

## BIOMEDICAL PREVENTION, FINANCING AND EXPERIENCES IN KZN FOCUS OF TUESDAY PLENARY

Tuesday's plenary session addresses long-term financing and current research on biomedical prevention, with two additional presentations focusing on experiences in the KwaZulu-Natal (KZN) province, the epicenter South Africa's HIV epidemic.

Of the 28 completed biomedical prevention trials, only four, including three trials of male circumcision, have reported significant efficacy. In his plenary presentation, Dr. Ronald Gray will use meta-analyses to summarize the results of trials of STD control, microbicides, pre-exposure prophylaxis (PrEP), HIV vaccines and male circumcision. Dr. Gray will examine issues related to research hypotheses, trial design and candidate screening, discussing lessons learned. Dr. Gray is Robertson Professor of Reproductive Epidemiology in the Department of Population, Family and Reproductive Health at the Johns Hopkins Bloomberg School of Public Health.

According to Dr. Gray, one of the conclusions to be drawn from research to date is that phase III prevention trials are difficult, expensive and time-consuming. Ultimately, researchers will need to more carefully screen candidate interventions prior to trials, and Dr. Gray will also note the possible argument for conducting fewer trials, but with a greater investment in rigor and quality.

Dr. Bruce Walker will analyze the roles of CD4 and CD8 T-cell responses in controlling HIV infection. Drawing from data collected in his collaboration with South African researchers at a site in KZN, Dr. Walker will focus on T-cell-driver immune responses in people infected with HIV-1 subtype C virus, the most common subtype. This ongoing work involves people of Zulu/Xhosa ethnicity who are chronically infected with subtype C virus.

Dr. Walker will explore several facets of how T lymphocytes fall short in fighting off HIV, including how genetics of the infected person affect HIV control, how mutations in cytotoxic (cell-killing) T lymphocytes can impair HIV's ability to replicate, and why specific genes in the human leukocyte antigen (HLA) system affect viral control differently in people infected with different HIV-1 subtypes. Dr. Walker, Professor of Medicine at Harvard Medical School and Director of the Ragon Institute of MGH, MIT and Harvard, will also review studies of mother-to-child HIV transmission and population studies from different continents that show how HIV-1 adapts to HLA-impelled pressure on T cells.

Dr. Sefano Bertozzi's presentation on *Financing the Long-Term Response to HIV* comes amid growing concerns about the impact of the global recession on funding for HIV programmes.

**Continued overleaf >>>**

## Tuesday Highlights

### HIV/TB Research: Where Do We Stand and What Are the Priorities?

18:30, Session Room 2

This satellite meeting will provide information on the current state-of-the-art for HIV/TB research priorities and will include a report on key outcomes from the pre-conference meeting entitled, *Catalysing HIV/TB Research: Innovation, Funding and Networking*.

### Accelerating the Impact of HIV Programming on Health Systems Strengthening

18:30, Session Room 4

At this satellite, organizers of the 18 July pre-conference meeting on the same topic will present highlights from the earlier meeting, including a review of recent research and case studies, offering delegates a chance to engage in discussion of this timely topic.

### New Strategies and Controversy in HIV Testing and Surveillance

14:30, Session Room 2

There is an increased recognition that widespread HIV testing will be necessary to reach the goal of universal access. This symposium will discuss the scientific, logistical and ethical issues that arise in the implementation of new methods.

## New Special Session to Address Drug Stock Outs

Last week, Médecins Sans Frontières (MSF) reported on disruptions in supplies of antiretroviral drugs in six African countries: Democratic Republic of Congo, Guinea, Malawi, South Africa, Uganda and Zimbabwe. In response, a new Special Session, *Sustainability of ART Programmes in Sub-Saharan Africa*, will take place at 13:00 today in Session Room 3. Presentations include:

- MSF stock-out reports  
Presented by Eric Goemaere, South Africa
- ART as preventive TB intervention  
Presented by Robin Wood, South Africa
- Community perspective of the ART shortages  
Presented by Vuyiseka Dubula, South Africa
- The perils of interrupted therapy  
Presented by Wafaa El-Sadr, United States

## IAS TB/HIV Research Prize

**Dr. Clare van Halsema, United Kingdom**, will receive the IAS TB/HIV Research Prize for her abstract, *Good tuberculosis treatment outcomes and no evidence of increased drug resistance in individuals previously exposed to isoniazid preventive therapy in a population with high HIV prevalence*.

The award is an incentive for young and established researchers to investigate pertinent research questions that affect TB/HIV co-infection and operational effectiveness of core TB/HIV collaborative services. The winning abstract was selected through a rigorous process of blind submission and peer-review, and further reviewed by a steering committee of TB and HIV experts.

The award will be presented before today's opening plenary at 8:35 in Session Room 1.

## Rapporteur Reports

Rapporteurs are reporting on major findings and discussions from all conference sessions and some posters. Report summaries will be available through the online Programme-at-a-Glance each evening, and final rapporteur presentations will precede the closing session. Daily and final summaries will be prepared by community experts, as well as by rapporteurs in each of the four scientific programme tracks.

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According to Dr. Bertozzi, the threats to HIV/AIDS funding from the financial crisis will place a greater emphasis on getting value from investments, and require a shift in thinking from a short-term, emergency response to a more efficient, long-term approach.

Dr. Bertozzi is Executive Director of the Center for Evaluation Research and Surveys at Mexico's National Institute of Public Health (INSP). He will point to several tactics to improve efficiency, including strategic selection and improved targeting of HIV interventions, and better management and strategic integration of those interventions into other services. He will also call for more balance between investing for long-term benefit and funding activities to achieve short-term results, pointing to the important role of evaluation.

Dr. Prashini Moodley, Chief Specialist and Head of the Department of Infection Prevention and Control at the Nelson R. Mandela School of Medicine, University of KwaZulu-Natal, will provide an overview of the emergence and spread of XDR-TB in KZN, explaining the interconnections between the local TB and HIV epidemics. Dr. Moodley will review mathematical modeling based on the situation in Tegula Ferry, site of a major XDR-TB outbreak. The model reveals the roles of both nosocomial spread and the increasing numbers of immune-compromised patients in the community as factors in the spread of TB, including XDR-TB. These findings, according to Dr. Moodley, indicate the need for a multi-pronged approach to TB control that includes active case finding through rapid diagnostic methods, appropriate and early treatment for all patients with TB, timely initiation of antiretroviral treatment for all HIV-infected individuals and appropriate hospital infection control.

A webcast of Monday's plenary will be available on the conference website later in the day.

## Programme Updates/Changes

### Programme Changes

Session: **TUPDB1** – Infectious Complications of HIV – 13:00-14:30

A 30-minute round table discussion entitled *Are you prepared to face swine flu in your HIV patients?* has been added to this session which will now end at 14:30.

Panellists include David Cooper, Australia; Curtis Cooper, Canada; Ian Sanne, South Africa; Jake Dunning, UK. The discussion is co-chaired by Sharon Walmsley, Canada, and Anton Pozniak, UK.

Session: **TUAA1** – Induction and Maintenance of Viral Latency – 16:30-18:00

Abstract TUAA101 will be presented by F. Kashanchi, United States

### Abstract Plus

Abstract Plus is a feature that enables abstract presenters to provide delegates and the public with additional information regarding their presentations or posters. Presenters may add unlimited free text, as well as supporting documents, links to project websites, graphs and photos. These additional documents are displayed below the abstracts on the Programme-at-a-Glance.

## U.S. Leaders Address HIV Policies Under Obama

In a special session on Monday, U.S. Ambassador at Large and Global AIDS Coordinator Eric Goosby and National Institute of Allergy and Infectious Diseases Director Anthony Fauci addressed U.S. global HIV policy, research and implementation under the Obama Administration. Addressing the current debate over when to initiate antiretroviral therapy, Dr. Goosby noted that the science clearly shows starting treatment at CD4 cell counts of 350 is better than starting at counts of 200. He assured delegates that this science will inform discussion of whether the World Health Organization's HIV treatment guidelines should be revised, but also noted that fiscal realities of what countries can afford will be a consideration. Dr. Fauci also noted the benefits and cost-effectiveness of earlier care and treatment, showing that the annual cost of caring for someone who starts treatment late in the course of disease (with a CD4 cell count of less than 50) is twice as high as the cost of care for someone who began treatment earlier. A webcast of the special session is available online.

## Visit *Infected and Affected* Photo Exhibit

*Infected and Affected: Portraits of a Community Combating Stigma* by photographer Joan L. Brown is on display outside Session Room 2. Brown photographed nearly 600 people who attended the XVII International AIDS Conference in Mexico City. Her subjects were both HIV positive and HIV negative and convey individual and collective emotions in response to HIV/AIDS stigma. Brown is also photographing individuals at IAS 2009. Those interested in being photographed should visit the exhibition. The project is supported by POZ magazine and endorsed by the International AIDS Society.