

Monday Plenary Examines Key Avenues of Future Enquiry

Bringing together a diverse array of expertise, Monday's plenary session will provide insights into both current and future HIV prevention research, and examine two fields of study aimed at developing potential avenues of treatment.

Dr. Reuben Granich, Medical Officer for HIV/TB in the HIV/AIDS Department of the World Health Organization (WHO), will examine the significant promise of the use of highly active antiretroviral therapy (HAART) as part of a combined approach to HIV prevention that includes behavioral, structural and biomedical prevention interventions. Placing HAART for prevention in the context of the limitations of behavioral interventions and disappointing results to date of biomedical interventions, Dr. Granich will outline the context and basic assumptions regarding this emerging strategy, including when to start HAART for maximal clinical and prevention benefit.

Dr. Granich will also provide a review of a recently published model developed by WHO that examines the impact of universal HIV testing and immediate HAART, reiterating the voluntary aspect of the model. He will also highlight the essential roles of human rights, dignity and community engagement, and will discuss the outstanding biological, feasibility, impact and cost issues related to HAART for prevention research.

Dr. Amalio Telenti will discuss the relatively new field of HIV and host genetics, examining the role of host genetics in susceptibility to HIV-1 disease, plasma drug levels and treatment toxicity. Dr. Telenti, Professor of Medical Virology and Director of the Institute of Microbiology at the University Hospital Center of the University of Lausanne, Switzerland, will note that despite some false starts, there is now solid data in this arena, including a thorough understanding of the role of common human genetic variation in HIV disease progression and drug toxicity. Dr. Telenti will conclude by outlining the need for greater knowledge about the role of rare human genetic variation on susceptibility to infection and disease, and the translation of knowledge about host genetics into clinical tools.

Moving to prevention strategies with long-established effectiveness, Dr. Louise Kuhn will call for a mobilization of political will to implement the latest knowledge on prevention of mother-to-child transmission (PMTCT). Dr. Kuhn will present data on breakthroughs in PMTCT strategies during breastfeeding, highlighting three strategies with demonstrated efficacy: lactation support and counseling; continuation of maternal highly active antiretroviral therapy after delivery; and extended infant prophylaxis with nevirapine. According to Dr. Kuhn, the urgency of implementing these interventions is underscored by accumulating data on negative impacts of avoiding or shortening the duration of breastfeeding.

Dr. Kuhn will also note that despite the substantial progress implementing programmes using short antiretroviral regimens for PMTCT in sub-Saharan Africa, significant improvements in coverage and coordination between treatment and prevention programmes are needed for broader implementation. Dr. Kuhn is Associate Professor of Epidemiology in the Gertrude H. Sergievsky Center, College of Physicians and Surgeons at Columbia University and the Mailman School of Public Health.

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HIV/AIDS in South Africa

South Africa has the largest number of people living with HIV in the world. An estimated 5.7 million people from a total population of about 46 million are HIV positive. Approximately 1,000 AIDS-related deaths occur in South Africa every day.

The HIV prevalence rate in South Africa's adult population is 18.1%, which means that one in every five adult South Africans is living with HIV. Neighbouring Swaziland's HIV prevalence rate of 26.1% is the highest in the world.

This epidemic affects all parts of the South African population, though women are more likely to be infected. A national household prevalence study by the Human Sciences Research Council in 2008 indicated that the country's HIV epidemic has leveled off, with a decline in new infections among teenagers aged 15-19.

Providing access to antiretroviral treatment (ART) is one of the country's biggest challenges. The HIV/AIDS National Strategic Plan set targets to treat 80% of people who need ART by 2011, to give 95% of women access to prevention-of-mother-to-child transmission services by 2011, and to reduce new infections by 50% by 2011.

According to the Treatment Action Campaign, which advocates for equitable access to affordable treatment for people living with HIV/AIDS, an estimated 600,000 patients had access to life-saving ART by mid-2008.

The response to HIV in South Africa takes on a variety of activities, with funding often being channelled through private sector organizations that provide support at national, regional and provincial levels. The U.S. President's Emergency Plan for AIDS Relief, for example, provided grants totaling \$856.8 million to support prevention and treatment programmes in South Africa between 2003 and 2007.

The biennial South African AIDS Conference convened by Dira Sengwe (local partner of IAS 2009) offers a forum where new findings and efforts to mitigate the effect of HIV/AIDS on the continent are presented and discussed.

Introducing Dira Sengwe

Dira Sengwe, local partner for IAS 2009, is a not-for-profit organization that is based in Pretoria, South Africa. It was established by a group of South African scientists and activists who helped to organize the XIII International AIDS Conference in Durban in 2000 under the Chairmanship of Dr. Hoosen (Jerry) Coovadia, who is also Local Co-Chair of IAS 2009.

Since 2003, Dira Sengwe (which means 'Take Action' in Tswana) has been organizing the biennial South African AIDS Conference in collaboration with the Foundation for Professional Development (FPD), a private higher educational institution in South Africa that serves as the conference secretariat.

FPD is headed up by Dr. Gustaaf Wolvaardt, who was the Chair of the AIDS 2000 Conference Organizing Committee. The SA AIDS Conference has become one of the largest national AIDS conferences in the world, attracting participants from 53 countries.

Monday Highlights

When to Start?

11:00, Session Room 1 

Until recently, the thresholds for starting HIV therapy in asymptomatic patients were set at 350 and 200 CD4 cells for resource-rich and -poor countries, respectively. As international guidelines evolve, this symposium will critically evaluate current data on when to start, enabling participants to better understand this complex and disputed issue.

SPECIAL SESSION: Global HIV Research, Policy and Programme Implementation under the New U.S. Administration

13:00, Session Room 1 

This session will examine the implications of the Obama administration, and will include presentations by NIAID Director Anthony Fauci and newly confirmed Ambassador at Large and Global AIDS Coordinator Eric Goosby. Global Fund Executive Director Michel Kazatchkine chairs the session.

Antiretroviral Therapy for Prevention: The Time Has Come?

14:30, Session Room 3 

This session will provide a comprehensive view of the evolving use of ART to prevent the transmission of HIV-1, including a discussion of preliminary results from an ongoing clinical trial (HPTN052) designed to determine the degree of benefit and durability of ART-based prevention.

Symposium: Future Directions in Biomedical Prevention Research


14:30, Session Room 2

Come hear an overview of research in three potentially 'game-changing' areas of biomedical prevention: microbicides, vaccines and pre-exposure prophylaxis. Ground breaking information on the earliest stages of HIV infection and the implications of these new data for vaccine discovery will be discussed.

From page 1 >>>

Presenting on *Inflammation and HIV: A New Paradigm*, Dr. Wafaa El-Sadr will highlight the unappreciated role of inflammation as an important cause of morbidity and mortality in people living with HIV. Inflammation has been noted to cause organ damage in people living with HIV, and biomarkers, particularly inflammatory markers, are associated with HIV disease progression, cardiac disease and mortality. Dr. El-Sadr will review the particular prominence that non-AIDS complications, including non-AIDS cancers and cardiac, renal, liver complications, have gained as a cause of morbidity and mortality as effective antiretroviral therapy has dramatically decreased HIV-related morbidity and mortality.

Noting that the optimization of antiretroviral therapy is not sufficient to achieve survival for those living with HIV similar to that of those without HIV, Dr. El-Sadr will discuss the need for innovative interventions to control the HIV-associated inflammatory response. Dr. El Sadr is Director of the International Center for AIDS Care and Treatment Programs (ICAP) at the Columbia University Mailman School of Public Health, as well as Chief of the Division of Infectious Diseases at Harlem Hospital Center in New York City.

Monday's plenary session begins at 8:40 in Session Room 1. 

Announcements

Programme Changes

Monday, 20 July

Session: **MOSS1** – 13:00-14:00

Speaker confirmed: **MOSS102** Eric Goosby, United States.

Title: PEPFAR HIV Programme Implementation

Session: **MOPDD1** – 13:00-14:00

Abstract **MOPDD106** will be presented by Sylvia Ojoo, Kenya.

Lost Badges

Your conference name badge must be worn at all times and is not transferable. If you lose, misplace or forget your name badge, please inform the registration staff immediately. New name badges are available at the registration desks with a handling fee of EUR 45. The old name badge will then become invalid.

IAS Goes Green

The conference secretariat is taking a number of steps to reduce the conference's environmental impact, including recycling conference waste, using local suppliers with good social responsibility policies, offsetting carbon emissions, donating surplus food and delegate bags, reducing the number of printed publications, and printing on recycled/Forest Stewardship Council-certified paper.

IAS/ANRS Young Investigator Award Winners Announced

The 2009 IAS/ANRS Young Investigator award winners are **Renato Aguiar**, for his research conducted in Brazil/USA (Track A: Basic Sciences); **Max O'Donnell**, for his research conducted in South Africa (Track B: Clinical Sciences); **Ashraf Fawzy**, for his research conducted in Zambia (Track C: Biomedical Prevention); and **Ingrid Bassett**, for her research also conducted in South Africa (Track D: Operations Research). Congratulations to all the winners!

This US\$2,000 award is jointly funded by the IAS and the *Agence Nationale de Recherches sur le SIDA* (ANRS) to recognize young researchers who demonstrate innovation, originality, rationale and quality in the field of HIV/AIDS research. The winning authors – one from each conference track – must be under 35 years of age.

Tuesday Early Bird Highlight

SPECIAL SESSION: What Have We Learned from the DART Trial?

07:00, Session Room 1

Abstract presentations and expert discussion of trial results from the Development of AntiRetroviral Therapy in Africa (DART) study, a six-year clinical trial of anti-HIV therapy in individuals with advanced HIV disease or AIDS in Uganda and Zimbabwe.