In our cover story we profile the recent publication in the New England Journal of Medicine of the impact of tenofovir gel in HSV-2 infection.

On page 2 we highlight Dr Linda Fried’s visit to CAPRISA and her announcement of the newly created endowed “CAPRISA Chair in Global Health” in the MSPH’s Department of Epidemiology.

On page 3 we congratulate Professor Quarraisha Abdool Karim on being awarded the “Living Legend” award from the eThekwini Municipality and also congratulate the HPTN077 team on reaching their targeted enrolment for the HPTN077 study.

**Contact Details**

CAPRISA
Doris Duke Medical Research Institute (DDMRI)
2nd Floor
University of KwaZulu-Natal
Private Bag X7, Congella 4013
South Africa

T: +27-31-260 4555
F: +27-31-260 4566
E-mail: caprisa@ukzn.ac.za

www.caprisa.org.za

**CAPRISA**

CENTRE FOR THE AIDS PROGRAMME OF RESEARCH IN SOUTH AFRICA

**UNAIDS**

CAPRISA is the UNAIDS Collaborating Centre for HIV Research and Policy

August 2015, Volume 14, Issue 8

---

**Tenovofir Gel for the Prevention of HSV-2 Infection**

Data from the CAPRISA 004 trial showing that pericoital application of tenofovir gel, an antiviral microbicide, reduced Herpes Simplex type 2 (HSV-2) acquisition by 51% in women was recently published in the New England Journal of Medicine.

Globally, Herpes simplex virus type-2 (HSV-2) is among the most common sexually transmitted infections and is the leading cause of genital ulcers. Available global estimates indicate that approximately 536 million (16.5%) sexually active adults between the ages of 15 and 49 years were infected with HSV-2 in 2003.

HSV-2 is a lifelong infection that causes recurrent painful genital ulceration and potentially fatal herpes infections in newborns. It is also associated with a 3.4-fold increased risk of HIV acquisition in women, after adjustment for sexual behaviour. Interventions to prevent HSV-2 infection, including condoms, circumcision, and antiviral treatment, have demonstrated protection levels ranging from 6% to 48%.

The effectiveness of pericoital tenofovir gel in preventing HSV-2 acquisition was assessed in a subgroup of 422 HSV-2 negative women enrolled in the CAPRISA 004 study.

Pericoital tenofovir gel reduced HSV-2 incidence (as measured by ELISA) by 51% overall (95% CI: 23-70%; P = 0.003). Confirmatory testing using Western blot testing produced similar results ie 55% effectiveness (95% CI: 18-77%; P = 0.005).

Risk of HSV-2 acquisition was reduced by 71% in women with high gel-use (defined as returning >6 gel applicators per month) compared to 27% reduction in the women with low gel-use (<4 applicators/month) (Figure).

Since there is no effective vaccine or cure for HSV-2, pericoital tenofovir gel has the potential to increase the range of options for HSV-2 prevention programs, which at present promote condoms and circumcision.

Effective prevention strategies for HSV-2 infection are needed to achieve the goals of the World Health Organization global strategy for the prevention and control of sexually transmitted infections.

**For further reading see:**

Dr Linda Fried, Dean of the Mailman School of Public Health (MSPH) at Columbia University, visited CAPRISA in Durban from 6 - 12 August 2015, building on MSPH’s long-standing collaboration with CAPRISA and the Nelson R Mandela School of Medicine at the University of KwaZulu-Natal (UKZN).

During her visit, she met with UKZN Vice-Chancellor, Dr Albert van Jaarsveld, Deputy Vice-Chancellor of the College of Health Sciences, Dr Rob Slotow and the Deans of Clinical Sciences, Health Sciences, Nursing and Public Health. During these discussions, Dean Fried explored opportunities for further collaboration and training to advance global health.

MSPH is one of the five partner institutions that created CAPRISA in 2002. Dean Fried currently serves as a member of the Board of Control of CAPRISA, which is led by Drs Salim and Quarraisha Abdool Karim, who are both professors in the MSPH Department of Epidemiology. The link between CAPRISA and MSPH was originally developed by Drs Zena Stein, Mervyn Susser, Alan Berkman and Allan Rosenfield and built on the Fogarty-funded Columbia University-Southern African AIDS International Training and Research Programme (AITRP).

During her visit to the CAPRISA research clinics in Durban and Vulindlela, Dean Fried had an opportunity to meet with several of the Fogarty Fellows. The eThekwini Clinic, which is located in central Durban, adjoins the largest government outpatient tuberculosis (TB) facility in Durban, the Prince Cyril Zulu Communicable Disease Centre. This Centre provides free diagnosis and treatment for patients with TB in Durban. Approximately 8000 TB patients attend the clinic each month.

TB and HIV infection are individually major global public health concerns but the two intertwined epidemics are a devastating and deadly combination, responsible for more deaths than any other condition in South Africa. South Africa is among the highest burden countries, ranking highest in the world for TB incidence and third highest for the total number of TB cases each year. CAPRISA’s rural research facility, the Vulindlela Clinic is about 90 minutes from Durban. Dean Fried spent a day in Vulindlela, where she visited the clinic and was invited to the home of one of the community members. Dean Fried had the opportunity to see the challenges of rural living and rural health care first hand.

Dean Fried delivered a Faculty Lecture at the medical school highlighting the “Opportunities and challenges in improving global health” and the keynote address at the CAPRISA “Celebration of Excellence” function focusing on the meaning of scientific excellence. She announced the newly created endowed “CAPRISA Chair in Global Health” in the MSPH’s Department of Epidemiology with Dr Salim Abdool Karim being the first appointment to this Chair. At the function, the South African National Research Foundation announced that Dr Quarraisha Abdool Karim, who is a Professor of Clinical Epidemiology at MSPH, had received its highest ranking, an “A-rating”. Dr Abdool Karim is only the second black woman ever in South Africa to get an A-rating. (see newsclip on: https://www.youtube.com/watch?v=ow2N8QulaKg)

During her visit, Dr Fried also had the opportunity to meet and interact with the senior scientists at CAPRISA. During these meetings, she explored how relationships between CAPRISA and MSPH could be strengthened. Importantly, she was able to see first-hand the impact of CAPRISA’s research and training activities on the HIV epidemic and global health in South Africa.
Enrolments completed appliance

Enrolments completed! The CAPRISA Vulindlela HPTN 077 team has just finished enrolling participants into its HPTN 077 study, a Phase IIa Safety, Tolerability and Acceptability Study of an Investigational Injectable HIV Integrase Inhibitor, Cabotegravir, for PrEP in HIV Uninfected Men and Women.
Scientific papers published in 2015


*continuation from previous newsletter

Scientific Reviews

<table>
<thead>
<tr>
<th>Abstracts submitted for review</th>
<th>Manuscripts submitted for review</th>
<th>Ancillary studies submitted for review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total#</td>
<td>Cumulative*</td>
<td>Total#</td>
</tr>
<tr>
<td>2</td>
<td>330</td>
<td>1</td>
</tr>
</tbody>
</table>

# for month, * since committee initiation

Conference & Workshop Reminders

<table>
<thead>
<tr>
<th>Conference</th>
<th>Dates</th>
<th>Abstracts</th>
<th>Deadlines</th>
<th>Registration</th>
<th>Website</th>
</tr>
</thead>
</table>