Bolaji⁴, Saye Khoo¹, Andrew Owen¹

¹University of Liverpool, Liverpool, United Kingdom; ²Obafemi Awolowo University, Ife-Ife, Nigeria; ³Bishop Murray Medical Centre, Makurdi, Nigeria

889 Safety, Efficacy, and PK of Atazanavir/Ritonavir (300/100 mg QD) in HIV+ Pregnant Women Cohort

Minh P. Lê¹, Charlotte Charpentier², Cathia Soulie³, Houria Ichou⁴, Julien Potier¹, Roland Tubiana⁵, Sophie Mathéron⁶, Roland Landman⁸, Laurent Mandelbrot⁷, Gilles Peytavin¹

¹Laboratoire de Pharmacologie, AP-HP, Groupe Hospitalier Bichat-Claude Bernard, HUPNVS, Paris, France; ²Laboratoire de Virologie, AP-HP, Groupe Hospitalier Bichat-Claude Bernard, HUPNVS, Paris, France; ³Laboratoire de Virologie, AP-HP, Groupe Hospitalier Pitié-Salpêtrière, Paris, France; ⁴Laboratoire de Microbiologie, AP-HP, Hôpital Louis Mourier, HUPNVS, Colombes, France; ⁵Service de Maladies Infectieuses et Tropicales, AP-HP, Groupe Hospitalier Pitié-Salpêtrière, Paris, France; ⁶Service de Maladies Infectieuses et Tropicales, AP-HP, Groupe Hospitalier Bichat-Claude Bernard, HUPNVS, Paris, France; ⁷Service de Gynécologie Obstétrique, AP-HP, Hôpital Louis Mourier, HUPNVS, Colombes, France

890 A Comparison of the Pharmacokinetics of Raltegravir During Pregnancy and Postpartum

Maren Blonk¹, Angela Colbers¹, Carmen Hidalgo-Tenorio², Katharina Weizsäcker³, José Moltó⁴, David Hawkins⁵, Marchina van der Ende⁶, Andrea Gimgelmaier⁷, Graham Taylor⁸, David Burger¹, PANNA Network

¹Department of Pharmacy, Radboud University Medical Center, Nijmegen, Netherlands; ²Hospital Universitario Virgen de las

Nieves Granada, Granada, Spain; ³Klinik für Geburtsmedizin, Charité Universitätsmedizin, Berlin, Germany; ⁴"Luita contra la Sida" Foundation, Hospital Universitari Germans Trias i Pujol, Badalona, Spain; ⁵Chelsea & Westminster Hospital, London, United Kingdom; ⁶Erasmus Medical Center, Rotterdam, Netherlands; ⁷Frauenklinik Innenstadt, Klinikum der Universität München, München, Germany; ⁸Imperial College Healthcare NHS Trust, London, United Kingdom

891 Intensive Etravirine PK and HIV-1 Viral Load in Breast Milk and Plasma in HIV+ Women Receiving HAART

LaShonda Y. Spencer¹, Siyu Liu², Chia-Hao Wang¹, Michael Neely¹, Stan Louie², Andrea Kovacs¹

¹Pediatric Infectious Diseases, Keck School of Medicine at University of Southern California, Los Angeles, CA, United States; ²University of Southern California School of Pharmacy, Los Angeles, CA, United States

892 Effective Exposure To Atazanavir During Pregnancy, Regardless of Tenofovir Use

Angela Colbers¹, David Hawkins², Carmen Hidalgo-Tenorio³, Marchina van der Ende⁴, Kabamba Kabeya⁵, Andrea Gimgelmaier⁶, Katharina Weizsäcker⁷, John Lambert⁸, Jürgen Rockstroh⁹, David Burger¹⁰

¹Department of Pharmacy, Radboud University Medical Center, Nijmegen, Netherlands; ²Chelsea & Westminster Hospital, London, United Kingdom; ³Hospital Universitario Virgen de las Nieves Granada, Granada, Spain; ⁴Erasmus Medical Center, Rotterdam, Netherlands; ⁵Saint-Pierre University Hospital, Brussels, Belgium; ⁶Frauenklinik Innenstadt, Klinikum der Universität München, München, Germany; ⁷Klinik für Geburtsmedizin, Charité Universitätsmedizin, Berlin, Germany; ⁸Mater and Rotunda Hospitals, Dublin, Ireland; ⁹Department of Medicine I, University of Bonn, Bonn, Germany; ¹⁰Department of Pharmacy, Radboud University Medical Center, Nijmegen, Netherlands

Session P-U1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D

ART in Children and Adolescents

893 P1073: Immune Reconstitution Inflammatory Syndrome - Wide Spectrum and Severity in Children

Mark F. Cotton¹, Hilda Mujuru², Raziya Bobat³, Boniface Njau⁴, Avy Violan⁵, Vidya Mave⁶, Charles Mitchell⁷, James Oleske⁸, Bonnie Zimmer⁹, Savita Pawha¹⁰

¹Pediatrics & Child Health, Stellenbosch University, Tygerberg, South Africa; ²Pediatrics & Child Health, UZ College of Health Sciences, Harare, Zimbabwe; ³Pediatrics & Child Health, University of Natal, Durban, South Africa; ⁴Kilimanjaro Christian Medical Centre, Moshi, Tanzania, United Republic of; ⁵Pediatrics & Child Health, Perinatal HIV Research Unit, Tygerberg, South Africa; ⁶BJ Medical College, Pune, India; ⁷Pediatric Immunology, University of Miami, Miami, FL, United States; ⁸Pediatrics & Child Health, New Jersey Medical School, Newark, NJ, United States; ⁹Frontier Science & Technology Research Foundation, Amherst, NY, United States; ¹⁰Pediatrics & Child Health, University of Miami Miller School of Medicine, Miami, FL, United States

894 sdNVP Exposure and ART Response in Children <3 Years Initiating ART in the ARROW Trial

Philippa Maseko¹, Victor Musime², Kusum Nathoo³, Patricia Nahiyra-Ntege⁴, Alexander J. Szuber⁵, Kuda Mutasa⁶, David E. Williams⁷, Moira Snyer⁸, Ann Sarah Walker⁹, Diana M. Gibb², and the ARROW Trial Team

¹Baylor-Uganda, Kampala, Uganda; ²Joint Clinical Research Center, Kampala, Uganda; ³University of Zimbabwe, Harare, Zimbabwe; ⁴MRC/UVRU Uganda Research Unit on AIDS, Entebbe, Uganda; ⁵MRC Clinical Trials Unit, London, United Kingdom; ⁶Zimbabwe Institute for Maternal Child Health Research, Harare, Zimbabwe

895 Virologic Response To Efavirenz vs Nevirapine-Containing ART in the ARROW Trial

Adeodata Kekitiinwa¹, Moira Snyer², Richard Katuramu³, Victor Musime⁴, Tandana Mhute⁵, Sabrina Kitaka⁶, Oscar Semfuma⁷, Marshall Munjoma⁸, Ann Sarah Walker⁹, Diana M. Gibb², and the ARROW Trial Team

¹Baylor-Uganda, Kampala, Uganda; ²MRC Clinical Trials Unit, London, United Kingdom; ³MRC/UVRU Uganda Research Unit on AIDS, Entebbe,

Uganda,¹Joint Clinical Research Center, Kampala, Uganda,²University of Zimbabwe, Harare, Zimbabwe

- 896 Growth Recovery Among HIV+ Children Randomized To Lopinavir/Ritonavir or NNRTI-Based Therapy**
Theodore Ruel¹, Abel Kaku², Gloria Ikilezi², Florence Mwangwa², Albert Plenty¹, Edwin Charlebois¹, Diane Havlir¹, Moses Kamya⁴, Jane Achan⁵
¹Department of Pediatrics, Division of Infectious Diseases, University of California San Francisco, San Francisco, CA, United States; ²Infectious Diseases Research Collaboration, Kampala, Uganda; ³Department of Medicine, University of California San Francisco, San Francisco, CA, United States; ⁴Department of Medicine, Makerere University College of Health Sciences, Kampala, Uganda; ⁵Department of Pediatrics and Child Health, Makerere University College of Health Sciences, Kampala, Uganda

Session P-U2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
HIV Drug Resistance and Tropism in Children and Youth

- 897 Prevalence and Predictors of HIV Drug Resistance Among US Children and Youth With Perinatal HIV**
Russell B. Van Dyke¹, Kunjal Patel¹, Ron M. Kagan¹, Shirley Traite⁴, William A. Meyer⁵, Katherine Tassiopoulos², George R. Seage², Lorna M. Seybolt⁶, Sandra Burchette⁶, Rohan Hazra⁴, and the Pediatric HIV/AIDS Cohort Study
¹Department of Pediatrics, Tulane University School of Medicine, New Orleans, LA, United States; ²Department of Epidemiology, Harvard School of Public Health, Boston, MA, United States; ³Quest Diagnostics Nichols Institute, San Juan Capistrano, CA, United States; ⁴Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ⁵Quest Diagnostics, Baltimore, MD, United States; ⁶Department of Pediatrics, Louisiana State University Health Sciences Center, New Orleans, LA, United States; ⁷Department of Pediatrics, Harvard Medical School, Boston, MA, United States; ⁸Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD, United States
- 898 HIV-1 Resistance After Randomized Virologic Switch at 1000 or 30,000 c/ml in Children**
Linda Harrison¹, Diana Gibb², Susan Fiscus³, Yacine Saidi⁴, Eleni Nantoulis⁵, Lynda Harper², Alexandra Compagnucci⁶, Abdel Babiker², Ann Melvin⁶, Gareth Tudor-Williams⁷, and the PENPACT 1 (PENTA 9/ PACTG 390) Study Team
¹Center for Biostatistics in AIDS Research, Harvard School of Public Health, Boston, MA, United States; ²Medical Research Council, Clinical Trials Unit, London, United Kingdom; ³UNC-Chapel Hill Virology Laboratory, University of North Carolina School of Medicine, Chapel Hill, NC, United States; ⁴INSERM, SC10, Paris, France; ⁵University College Hospital, University College London, London, United Kingdom; ⁶Seattle Children's Hospital, Seattle, WA, United States; ⁷Imperial College London, London, United Kingdom
- 899 Longitudinal Evolution of Tropism in Perinatal HIV-1 Infection: The HICcup Study**
Caroline Foster¹, Steve Kaye², Colette Smith³, Nicola Mackie⁴
¹900 Clinic, Imperial College Healthcare NHS Trust, London, United Kingdom; ²Jefferies Trust Laboratory, Imperial College London, London, United Kingdom; ³Research Department of Infection and Population Health, University College London, London, United Kingdom; ⁴Jefferies Wing, Imperial College Healthcare NHS Trust, London, United Kingdom

Session P-U3 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
ARV Pharmacokinetics, Pharmacogenetics, and Safety in Children and Adolescents

- 900 Rilpivirine Pharmacokinetics in HIV-1-Infected Adolescents: A Substudy of PAINT (Phase II Trial)**
Herta Crauwels¹, Annetie Hoogstoel¹, Simon Vanveggel¹, Wayne Yarnall¹, Marita Stevens¹, Katia Boven¹
¹Janssen Infectious Diseases BVBA, Beerse, Belgium; ²Janssen Research & Development, LLC, Titusville, NJ, United States

- 901 Safety, Pharmacokinetics and Efficacy of Dolutegravir in Treatment-Experienced HIV+ Children**

Rolando M. Viani¹, Carmelita Alvero², Terry Fenton², Edward Acosta³, Rohan Hazra⁴, Ellen O'Gara⁵, Barbara Heckman⁶, Debra Steimers⁷, Sherene Min⁸, Andrew Woznia⁹
¹University of California San Diego, La Jolla, CA, United States; ²Harvard School of Public Health, Boston, MA, United States; ³University of Alabama at Birmingham, Birmingham, AL, United States; ⁴NICHD, Bethesda, MD, United States; ⁵NIAD, Bethesda, MD, United States; ⁶Frontier Science Research Foundation, Inc, Amherst, NY, United States; ⁷GlaxoSmithKline, Research Triangle Park, NC, United States; ⁸Jacobi Medical Center, Bronx, NY, United States

- 902 Bioequivalence of Two Pediatric Formulations vs Adult Tablet Formulation of Elvitegravir**

Joseph M. Custodio¹, Xiang Yin², Hiba Graham³, Mischa Heppner⁴, Lauren Wiser⁵, Erin Quirk⁶, Brian P. Kearney¹, Srinivasan Ramanathan¹
¹Clinical Pharmacology, Gilead Sciences, Foster City, CA, United States; ²Biometrics, Gilead Sciences, Foster City, CA, United States; ³Clinical Research, Gilead Sciences, Foster City, CA, United States; ⁴Clinical Operations, Gilead Sciences, Foster City, CA, United States; ⁵Formulations Process Development, Gilead Sciences, Foster City, CA, United States

- 903 CYP2B6 Polymorphisms Challenge Generalized FDA Efavirenz Dosing Guidelines in Children < 3 Yrs**

Carolyn Bolton Moore¹, Edmund Capparelli², Pearl Samson³, Mutsa Bwakura-Dangarembizi⁴, Patrick Jean-Philippe⁵, Carol Worell⁶, Barbara Heckman⁷, Lynette Purdue⁸, Stephen A. Spector⁹, Ellen G. Chadwick¹⁰, IMPAACT P1070 team
¹University of North Carolina Chapel Hill, Centre for Infectious Disease Research in Zambia, Lusaka, Zambia; ²University of California San Diego, San Diego, CA, United States; ³Harvard School of Public Health, Boston, MA, United States; ⁴University of Zimbabwe, Harare, Zimbabwe; ⁵Henry Jackson Foundation/ NIAID/ DAIDS, Bethesda, MD, United States; ⁶Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD, United States; ⁷Frontier Science and Technology Research Foundation, Amherst, NY, United States; ⁸Northwestern University's Feinberg School of Medicine, Chicago, IL, United States

- 904 High Nevirapine and Low Lopinavir/Efavirenz Exposures in Resource-Poor Ugandan Children**

Imke H. Bartelink¹, Rada M. Savić², Grant Dorsey³, Henriette J. Scherpbier⁴, Edmund Capparelli⁵, Jane Achan⁶, Albert Plenty⁷, Moses Kamya⁸, Diane Havlir⁹, Francesca T. Aweke¹⁰
¹Bioengineering and Therapeutic Sciences, University of California San Francisco, San Francisco, CA, United States; ²Medicine, University of California San Francisco, San Francisco, CA, United States; ³Pediatrics, Emma Childrens Hospital AMC, Amsterdam, Netherlands; ⁴Center for Immunity, Infection & Inflammation, University of California San Diego, La Jolla, CA, United States; ⁵Medicine, The Makerere University, Kampala, Uganda; ⁶Center for AIDS Prevention Studies, University of California San Francisco, San Francisco, CA, United States; ⁷Clinical Pharmacy, University of California San Francisco, San Francisco, CA, United States

- 905 Bone and Renal Safety at 96 Weeks of TDF-Containing Regimens in HIV-Infected Thai Children**

Wasana Prasitsuebsai¹, Thanyawee Puthanakit^{1,2}, Tanakorn Apornpong¹, Sriwan Keadpudsa¹, Torsak Bunupuradah¹, Thongsual Chammajaroen¹, Narukajorn Thammajaru¹, Thidarat Jupimai¹, Stephen J. Kerr^{1,3}, Jintanat Ananworanich^{1,4}
¹HIV-NAT, TRCARC, Bangkok, Thailand; ²Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; ³The Kirby Institute, University of New South Wales, Sydney, Australia; ⁴HIV-NAT, SEARCH, TRCARC, Bangkok, Thailand

- 906LB Safety and Efficacy of Dolutegravir in HIV Treatment-Experienced Adolescents: 48-Week Results**

Rolando M. Viani¹, Carmelita Alvero², Terry Fenton², Edward Acosta³, Rohan Hazra⁴, Ellen O'Gara⁵, Barbara Heckman⁶, Debra McCarty-Steimers⁷, Sherene Min⁸, Andrew Woznia⁹
¹University of California San Diego, La Jolla, CA, United States; ²Harvard School of Public Health, Boston, MA, United States; ³University of Alabama, Birmingham, Birmingham, AL, United States; ⁴Eunice

Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD, United States;³National Institutes of Health, NIAID, DAIDS, Bethesda, MD, United States;⁴Frontier Science and Technology Research Foundation, Amherst, NY, United States;⁵GlaxoSmithKline, Research Triangle Park, NC, United States;⁶GSK, Research Triangle Park, NC, United States;⁷Jacobi Medical Center, Bronx, NY, United States

- 907 Simulation and Exposure-Based Assessment of Pediatric Lopinavir Fixed-Dose Combination Product**
Saik Urien¹, Naim Bouazza², Frantz Foissac³, Floris Fauchet⁴, David Burger⁵, Jean-René Kiechel⁶, Edmund Capparelli⁷, Jean-Marc Tréluyer¹, Marc Lallemand⁸
¹Cochin Hospital, Paris, France;²Radboud University, Nijmegen, Netherlands;³Drugs for Neglected Diseases Initiative, Geneva, Switzerland;⁴University of California San Diego, La Jolla, CA, United States

- 908 Bioequivalence of Two Pediatric Formulations vs Adult Tablet Formulation of Cobicistat**
Joseph M. Custodio¹, Xiang Yin², Hiba Graham³, Mischa Hepner⁴, Joanna Koziara⁵, Erin Quirk⁶, Brian P. Kearney⁷, Srinivasan Ramanathan¹
¹Clinical Pharmacology, Gilead Sciences, Foster City, CA, United States;²Biometrics, Gilead Sciences, Foster City, CA, United States;³Clinical Research, Gilead Sciences, Foster City, CA, United States;⁴Clinical Operations, Gilead Sciences, Foster City, CA, United States;⁵Formulations Process Development, Gilead Sciences, Foster City, CA, United States

- 909 Pharmacokinetics, Efficacy, and Safety of an Integrase Inhibitor STR in HIV-Infected Adolescents**
Aditya Gaur¹, Jan Fourie², Kulkanya Choekhaibulkit³, Linda-Gail Bekker⁴, Xiang Yin⁵, Joseph M. Custodio⁶, Sean R. Bennett⁷, Andrew Cheng⁸, Erin Quirk⁹
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Session P-U4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D

Host and Immune Response in Children and Adolescents

- 910 Complex Pattern of Inflammatory Biomarkers After ART Initiation in HIV-Infected African Children**
Nigel Klein¹, Chipso Berejena², Godfrey Pimundu³, Pietro Pala⁴, Tichaona Vhembo⁵, Victor Musime⁶, Phillip Kasirye⁷, Hannah Poulson⁸, Ann Sarah Walker⁹, Andrew J. Prendergast¹⁰, and the ARROW Trial Team
¹Institute of Child Health, London, United Kingdom;²University of Zimbabwe, Harare, Zimbabwe;³Joint Clinical Research Center, Kampala, Uganda;⁴MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda;⁵Baylor-Uganda, Kampala, Uganda;⁶MRC Clinical Trials Unit at UCL, London, United Kingdom;⁷Queen Mary University of London, London, United Kingdom
- 911 Preferential Preservation of Helios+Foxp3+ Regulatory T Cell Subset in HIV Infected Children**
Guenet Degaffe, Ramia Zakhour, Weihe Zhang, German Contreras, Cynthia Bell, Gilhen Rodriguez, Gabriela Del Bianco, James Murphy, Gloria P. Herlihy, Dat Q. Tran
Pediatrics, UT Health, Houston, TX, United States
- 912 Perturbation of Regulatory T Cell Subsets in HIV Infected Children**
Alka Khatnani¹, Mussa Mwamuzika², Fatma Marshad³, Adam Kravietz⁴, Tiina Ilmet⁵, Swale Said⁶, Aabid Ahmed⁷, William Borkowsky⁸, Derya Unutmaz⁹
¹Pediatrics, Division of Infectious Diseases and Immunology, New York University School of Medicine, New York, NY, United States;²Bomu Hospital, Mombasa, Kenya;³Microbiology, New York University School of Medicine, New York, NY, United States;⁴Microbiology, Pathology, Medicine, New York University School of Medicine, New York, NY, United States

- 913 Incomplete Immune Reconstitution in HIV-1-Infected Children With Virological Suppression**

Paul Kroghstad¹, Kunjal Patel², Brad Karalius³, Mark Abzug³, James Oleske⁴, George Seage⁵, Andrew Wiznia⁶, Rohan Hazra⁷, Russell Van Dyke⁸, for The Pediatric HIV/AIDS Cohort Study and NISID Investigators

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- 914 Lower Inflammatory Biomarkers in Children Randomized To Prolonged Cotrimoxazole Prophylaxis**

Andrew J. Prendergast¹, Mutsawase Bwakura Dangarembizi², Victor Musime³, Joseph Lutaakome⁴, Adeodata Kekitima⁵, Godfrey Pimundu⁶, Annie Shonhai⁷, Moira Spyer⁸, Nigel Klein⁹, Ann Sarah Walker¹⁰, and the ARROW Trial Team
¹Queen Mary University of London, London, United Kingdom;²University of Zimbabwe, Harare, Zimbabwe;³Joint Clinical Research Center, Kampala, Uganda;⁴MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda;⁵Baylor-Uganda, Kampala, Uganda;⁶MRC Clinical Trials Unit, London, United Kingdom;⁷Institute of Child Health, London, United Kingdom

- 915 CD127 Expression On Naive T-Cells and HIV Replication in Youths Infected in the Perinatal Period**

Daniel Scott-Algara¹, Jérôme Le Chenadec², Josiane Warszawski³, Thomas Montange⁴, Jean-Paul Vialat⁵, Catherine Dollfus⁶, Véronique Avettand-Fenoel⁷, Christine Rouzioux⁸, Stéphane Blanche⁹, Florence Busenye¹⁰
¹Virology, Institut Pasteur, Paris, France;²CESP INSERM U1018, Le Kremlin-Bicêtre, France;³AP-HP, Paris, France;⁴EA3620, Université Paris Descartes, Paris, France

Session P-U5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D

Complications of HIV and ART in Children and Adolescents

- 916 Pediatric HIV Infection and Dental Caries in the Era of Antiretroviral Therapy in West Africa**
Noella Rajonson¹, David G. Meless², Boubacar Ba³, Malick Faye⁴, Jean-Serge Diby⁵, Serge N'zoré⁶, Sébastien Datté⁷, François Dabis⁸, Shibuski Caroline⁹, Elise Arrivé¹⁰
¹ISPED, Université Bordeaux Ségalen, Bordeaux, France;²PACCI, Abidjan, Côte d'Ivoire;³CHU d'Odonto-Stomatologie, Bamako, Mali;⁴Hôpital d'Enfants Albert Royer, Dakar, Senegal;⁵PMI Yopougon-Attie, Abidjan, Côte d'Ivoire;⁶CCTOS, Abidjan, Côte d'Ivoire;⁷Département d'Oralofacial Sciences, University of California San Francisco, San Francisco, CA, United States
- 917 Preclinical Atherosclerosis in Eastern Africa: Results From a Pediatric Ethiopian Cohort**
Julia C. Rosebush¹, Rudolph L. Gleason², Alexander Caulk³, Daniel Seifu⁴, Allison Eckard⁵, Workeabeba Taye⁶
¹Pediatric Infectious Diseases, Emory University, Atlanta, GA, United States;²Biomedical Engineering, Georgia Institute of Technology, Atlanta, GA, United States;³Biochemistry, Black Lion Hospital, Addis Ababa, Ethiopia;⁴Pediatrics, Black Lion Hospital, Addis Ababa, Ethiopia
- 918 Insulin Resistance in HIV-Infected Youth Is Associated With Decreased Mitochondrial Respiration**
Jody K. Takemoto¹, Jiajia Wang², Denise L. Jacobson³, Tracie L. Miller⁴, Mitchell E. Gelfner⁵, Russell B. Van Dyke⁶, Daniel E. Libutti⁷, Patricia Graham⁸, Mariana Gerschenson⁹, for the Pediatric HIV/AIDS Cohort Study
¹Cell and Molecular Biology, University of Hawaii, Honolulu, HI, United States;²Harvard School of Public Health, Boston, MA, United States;³University of Miami, Miami, FL, United States;⁴Children's Hospital Los Angeles, Los Angeles, CA, United States;⁵Tulane University Health Sciences Center, New Orleans, LA, United States

919 The Effect of Long-Term Zidovudine On Hematological Parameters in the ARROW Randomized Trial

Victor Musime¹, Adrian Cook², Patricia Nahirya-Ntege³, Mutsawashe Bwakura-Dangarembizi⁴, Adeodata Kekitiinwa⁵, Margaret Thomason², Richard Katuramu², Philippa Musoke², Ann Sarah Walker², Diana M. Gibb², and the ARROW Trial Team
¹Joint Clinical Research Center, Kampala, Uganda; ²MRC Clinical Trials Unit, London, United Kingdom; ³MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda; ⁴University of Zimbabwe, Harare, Zimbabwe; ⁵Baylor-Uganda, Kampala, Uganda

920 Bone Quality Determination by Ultrasonometry in Young South African HIV-Infected Children

Stephen M. Arpad¹, Stephanie Shiau¹, Jonathan J. Kaufman², Ashraf Coovadia³, Renate Strehlau³, Francoise Pinillos³, Michael T. Yin¹
¹Columbia University, New York, NY, United States; ²Mount Sinai School of Medicine, New York, NY, United States; ³University of the Witwatersrand, Johannesburg, South Africa

Session P-U6 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
Response To Early ART Initiation in Infants

922 Routine Infancy Tests Have No Place in Determining HIV Status After Early ART: Evidence From CHER

Helen Payne^{1,2}, Nonhlanhla Mkhize³, Lynn Morris³, Kennedy Otumbe⁴, Ravindra Panchia⁴, Ayy Violaria⁴, Nigel Klein⁴, Abdel G. Babiker⁵, Mark F. Cotton², Diana M. Gibb⁵
¹Infectious Diseases and Microbiology, Institute of Child Health, London, United Kingdom; ²Children's Infectious Diseases Clinical Research Unit, Faculty of Medicine and Health Sciences, University of Stellenbosch, Cape Town, South Africa; ³Centre for HIV and STIs, National Institute for Communicable Diseases, Johannesburg, South Africa; ⁴Perinatal HIV Research Unit, University of the Witwatersrand, Johannesburg, South Africa; ⁵Clinical Trials Unit, Medical Research Council, London, United Kingdom

923 Different Profiles of HIV in Early Treated HIV-Infected Children Seronegative by ELISA in Cameroon

Mathurin C. Tejiokem¹, Anlumbom Kfutwah¹, Francis Ateba Ndongso², Suzie Tetang Ndiang³, Ida Calixte Penda^{4,5}, William Mbonzouen⁶, Félicité Owona⁷, Josiane Warszwawski^{7,8}, Christine Rouziou^{9,10}, Albert Faye^{11,12}
¹Service d'Epidémiologie et de Santé Publique, Centre Pasteur du Cameroun, Membre du Réseau International des Instituts Pasteur, Yaoundé, Cameroon; ²Service de Virologie, Centre Pasteur du Cameroun, Membre du Réseau International des Instituts Pasteur, Yaoundé, Cameroon; ³Unité de Jour, Centre Mère et Enfant, Fondation Chantal Biya, Yaoundé, Cameroon; ⁴Service de Pédiatrie, Centre Hospitalier d'Essos, Yaoundé, Cameroon; ⁵Hôpital de Jour, Hôpital Laquintinie de Douala, Douala, Cameroon; ⁶Université de Douala, Faculté de Médecine et des Sciences Pharmaceutiques, Douala, Cameroon; ⁷EPF, Equipe 4 (VIH et IST), INSERM U1018 (CESP), Le Kremlin Bicêtre, France; ⁸Université de Paris Sud 11, Paris, France; ⁹Laboratoire de Virologie, Assistance Publique des Hôpitaux de Paris, Hôpital Necker, Paris, France; ¹⁰Université Paris Descartes, EA 3620, Paris, France; ¹¹Pédiatrie Générale, Assistance Publique des Hôpitaux de Paris, Hôpital Robert Debré, Paris, France; ¹²Université Paris 7 Denis Diderot, Paris Sorbonne Cité, Paris, France

924 Greater Virologic Control in Infants Initiated On ART Before 6 Months of Age

Stephanie Shiau¹, Ashraf Coovadia², Karl-Gunter Technau², Renate Strehlau², Leigh Martens², Francoise Pinillos², Elaine J. Abrams¹, Louise Kuhn¹
¹Columbia University, New York, NY, United States; ²University of the Witwatersrand, Johannesburg, South Africa

925 Early Viral Suppression Improves Neurocognitive Outcomes in HIV-Infected Children

Claudia S. Crowell¹, Yanling Huo², Katherine Tassiopoulos³, Kathleen M. Malee³, Ram Yoge³, Rohan Hazra⁴, Richard M. Rutstein⁴, Sharon L. Nichols⁴, Renee A. Smith⁴, William J. Muller⁴, for the IMPAACT 219C Study Team and the PediatricHIV/AIDS Cohort Study
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Chicago, IL, United States; ⁴National Institute of Child Health and Human Development, Bethesda, MD, United States; ⁵Children's Hospital of Philadelphia, Philadelphia, PA, United States; ⁶University of California San Diego, La Jolla, CA, United States; ⁷University of Illinois at Chicago, Chicago, IL, United States

926 Early Cytomegalovirus Viraemia and Clinical Outcomes of HIV-Infected Children in the Early ART Era

Nei-yuan Hsiao¹, Kennedy Otumbe², Landon Myer³, Ayy Violaria², Diana Gibb², Ravindra Panchia², Abdel Babiker², Patrick Jean-Philippe², Mark Fredric Cotton²
¹Clinical Laboratory Sciences, University of Cape Town, Cape Town, South Africa; ²Perinatal HIV Research Unit, Johannesburg, South Africa; ³Public Health and Family Medicine, University of Cape Town, Cape Town, South Africa; ⁴Medical Research Council UK, London, United Kingdom; ⁵National Institute of Allergy and Infectious Diseases, Bethesda, MD, United States; ⁶Paediatrics and Child Health, Stellenbosch University, Cape Town, South Africa

Session P-U7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
Co-Infections and Treatment Responses in Children and Adolescents

927 Risk Factors Associated With TB in Children Receiving ART in a South African Multicenter HIV Cohort

Alana T. Brennan^{1,2}, Mhairi Maskew², Kate Schnippel², Ian Sanne^{1,2}, Lawrence Long², Matt P. Fox^{1,2}
¹Center for Global Health & Development, Boston University, Boston, MA, United States; ²Health Economics and Epidemiology Research Office, Department of Internal Medicine, School of Clinical Medicine, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

928 Hepatitis B Treatment Response To TDF in 3TC-Experienced Perinatally HIV-Infected Adolescents

Linda Aupitbul¹, Pakakrong Lumbiganon², Pope Kosalaraksa², Raviwan Hansudewchakul³, Pawinee Taepsraser³, Torsak Bunupuradah⁴, Thanayawee Puthanakit^{4,5}, Khuanchai Supparatpinyo⁶
¹Chiang Mai University, Chiang Mai, Thailand; ²Khon Kaen University, Khon Kaen, Thailand; ³Chiang Rai Prachanukroh Regional Hospital, Chiang Rai, Thailand; ⁴The Netherlands, Australia, Thailand Research Collaboration (HIV-NAT), Bangkok, Thailand; ⁵Department of Pediatrics, Chulalongkorn University, Bangkok, Thailand

929 T-Cell Senescence and CMV Positivity and Viremia Status in Perinatally HIV-Infected Children

Suad Kapetanovic¹, Lisa Aaron², Grace Montepiedra², Andrea Kovacs³
¹National Institute of Mental Health, National Institutes of Health, Bethesda, MD, United States; ²School of Public Health, Harvard University, Boston, MA, United States; ³Keck School of Medicine, University of Southern California, Los Angeles, CA, United States

Session P-U8 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
Outcomes Among Adolescents: Perinatally and Behaviorally Acquired HIV Infection

930 Outcomes of Perinatally HIV-Infected Adolescents On Antiretroviral Therapy in Southern Africa

Mary-Ann Davies¹, Kathryn Tinson¹, Karl Technau^{2,3}, Sam Phiri⁴, Helena Rabie⁵, Maureen Wellington⁶, Janet Giddy⁷, Robin Wood^{8,9}, Lynne Mofenson¹⁰, Harry Mouttrie^{11,12}, for International Epidemiology Databases to Evaluate AIDS Southern Africa (IeDEA-SA)
¹School of Public Health and Family Medicine, University of Cape Town, Cape Town, South Africa; ²Empilweni Services and Research Unit, Rahima Moosa Mother and Child Hospital, Johannesburg, South Africa; ³University of Witwatersrand, Johannesburg, South Africa; ⁴Lighthouse Trust Clinic, Lilongwe, Malawi; ⁵Tygerberg Academic Hospital, University of Stellenbosch, Stellenbosch, South Africa; ⁶Newlands Clinic, Harare, Zimbabwe; ⁷McCord Hospital, Durban, South Africa; ⁸Desmond Tutu HIV Centre, University of Cape Town, Cape Town, South Africa; ⁹Gugulethu Community Health Centre, Cape Town, South Africa; ¹⁰Eunice Kennedy Shriver National Institute of Child Health and Human Development, Rockville, MD, United States; ¹¹Wits

Reproductive Health and HIV Institute, University of Witwatersrand, Johannesburg, South Africa.¹²Harriet Shezi Children's Clinic, Chris Hani Baragwanath Hospital, Soweto, South Africa

931 Greater Early CD4 Responses To cART Initiation Not Maintained for Non-Perinatal Youth

Allison Agwu¹, Guy Mahiane², Bareng A. S. Nonyane³, Keri Althoff², Baligh Yehia⁴, Stephen Berry⁵, Richard Rutstein⁶, Kelly A. Gebo⁸, for the HIV Research Network

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932 Parental Absence From Clinic Predicts Virologic Failure in Adolescents in Botswana

Elizabeth Lowenthal^{1,2}, Tafireyi Marukutira³, Ontibile Tshume³, Jennifer Chapman⁴, Tebo Dipotso⁵, Omphile Lepodisi⁶, Keboletse Mokele⁷, Jean Nachega⁸, Gabriel Anabwani⁹, Robert Gross^{6,7}

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933LB ART De-Intensification To AtVr Monotherapy in Adolescents Sustains CD4 and Activation Responses

Bret J. Rudy¹, Bill Kapogiannis², Craig Wilson³, Allison Agwu⁴, Maureen Goodenow⁵, Carol Worell⁶, John W. Sleasman⁷, Sue X. Li⁸, James Bethel⁹, Kathleen Squires⁹

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934 Factors Associated With Successful Retention Among Non-Perinatally HIV-Infected Youth

Charles Farmer¹, Baligh Yehia², Richard Rutstein³, Stephen Berry⁴, Kelly Gebo⁵, Allison Agwu⁶, for the HIV Research Network

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Session P-V1 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
Pre-Clinical Studies of Microbicides

935 PCR as a Virological Endpoint for Testing Microbicide Efficacy in the Colorectal Explant Model

Laura Janocko¹, Alexey Nikiforov², Ian McGowan³

936 Irreversible Inactivation and Breakdown of HIV-1 With Env-gp120 Targeting Peptide Triazole Thiols

Arangassery Rosemary Bastian¹, Lauren D. Bailey², Diogo R. D. Moreira³, Kevin Freedman⁴, Karyn McFadden⁵, Caitlin Duffy⁶, Ali Emileh⁷, Jefferey Jacobson⁸, James A. Hoxie⁹, Irwin Chaiken⁹

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937 Labyrinthopeptin A1 Demonstrates Potent and Dual Anti-HSV and Anti-HIV Activity

Geoffrey Férris¹, Mariya Petrova², Graciela Andrei³, Robert Snoeck⁴, Jos Vanderleyden⁵, Roderich Süßmuth³, Mark Brünstrup¹, Dominique Schols⁶

¹Rega Institute, Leuven, Belgium; ²Centre of Microbial and Plant Genetics, Leuven, Belgium; ³Technische Universität Berlin, Berlin, Germany

938 GSK1265744 Demonstrates Robust In Vitro Activity Against Various Clades of HIV-1

Sharon L. Karmon¹, Hiroshi Mohri¹, William Spreen², Zhi Hong³, David Ho⁴, Martin Markowitz¹

¹Aaron Diamond AIDS Research Center, an affiliate of The Rockefeller University, New York, NY, United States; ²GlaxoSmithKline, Research Triangle Park, NC, United States

Session P-V2 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
Animal Models of Clinical Studies and PrEP

939 Does Tenofovir Gel Alter HIV Disease Progression in CAPRISA 004 Trial Seroconvertors?

Nigel J. Garrett¹, Lise Werner², Nivashnee Naicker¹, Thabile Mthembu¹, Vivek Narandhai¹, Sengenize Sibeko¹, Natasha Samsunder¹, Carolyn Williamson³, Quarraisha Abdoal Karim^{1,3}, Salim Abdoal Karim^{1,3}

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940 Efficacy of Vaginal Gel Containing Tenofovir and Emtricitabine Against Rectal SHIV Transmission

Charles W. Dobard¹, Natalia Makarova¹, Rolieria West², Andrew Taylor³, Chuong Dinh³, Amy Martin¹, James Mitchell¹, Debra Hanson², Choung-Pong Paul¹, Walid Heneine¹

¹HIV and prevention, Centers for Disease Control, Atlanta, GA, United States; ²Quantitative Sciences and Data Management Branch, Centers for Disease Control, Atlanta, GA, United States

941LB GSK1265744 Long-Acting Protects Macaques Against Repeated High-Dose Intravaginal Challenges

Chasity D. Andrews¹, William R. Spreen², Yun Lan Yueh², Agegnehu Gettie¹, Kasi Russell-Lodrigue³, Hiroshi Mohri¹, Cecilia Cheng-Mayer¹, Zhi Hong³, David D. Ho⁴, Martin Markowitz¹

¹Aaron Diamond AIDS Research Center, New York, NY, United States; ²GlaxoSmithKline, Research Triangle Park, NC, United States; ³Tulane National Primate Research Center, Covington, LA, United States

942 SHIV Infection Risk After Rectal Application of a Highly Osmolar Personal Lubricant

Sundaram A. Vishwanathan¹, Monica Morris², Charles Rose¹, Richard J. Wolitski¹, Leecresia Jenkins¹, Sharon Ellis¹, Michael Hendry³, Janet M. McNicholl¹, Ellen N. Kersh¹

¹DHAP, CDC, Atlanta, GA, United States; ²Total Solutions, Atlanta, GA, United States

Session P-V3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
Identifying and Reducing HIV Risk

- 943 Controlled Trial of an Internet-Based Risk Reduction Intervention in HIV+ Men Who Have Sex With Men**
 Joel Milam¹, Sonia Jain², Eric Daar³, Michael Dube⁴, Edward Seefried⁵, Eric Ellorin⁶, Gustavo A. Jimenez-Maggiola⁷, **Sheldon R. Morris¹**, Richard H. Haubrich⁸, CCGT 592 Team
¹University of Southern California Keck School of Medicine, Los Angeles, CA, United States; ²UC, San Diego, San Diego, CA, United States; ³Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center, Torrance, CA, United States
- 944 Changes in the Contribution (PAR%) of STIs To HIV Acquisition Among Kenyan FSWs From 1993 To 2012**
Linnet Masese¹, Jared M. Baeten¹, Barbra A. Richardson¹, Susan M. Graham¹, Elizabeth Bukusi², Juma Shafi³, Walter Jaoko⁴, James Kiarie⁵, R. Scott McClelland¹
¹University of Washington, Seattle, WA, United States; ²KEMRI, Nairobi, Kenya; ³University of Nairobi, Nairobi, Kenya
- 945 Intervention To Reduce HIV/STI Among High-Risk Patients in China: Cluster Randomized Trial**
Don Operario¹, Debin Wang², Mei-Fen Yang³, Kathleen Blaney⁴, Jing Cheng⁵, Hong Qian⁶, Hongbo Zhang⁷, Gregory Szekeres⁸, Jerome Galea⁹, Thomas Coates³
¹School of Public Health, Brown University, Providence, RI, United States; ²Anhui Medical University, Hefei, China; ³University of California Los Angeles, Los Angeles, CA, United States
- 946 Validation of the Refined Denver HIV Risk Score Using a National HIV Testing Cohort**
Jason Haukoos¹, Emily Hopkins¹, Meggan Bucossi¹, Michael Lyons², Richard Rothman³, Douglas White⁴, Alia Al-Tayyib⁵, Lucy Bradley-Springer⁶, Allison Sabel⁷, Mark Thrun⁸
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Session P-V4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM **Exhibit Hall D**
PrEP, PEP, TasP

- 947 Cost Effectiveness of Antiretrovirals in HIV Control in Rural Zambia: A Stochastic League Approach**
Brooke E. Nichols¹, Rob Baltussen², Janneke H. van Dijk³, Phil E. Thuma⁴, Jan L. Nouwen⁵, Charles A. B. Boucher⁶, David A. M. C. van de Vijver¹
¹Viroscience, Erasmus Medical Center, Rotterdam, Netherlands; ²Primary and Community Care, Radboud University Nijmegen Medical Center, Nijmegen, Netherlands; ³Macha Mission Hospital and Macha Research Trust, Macha, Zambia; ⁴Medical Microbiology and Infectious Diseases, Erasmus Medical Center, Rotterdam, Netherlands
- 948 Darunavir (DRV)/r-Based PEP Versus Standard of Care (SOC) - the Randomized PEPDar Study**
Gerd Fätkenheuer¹, Norma Jung², Heiko Jessen³, Albrecht Stoeht⁴, Keikawus Arasteh⁵, Johannes Bogner⁶, Christoph Stephan⁷, Christoph D. Spinner⁸, Olaf Degen⁹, Britta Ranneberg¹⁰
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- 949 High Initiation of PrEP and ART in a Demonstration Project Among African HIV-Discordant Couples**
Renee Heffron¹, Connie Celum², Nelly Mugoi³, Ely Katabira⁴, Elizabeth Bukusi⁵, Elioda Tumwesigye⁶, Jessica Haberer^{6,8}, Jared Baeten¹, for the Partners Demonstration Project Team
¹University of Washington, Seattle, WA, United States; ²Kenya Medical Research Institute, Nairobi, Kenya; ³Makerere University, Kampala, Uganda; ⁴Integrated Community Based Initiatives (ICOB), Bushenyi, Uganda; ⁵Massachusetts General Hospital, Boston, MA, United States; ⁶Harvard University, Boston, MA, United States
- 950 PrEP Is Efficacious for HIV Prevention Among Women Using DMPA for Contraception**
Renee Heffron¹, Nelly Mugoi², Edwin Were³, James Kiarie^{4,5}, Elizabeth Bukusi⁶, Andrew Mujugira⁷, Deborah Donnell^{1,8}, Allan Ronald⁷, Connie Celum¹, Jared Baeten¹, for the Partners PrEP Study Team
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- 951 PrEP Interest, Uptake, and Adherence Among Young Men Who Have Sex With Men (YMSM) in the United States**
Sybil Hosek¹, Jaime Martinez², Kristine Santos³, Megha Mehrotra⁴, Christopher Balthazar¹, Pedro Serrano¹, Kelly Bojan⁵, Robert Grant⁶, The Adolescent Medicine Trials Network for HIV/AIDS Interventions
¹Psychiatry, Stroger Hospital of Cook County, Chicago, IL, United States; ²Stroger Hospital of Cook County, Chicago, IL, United States; ³Ruth M. Rothstein CORE Center, Chicago, IL, United States; ⁴Gladstone Institutes, San Francisco, CA, United States
- 952 Early Adopters: Correlates of Chemoprophylaxis Use in an Online Sample of US Men Who Have Sex With Men**
Kenneth H. Mayer^{1,2}, Catie Oldenberg^{3,4}, David Novak⁵, Douglas Krakower^{1,2}, Matthew Mimiaga^{1,3}
¹The Fenway Institute, Fenway Health/Harvard Medical School, Boston, MA, United States; ²Medicine, Beth Israel Deaconess Medical Center, Boston, MA, United States; ³Epidemiology, Harvard School of Public Health, Boston, MA, United States; ⁴Online Buddies, Cambridge, MA, United States
- 953 Measuring Intermittent and Daily PrEP Adherence by Hair Levels, Self-Report and MEMS Caps Openings**
Sanjiv M. Baxi¹, Albert Liu², Peter Bacchetti³, Gaudensia Mutua⁴, Eduard Joachim Sanders⁵, Freddie M. Kibengo⁶, Jessica E. Haberer⁷, James Rooney⁸, Frances Priddy⁹, Monica Gandhi¹
¹Infectious Diseases, University of California San Francisco, San Francisco, CA, United States; ²San Francisco Department of Public Health, San Francisco, CA, United States; ³Epidemiology & Biostatistics, University of California San Francisco, San Francisco, CA, United States; ⁴Kenya AIDS Vaccine Initiative, Nairobi, Kenya; ⁵Centre for Geographic Medicine Research Coast, Kilifi, Kenya; ⁶Medical Research Council (MRC)/Uganda Virus Research Institute (UVRI), Entebbe, Uganda; ⁷Infectious Diseases, Center for Global Health, Boston, MA, United States; ⁸Gilead Sciences, Foster City, CA, United States; ⁹International AIDS Vaccine Initiative, New York, NY, United States
- 954 Implementation of PrEP in STD Clinics: High Uptake and Drug Detection Among MSM in the Demonstration Project**
Stephanie E. Cohen¹, Eric Vittinghoff², Peter Anderson³, Susanne Doblecki-Lewis⁴, Oliver Bacon⁵, Wairimu Chege⁶, Richard Elion⁶, Susan Buchbinder⁷, Michael Kolber⁸, Albert Liu⁹
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955 High Medication Adherence Among HIV-1 Uninfected Women Experiencing Pregnancy in a PrEP Trial

Lynn T. Matthews^{1,2}, Renee Heffron¹, Nelly R. Mugo^{3,4}, Craig R. Cohen⁵, Craig W. Hendrix⁶, Connie Celum^{3,7}, David R. Bangsberg¹, Jared M. Baeten^{3,7}, for the Partners PrEP Study Team

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956 Willingness To Use Pre-Exposure Prophylaxis Among Community-Recruited Injection Drug Users

Irene Kuo¹, Gregory L. Phillips², Manya Magnus², Jenevieve Opoku³, Anthony L. Rawls², James Peterson², Michael Kharne², Alan E. Greenberg²

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957 PrEP Does Not Diminish the Pregnancy Prevention Effectiveness of Hormonal Contraception

Pamela M. Murnane¹, Renee A. Heffron¹, Connie Celum¹, Elizabeth Bukusi², Deborah Donnell¹, James Kiarie², Nelly Mugo³, Allan Ronald³, Edwin Were¹, Jared Baeten¹

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958 Uptake of Treatment as Prevention and Continuum of Care Among Men Who Have Sex With Men in Nigeria

Christopher Akolo^{1,2}, Stefan Baral³, Julie Ake⁴, Sara Kennedy¹, Benjamin Emmanuel¹, Ifeanyi Orazulike⁵, Marc Boulay⁶, Babajide Keshinro⁴, William Blattner⁷, Manhattan Chaurat¹

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959LB FEM-PrEP: Participant Explanations for Non-Adherence

Amy Cornelli¹, Brian Perry¹, Kawango Agot², Khatija Ahmed³, Kevin McKenna⁴, Fulufhelo Malamathso⁵, Jacob Odhiambo⁶, Joseph Skhosana⁷, Lut Van Damme⁸, FEM-PrEP study team
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960 Prevention of HIV Transmission With Post-Exposure Prophylaxis After Infected-Blood Transfusion

Sami H. Al Hajjar¹, Husein H. Frayha¹, Mohammad Al Hazmi², Reem Batawi¹, Kenneth McIntosh³, Paul E. Sax⁴, Emily Hanhauser⁵, Daniel R. Kuritzkes⁶, Jonathan Z. Li⁶, Timothy J. Henrich⁵

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961 Contingency Management Facilitates PEP Completion Among Stimulant-Using MSM

Raphael J. Landovitz¹, Jesse B. Fletcher², Steve Shoptaw³, Cathy J. Reback²

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Session P-V5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D Circumcision

962 Male Circumcision: Association With HIV Prevalence, Knowledge, and Attitudes Among Women

Bertran Auvert¹, Pascale Lisouba², Dirk Taljaard³, Gilles Peytavin⁴, Beverley Singh⁵, Adrian Puren⁶

¹University of Versailles, Villejuif, France; ²INSERM, Villejuif, France; ³CHAPS, Johannesburg, South Africa; ⁴APHF, Paris, France; ⁵NHLS-NICD, Johannesburg, South Africa; ⁶NHLS-NICD, Johannesburg, South Africa

963 Lower Odds of HIV Among Circumcised MSM in China and Zhu Qian With Anal Sexual Role

Han-Zhu Qian¹, Yuhua Ruan², Yu Liu³, Douglas F. Milam⁴, Hans M. L. Spiegel¹, Lu Yin¹, Yiming Shao², Sten H. Vermund¹

¹Vanderbilt University, Nashville, TN, United States; ²Chinese Center for Disease Control and Prevention, Beijing, China; ³HJF-DAIDS, Bethesda, MD, United States

964 Client Experiences of Odor Associated With PrePex™ Device Male Circumcision in Botswana

Adrian Musighe¹, Tigistu A. Ashengo², Lesego Busang³, Kenanao Motlhoiwa⁴, Alex Chipara⁴, Galina Stolarsky⁴, Frank Mwangemi⁴, Conrad Ntsape⁴

¹Jhpiego, Gaborone, Botswana; ²Jhpiego and Johns Hopkins University School of Public Health, Baltimore, MD, United States; ³African Comprehensive HIV/AIDS Partnerships (ACHAP), Gaborone, Botswana; ⁴Ministry of Health, Gaborone, Botswana; ⁵Ministry of Health of Botswana, Gaborone, Botswana

965 Penile Cytokines Correlate With HIV Target Cells and Decrease After Circumcision in Rakai, Uganda

Jessica L. Prodger¹, Brett Shannon¹, Kamnosh Shababi¹, Xiangrong Kong², Cindy M. Liu³, Lance Price^{4,5}, Godfrey Kigozi⁶, David Serwadda⁶, Ronald H. Gray², Rupert Kaul¹

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966 HIV Shedding From Male Circumcision Wounds in Rakai, Uganda

Aaron A. R. Tobian¹, Jordyn G. Manucci¹, Godfrey Kigozi², Mary K. Grabowski¹, David Serwadda², Ronald H. Gray¹, Fred Nalugoda², Anthony Ndyababo³, Thomas C. Quinn³, Maria J. Wawer¹

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Session P-W1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D Cascade of Care and Testing

967 Finding Unawares: High Levels of Undiagnosed HIV Infection Among Moscow Men Who Have Sex With Men

Andrei L. Wirtz^{1,2}, Carla E. Zelaya³, Noya Galai⁴, Alena Peryshkina⁴, Vladimir Mogulyniy⁴, Petr Dzighun¹, Irina Kostetskaya¹, Carl Latkin⁵, Chris Beyrer⁵

¹Emergency Medicine, Johns Hopkins Medical Institute, Baltimore, MD, United States; ²Epidemiology, Johns Hopkins School of Public Health, Baltimore, MD, United States; ³Epidemiology, Johns Hopkins School of Public Health, Johns Hopkins Medical Institute, Baltimore, MD, United States; ⁴AIDS Infoshare, Moscow, Russian Federation; ⁵Health, Behavior, and Society, Johns Hopkins School of Public Health, Baltimore, MD, United States

968 Increases in HIV Testing Among MSM: US National HIV Behavioral Surveillance System, 2008-2011

Laura A. Cooley, Alexandra M. Oster, Cyprian Wejnert, Binh C. Le, Charles E. Rose, Gabriela Paz-Bailey
Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States

969 Feasibility of HIV Self-Test Vouchers to Raise Community-Level Serostatus Awareness, Los Angeles

Robert Marlin¹, Sean Young¹, Greg Wilson², Jeffrey P. Rodriguez², Jose Montes³, Jose Ortiz², Rhea Mathew², Zoe Glick², Jeffrey D. Klausner¹

¹David Geffen School of Medicine at University of California Los Angeles, Los Angeles, CA, United States; ²Reach LA, Los Angeles, CA, United States; ³LA Gay & Lesbian Center, Los Angeles, CA, United States; ⁴Bienestar, Los Angeles, CA, United States; ⁵University of California Los Angeles, Los Angeles, CA, United States; ⁶Brentwood School, Los Angeles, CA, United States

970 Availability, Accessibility, Price of Rapid HIV Self-Tests, New York City Pharmacies, Summer 2013

Julie E. Myers^{1,2}, Olivia El-Sadr Davis³, Elliott R. Weinstein³, Molly Remch³, Amy L. Edelstein⁴, Blayne H. Cutler⁵, Julia A. Schillinger^{6,6}
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971 Acceptability & Affordability of Self HIV Testing in an Urban Neighborhood With 3% Seroprevalence

Amy Nunn¹, Philip Chan¹, Caitlin Towey¹, Joanna Poceta², Sophie Feller², Stacey Trooksin³
¹Division of Infectious Diseases, Warren Alpert Medical School of Brown University, Providence, RI, United States; ²Jefferson Medical College, Philadelphia, PA, United States; ³Drexel University College of Medicine, Philadelphia, PA, United States

972 Getting To Zero: HIV Testing and Counselling in Kenya - Results From a Population-Based Survey

Anne Nganga¹, Wanjiru Waruiru², Carol Ngaré³, Victor Sempijja³, Patricia Oluoch⁴, Inviolata Njoroge⁵, Thomas Gachuki⁶, William Maina¹, Rex Mpazanje⁷, Andrea A. Kim³
¹National AIDS and STI Control Programme, Ministry of Health, Nairobi, Kenya; ²Global Health Sciences, University of California San Francisco, San Francisco, CA, United States; ³Division of Global HIV/AIDS-Kenya, US Centers for Disease Control and Prevention, Nairobi, Kenya; ⁴Division of Global HIV/AIDS-Kenya, US Centers for Disease Control and Prevention, Washington DC, US, United States; ⁵Liverpool VCT, Nairobi, Kenya; ⁶National Public Health Laboratory Services, Ministry of Health, Nairobi, Kenya; ⁷World Health Organization, Nairobi, Kenya

973 Counselor Based Versus Integrated Routine HIV Screening in a Urban Emergency Department

Georgina Osorio¹, Anca Giurgulescu², Zachariah Hennessey¹, Andrea Wood³, Daniel Egan³, Dan Wiener³, Rituparna Pati³, Victoria Sharp¹
¹Medicine, Spencer Cox Center for Health, St. Luke's-Roosevelt Hospital Center, New York, NY, United States; ²Emergency Medicine, St. Luke's-Roosevelt Hospital Center, New York, NY, United States; ³Emergency Department, New York University School of Medicine, New York, NY, United States

974 Low Feasibility Rate of Self Testing With a Finger-Stick Whole Blood Test

Guillaume Gras¹, Pascal Le Bret², Jean Francois Dailloux², Gwenael Le Moal³, Aurelia Raoult⁴, Gaelle Fajole⁵, Penelope Hodges⁵, Claire Poirier¹, Frédéric Bastides¹, Louis Bernard¹
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CHU, Poitiers, France; ⁴Pharmacie, CHU Bretonneau, Tours, France; ⁵COREVIH, CHU Bretonneau, Tours, France

975 Estimating the Size of the Undiagnosed HIV Population in the Netherlands by Disease Stage

Ard van Sighem¹, Fumiyo Nakagawa², Daniela Bezemer¹, Daniela De Angelis³, Eline Op de Coul⁴, Matthias Egger⁵, Frank de Wolf⁶, Christophe Fraser⁶, Andrew Phillips²
¹Stichting HIV Monitoring, Amsterdam, Netherlands; ²University College London, London, United Kingdom; ³MRC Biostatistics Unit, Cambridge, United Kingdom; ⁴National Institute for Public Health and the Environment, Bilthoven, Netherlands; ⁵University of Bern, Bern, Switzerland; ⁶Imperial College School of Medicine, London, United Kingdom

976 Prenatal HIV Testing Coverage of Medicaid-Insured Women – United States, 2009–2010

Christine E. Ross, Guoyu Tao, Karen W. Hoover
DSTD, CDC, Atlanta, GA, United States

977 Measuring Late HIV Diagnosis Among Men Who Have Sex With Men: AIDS Diagnosis vs. Testing Frequency

David A. Katz^{1,2}, Julia C. Dombrowski^{1,2}, Amy Bennett², Susan Buskin², Christina Thibault², Matthew R. Golden¹
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Session P-W2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Cascade of Care, Linkage, and Retention

978 Using HIV Surveillance Registry Data To Re-Link

Patients To Care: The RSVP Project in San Francisco
Kate A. Buchacz¹, Miao-Jung Chen², Maree Kay Parisi³, Maya Yoshida², Erin Antunez², Viva Delgado², Nicholas J. Moss³, Susan Scheer²

¹Centers for Disease Control and Prevention, Atlanta, GA, United States; ²San Francisco Department of Public Health, San Francisco, CA, United States; ³Alameda County Public Health Department, Oakland, CA, United States

979 Disentangling Roles of Internalized Stigma and Depression in Women's Linkage To Care

Kristi L. Stringer¹, Bulent Turan², Mariciana Onono³, Elizabeth A. Bukusi³, Craig C. Cohen⁴, Janet M. Turan⁵
¹Medical Sociology, University of Alabama at Birmingham, Birmingham, AL, United States; ²Psychology, University of Alabama at Birmingham, Birmingham, AL, United States; ³Kenya Medical Research Institute, Nairobi, Kenya; ⁴Department of Obstetrics, Gynecology, and Reproductive Sciences, University of California San Francisco, San Francisco, CA, United States; ⁵Medical Health Care Organization and Policy, University of Alabama at Birmingham, Birmingham, AL, United States

980 Longitudinal Treatment Outcomes in HIV-Infected Prisoners and Influence of Re-incarceration

Jaimie P. Meyer^{1,2}, Javier Cepeda³, Johnny Wu⁴, Robert L. Trestman⁵, Frederick L. Altice^{1,5}, Sandra A. Springer¹
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981 Imprisonment Among a Large US Clinical Cohort of HIV-Positive Outpatients

David L. Rosen¹, Carol E. Golin², Catherine A. Grodensky³, Samuel Stinnette⁴, Becky L. White⁴, Sonia Napravnik¹, David A. Wohl¹
¹Institute for Global Health and Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ²Medicine and Health Behavior, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ³Center for AIDS Research, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States; ⁴Division of Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States

982 A Surveillance-Based Risk-Scoring Tool To Prioritize Cases for HIV Care Re-Linkage Efforts

Julia C. Dombrowski^{1,2}, James P. Hughes³, Amanda D. Castel³, Kathleen A. Brady^{4,5}, Susan Buskin², Amy Bennett², Matthew R. Golden^{1,2}

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983 Beyond Core Indicators of Retention in HIV Care: Added Prognostic Value of Missed Clinic Visits

Michael J. Mugavero¹, Andrew O. Westfall¹, Elvin Geng², Stephen R. Cole¹, Heidi M. Crane⁴, Mari M. Kitahata³, W. Christopher Mathews⁵, Sonia Napravnik⁶, James L. Raper¹, CFAR Network of Integrated Clinical Systems (CNICS)

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984 National ART Monitoring System Enables Robust Transfer-Adjusted Retention Analyses in Namibia

Anna Jonas¹, Andrew Maher², Ray W. Shiraiishi³, Michael de Klerk¹, Francina Kaingjee-Tjittuka¹, Gram Mutandi⁴, Sadhna V. Patel⁵, Anne-Marie Nitschke⁶, Alexinah Muadinohamba¹, David W. Lowrance²
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985 Migration After HIV Diagnosis, United States

Lorena Espinoza, H. Irene Hall, Aruna Surendera Babu, Tian Tang, Mi Chen
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986 Early Linkage To HIV Care and Antiretroviral Therapy Use Among MSM — 20 US Cities, 2008 and 2011

Brooke Hoots, Teresa Finlayson, Cyprian Wejnert, Gabriela Paz-Bailey for the NHBS Study Group
CDC, Atlanta, GA, United States

987 The Impact of Opioid Substitution Treatment On Highly Active Antiretroviral Treatment Adherence

Bohdan Nosyk, Jeong Min, Viviane Lima, Guillaume Colley, Benita Yip, Evan Wood, Julio Montaner
BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada

988 Correlation Between Community Variables and HIV Linkage To Care and Viral Suppression, Atlanta, GA

Neela D. Goswami^{1,2}, Sharoda Dasgupta⁴, Patrick Sullivan², Deepali Rane³, Carlos del Rio^{1,2}, Travis Sanchez²
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Session P-W3 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Cascade of Care, Community Viral Load, and Viral Suppression

989 Viral Suppression Among Foreign-Born HIV-Infected Persons in the United States

Tanya R. Myers^{1,2}, Jacek Skarbinski¹
¹CDC, Atlanta, GA, United States; ²LSHTM, London, United Kingdom

990 Mapping Community Viral Load and Transmission Potential Prevalence of HIV Among MSM in New York City

Hong Van Tieu^{1,2}, Vijay Nandi¹, James E. Egan³, Victoria Frye⁴, Donald R. Hoover⁵, Eduardo Baez², Debbie Lucy¹, Magdalena Cerda⁶, Danielle C. Ompad², Beryl A. Koblin¹

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991 HIV Care and Viral Suppression Among Persons Living With HIV/AIDS, New York City 2006–2010

Lucia V. Torian, Qiang Xia, Ellen W. Wiewel
HIV Epidemiology Program, New York City Department of Health, Long Island City, NY, United States

992LB Low Incidence and High Population Viral Suppression in Malawi: The Chiradzulu HIV Incidence Study

David Maman¹, Sophie Masson¹, Benson Chilima², Charles Masiku³, Elizabeth Szumilin⁴, Ahidjo Ayoub⁵, Benjamin Riche⁶, Etard Jean-Francois⁷

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993 Disparities in Viral Suppression Among a Large Cohort of HIV-Infected Persons in Washington, DC

Amanda D. Castel, Alan E. Greenberg, Heather Young, Mariah M. Kalmin, DC Cohort Executive Committee
Dept. of Epidemiology and Biostatistics, The George Washington University, Washington, DC, United States

994 Community Viral Load and HIV Incidence: A Multi-City Study of High-Risk Populations in India

Sunil S. Solomon^{1,2}, Shruti H. Mehta¹, Aylur K. Srikrishnan², Oliver Laeyendecker^{1,3}, Shanmugam Saravanan², Allison McFall¹, Pachamuthu Balakrishnan², Suniti Solomon², David D. Celentano⁴, Gregory M. Lucas¹

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995 Declines in Community Viral Load in the Context of Population Prevention Strategies in the Bronx

David B. Hanna¹, Uriel R. Felsen^{1,2}, Mindy S. Ginsberg¹, Barry S. Zingman^{1,2}, Robert S. Bell^{1,2}, Donna C. Futterman^{1,2}, Howard D. Strickler¹, Kathryn Anastos^{1,2}
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Session P-W4 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Cascade of Care

996 New Epidemiological Indicator To Estimate the Gap Between WHO Eligibility ART Criteria and Reality

Jacques D. A. Ndawinzi¹, Xavier Anglaret^{2,3}, Eric Delaporte^{4,5}, Sinata Koulla-Shiro⁶, Delphine Gabillard^{2,3}, Dominique Costagliola^{2,3}, Virginie Supervie^{1,8}

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997 Trends in Cascade of Care in the Eastern European Country of Georgia: 2008–2012

Nikoloz Chkhartishvili¹, Otar Chokoshvili¹, Lali Sharvadze^{1,2}, Jack A. DeHovitz³, Carlos del Rio⁴, Tengiz Tsertsvadze^{1,5}

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998 Use of National Standards To Monitor HIV Care and Treatment in a High Prevalence City – Washington, DC

Amanda D. Castel, Alan E. Greenberg, Mariah M. Kalmin, Heather Young, DC Cohort Executive Committee
Dept. of Epidemiology and Biostatistics, The George Washington University, Washington, DC, United States

999 Potential Impact of Viral Load On ART Eligibility Criteria in Swaziland

Naomi Bock¹, Ruth Emerson², Charles Azih³, Deborah Donnell², George Bicego¹, Velephi Okello³, Neena Philip⁴, Rejoice Nkambule³, Yen Duong¹, Jessica Justman¹
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1000 Health Insurance for PLWH: Establishing a Baseline To Monitor the Impact of the Affordable Care Act

Baligh R. Yehia¹, Allison A. Agwu², Stephen A. Berry³, Joshua P. Mettlay³, Kelly Gebro³
¹University of Pennsylvania, Philadelphia, PA, United States; ²Johns Hopkins University, Baltimore, MD, United States; ³Massachusetts General Hospital, Boston, MA, United States

Session P-W5 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Acute Infection

1001 Atypical Clinical Presentations Occur in One Third of 293 Patients With a Primary HIV-1 Infection

Dominique L. Braun, Roger Kouyou, Belinda Balmer, Christina Grube, Rainer Weber, Huldrych Günthard
Division of Infectious Diseases and Hospital Epidemiology, University Hospital Zurich, University of Zurich, Zurich, Switzerland

1002 Evaluating New Definitions of Acute and Early HIV Infection From HIV Surveillance Data

Susan E. Buskin^{1,2}, Neway G. Fida¹, Amy B. Bennett¹, Matthew R. Golden^{1,3}, Joanne D. Stekler^{1,4}
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1003 Association Between Number of Acute Retroviral Symptoms and Extended High Viremia by HIV-1 Subtype

Kimberly A. Powers¹, Matthew A. Price^{2,3}, Etienne Karita⁴, Anatoli Kamali⁵, William Kilembe⁶, Susan Allen⁷, Eric Hunter⁸, Omu Anzala⁹, Pat Fast², Eduard J. Sanders^{9,10}
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1004 Targeted Screening of Young Adults for Acute HIV-1 Infection at Care Seeking in Kenya

Eduard J. Sanders^{1,2}, Peter Mugo³, Henrieke A. B. Prins¹, Elizabeth Wahome¹, Alexander Thiong'o¹, Grace Mwasigadi¹, Elisabeth M. Van der Elst¹, Anisa Omar³, Adrian D. Smith⁴, Susan M. Graham^{1,5}
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Session P-W6 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Incidence Assays

1005 Independent Evaluation of Predicate Incidence Assays for HIV Surveillance

Reshma Kassanjee¹, Christopher Pilcher², Sheila Keating³, Shelley Facente², Matt Price⁴, Jeffrey Martin⁵, Susan Little⁶, Alex Welte¹, Michael Busch³, Gary Murphy⁶, Consortium for the Evaluation and Performance of HIV Incidence Assays (CEPIHA)
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1006 Performance of the Limiting Antigen-Avidity EIA for Use With Dried Blood Spot Specimens

Erin K. Rottinghaus, Trudy Dobbs, Bharat S. Parekh, Yen T. Duong
Centers for Disease Control and Prevention, Atlanta, GA, United States

1007 The Impact of HIV Subtype On Specificity of Cross-Sectional HIV Incidence Assays in Rakai, Uganda

Andrew F. Longosz¹, David Serwadda^{2,3}, Fred Nalugoda³, Godfrey Kigozi², Veronica Franco⁴, Ronald H. Gray^{3,5}, Thomas C. Quinn^{1,4}, Susan H. Eshleman⁴, Oliver Laeyendecker^{1,4}
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1008 Incorrect Identification of Recent HIV Infection Using a LAg-Avidity Assay in Adults in the US

Andrew F. Longosz¹, Ron Brookmeyer², Shruti Mehta³, Greg D. Kirk³, Joseph B. Margolick⁴, Joelle Brown¹, Thomas C. Quinn^{1,6}, Susan H. Eshleman⁴, Oliver Laeyendecker^{1,6}
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Session P-W7 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Disease Progression/Mortality

1009 Increasing Viral Suppression and Declining HIV/AIDS and Mortality in the Era of Expanded Treatment

Susan E. Buskin^{1,2}, Amy B. Bennett¹, Julia C. Dombrowski^{1,3}, Matthew R. Golden^{1,3}
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1010 BMI and CD4+ T-Cell Recovery at 12 Months Among Adults Initiating ART in the United States and Canada

John R. Koethe¹, Cathy Jenkins², Bryan Lau³, Bryan E. Shepherd², Michael J. Silverberg⁴, Aaron J. Blashill¹, Aranka Anema⁵, Amanda Willig¹, Samuel E. Stinnett⁶, Timothy R. Sterling¹, North American AIDS Cohort Collaboration on Research and Design (NA-ACCORD)
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United States;⁴Kaiser Permanente Northern California, Oakland, CA, United States;⁵Harvard University, Boston, MA, United States;⁶British Columbia Centre For Excellence in HIV/AIDS, Vancouver, BC, Canada;⁷University of Alabama at Birmingham, Birmingham, AL, United States;⁸University of North Carolina, Chapel Hill, NC, United States

- 1011 Impact of Smoking On Life Expectancy Among HIV-Infected Individuals: The ART Cohort Collaboration**
Marie Helleberg¹, Margaret T. May², Jonathan A. C. Sterne³, Niels Obel⁴, for the ART-CC

¹Department of Infectious Diseases, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark; ²School of Social and Community Medicine, University of Bristol, Bristol, United Kingdom

- 1012 Standardized Mortality Ratios Among Drug Users in Amsterdam Differ by HCV and HIV Infection Status**
Daniela K. van Santen¹, Jannie J. J. van der Helm¹, Bart P. X. Grady^{1,2}, Anneke S. de Vos³, Mirjam E. E. Kretzschmar^{3,4}, Ineke G. Stolte⁵, Maria Prins^{1,2}

¹Research, Public Health Service of Amsterdam, Amsterdam, Netherlands; ²Center for Infection and Immunology Amsterdam (CINIMA); ³Academic Medical Center (AMC), Amsterdam, Netherlands; ⁴University Medical Center Utrecht, Julius Centrum, Utrecht, Netherlands; ⁵Centre for Infectious Disease Control, National Institute of Public Health and the Environment, Bilthoven, Netherlands

- 1013 Prognostic Value of the VACS Index for Mortality in British Columbia, Canada**

Angela Cascon¹, Mark Hull¹, Wendy Zhang¹, Thomas Roston², Susan Shurgold¹, Guillaume Colley¹, Viviane D. Lima^{1,2}, P. Richard Harrigan^{1,3}, Julio S. G. Montaner^{1,2}, Robert S. Hogg^{1,3}
¹BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; ²University of British Columbia, Vancouver, BC, Canada; ³Simon Fraser University, Burnaby, BC, Canada

- 1014 Impact of Low-Level Viremia On Clinical and Virological Outcomes in Treated HIV Infected Patients**

Marie-Anne Vandenhende¹, Suzanne Ingle², Margaret May², Matthias Cavassini³, Amanda Mocroft⁴, Peter Reiss⁵, Janet Tate⁶, Heidi Crane⁷, Jonathan Sterne⁸, Geneviève Chêne⁹, on behalf of the Antiretroviral Therapy Cohort Collaboration (ART-CC)
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- 1015 Increase in HIV Plasma Viral Load Set-Point Among UK MSM**

Victoria Parsons^{1,2}, Andrew Phillips³, Richard Gilson², Sarah Fidler³, Martin Fisher⁴, Anne Johnson⁵, David Hawkins⁶, Ken McLean⁶, Margaret Johnson⁷, Kholoud Porter¹, for the UK Register of HIV Seroconverters
¹MRC Clinical Trials Unit at UCL, London, United Kingdom; ²University College London, London, United Kingdom; ³Imperial College London, London, United Kingdom; ⁴Brighton & Sussex Medical School, Brighton, United Kingdom; ⁵Chelsea & Westminster NHS Foundation Trust, London, United Kingdom; ⁶West London Centre for Sexual Health, London, United Kingdom; ⁷Royal Free London NHS Foundation Trust, London, United Kingdom

Session P-W8 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM Exhibit Hall D
Co-Morbidities

- 1016 HIV, Non-Communicable Chronic Diseases and Associated Factors in Tanzania and Uganda**

Saidi H. Kapiga¹, Kathy Baisley², Samuel Biraro³, Bazil Baltazar⁴, Fiona Ewings⁵, Hashim Ramadhan⁴, Robert Peck⁴, Richard Hayes⁴, Paula Munderi³, Heiner Grosskurth¹

¹Infectious Disease Epidemiology, London School of Public Health, Mwanza, Tanzania, United Republic of; ²Infectious Disease Epidemiology, London School of Public Health, Mwanza, United Kingdom; ³MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda; ⁴Mwanza Intervention Trials Unit, Mwanza, Tanzania, United Republic of; ⁵Bugando Medical Centre, Mwanza, Tanzania, United Republic of; ⁶Infectious Disease Epidemiology, London School of Public Health, London, United Kingdom

- 1017 Female Partner Bacterial Vaginosis and the Penis Microbiota: Rakai, Uganda**

Cindy Liu¹, Bruce Hungate², Aaron Tobian¹, Jacques Ravel¹, Jessica Procter¹, David Serwadda³, Fred Nalugoda³, Maria Wawer⁴, Ronald Gray⁵, Lance Price⁶

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- 1018 Low Viral Suppression and High HIV Diagnosis Rate Among MSM With Syphilis - Baltimore, Maryland**

Laura A. Cooley¹, Marcia L. Pearl², Colin Flynn³, David S. Blythe², Christine Ross², Geoffrey Hart-Cooper³, James Morgan⁴, Alexandra M. Oster¹

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- 1019 Trends in Comorbid Conditions Mentioned With HIV Disease On Death Certificates, US, 2000-2010**

Kpandja Djawe¹, Kate Buchacz, Charles E. Rose, John T. Brooks
¹Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Epidemiology Branch, Atlanta, GA, United States

- 1020 The Association Between HPV and HIV Shedding in Vaginal and Anorectal Specimens**

Julia Hood¹, Geoffrey Gottlieb², Papa Salif Sow³, Macoumba Toure³, Qinghua Feng⁴, Nancy Kiviat⁵, Stephen Hawes⁵
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- 1021 Incidence of Sexually Transmitted Diseases Among Persons With HIV, New York City, 2000-2010**

Sarah L. Braunstein¹, Preeti Pathela², Laura Kersanske¹, Colin Shepard¹
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- 1022 Increasing Rates of STI Are Linked To Reduced Condom Use in Patients With Primary HIV-1 Infection**

Dominique L. Braun¹, Roger Kouyou, Raffael Ghenzi, Christina Grube, Rainer Weber, Huldrych Günthard
¹Division of Infectious Diseases and Hospital Epidemiology, University Hospital Zurich, Zurich, Switzerland

- 1023 Does Substance Use Compromise Depression Treatment? A Randomized Trial of Homeless HIV+ Persons**

David J. Grelotti^{1,2}, Gwendolyn P. Hammer³, James W. Dille⁴, Dan H. Karasic⁴, James L. Sorensen⁵, David R. Bangsberg⁶, Alexander C. Tsai¹
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Session P-W9 Poster Session

Thursday March 6, 2014, 2:30 PM–4:00 PM

Exhibit Hall D

Transmission/Risk Factors

1024 National Estimates of Key Populations at High Risk of HIV Exposure in Kenya, 2012

George Githuka¹, Wolfgang Hladik², Samuel Mwailili³, Davies Kimanga¹, Mamo Umuro⁴, Mercy Mutui⁵, Joshua Gitonga⁶, William Maina¹, Andrea A. Kim⁷
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1025 HIV Incidence in Rural Western Kenya Using Longitudinal Analysis From Home-Based HIV Testing

Lisa A. Mills^{1,2}, George Ollio², Manase Amolloh², Daniel Kwaro³, Victor Ssempija⁴, Fredrick Odongo², Fredrick Otieno², Maquins Sewer⁵, John Williamson¹, Kayla Laserson¹
¹Centers for Disease Control and Prevention, Kisumu, Kenya;²Kenya Medical Research Institute/Centers for Disease Control and Prevention Research and Public Health Collaboration, Kisumu, Kenya

1026 Temporal Trends in HIV-1 Incidence and Risk Behaviors Among MSM, Bangkok, Thailand, 2006–2013

Timothy H. Holtz^{1,2}, Philip A. Mock¹, Warunee Thienkrua¹, Wannee Chonwattana¹, Wipass Wimonasate¹, Supaporn Chaikummao¹, Wichuda Sukwicha¹, Anupong Chitwarakorn¹, Marcel E. Curlin^{1,2}
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1027 The Potential Impact of Targeting Prevention Strategies To HIV-Discordant Households

Ruth Emerson¹, Deborah Donnell¹, George Bicego², Khanya Mabuz³, Stephane Helleiner⁴, Jessica Justman⁵
¹Statistical Center for HIV/AIDS Research & Prevention, Fred Hutchinson Cancer Research Center, Seattle, WA, United States;²Centers for Disease Control and Prevention, Atlanta, GA, United States;³National Emergency Response Council on HIV and AIDS, Kingdom of Swaziland, Manzini, Swaziland;⁴Department of Population and Family Health, Mailman School of Public Health, Columbia University, New York, NY, United States;⁵ICAP-Columbia, Mailman School of Public Health, Columbia University, New York, NY, United States

1028 The Effect of Sexually Transmitted Infections On HIV Incidence Among MSM in Atlanta, GA

Colleen F. Kelley, Adam S. Vaughan, Nicole Luisi, Travis Sanchez, Paula Frew, Carlos del Rio, Patrick S. Sullivan, Eli S. Rosenberg
Center for AIDS Research, Emory University, Atlanta, GA, United States

1029 Factors Associated With HIV Discordance Among Couples in Kenya: Results From a Population Survey

Wanjiru Waruru¹, Agneta Mbithi², Anthony Waruru³, Jennifer Galbraith⁴, Timothy A. Kelloff⁵, Scott Epperson⁶, Anne Ng'ang'a², Sophie Mwanumba², Lucy Kimondo⁶, Andrea A. Kim⁷
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Laboratory Services, Nairobi, Kenya;⁶National Council for Population and Development, Nairobi, Kenya

1030 Partners of Individuals With Acute HIV Infection Have a High Frequency of Known HIV Infection

Philip J. Peters¹, Emily Westheimer², Stephanie Cohen³, Charles E. Rose⁴, Cynthia L. Gay⁴, Charles Fann⁵, Steve Beagle^{4,6}, Kate Washburn⁷, Tonyka L. Jackson⁸, Lisa B. Hightow-Weidman⁴
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1031 Baseline Predictors of HIV-1 Acquisition Among Women Participating in MTN-003 (VOICE)

Gonasagrie Nair¹, Jennifer E. Balkus^{2,3}, Jeanne M. Marrazzo³, Gita Ramjee⁴, Thesla Palanee⁵, Baningi Mkhize⁶, Clemensia Nakabiito⁷, Marthienne Taljaard⁸, Kailazari Gomez⁹, Zvavahera M. Chirenje¹⁰
¹CAPRISA/DDRMI, Nelson R Mandela School of Medicine, Durban, South Africa;²Fred Hutchinson Cancer Research Center, Seattle, WA, United States;³University of Washington, Seattle, WA, United States;⁴South African Medical Research Council, Durban, South Africa;⁵University of Witwatersrand, Johannesburg, South Africa;⁶Chris Hani Baragwanath Hospital, Johannesburg, South Africa;⁷Makere University, Kampala, Uganda;⁸The Aurum Institute, Klerksdorp, South Africa;⁹FHI360, Durham, NC, United States;¹⁰UZ-UCSF, Harare, Zimbabwe

1032 Measuring Purposefully Adopted Seroadaptive Behaviors vs Reported Sexual Behaviors Among MSM

Christine M. Khosropour¹, Julia C. Dombrowski^{2,3}, James P. Hughes⁴, Lisa E. Manhart¹, Jane M. Simoni⁵, Matthew R. Golden^{2,3}
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1033 Prevalence and Predictors of HIV Disclosure Among Adults Receiving Care in the United States

Christine L. Mattson¹, Mark S. Freedman¹, Linda Beer¹, Patrick Sullivan², Jacek Skarbinski¹
¹Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States;²Emory University, Atlanta, GA, United States

1034 Trends in HIV Diagnoses Among Persons Who Inject Drugs – United States, 2008–2011

Andrew J. Mitsch¹, H. I. Hall¹, Amy L. Lansky¹, Aruna Surendra-Babu²
¹National Center for HIV, STD, Tuberculosis, and Viral Hepatitis Prevention, U.S. Centers for Disease Control and Prevention, Atlanta, GA, United States;²Macro International, Inc., Atlanta, GA, United States

1035 An Emerging HIV Epidemic Among Injection Drug User Networks During Austerity in Athens, Greece

Ashley Tsang¹, John Schneider², Vana Syspa³, Georgios Nikolopoulos⁴, Dimitrios Paraskevris⁵, Samuel Friedman⁶, Angelos Hatzakis³
¹University of Chicago, Chicago, IL, United States;²Department of Medicine, University of Chicago, Chicago, IL, United States;³National Retrovirus Reference Center, Athens, Greece;⁴Hellenic Center for Disease Control and Prevention, Athens, Greece;⁵National Development and Research Institutes, New York, NY, United States

1036 High HIV Prevalence Among Injection Drug Users in India: Women Bear a Disproportionate Burden

Gregory M. Lucas¹, Sunil S. Solomon^{1,2}, Aylur K. Srikrishnan², Syed H. Iqbal³, Oliver Laeyendecker^{1,3}, Allison McFall¹, Munirathnam S. Kumar², David D. Celentano⁴, Suniti Solomon¹, Shruti H. Mehta⁴
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*Institutes of Health, Bethesda, MD, United States;*³*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*

- 1037 HIV Prevalence Among Women Who Inject Drugs and Exchange Sex for Money or Drugs: 20 US Cities, 2009**
Lina M. C. Nerlander, Kristen L. Hess, Dita Broz, Binh C. Le, Cattalain Sioneau, Charles E. Rose, Gabriela Paz-Bailey, for the NHBS Group
Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States

- 1038 Erectile Dysfunction Medication Use Associated With Unprotected Intercourse in HIV-Infected MSM**
Xia Lin, Christine L. Mattson, Mark S. Freedman, Jacek Skarbinski
Centers for Disease Control and Prevention, Atlanta, GA, United States

- 1039 A Novel Analytical Approach Confirms Stabilization of HIV Epidemic in Pregnant Women in Namibia**

Anna Jonas¹, Steven Gutreuter², Sadhna V. Patel³, Andrew Maher³, Michael de Klerk¹, Tuli Nakanyala¹, Francina Kaindjee-Tijuka¹, Ella Shihepo¹, David W. Lowrance²

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- 1040 Viral Load Strategy: Impact On Risk Behavior and Serocommunication of MSM in Specialized Care**
 Elisabeth Kuhn¹, Anja Potthoff^{1,2}, Henrike Dirks³, René Borgmann³, Michael Wolter³, Stefan Esser¹, Norbert Scherbaum^{2,3}, **Norbert H. Brockmeyer**²

¹*Clinic for Dermatology, Venerology and Allergy of the Ruhr-Universität Bochum, Bochum, Germany;*²*Competence Network HIV/AIDS, Bochum/Essen, Germany;*³*Department of Psychiatry and Psychotherapy, LVR-Klinikum Essen, Hospital of the University of Duisburg-Essen, Essen, Germany;*⁴*Department of Dermatology and Venerology, University Hospital Duisburg-Essen, Essen, Germany*

- 1041 Transmission Rates and Not Sexual Contact Patterns Drive HIV Epidemic Intensity in Africa**

Steve E. Bellan¹, Jonathan Dushoff², David Champredon³, Alison P. Galvani⁴, Lauren A. Meyers⁵

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Session P-X1 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
HIV Testing in Low Income Settings

- 1042 Community-Based Integrated Family Planning and HIV Testing and Counseling Services in Uganda**

Aurélien Brunie¹, Patricia Wamala-Mucher², Jane Harriet Namwebya³, Tricia Petrunery⁴, **Vincent J. Wong**⁵, Benson Tumwesigye⁶, Sarah Mercer⁷, Victor Draman Ajayi⁸, Angela Akol⁹
¹*FHI 360, Washington, DC, United States;*²*Clinton Health Access Initiative, Kampala, Uganda;*³*FHI 360, Kampala, Uganda;*⁴*FHI 360, Durham, NC, United States;*⁵*Office of HIV/AIDS, USAID, 1200 Pennsylvania Ave, DC, United States;*⁶*National HTC Coordinator, Ugandan Ministry of Health, Kampala, Uganda*

- 1043 HTC Campaign in Households Reached the Majority of Women But Only 50% of Men in Botswana Community**
Vlad Novitsky¹, Hermann Bussmann², Sikhulile Moyo³, Erik van Widenfelt², Mompoti Mmalane², Qunhong Lei⁴, Joseph Makhele², Shahin Lockman¹, Victor DeGruetola³, Max Essex¹

¹*Immunology & Infectious Diseases, Harvard School of Public Health, Boston, MA, United States;*²*Botswana-Harvard AIDS Institute Partnership, Gaborone, Botswana;*³*Department of Biostatistics, Harvard School of Public Health, Boston, MA, United States*

- 1044 Implementation of Routine, Opt-Out HIV Testing Does Not Increase Loss To Follow-up**

Kate Clouse¹, Colleen Hanrahan¹, Jean Bassett², Nandipha Gangule², Lindi Matjeke², Sandra Mokonyane², Ian Sanne³, Annelies Van Rie¹

¹*Department of Epidemiology, University of North Carolina at Chapel Hill, Chapel Hill, NC, United States;*²*Witkoppen Health and Welfare Centre, Johannesburg, South Africa;*³*Right to Care, Johannesburg, South Africa*

- 1045 Assessment of the Potential Cost-Effectiveness of HIV Self-Testing in Resource Limited Settings**

Valentina Cambiano¹, Debbie Ford², Travor Mabugu³, Sue Napierala Mavedzenge⁴, Alec Miners⁵, Owen Mugurungu⁶, Fumiyu Nakagawa⁷, Paul Revill¹, Andrew Phillips¹

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Session P-X2 Poster Session

Tuesday March 4, 2014, 2:30 PM–4:00 PM Exhibit Hall D
HIV Treatment and Care

- 1046 Treatment Outcomes Before and After the Decentralization of ART in an Urban Setting in Mozambique**

Jan Walter¹, Marie-Luce Tombo¹, Celeste Gracia Edwards¹, Johnny Lujan², Annick Antierens², Lucas Mofino¹
¹*Médecins sans Frontières, Maputo, Mozambique;*²*Médecins sans Frontières, Geneva, Switzerland*

- 1047 CD4 Count at ART Initiation and Economic Restoration in Rural Uganda**

Atheendar Venkataramani¹, Harsha Thirumurthy², Jessica Haberer¹, Yap Boum³, Mark Siedner⁴, Annet Kembabazi⁵, Peter Hunt⁶, Jeffrey Martin⁷, David Bangsberg⁸, Alexander Tsai⁹
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- 1048 48-Week Outcomes in Adults Starting ART at CD4>350 Using Streamlined Care in Rural Uganda**

Vivek Jain¹, Dathan M. Byonanebye², Gideon Amanyire³, Douglas Black⁴, James Rooney⁵, Gabriel Chamie¹, Elvin H. Geng⁶, Edwin D. Charlebois⁷, Moses R. Kamya², Diane V. Havlin¹

¹*HIV/AIDS Division, University of California, San Francisco, San Francisco, CA, United States;*²*Makerere University College of Health Sciences, Kampala, Uganda;*³*Gilead Sciences, Inc., Foster City, CA, United States*

- 1049 Second-Line Failure and Protease Inhibitor Resistance in a Clinic in Johannesburg, South Africa**

Rebecca H. Berhanu¹, Denise Evans², Prudence Ive³, David Spencer⁴, Cindy Firnhaber⁵, Ian Sanne⁶, Matthew P. Fox⁷
¹*TB Focal Point, Right to Care, Johannesburg, South Africa;*²*Health Economics and Epidemiology Research Office, University of the Witwatersrand, Johannesburg, South Africa;*³*Clinical HIV Research Unit, University of the Witwatersrand, Johannesburg, South Africa;*⁴*Heleen Joseph Hospital, University of the Witwatersrand, Johannesburg, South Africa;*⁵*Center for Global Health and Development Department of Epidemiology, Boston University, Boston, MA, United States*

- 1050 A 5-Year Comparison of Viral Load and CD4 Cell Count Monitoring for ART Patients in Rural Uganda**

Jonathan Wangisi¹, Paul Ekwaru², Stephen Okoboi¹, James Campbell³, Rachel King⁴, Aggrey Egessa¹, Celestin Bakanda¹, Emmy Muramuzi⁵, Frank Kaharuzza⁶, Sam Malamba⁷, **David M. Moore**⁸
¹*The AIDS Support Organisation, Kampala, Uganda;*²*University of Alberta, Edmonton, AB, Canada;*³*University of Maryland, Baltimore, MD, United States;*⁴*University of California San Francisco, San Francisco, CA, United States;*⁵*Makarere University School of Public*

Health, Kampala, Uganda;⁶Makare University, Kampala, Uganda;⁷BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada;⁸University of British Columbia, Vancouver, BC, Canada

1051 Success of Transfer of HIV Care From a PEPFAR Site To Community-Based Clinics in South Africa

Christie Cloete¹, Susan Regan^{2,3}, Janet Giddy¹, Tessa Govender¹, Melanie R. Gaynes⁴, Kenneth A. Freedberg⁵, Jeffrey N. Katz^{6,7}, Rochelle P. Walensky⁸, Elena Losina⁹, **Ingrid V. Bassett¹⁰**
¹McCord Hospital, Durban, South Africa;²Massachusetts General Hospital, Department of General Medicine, Boston, MA, United States;³Massachusetts General Hospital, Medical Practice Evaluation Center, Boston, MA, United States;⁴Brigham and Women's Hospital, Department of Orthopedic Surgery, Boston, MA, United States;⁵Brigham and Women's Hospital, Division of Rheumatology, Boston, MA, United States;⁶Division of Infectious Diseases, Massachusetts General Hospital, Boston, MA, United States;⁷Boston University School of Public Health, Departments of Biostatistics and Epidemiology, Boston, MA, United States;⁸Division of Infectious Disease, Massachusetts General Hospital, Boston, MA, United States

1052 The Feasibility and Economic Impact of Time Designated Appointment System in a Busy HIV Care Clinic

Zachary A. Kwen¹, Betty Njoroge², Patrick Oyaró³, Craig R. Cohen⁴, Elizabeth A. Bukusi²
¹Center for Microbiology Research, Kenya Medical Research Institute, Kisumu, Kenya;²Center for Microbiology Research, Kenya Medical Research Institute, Nairobi, Kenya;³Ob/Gyn & RS, University of California, San Francisco, San Francisco, CA, United States

1053 Long-Term Virologic Response in a Cohort of HIV-Infected Patients in South Africa

Kate Shearer¹, Alana T. Brennan², Mhairi Maskew¹, Rebecca Berhanu³, Lawrence Long¹, **Matthew Fox^{1,2}**
¹Health Economics and Epidemiology Research Office, Johannesburg, South Africa;²Center for Global Health & Development, Boston, MA, United States;³Right to Care, Johannesburg, South Africa

1054 CD4 Cell Decline and Time To Reaching ART Eligibility in HIV Patients From Rwanda

Chloe A. Teasdale, Allison Zerbe, Veronica Mugisha, Ruben Sahabo, Elaine J. Abrams, Wafaa M. El-Sadr, for Identifying Optimal Models of HIV Care in Africa Study
¹ICAP, Columbia University, New York, NY, United States

1055 Predictors of Late Engagement To HIV Care in Western Kenya: A Cross-Sectional Study

Charles M. Kwohah^{1,2}, Paula Brattstein^{3,4}, Julius Koech², Gilbert Simiyu⁵, Ann W. Mwangi^{2,5}, Kara Wools-Kaloustian^{2,6}, **Abraham Sika^{1,2,3}**
¹Medicine, Moi University Clinical Research Centre, Eldoret, Kenya;²Academic Model Providing Access to Healthcare, Eldoret, Kenya;³Medicine, Moi University College of Health Sciences, School of Medicine, Eldoret, Kenya;⁴University of Toronto, Dalla Lana School of Public Health, Toronto, TN, Canada;⁵Behavioural Sciences, Moi University College of Health Sciences, School of Medicine, Eldoret, Kenya;⁶Medicine, Indiana University School of Medicine, Indianapolis, IN, United States

1056 Cost Savings of Viral-Load Testing Before ART Second-Line Switch in a Resource-Limited Setting

Joanita Kigozi¹, Christine Mugasha¹, Alex Muganzi¹, Alex Coutinho¹, Yukari Manabe²
¹Infectious Disease Institute, Kampala, Uganda;²Johns Hopkins University, Baltimore, MD, United States

1057 Peer Support and Engagement, HIV Care and Sexual Behaviors Among PLHIV Not On ART: A Randomized Trial

Larry W. Chang^{1,2}, Gertrude Nakigizi³, Veena Billioux², David Serwadda⁴, Thomas Quinn⁵, Robert Bollinger^{1,2}, Maria Wawer⁶, Ronald Gray², Steven Reynolds²
¹Johns Hopkins School of Medicine, Baltimore, MD, United States;²Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States;³Rakai Health Sciences Program, Entebbe, Uganda;⁴Laboratory of Immunoregulation, Division of Intramural

Research, National Institute for Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, United States

1058 Community-Based ART Programs in Resource-Limited Settings

Stephen Okonoi¹, Ding Erin², Steven Persaud³, Jonathan Wangisi¹, Darius Kato¹, Chen YaLin², Maureen Nyonyitono², Celestin Bakanda¹, Josephine Birungi¹, David Moore²
¹Research, The AIDS Support Organization, Kampala, Uganda;²Research, British Columbia Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada;³Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada

Session P-X3 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D
The Treatment Cascade and Loss To Follow-Up

1059 Gender Differences in Loss To Follow-up and Mortality in Older Adults On ART in Sub-Saharan Africa

Mansi Agarwal¹, Matthew R. Lamb¹, Veronica Mugisha¹, Davies Kimanga², Bonita Kilama³, Andrea A. Howard⁴, Elaine J. Abrams¹, Wafaa M. El-Sadr¹, Batya Elul¹
¹ICAP-Columbia University, New York, NY, United States;²National AIDS and STI Control Programme, Nairobi, Kenya;³National AIDS Control Programme, Dar es Salaam, Tanzania, United Republic of

1060 Comparative Effectiveness of HIV Care and Treatment Programs in East Africa

Elvin Geng¹, Thomas Odeny², Rita Lyamuya³, Alice Nakiwogga-Muwanga⁴, Mwesiba Bwana⁵, Paula Brattstein⁶, Andrew Kambugu⁴, Elizabeth Bukusi¹, Geoffrey Soti⁷, Lameck Diero⁸, Jeffrey Martin¹⁰
¹Medicine, University of California San Francisco, San Francisco, CA, United States;²KEMRI, Nairobi, Kenya;³Medicine, NACP, Dar es Salaam, Tanzania, United Republic of;⁴IDI, Kampala, Uganda;⁵Medicine, MUST, Mbarara, Uganda;⁶AMPATH, Eldoret, Kenya;⁷Medicine, KEMRI, Nairobi, Kenya;⁸NACP, Dar es Salaam, Tanzania, United Republic of;⁹AMPATH, Eldoret, Kenya;¹⁰University of California San Francisco, San Francisco, CA, United States

1061 Loss To Follow-Up: Determining Outcomes for Adults Enrolled in HIV Services in Kenya

William Reidy¹, Mansi Agarwal¹, Matthew Lamb¹, Mark Hawken¹, Duncan Chege¹, Batya Elul¹, Elaine J. Abrams¹, Elvin Geng¹
¹Mailman School of Public Health, ICAP-Columbia University, New York, NY, United States;²School of Medicine, University of California at San Francisco, San Francisco, CA, United States

1062 Community ART Delivery for High Patient Retention - TASO Uganda Operational Research

Denis Mpiima^{1,2}, Birungi Josephine¹, Luzze Ceaser³, Nanfuka Masitula⁴
¹Medical, The AIDS Support Organisation, Kampala, Uganda;²Medical, International Health Sciences University, Kampala, Uganda;³Programmes and Strategic Information, The AIDS Support Organisation (TASO), Kampala, Uganda;⁴Research, Canadian African Prevention Trials Network, Kampala, Uganda

1063 HIV Care Cascade Among Hard To Reach Populations in India: Need To Expand HIV Counseling and Testing

Shruti H. Mehta¹, Gregory M. Lucas², Suniti Solomon³, Aylur K. Srikrishnan⁴, Allison McFall⁵, P. Nandagopal⁶, Pachamuthu Balakrishnan⁷, Munirathnam S. Kumar⁸, David D. Celentano⁹, Sunil S. Solomon^{2,3}
¹Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States;²Johns Hopkins University School of Medicine, Baltimore, MD, United States;³YR Gaitonde Centre for AIDS Research and Education, Chennai, India

1064 Unplanned Interruptions in HIV Care in Nigeria: Rates and Implications

Aima A. Ahonkhai¹, Bolanle Banigbe², Juliet Adeola¹, Ifeyinwa Onwuatueto², Ingrid V. Bassett³, Elena Losina⁴, Kenneth A. Freedberg¹, Prosper Okonkwo⁵, Susan Regan¹
¹Massachusetts General Hospital, Boston, MA, United States;²AIDS Prevention Initiative Nigeria, Abuja, Nigeria;³Infectious Disease, Massachusetts General Hospital, Boston, MA, United States;⁴Brigham and Women's Hospital, Boston, MA, United States

1065 Using the Side Door: Non-Linear Patterns Within the HIV Treatment Cascade in Zambia

Charles B. Holmes^{1,2}, Angela Bengtson^{1,2}, Izukanji Sikazwe^{1,2}, Carolyn Bolton-Moore^{1,2}, Lloyd B. Mulenga¹, Patrick Musonda^{1,3}, Benjamin H. Chi^{1,2}

¹Centre for Infectious Disease Research in Zambia, Lusaka, Zambia; ²University of North Carolina School of Medicine, Chapel Hill, NC, United States; ³University of East Anglia, East Anglia, United Kingdom

1066 Effectiveness of Potential Improvements in the Cascade of HIV Treatment and Care in South Africa

Valentina Cambiano¹, Silvia Bertagnolio², Michael Jordan², Jens Lundgren³, Alec Miners⁴, Deenan Pillay¹, Paul Revill⁵, Francois Venter⁶, Andrew Phillips¹

¹UCL, London, United Kingdom; ²WHO, Geneva, Switzerland; ³University of Copenhagen, Copenhagen, Denmark; ⁴London School of Hygiene and Tropical Medicine, London, United Kingdom; ⁵University of York, York, United Kingdom; ⁶University of the Witwatersrand, Johannesburg, South Africa

Session P-X4 Poster Session

Wednesday March 5, 2014, 2:30 PM–4:00 PM Exhibit Hall D

Mental Health in HIV Care

1067 Trends in Depression Among Patients Presenting for ART in Rural Uganda

Brian T. Chan^{1,2}, Sheri D. Weiser^{3,4}, Yap Boum⁵, Jessica Haberer^{2,6}, Annet Kembabazi⁷, Peter W. Hunt⁴, Jeffrey N. Martin⁸, David R. Bangsberg^{2,6}, Alexander C. Tsai^{2,6}

¹Infectious Diseases, Massachusetts General Hospital, Boston, MA, United States; ²Harvard Medical School, Boston, MA, United States; ³Center for AIDS Prevention Studies, University of California San Francisco, San Francisco, CA, United States; ⁴Division of HIV/AIDS, University of California San Francisco, San Francisco General Hospital, San Francisco, CA, United States; ⁵Epicentre, Mbarara, Uganda; ⁶Center for Global Health, Massachusetts General Hospital, Boston, MA, United States; ⁷Mbarara University of Science and Technology, Mbarara, Uganda; ⁸Epidemiology and Biostatistics, University of California San Francisco, San Francisco, CA, United States

1068 Mental Health and Mortality in an HIV Treatment Cohort in Rural Uganda

Alexander C. Tsai¹, Brian T. Chan¹, Yap Boum², Jessica E. Haberer¹, Annet Kembabazi³, Peter W. Hunt⁴, Jeffrey N. Martin⁴, David R. Bangsberg¹

¹Massachusetts General Hospital, Boston, MA, United States; ²Medicins San Frontieres, Mbarara, Uganda; ³Mbarara University of Science and Technology, Mbarara, Uganda; ⁴University of California San Francisco, San Francisco, CA, United States

Conference Schedule Overview

	Monday, March 3, 2014	Tuesday, March 4, 2014	Wednesday, March 5, 2014	Thursday, March 6, 2014
8:30 AM		Plenary: HPV Vaccines: Progress to Date and Future Worldwide Directions Auditorium	Plenary: B-Cell Responses to HIV Infection: Challenges and Opportunities Auditorium	Plenary: HIV-1 Infection and Type-1 Interferon Auditorium
9:00 AM	Program Committee Workshop for New Investigators and Trainees Ballroom B/C	Plenary: HIV in People Who Use Drugs Auditorium	Plenary: NeuroHIV in 2014: Beyond Dementia Auditorium	Plenary: PEPFAR/Global Fund at 10 Years: Past, Present and Future Auditorium
9:30 AM				
10:00 AM		ORAL ABSTRACT CONCURRENT SESSIONS Hepatitis Ballroom B/C NeuroHIV: Developments in Treatment and Pathogenesis RM 304 Prevention and Epidemiology: Evolving Trends Ballroom A Host Factors and HIV/SIV Replication RM 312	ORAL ABSTRACT CONCURRENT SESSIONS Critical Issues in MTCT: Maternal Health and HIV Treatment in Children RM 304 HIV/SIV Pathogenesis RM 312 Randomized Controlled Trials and Antiretroviral Resistance Ballroom B/C TB and Other Coinfections Ballroom A	ORAL ABSTRACT CONCURRENT SESSIONS Interferon and Antibody at the Interface of Innate and Adaptive Immunity to HIV RM 312 CV and Other Complications Ballroom B/C Persistence Ballroom A Antiretroviral Scale-Up in Sub-Saharan Africa: Challenges and Opportunities RM 304
12:15 PM		LUNCH	LUNCH	LUNCH
1:15 PM				
1:30 PM	Martin Delaney Panel: Hepatitis C Virus: From Trials and Tribulations to Triumph Ballroom B/C	THEMED DISCUSSION CONCURRENT SESSIONS Acute HCV Infection RM 309 Restriction Factors Ballroom A Heart Failure, Cardiac Steatosis, and HIV RM 304 Response to Early ART Initiation in Infants RM 312 Treatment Cascade and Loss to Follow-Up RM 311	THEMED DISCUSSION CONCURRENT SESSIONS Frailty and Functional Impairment RM 309 Clinical Pharmacology in Patient Care Ballroom A How Transmission Networks Drive Epidemics RM 304 Gut and Immune Activation RM 312 Reproductive Hormones in Women: Impact on Risk and Barrier Dysfunction RM 311 Real-World Experiences with Hepatitis C Ballroom B/C	THEMED DISCUSSION CONCURRENT SESSIONS Kaposi Sarcoma RM 309 Pulmonary Complications of HIV Infection Ballroom A Incidence Assays RM 304 What We Learn From Bone Marrow Transplants RM 312 CNS Viral Escape and Neuroinflammation on ART RM 311
2:30 PM	CONCURRENT WORKSHOPS Clinical Trial Design and Analysis Ballroom B/C Frontiers in Laboratory Science Workshop Ballroom A Workshop for Clinicians Who Are New to Hepatitis C Management: A Case-Based Interactive Session RM 304	POSTER SESSIONS	POSTER SESSIONS	POSTER SESSIONS
4:00 PM		CONCURRENT SYMPOSIA Toward a Cure: A Challenging Game of Hide and Seek Ballroom B/C HCV and Beyond Ballroom A PrEP: Use It or Lose It RM 304	CONCURRENT SYMPOSIA TB: Looking to the Future: Resistance, Persistence, Monitoring, and Control Ballroom B/C Visualizing the Virus Ballroom A Know Your Epidemic: From Data to Action RM 304	CONCURRENT SYMPOSIA Interferon: Whatever Turns You On RM 304 The Road to Elimination: Preventing and Treating HIV Infection in Infants RM 311 Intimate Infections: What's Love Got to Do With It? RM 312
4:30 PM			ORAL ABSTRACT SESSION Malignancies and Pharmacology RM 312	
5:00 PM	Opening Session Bernard Fields Lecture: Making and Breaking Barriers to Cross-Species HIV-1 Transmission Auditorium N'Galy-Mann Lecture: Application of Scientific Knowledge and Evidence to Limit the Progression of HIV/AIDS and Fight Other Endemic Diseases in West Africa Auditorium Close			
7:00 PM	Welcome Reception			

