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Our front-page story covers the publication of a study looking into the links between genital tract inflammation and HIV progression.

There is coverage on page 2 on CAPRISA's presence at CROI and the N'Galy-Mann Award Lecture.

On page 3, we report on the "Sugar Daddy" public awareness programme in KwaZulu Natal.



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## Genital tract inflammation linked to disease progression

**T**he significant results of a recent study has shown that elevated genital cytokine concentrations after HIV-1 infection were associated with more rapid disease progression. Genital inflammation during early infection did not differ relative to pre-infection, but was increased in women who had vaginal discharge, detectable HIV-1 RNA in their genital tracts, and lower blood CD4 counts. The study concluded that strategies aimed at reducing genital inflammation during early HIV-1 infection may slow disease progression.

Other findings showed that genital inflammation in women recently infected with HIV-1 were not significantly increased when compared with pre-infection.

It was also found that inflammation was associated with women who tested positive for more than one STI or had symptoms of STIs.

The results also showed a link between genital tract inflammation and HIV-1 shedding in the study participants.

Against the background of the heavy burden of HIV infection in young women, the study — the first of its type conducted — compared cytokine concentrations in cervi-



covaginal samples from the same women at pre-infection and during early HIV-1 infection.

The methods used in the study involved the measurement of inflammatory cytokine concentrations in cervicovaginal lavage from 49 women at various stages between 6 and 55 weeks after HIV-1 infection and from 22 women before infection.

*JID*, 15 January 2012, Vol 205, No 2



## Salim & Quarraisha Abdool Karim received the N'Galy-Mann Award at CROI 2012

Professors Quarraisha and Salim Abdool Karim collected the prestigious N'Galy-Mann Award at the 19th Conference on Retroviruses and Opportunistic Infections (CROI) on Monday 5 March 2012 in Seattle, Washington, USA.

Focusing on the important partnerships and collaborations in creating excellence in developing scientific innovations for HIV prevention and treatment, the Abdool Karims delivered the plenary lecture in the opening session of the conference.

CROI included 4000 scientists and clinical investigators from around the world

In paying tribute to its partners, Professor Quarraisha Abdool



*Professors Quarraisha and Salim Abdool Karim deliver the N'Galy-Mann Award Lecture at CROI 2012*

Karim said: "Our research on the tenofovir gel microbicide was made possible by the joint funding of the South African and US governments. The South African partnerships with US government agencies (USAID and NIH), US non-profit organisations (FHI36 and CONRAD), US pharmaceutical company (Gilead Sciences)

and US philanthropy (MAC AIDS Fund) are central to the success of the gel research."

The N'Galy-Mann Award was established in 2006 to recognise an individual or team of researchers for their contribution to epidemiology and clinical research.

### CAPRISA PAPERS PRESENTED AT CROI

#### No major increase in tenofovir resistance detected

The results of a study to assess tenofovir resistance, found that resistance-mutant frequencies were not significantly increased in women who were receiving tenofovir gel.

Using deep sequencing the authors examined HIV sequences

from breakthrough infection among women who participated in the CAPRISA 004 treatment arms.

(Paper 1063)

#### Natural killer cells linked to HIV protection

The data from a study indicated that women who have a large

number of natural killer cells in their blood, that produced antiviral cytokine IFN- $\gamma$ , were less likely to become infected with HIV.

The authors concluded that the results were consistent with a model in which NK cells, as early responders to viral exposure, play a role in protection from HIV acquisition.

(Paper 56)



## Prof Abdool Karim appointed to MRC



The South African Medical Research Council (MRC) has announced the appointment of Professor Salim Abdool Karim as its new President with effect from 2 April 2012 for an interim period.

Professor Abdool Karim will take up the position as Interim President of the MRC in a part-time capacity and will continue as Director of CAPRISA part-time.

## IBSA workshop

In February, CAPRISA participated in the India, Brazil and South Africa (IBSA) Workshop, a scientific collaboration in HIV/AIDS, Malaria and TB, which took place in Cape Town.

The overall aim of the workshop was to promote co-operation and partnership on concrete projects in the three countries under the auspices of their respective science and technology government departments.

Discussions covered basic biology, immunology, epidemiology and aspects of translational research that would cut across the three diseases.

The workshop was facilitated by the South African National Department of Science and Technology and was conducted in partnership with the International AIDS Vaccine Initiative and the National Institutes for Allergy and Infectious diseases.

## Farewell, Francois



CAPRISA was sad to say farewell to project director, Francois van Loggenberg, who left the organisation in early March.

Francois was amongst the pioneering group of recruits to join CAPRISA when it was established in 2002.

He has decided to relocate to the UK and is considering returning to lecturing.

To a respected scientist and colleague, we wish Francois all the best in the next stage of his career in a new country.



*KZN's billboards warning of risks of intergenerational relationships*

## “Sugar daddy” campaign kicks off in KZN

In January, the issue of intergenerational sex became the centre of an awareness campaign launched by Dr Sibongiseni Dhlomo, the MEC for the KwaZulu-Natal Provincial Department of Health.

The so-called “sugar daddy” campaign encourages the friends and families of young women aged 14 to 25 to protect their young women from entering into sexual relationships with older men in exchange for gifts.

Transactional sex has seen a rise, particularly in poverty stricken rural areas, where many people – men and women - tolerate these forms of relationships as a means for young women to acquire food, money, cell-phones or status.

In addition to high pregnancy rates, intergenerational relationships have been cited as one of the causes of the high incidence of HIV infection in young women in South Africa.



## Research papers published in 2012



UNIVERSITY of the WESTERN CAPE



THE AURUM INSTITUTE

CAPRISA is an official research institute of the University of KwaZulu-Natal and Columbia University.

CAPRISA was established in 2002 through a CIPRA grant from the NIH, as a multi-institutional collaboration, incorporated as an independent non-profit AIDS Research Organization

Registration Number: 2002/024027/08

- 1 **Comparing early treatment outcomes of MDR-TB in a decentralised setting with a centralised setting in South Africa.**  
Loveday M, Wallengren K, Voce A, Margot B, Reddy T, Master I, Brust J, Chaiyachati K, **Padayatchi N.**  
*Int Journal of Tub Lung Dis.* 2012 16(2):209-215
- 2 **Genital Tract Inflammation during early HIV-1 infection predicts higher plasma viral load set point in women.**  
**Roberts L, Passmore J-A S, Mlisana K, Williamson C,** Little F, Bebell LM, Walz G, Abrahams M-R, Woodman Z, **Abdool Karim Q, Abdool Karim SS.**  
*J Infect Dis* 2012; 205(2): 194-203 doi: 10.1093/infdis/jir715
- 3 **Design challenges facing clinical trials of the effectiveness of new HIV prevention technologies.**  
**Grobler AC, Abdool Karim SS.**  
*AIDS* 2012, 25:000-000. DOI:10.1097/QAD.0b013e3283509a29
- 4 **HIV Prevention in High-Risk women in South Africa: Condom Use and the Need for Change.**  
**Van Loggerenberg F,** Dieter AA, Sobieszczyk ME, **Werner L, Grobler A, Koleka Mlisana** for the CAPRISA 002 Acute Infection Study Team.  
*PLoS ONE* 7(2): e30669. doi:10.1371/journal.pone.0030669
- 5 **Experience of the HIV Prevention Trials Network (HPTN).**  
Sista ND, **Abdool Karim Q,** Hinson S, Donnell D, Eshleman, Vermund SH. Development of an international network for clinical research:  
*Clinical Investigation.* 12/2011; 1:1609-1618

## Scientific Reviews

Abstracts submitted for review		Manuscripts submitted for review		Ancillary studies submitted for review	
Total#	Cumulative <sup>^</sup>	Total#	Cumulative <sup>^</sup>	Total#	Cumulative <sup>^</sup>
1	272	2	210	2	29

# for month, <sup>^</sup> since committee initiation

## Conference & Workshop Reminders

Conference	Dates	Deadlines		
		Abstracts	Registration	Website
<b>Keystone Symposia</b>	21-26 Mar 2012	21 Nov 2011	21 Mar 2012	<a href="http://keyonesymposia.org/12x5">http://keyonesymposia.org/12x5</a>
<b>Microbicides 2012</b>	15-18 April 2012	17 Nov 2011	15 Mar 2012	<a href="http://www.microbicides2012.org">http://www.microbicides2012.org</a>
<b>3rd SA TB Conference</b>	12-15 Jun 2012	20 Jan 2012	18 May 2012	<a href="http://www.tbconference.co.za/">http://www.tbconference.co.za/</a>
<b>AIDS 2012</b>	22-27 Jul 2012	15 Feb 2012	3 May 2012	<a href="http://www.aids2012.org">http://www.aids2012.org</a>
<b>Tuberculosis 2012</b>	11-15 Sept 2012	15 June 2012	15 June 2012	<a href="http://www.pasteur.fr/infosci/conf/sb/tuberculosis2012/index.html">http://www.pasteur.fr/infosci/conf/sb/tuberculosis2012/index.html</a>