



UNIVERSITY OF TORONTO  
FACULTY OF MEDICINE



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University of Toronto



Comprehensive Research  
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Medical Alumni Association & CREMS Programs  
Dr. Elva May Rowe Fund

PLEASE PROVIDE A COPY OF THE ON-SITE SUPERVISOR'S CV. THIS IS REQUIRED IN ORDER TO PROCESS YOUR APPLICATION

PLEASE SUBMIT THIS COMPLETED FORM TO [CREMS.PROGRAMS@UTORONTO.CA](mailto:CREMS.PROGRAMS@UTORONTO.CA) BY **FEBRUARY 25, 2019**

**PART A: SUPERVISOR AND ON-SITE SUPERVISOR CONTACT INFORMATION**

U OF T RESEARCHER	
NAME:	DR. RUPERT KAUL
EMAIL:	rupert.kaul@utoronto.ca
DEPARTMENT:	MEDICINE
SGS (please indicate where)	IMS AND IMMUNOLOGY
Selected Publications (3 most recent and relevant to the project)	<p>Zhabokritsky A, Nelson LE, Tharao W, Husbands W, Sa T, Zhang N, Thomas-Pavanel J, Baidoobonso S, Kaul R. Barriers to HIV pre-exposure prophylaxis among African, Caribbean and other Black (ACB) men in Toronto, Canada (Resubmitted after revision). <i>PLoS One</i>. 2019.</p> <p>Yegorov S, Joag V, Galiwango R, Good SV, Akiteng OP, Drajole DA, Miiro G, Huibner S, Kitandwe P, Boggild A, Bagaya BS, Kiwanuka N, Kaul R. Treatment of the helminth <i>Schistosoma mansoni</i> in Ugandan women reduces HIV entry into cervical CD4 T cells and induces type I interferon pathways (Resubmitted after revision). <i>Nat Communications</i>. 2019.</p> <p>Joag VR, Obila O, Shahabi K, Oyugi JO, Kimani J, Anzala AO, Kaul R. Impact of standard bacterial vaginosis treatment on the genital microbiota, immune milieu and <i>ex vivo</i> HIV susceptibility. <i>Clin Infect Dis</i>. 2018; Sep 12. doi: 10.1093/cid/ciy762. PMID: 30407498</p>
	PRIOR CREMS PROJECT:



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	Olsthoorn A, Sivachandran N, Bogoch I, Kwatampora J, Kimani M, Kimani J, Kaul R. Barriers to the uptake of post-exposure prophylaxis among Nairobi-based female sex workers. <i>AIDS</i> . 2016;30(1):99-103. PMID: 26372489
<b>ON SITE SUPERVISOR</b>	
NAME:	DR. JOSHUA KIMANI
LOCATION OF PLACEMENT:	UNIVERSITY OF NAIROBI, NAIROBI, KENYA
EMAIL:	Jkimani@csrkenya.org
AREA OF RESEARCH:	HIV PREVENTION IN HIGH RISK FEMALE SEX WORKERS

**PART B: PROJECT INFORMATION**

**PROJECT TITLE:**

**BARRIERS TO THE UPTAKE OF HIV PRE-EXPOSURE PROPHYLAXIS (PrEP) AMONG NAIROBI FEMALE SEX WORKERS**

**PROJECT/PROGRAM/INSTITUTION BACKGROUND INFORMATION (MAX 500 WORDS):**

The Universities of Toronto and Nairobi have a longstanding research collaboration, and Dr. Rupert Kaul (Toronto) has been working with Dr. Joshua Kimani (Nairobi) since 1995 with over 60 co-authored manuscripts. Over the past several years Dr. Kimani has been directing a PEPFAR-funded HIV treatment and care program in Nairobi for “Most At Risk Populations” entitled the Kenya AIDS Control Project. There is a focus on care for male and female sex workers, with enrolment of 800 and >6,000 participants, respectively, since commercial sex underlies approximately 75% of HIV transmission in many urban centers in Africa.

An important recent initiative for the KACP is the provision of antiretroviral therapy to HIV-uninfected but at-risk male and female sex workers in order to prevent HIV, since Pre-Exposure Prophylaxis (PrEP) has been shown to reduce HIV acquisition by almost 95% in at-risk gay men from North America and Europe. However, uptake has been very slow, and almost 50% of women starting on PrEP do not come back to clinic to renew their prescriptions. Therefore, the student will work with Dr. Kimani on a Quality Improvement project that will gather together and analyse existing clinical data in this important area. The Kenya AIDS Control Project was established by the Universities of Nairobi and Manitoba, and many medical and graduate students carry out research electives on site; there is considerable on-site infrastructure including a fully-equipped research institute, IT team, laboratories, etc. Student accommodation near the central KACP offices is available. Previous experience with datasets and epidemiology would be an asset.



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## STUDENT ROLES/RESPONSIBILITIES (PLEASE BE AS SPECIFIC AS POSSIBLE):

Together with clinic staff, the student will design and administer an anonymous questionnaire between May-August 2019 that examines the knowledge of PrEP, experience with PrEP, and potential barriers to PrEP uptake and /or continued use. The questionnaire will be administered to HIV-uninfected clinic attendees at five dedicated Sex Worker Outreach Program (SWOP) clinics in downtown Nairobi. Participants will be recruited on a convenience basis, and participation will be voluntary. Surveys will be administered in a one-on-one interview format in Kiswahili or in English to at least 100 participants, and responses will be recorded by the student in writing. It is anticipated that results will be used to improve clinical services at the SWOP clinics, and since this topic is very important for HIV prevention work in the region it may also form the basis of a future academic publication.

- What, if any, second language is required for the student to successfully complete this project?

English is the official first language in Kenya, but many participants will primarily speak Swahili and/or their own tribal language. The questionnaire will be translated into Swahili, and clinic staff will be available to assist the student(s) when needed.

- Is this project for 1 or 2 students to complete?

A similar Quality Improvement project in 2013 was posted for 1-2 students, and in the end two students signed up and were very successful. This project could again either be suitable for either 1 or 2 students.

- How long have you worked with the on-site supervisor and briefly describe your working partnership:

Dr. Kimani I first worked together as junior physicians in the Pumwani female sex worker clinic in 1995; I was then on faculty at the University of Nairobi until 2002 when I returned to Toronto. We have collaborated continuously since, with over 60 academic publications in various areas of HIV clinical and basic science research.

- Have you visited the city/town where the student will be placed? If yes, when was your last visit?

I lived in Nairobi from 1995-2002, and was last there in January 2019 to discuss this research project (and others) with Dr. Kimani and his team.



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- If human subjects are involved, has Ethics been obtained (note: written proof or an email indicating protocol approval may be requested prior to the student's arrival at the on-site location)?

In 2013 formal REB review was waived for a similar project, since it was deemed a Quality Improvement project gathering anonymous data in order to enhance clinical services. However, we will again be in formal communication with the REBs from both the Universities of Nairobi and Toronto regarding this project.