



**RECAP**  
**HIV-TB Coinfection: New Vision, New  
Direction**

July 25, 2006  
Rio de Janeiro, Brazil

Veronica Miller, PhD  
Director, FCHR  
July 23, 2007  
Sydney, Australia

**Forum for Collaborative  
HIV Research**

**School of Public Health &  
Health Services**  
**The George Washington  
University**



## HIV-TB Coinfection: Meeting the Challenge

A roundtable discussion organized by the \*Forum for Collaborative HIV Research and the TB/HIV Working Group of the Stop TB Partnership

in collaboration with

\*Agence Nationale de Recherches sur le Sida (ANRS)

\*Bill and Melinda Gates Foundation,

\*Consortium to Respond Effectively to the AIDS/TB Epidemic (CREATE),

The European and Developing Countries Clinical Trials Partnership Programme EDCTP)

\*International AIDS Society,  
National Institutes of Health

\*Tibotec

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*\*Provided financial support for this program*

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# Symposium Planning Committee



- **Dick Chaisson**; Johns Hopkins University and CREATE
- **Jean-Francois Delfraissy**; ANRS
- **Mamadou Diallo**; International AIDS Society
- **Lois Eldred**; Johns Hopkins University and CREATE
- **Haileyesus Getahun**; WHO Stop TB Partnership
- **Mark Harrington**; Treatment Action Group
- **Diane Havlir**; UCSF and HIV-TB Working Group
- **Barbara Laughon**; Division of AIDS/NIH
- **Karen Manson**; Tibotec
- **Charles Mgone**; EDCTP
- **Veronica Miller**; Forum for Collaborative HIV Research
- **Renee Ridzon**; Bill & Melinda Gates Foundation

# Special thanks



- Meagan Lyon
- Ben Cheng
- Nyasha Bakare
- Mamadou Diallo

# 2005 --: Series of meetings highlighting need for research on HIV-TB Coinfection



- WHO TB/HIV Research Priorities, February 14-15, 2005:  
[http://www.who.int/tb/events/tbhiv\\_meetings/en/index.html](http://www.who.int/tb/events/tbhiv_meetings/en/index.html)
- June 2005; Boston MA
  - CFAR (University of Pennsylvania and Harvard University)
  - <http://www.hms.harvard.edu/aids/index.htm>
- July 2005; Rio de Janeiro 3<sup>rd</sup> IAS Conference on HIV Pathogenesis, Treatment & Prevention Symposium
  - Symposium (Forum & Partners)
  - Research Discussion Roundtable  
<http://www.hivforum.org/projects/HIVTB.htm>
- July 2006; Toronto, Ontario XVI International AIDS Conference
- HIV and TB in the context of universal access: What is working and what is not? WHO Stop TB Partnership  
[http://whqlibdoc.who.int/hq/2007/WHO\\_HTM\\_TB\\_2007.382\\_eng.pdf](http://whqlibdoc.who.int/hq/2007/WHO_HTM_TB_2007.382_eng.pdf)
- WHO HIV-TB Working Group sponsored meeting with key HIV researchers during CROI 2007



## TUBERCULOSIS AND HIV COINFECTION

### Current State of Knowledge and Research Priorities

INTRODUCTION **SUPPLEMENT ARTICLE**

- S1 **Introduction: Tuberculosis and HIV Coinfection: Current State of Knowledge and Research Priorities**  
Gerald Friedland, Gavin J. Churchyard, and Edward Nardell
- S4 **Tuberculosis and HIV Coinfection: Genesis of the Supplement and Sponsors' Contribution**  
James A. Hoxie, Veronica Miller, and Bruce Walker
- S5 **Tuberculosis and HIV Infection: The Global Setting**  
Paul Nunn, Alisdair Field, and Kevin M. De Cock
- S15 **Facing the Crisis: Improving the Diagnosis of Tuberculosis in the HIV Era**  
Mark D. Perkins and Jane Cunningham
- S28 **New Tuberculosis Therapeutics: A Growing Pipeline**  
MeMn K. Spiegelman
- S35 **Treatment Options for HIV-Associated Tuberculosis**  
Philip Chukwuka Onyebujoh, Isabela Ribeiro, and Christopher Curtis Whalen
- S46 **Treatment Strategies for HIV-Infected Patients with Tuberculosis: Ongoing and Planned Clinical Trials**  
François-Xavier Blanc, Diane V. Havlik, Philip C. Onyebujoh, Sok Thim, Anne E. Goldfeld, and Jean-François Delfrayssy
- S52 **Tuberculosis Preventive Therapy in the Era of HIV Infection: Overview and Research Priorities**  
Gavin J. Churchyard, Fabio Scano, Allison D. Grant, and Richard E. Chaisson
- S63 **Complications of Antiretroviral Therapy in Patients with Tuberculosis: Drug Interactions, Toxicity, and Immune Reconstitution Inflammatory Syndrome**  
Helen Milleron, Graeme McIntjes, William J. Buman, and Gary Maertens
- S76 **Diagnostic and Management Challenges for Childhood Tuberculosis in the Era of B. J. Marais, S. M. Graham, M. F. Cotton, and N. Beyers**
- S86 **HIV Infection and Multidrug-Resistant Tuberculosis—The Perfect Storm**  
Charles D. Wells, J. Peter Cegielski, Lisa J. Nelson, Kayla F. Laserson, Timothy H. Holtz, Alyssa Finlay, Kenneth G. Castro, and Karin Weyer
- S108 **Tuberculosis Infection Control in Resource-Limited Settings in the Era of Expanding HIV Care and Treatment**  
Naomi N. Bock, Paul A. Jensen, Bess Miller, and Edward Nardell
- S114 **Implementation Issues in Tuberculosis/HIV Program Collaboration and Integration: 3 Case Studies**  
Gerald Friedland, Anthony Harries, and David Coetzee
- S124 **Tuberculosis and HIV Infection: Partners in Human Tragedy**  
John G. Bartlett

## Tuberculosis and HIV Coinfection: Current State of Knowledge and Research Priorities

Gerald Friedland,<sup>1</sup> Gavin J. Churchyard,<sup>1,5,6</sup> and Edward Nardell<sup>2,3</sup>

<sup>1</sup>AIDS Program, Section of Infectious Diseases, Departments of Internal Medicine and Epidemiology and Public Health, Yale University School of Medicine, New Haven, Connecticut; <sup>2</sup>Division of Social Medicine and Health Inequalities, Brigham and Women's Hospital, Harvard Medical School, and <sup>3</sup>Partners In Health, Boston, Massachusetts; <sup>4</sup>Aurum Institute for Health Research, Marshalltown, and <sup>5</sup>Centre for AIDS Programme of Research in South Africa (CAPRISA), University of KwaZulu Natal, Durban, South Africa; <sup>6</sup>London School of Hygiene and Tropical Medicine, London, United Kingdom

**SUPPLEMENT ARTICLE** FORWARD

## Tuberculosis and HIV Coinfection: Genesis of the Supplement and Sponsors' Contribution

James A. Hoxie,<sup>1,2</sup> Veronica Miller,<sup>1</sup> and Bruce Walker<sup>4,5</sup>

<sup>1</sup>Department of Medicine and <sup>2</sup>Penn Center for AIDS Research, University of Pennsylvania, Philadelphia; <sup>3</sup>Forum for Collaborative HIV Research, George Washington University, Washington, DC; <sup>4</sup>Department of Medicine, Harvard University, and <sup>5</sup>Harvard Center for AIDS Research, Cambridge, Massachusetts

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## Brief re-cap of Rio de Janeiro Discussion



- Research priorities were outlined during symposium session
- Roundtable discussion focused on pediatric HIV-TB and family program approaches
- Coordination & networking: perspective from programs on the ground
- Coordination & networking: perspective from sponsors, funders & agencies

# Confronting the problem through an integrated research agenda



- Provide a platform for maximizing the research efforts through synergy, integration and collaboration
- Can we put together a global road map including all disciplines and constituencies?
  - TB and HIV “communities”, basic science, clinical science, trials and open access programs, health economists, policy makers, regulatory agencies, etc etc
- Best use of what we have today; better tools for tomorrow
- Let’s get started!
  - Toronto 2006?



## Some discussion highlights



### ***HIV IS A FAMILY DISEASE*** ***TB is a Family Disease***

Almost inevitably, when you identify an individual with HIV or TB you will find that other members of his or her family and/or household also have HIV or TB

# Opportunities and Challenges

## Families

- Case finding for HIV
- TB case finding
- TB in children
- INH preventive therapy (children and HIV - infected individuals)

# Research Opportunities

- TB incidence and prevalence in cohorts and among household members with introduction of ARV/HIV care
- Potential additive benefit/tolerability of INH preventive therapy to ART
- Prevention of TB in households
- Early diagnosis of TB in HIV -infected patients
- Tolerability of HIV/TB medications in women and pregnant women
- Pharmacokinetics of HIV/TB medications in pregnant women and children
- Evaluation of adherence interventions
- others

# Discussion highlights



- INH preventive therapy
  - Somehow the message is not getting out
  - IPT not implemented due to fear of development of drug resistance
  - Concern not founded in science: extensive available data indicates that this concern is unfounded
  - Why is this message not getting out?

# Discussion highlights



- “Integration” is a problematic word
  - Clear understanding of the separate mission and goals of TB and HIV programs
  - In some cases, integration works well
  - In other cases, it’s more a matter of collaboration
- Need to look at different models in different settings
- Better use of program (e.g. GFATM) to support research: availabilities are not being taken advantage of



## This evening....

- You are all here because of your expertise & interest
- Everyone participates in the discussion
- Forum rules:
  - Open, honest, dialogue
  - Differences of opinion are welcome
  - Many constituencies represented: leave your “hat” at the door, bring your experience and critical thinking to the discussion
  - Moderated discussion
    - Identified individuals to get discussion started
    - Discussion not limited to those listed on the agenda



Please speak into the microphone: we need the recording to generate a report of this meeting