



CAPRISA IS A UNAIDS COLLABORATING CENTRE FOR HIV RESEARCH AND POLICY

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In our feature article this month we profile and congratulate CAPRISA's Director, Professor Salim Abdool Karim, on his Award from the African Union Commission.

On page 2 we congratulate Dr Lenine Liebenberg and Professor David Celentano on receiving the National Institute of Health's R01 grant.

On page 3 we profile visitors to CAPRISA, including a delegation from the Ragon Institute of Massachusetts General Hospital, Massachusetts Institute of Technology and Harvard.



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CAPRISA Director receives African Union Science Prize

outh African AIDS researcher, Professor Salim S. Abdool Karim was awarded the most prestigious prize for science in Africa. the \$100,000 (R1.1million) Kwame Nkrumah Award presented by the Chair of the African Union Robert Mugabe and the Chairperson of the African Union Commission Dr Nkosazana Dlamini Zuma, at the African Union General Assembly in Addis Ababa on 31 January. The award was for Professor Abdool Karim's research on HIV prevention and treatment in Africa. In conferring the award, the African Union Commission acknowledged Abdool Karim "for great scientific achievement and contribution through science for the socio-economic development of Africa".

Professor Abdool Karim, Director of CAPRISA and Pro Vice-Chancellor (Research) at the University of KwaZulu-Natal, said that "this award recognises the importance of science and the contributions of scientific innovation in the path to a healthier Africa. Research can play a central role in the development and integration of Africa." He said that he was "humbled" by this honour. "Science has a key role to play in Africa's future growth and prospects. Hence, this African Union award has special significance for me as it highlights science for its contribution to Africa's future."

In addition to directing CAPRISA, Professor Abdool Karim is Pro Vice-Chancellor (Research) at the University of KwaZulu-Natal and Professor of Epidemiology at Columbia University in New York. He is the Chair of the UNAIDS Scientific Expert Panel and is scientific advisor to the Executive Director of the Joint United Nations Programme on HIV/AIDS



President Jacob Zuma congratulating Professor Salim Abdool Karim and Professor Timoléon Kofané (the second recipient of the award)

(UNAIDS).

Until last year, he was the President of the South African Medical Research Council and has just taken up an appointment, a first for an African scientist, on the Editorial Board of the prestigious New England Journal of Medicine.

Professor Hoosen Coovadia, emeritus professor of Paediatrics and Child Health at the University of KwaZulu-Natal and a leading global HIV scientist paid tribute to Professor Abdool Karim's contributions, "In addition to being an international figure, which is evident from his numerous highlevel positions in United Nations Agencies and leading global research institutions, Professor Abdool Karim has distinguished track record for fighting for the rights of the dispossessed and impoverished in South Africa. The apical position of his engagement with science and policy reveals his considerable scientific stature globally and within the continent of Africa."





Joanne Csedrik (4th from left), Program Officer in the of Clinical Site Oversight (OCSO) of the Division of AIDS of the National Institutes of Health (NIH) and her colleague Nancy Cogliano (5th from left), visited the CAPRISA CTU and the three linked Clinical Research Sites (CRSs) on 22-23 January. Joanne is the CAPRISA CTU Program Officer. They visited the eThekwini, Vulindlela and Umlazi CRSs and also met with the CAPRISA Finance, Administrative and Compliance teams to discuss the additional financial management and reporting in the second seven-year cycle of the CTU grant.

iSpotU Innovation Award

he CAPRISA iSpotU Innovation Award is a new initiative implemented this year to recognise and reward employees for innovation and initiative which demonstrate that "There Is a Better Way" of doing a task, process or system. The innovation should add value to the organisation and/or improve CAPRISA's organisational reputation.

Awards will be made monthly based on nominations received by an employee's manager or a colleague, and will be evaluated by the iSpotU Panel. Examples of such innovation include making an exceptional contribution to improve processes or procedures, introducing automated or electronic systems to get things done more effectively, effecting cost savings or improving the organisational reputation. Awardees will receive a monetary reward and a certificate of achievement in the month the award is announced.

Collaborative Biomedical Research Grant awarded

he US-South Africa Program for Collaborative Biomedical Research (R01) grant from the National Institute of Health (NIH) was awarded to Dr. Lenine Liebenberg, Research Associate at CAPRISA, and Professor David Celentano at John Hopkins Bloomberg School of Public Health. The grant of USD\$333,574 over a period of two years will fund Liebenberg's and Celentano's research on the link between human papillomavirus (HPV) clearance and increased risk of HIV acquisition.

The RO1 funds will be used to investigate the immune biomarkers of genital inflammation associated with HPV clearance, given that HPV is one of the most common sexually transmitted infection (STI) and is thus an important potential cause for genital inflammation.

The study will elaborate on preliminary data from the CAPRISA 004 trial that demonstrated an increased risk of HIV infection in the context of genital inflammation and aims to support the hypothesis that the very immune cells recruited to control HPV infection are those that promote an optimum environment for HIV infection.

An elated Dr Liebenberg said that the funding presented "a wonderful opportunity to improve the understanding of genital HPV-associated immune responses and to determine whether the immune correlates of HPV infection are associated with HIV infection. I am especially grateful to be the recipient of an R01 award at this early stage of my career."

The South African Medical Research Council and the U.S NIH jointly initiated this funding opportunity designed to strengthen South African science through collaborations with US scientists.



Dr Lenine Liebenberg congratulated on R01 grant by Professor Salim Abdool Karim



Centres of Excellence exchange ideas

Professor Salim Abdool Karim led a senior CAPRISA delegation, to visit the Forestry and Agricultural Biotechnology Institute (FABI) at the University of Pretoria. The purpose of the visit was to establish what the two centres could learn from one another and to get a better sense of how the research centres promoted excellence.

The delegation met with FABI's Director Professor Mike Wingfield, and members of FABI management committee to share strategies on the impressive high standard of research that both organisations had achieved. Discussions included challenges and recommendations to further achieve research excellence. Various funding models were also explored.

FABI's research focuses on trees and agricultural health and the core values of the institution align with those of CAPRISA. Both FABI and CAPRISA are dedicated to research excellence and hope to continue learning from one another in the future. FABI leadership are planning to visit CAPRISA in the near future.



Left to right: Dr Kogie Naidoo, Dr Nesri Padayatchi, Prof Quarraisha Abdool Karim, Dr Lenine Liebenberg, Prof Mike Wingfield, Prof Salim Abdool Karim, Ms Cheryl Baxter, Ms Tanuja Gengiah, Dr Carl Montague, Dr Irene Barnes, and Dr Wilhelm de Beer

Professor Bavesh Kana, Head of Research Unit DST/NRF Centre of Excellence for Biomedical TB Research at the University of the Witwatersrand, delivered a talk entitled: "Remodeling of mycobacterial peptidoglycan during growth and tuberculosis disease", on 16 January. Kana was a Fogarty trainee of CAPRISA in 2005/6 and a local postdoc mentor.

Harvard Scientists Visit



On Tuesday, January 20th a delegation from Harvard University delivered a seminar discussing "Novel technologies for understanding the human immune response and in vaccine development." The seminar was moderated by Professor Bruce Walker, Director of the Ragon Institute of Massachusetts General Hospital, Massachusetts Institute of Technology and Harvard University Centre for AIDS Research, and focused on utilizing and adapting technological innovations to suit research needs in South Africa. The speakers were (left to right): Professor David Weitz, Mallinckrodt Professor of Applied Physics and Professor of Physics; Professor Alex Balazs, Assistant Professor of Medicine, Harvard Medical School; Professor Gary Tearney, Professor of Pathology at Harvard Medical School; Professor Daniel Lingwood, Assistant Professor of Medicine, Harvard University; and Dr John Heyman, Research Associate, Harvard University. The delegation also visited CAPRISA's Vulindlela and eThekiwini clinical research sites.







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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 Organisation

Registration Number:

2002/024027/08

Scientific papers published in 2015

- **McKinnon L**, Nyanga B, Kim C, Izulla P, Kwatampora J, Kimani M, Shahabi K, Mugo N, Smith J, Anzala AO, Kimani J, Kaul R. Early HIV-1 infection is associated with reduced frequencies of cervical Th17 cells. *JAIDS 2015; 68(1): 6–12.*
- 2 Daftary A, Calzavara L, Padayatchi N. The contrasting cultures of HIV and tuberculosis care. AIDS 2015; 29(1): 1-4.
 - Stein DS, Shaw SY, McKinnon LR, Abou M, McCorrister SJ, Westmacott GR, Fowke KR, Plummer FA. Ball TB.
- 3 Mx2 expression is associated with reduced susceptibility to HIV infection in highly exposed HIV seronegative sex workers from Nairobi, Kenya. AIDS 2015, 29:35–41
- Morrison CS, Chen P-L, Kwok C, Baeten JM, Brown J, Crook AM, Van Damme L, Delany-Moretlwe S, Francis SC, Friedland BA, Hayes RJ, Heffron R, Kapiga S, **Abdool Karim Q,** Karpoff S, Kaul R, McClelland RS, McCormack S, McGrath N, Myer L, Rees H, van der Straten A, Watson-Jones D, van de Wijgert JHH, Stalter R, Low N. Hormonal Contraception and the Risk of HIV Acquisition: An Individual Participant Data Meta-analysis. *PLoS Medicine* 2015; 12(1): e1001778. doi:10.1371/journal.pmed.10017788
- Garrett N, Werner L, Naicker N, Naranbhai V, Sibeko S, Samsunder N, Gray C, Williamson C, Morris L, Abdool Karim Q, Abdool Karim SS. HIV Disease Progression in Seroconvertors from the CAPRISA 004 Tenofovir Gel Preexposure Prophylaxis Trial. *JAIDS* 2015; 68(1):55-61
- Bandawe G, Moore PL, Werner L, Gray ES, Sheward DJ, Madiga M, Nofemela A, Thebus R, Marais JC, Maboko L,

 Abdool Karim SS, Hoelscher M, Morris L, Williamson C. Differences in HIV-1 neutralization breadth in two geographically distinct cohorts in Africa. *Journal of Infectious Diseases* 2015; doi:10.1093/infdis/jiu633
- 7 Shey MS, Garrett N, McKinnon LR, Passmore J-AS. Role of dendritic cells in driving genital tract inflammation and HIV-1 transmission risk: opportunities to intervene? *Innate Immunity* 2015;21(1):99-112
- van Loggerenberg F, Grant AD, Naidoo K, Murrman M, Gengiah S, Gengiah TN, Fielding K, Abdool Karim SS. Individualised Motivational Counselling to Enhance Adherence to Antiretroviral Therapy is not Superior to Didactic Counselling in South African Patients: Findings of the CAPRISA 058 Randomised Controlled Trial. AIDS and Behavior 2015; 19:145–156
- Gengiah TN, Botha JH, Yende-Zuma N, Naidoo K, Abdool Karim SS. Efavirenz dosing: influence of drug metabolizing enzyme polymorphisms and concurrent tuberculosis treatment. *Antivir Ther* 2015; doi: 10.3851/IMP2877. [Epub ahead of print]

Scientific Reviews

Abstracts submitted for review		Manuscripts s	submitted for review	Ancillary studies submitted for review	
Total#	Cumulative [^]	Total#	Cumulative [^]	Total#	Cumulative [^]
3	328	2	202	0	52

for month, ^ since committee initiation

Conference & Workshop Reminders

	Deadlines					
Conference	Dates	Abstracts	Registration	Website		
International Conference on HIV and AIDS - London, United Kingdom	25-26 May 2015	25 Nov 2014	25 Jan 2015	https://www.waset.org/ conference/2015/05/london/ICHA		
7th South African AIDS Conference - Durban, South Africa	9-12 Jun 2015	20 Jan 2015	22 May 2015	http://www.saaids.co.za/		
8th IAS Conference on HIV Pathogenesis, Treatment and Prevention (IAS 2015) - Vancouver, British Columbia, Canada	19-22 July 2015	27 Jan 2015	25 Fab 015	http://www.ias2015.org/		
46th Union World Conference on Lung Health - Cape Town, South Africa	2-6 Dec 2015	24 Apr 2015	20 Aug 2015	http://capetown.worldlunghealth.org/		