OMB No. 0925-0001 and 0925-0002 (Rev. 10/15 Approved Through 10/31/2018)

BIOGRAPHICAL SKETCH

**DO NOT EXCEED FIVE PAGES.**

NAME: **Bukusi, Elizabeth Anne**

eRA COMMONS USER NAME (credential, e.g., agency login): EBUKUSI

POSITION TITLE:

Chief Research Officer, Center for Microbiology Research, KEMRI

Research Professor, University of Washington

Honorary Lecturer, Dept. Of ObGyn, Aga Khan University

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

| INSTITUTION AND LOCATION | DEGREE  (if applicable) | Completion Date  MM/YYYY | FIELD OF STUDY |
| --- | --- | --- | --- |
| University of Nairobi, Kenya | MBChB | 12/1987 | Medicine |
| University of Nairobi, Kenya | M.MED | 12/1995 | Obstetrics and Gynecology |
| University of Washington, Seattle, WA | MPH | 12/2000 | Epidemiology |
| University of Washington, Seattle, WA | PhD | 08/2006 | Epidemiology |
| University of Cape Town, South Africa | PGD | 06/2011 | Research Ethics |
| Centre for Bioethics and Culture (SIUT) | MBE | 2013 | Bioethics |

**A. Personal Statement**

My primary research focuses on sexually transmitted infections; reproductive health; and HIV prevention, care, and treatment. In 1995, we established the Research Care and Treatment Program at KEMRI. In addition to conducting research, the program aims to enhance local capacity to conduct socio-behavioral and biomedical research and provide HIV care through training and infrastructure development. In addition to my substantial experience conducting research in Kenya, providing HIV care, and mentoring and training different cadres of health care and research personnel, I have an interest in ethics and the development of systems and structures for regulating research in the institute and the country. I chaired the Scientific Steering Committee at KEMRI and oversaw scientific regulation at KEMRI between 2011 and 2016. I steered the restructuring of the research regulation system at KEMRI, revising the research guidelines, improving investigator education, and instituting a mechanism for monitoring approved research projects. I served on the data and safety monitoring boards for the MIRA (diaphragm) study and the CAPRISA 004 trial, previously chaired the Kenya HIV and AIDS Research Coordinating Mechanism of the National AIDS Control Council, and currently serve on the Kenya National HIV Prevention Task Force. I served on the World Health Organization’s Department of Reproductive Health Scientific Technical Advisory Group from 2008 to 2014, and currently serve as the HRP Alliance chair person. I was the inaugural chair of KEMRI’s Sexual, Reproductive, and Child Health Program Committee from inception to 2014, and co-chaired the HIV Prevention Trials Network’s Women at Risk Committee between 2012 and 2014. I currently serve as the first non-South African to be appointed to the South African Medical Research Council Board of management for a second 3-year term. Over the past decade we have conducted pivotal HIV prevention studies with colleagues from the University of Washington, including the Partners PrEP Study, the Partners Demonstration Project, and the ongoing Partners Scale-up Project that has been central to the development of PrEP guidance for populations worldwide. I am passionate about mentoring and for this application, I am honored to mentor and collaborate with Dr. Mugwanya on his proposed work to improve the efficiency of PrEP delivery in Kenya. Specifically, I will provide mentored training in responsible conduct of research, provide connections and liaison with local HIV community and policymakers and will I contribute to design, implementation, analysis and result interpretation. We will meet monthly via Skype and face-to-fact in Kenya at least annually.

**B. Positions and Honors**

**Positions and Employment**

1987-1988 Internship, Kenyatta National Hospital, Nairobi, Kenya

1988-1990 Medical Officer, Ministry of Health, Busia District Hospital, Kenya

1990-2009 Assistant Research Officer (1995), Research Officer (2000), Senior Research Officer, (2006), Principal Research Officer (2009), Chief Research Officer (2009)

1990-1995 Senior House Officer, Department of Obstetrics and Gynecology, University of Nairobi, Kenya; Assistant Research Officer, KEMRI, Kenya

1995-present Honorary Lecturer and Senior Registrar, Department of Obstetrics and Gynecology, University of Nairobi, Kenya

1995-1998 Research Physician, WHO Collaborative Project, Department of Medical Microbiology, University of Nairobi, Kenya

1996-1997 Coordinator for the Clinical Care Guidelines in the Era of HIV, Departments of Medical Microbiology and Community Health in collaboration with CIDA and the Belgian Project on Strengthening Sexually Transmitted Disease Control in Kenya, University of Nairobi, Kenya

1998-2000 Program Manager, Christian Health Association of Kenya

2001-2003 Consultant, Medical Assistance Program International

2001-2006 Research Scientist, Department of Obstetrics and Gynecology, University of Washington, Seattle, WA

2001-2006 Research Scientist, Department of Global Health, University of Washington, Seattle, WA

2007-2016 Associate Research Professor, Department of Obstetrics and Gynecology, University of Washington, Seattle, WA

2007-2016 Associate Research Professor, Department of Global Health, University of Washington, Seattle, WA

2006/2011 Research Administrator/Volunteer Faculty Professor, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California San Francisco, CA

2009-2011 Chair, Infectious Disease Research Committee Program, KEMRI; Co-chair, Kenya HIV and AIDS Research Coordinating Mechanism of the NACC

2010-present Department of Obstetrics and Gynecology, Aga Khan University, Nairobi, Kenya

2011-2016 Deputy Director, Research and Training, KEMRI, Kenya

2016-present Research Professor, Department of Obstetrics and Gynecology, University of Washington, Seattle, WA

2016-present Research Professor, Department of Global Health, University of Washington, Seattle, WA

2016-present Chief Research Officer, KEMRI, Kenya

**Membership in Professional Organizations**

2001- Nairobi Clinical Epidemiology Unit

1995- Kenya Obstetric and Gynecological Society

1995- Christian Medical Fellowship (Kenya)

1990- Kenya Medical Women’s Association

1997-2000 Kenya Association of University Women

1987- Kenya Medical Association

2014 Fellow, African Academy of Sciences

**Honors**

1997 FIGO Fellowship, Copenhagen; Poster presentation on “The impact of HIV-1 on Pelvic inflammatory disease in an outpatient clinic in Nairobi, Kenya.” Runner up in the infectious disease category; Upjohn Young female scientist’s award and one of the 10 best posters for the Wednesday poster presentations.

2006 Runner up in the inaugural International Christian Medical and Dental Association HIV Initiative’s annual "Dignity and Right to Health Award"

2017 King Holmes endowed Professor in STD and AIDS, University of Washington, Departments of Medicine and Global Health

# C. Contribution to Science

1. My early work on the effect of pelvic inflammatory disease among HIV infected women contributed to recommendations of treatment of mild PID among women with HIV as outpatient oral medication. As a follow up my subsequent work on Bacterial vaginosis and the association male partners and recurrence of BV contributed to better understanding of socioeconomic factors affecting female genital hygiene.
2. **Bukusi EA**, Cohen CR, Meier AS, Waiyaki PG, Nguti R, Njeri JN, Holmes KK. Bacterial vaginosis: risk factors among Kenyan women and their male partners. Sex Transm Dis. 2006 Jun;33(6):361-7. PMID: 16547451.
3. Meier AS, **Bukusi EA**, Cohen CR, Holmes KK. Independent association of hygiene, socioeconomic status, and circumcision with reduced risk of HIV infection among Kenyan men. J Acquir Immune Defic Syndr. 2006 Sep;43(1):117-8. PMID: 16885771.
4. Steele MS, **Bukusi E**, Cohen CR, Shell-Duncan BA, Holmes KK. The ABCs of HIV prevention in men: associations with HIV risk and protective behaviors. J Acquir Immune Defic Syndr. 2006 Dec 15;43(5):571-6. PMID: 17019371.
5. **Bukusi EA**, Steele M, Cohen CR, Nguti R, Maingi CW, Thomas KK, Holmes KK. Safety, acceptability, and tolerability of 3 topical microbicides among heterosexual Kenyan men. J Acquir Immune Defic Syndr. 2007 Apr 1;44(4):423-8. PMID: 17195765.
6. The expansion of HIV care within the region in Kenya with the highest HIV prevalence and the platform for research in various aspects of HIV care/integration and socioeconomic concerns have led to improving health outcomes for those living with HV in the region and contributing to scientific output.
7. Hatcher AM, Turan JM, Leslie HH, Kanya LW, Kwena Z, Johnson MO, Shade SB, **Bukusi EA**, Doyen A, Cohen CR. Predictors of linkage to care following community-based HIV counseling and testing in rural Kenya. AIDS Behav. 2012 Jul;16(5):1295-307. PMCID: 3590795.
8. Onono M, Guzé MA, Grossman D, Steinfeld R, **Bukusi EA**, Shade S, Cohen CR, Newmann SJ. Integrating family planning and HIV services in western Kenya: the impact on HIV-infected patients' knowledge of family planning and male attitudes toward family planning. AIDS Care. 2015 Jan 29:1-10. PMCID: 4366270.
9. Karari C, Tittle R, Penner J, Kulzer J, **Bukusi EA**, Marima R, Cohen CR. Evaluating the uptake, acceptability, and effectiveness of Uliza! clinicians' HIV hotline: a telephone consultation service in Kenya. Telemed J E Health. 2011 Jul-Aug;17(6):420-6. PMID: 21612519.
10. Huchko MJ, **Bukusi EA**, Cohen CR. Building capacity for cervical cancer screening in outpatient HIV clinics in the Nyanza province of western Kenya. Int J Gynaecol Obstet. 2011 Aug; 114(2):106-10. PMCID: 3133829.
11. My work in the fishing community where the HIV prevalence is highest in Kenya has contributed to understanding of risk factors in this key population and formulating possible interventions to mitigate the high rate of infection transmission.
12. Kwena ZA, **Bukusi EA**, Ng'ayo MO, Buffardi AL, Nguti R, Richardson B, Sang NM, Holmes K. Prevalence and risk factors for sexually transmitted infections in a high-risk occupational group: the case of fishermen along Lake Victoria in Kisumu, Kenya. Int J STD AIDS. 2010;21(10):708-13. PMID: 21139150.
13. Kwena ZA, **Bukusi EA**, Gorbach P, Sharma A, Sang NM, Holmes KK. Genital hygiene practices of fishermen targeted for a topical microbicide intervention against sexually transmitted infections in Kisumu, Kenya. Int J STD AIDS. 2010;21(6):435-40. PMID: 20606226.
14. Kwena ZA, Camlin CS, Shisanya CA, Mwanzo I, **Bukusi EA**. Short-term mobility and the risk of HIV infection among married couples in the fishing communities along Lake Victoria, Kenya. PLoS One. 2013;8(1):e54523. PMCID: 3545885.
15. I was part of the Partners PrEP Study that demonstrated the use of PrEP for prevention of HIV among discordant couples. The Kisumu site for which I was the PI was audited by the US FDA.
16. Baeten JM, Donnell D, Ndase P, Mugo NR, Campbell JD, Wangisi J, Tappero JW, **Bukusi EA**, Cohen CR, Katabira E, Ronald A, Tumwesigye E, Were E, Fife KH, Kiarie J, Farquhar C, John-Stewart G, Kakia A, Odoyo J, Mucunguzi A, Nakku-Joloba E, Twesigye R, Ngure K, Apaka C, Tamooh H, Gabona F, Mujugira A, Panteleeff D, Thomas KK, Kidoguchi L, Krows M, Revall J, Morrison S, Haugen H, Emmanuel-Ogier M, Ondrejcek L, Coombs RW, Frenkel L, Hendrix C, Bumpus NN, Bangsberg D, Haberer JE, Stevens WS, Lingappa JR, Celum ; Partners PrEP Study Team. Antiretroviral prophylaxis for HIV prevention in heterosexual men and women. N Engl J Med. 2012;367:399-410. PMCID: 3770474.
17. Cohen Cr, Lingappa JR, Baeten JM, Ngayo MO, Spiegel CA, Hong T, Donnell D, Celum C, Kapiga S, Delany S, **Bukusi EA**. Bacterial vaginosis associated with increased risk of female-to-male HIV-1 transmission: a prospective cohort analysis among African couples. PLoS Med. 2012;9:e1001251. PMCID: 3383741.
18. Kahle EM, Hughes JP, Lingappa JR, John-Stewart G, Celum C, Nakku-Joloba E, Njuguna S, Mugo N, **Bukusi E**, Manongi R, Baeten JM; Partners in Prevention HSVHIV Transmission Study and the Partners PrEP Study Team. An empiric risk scoring tool for identifying high-risk heterosexual HIV-1-serodiscordant couples for targeted HIV-1 prevention. J Acquir Immune Defic Syndr. 2013;62:339-47. PMCID: 3620695.
19. I have contributed to the advancement of research regulation at the Kenya Medical Research institute including the reorganization of the structure of the institutional review boards including a book to improve research review for Sub Saharan Africa.
20. Wasunna C, **Bukusi EA**. 2014. A Stepwise Approach to Protocol Review. In: Mariana Kruger, Paul Ndedele. Lyn Horon. ed. *Research Ethics in Africa*. SUN MeDIA Stellenbosch under the imprint SUN PRESS; pp 33-40.
21. Oukem-Boyer OOM, **Bukusi EA**. 2014. Educational Resources for Research in Ethics. In: Mariana Kruger, Paul Ndedele, Lyn Horon, ed. *Research Ethics in Africa*. SUN MeDIA Stellenbosch under the imprint SUN PRESS; pp 163-174.

# Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/48200480/?sort=date&direction=ascending>

# D. Research Support

**Ongoing Research Support**

**CDC 1 NU2GGH001947-01-00 Cohen (PI) 09/30/16-09/29/21**

Implementation and expansion of high quality, sustainable and comprehensive HIV prevention, care, and treatment to achieve 90-90-90 goals in Western Kenya.

The major goal of this project is to Identify and enroll PLHIV through targeted HIV testing and linkage strategies, including key and priority populations and provide comprehensive HIV care and treatment, identify HIV+ pregnant and breastfeeding women, initiate ART, identify HEI to ensure follow up, adherence, and retention to PMTCT services and implement high quality, comprehensive and integrated TB/HIV services.

Role: Site Principal Investigator

**NIH/NIMH R01 MH095507 Baeten (PI) 08/10/11-07/31/21**

Delivery of integrated PrEP and ART for HIV prevention for couples in Kenya

The main goal of this project is to extend the prior work by conducting a stepped-wedge trial evaluate roll-out of this strategy in public health clinics in Kenya, where policy support for implementing PrEP for HIV-1 prevention for couples is high.

Role: Site Principal Investigator

**NIH/NIAID 5UM1A1068636-11 Havlir (PI) 12/01/17-11/30/18**

AIDS Clinical Trials Group

The main goals of this project are: Aim1: To study and quantify the health, economic and educational impact of early HIV diagnosis and immediate ART (antiretroviral therapy) using a streamlined care delivery system in rural communities in East Africa. Aim 2: Study Pre-exposure Prophylaxis(PrEP )Aim 3: Study targets HIV testing and targeted care interventions on top of universal treatment and streamlined care .Aim 4;To improve the entire continuum of care, to reduce structural barriers for all populations including those most “at risk “and build upon evidence based prevention interventions including adult male circumcision

Role: Site Principal Investigator

**NIH/UCD 5R01HD08477-03 Abuogi (PI) 05/12/14-04/30/19**

Maximizing Adherence and Retention for Women and Infants in the Context of Option B+ in Kenya

This project will improve uptake of early infant diagnosis in prevention of mother to child transmission services in Kenya through community based participatory interventions for health care workers and women.

Role: Site Principal Investigator

**USAID AID-OAA-A-15-00034 Celum, Baeten (PIs) 07/20/15-07/17/20**

Scaleable, effective delivery of microbicides and PrEP for young women in Kenya and South Africa

To develop and evaluate effective, scalable strategies to close critical gaps in microbicide and PrEP delivery for African women in high HIV incidence settings.

Role: Site Principal Investigator

**NIH/NIMH R01 MH104123 Geng, Petersen (PIs) 07/24/14-03/31/19**

Adaptive Strategies for Preventing & Treating Lapses of Retention in Care (AdaPT)

The major objectives of this project are (1) to assess the comparative effectiveness of interventions to prevent lapses in retention, (2) to assess the effectiveness of interventions to re-engage patients with early lapse in retention, and (3) to assess the effectiveness and cost-effectiveness of sequential prevention—reengagement strategies for retention.

Role: Site Principal Investigator

**NIH/NIMH R01MH107330 Cohen (PI) 05/07/15-04/30/20**

Agricultural Intervention for Food Security and HIV Health Outcomes in Kenya

This study systematically evaluated the impact of a multi-sectoral agricultural intervention on preventing highly active antiretroviral treatment failure, reducing co-morbidities, and decreasing secondary HIV transmission risk in Nyanza Province, Kenya.

Role: Site Principal Investigator

**NIH D43 TW009783-01A1 Farquhar (PI) 05/01/15-04/30/20**

Women and HIV: Translation of Research into Practice

This training program will provide MPH training for qualified individuals from Kenya Medical Research Institute (KEMRI) and advanced training to KEMRI senior faculty to promote translation of knowledge to improve the translation of HIV research into prevention of new infections and providing optimal treatment among women and adolescent girls in Kenya.

Role: Site Principal Investigator

**NIH 1G11TW010352-01 Cohen (PI) 05/13/16-04/30/19**

Uwezo: Developing an Office of Sponsored Research in KEMRI

This program will improve and expand the administrative capacity of the Kenya Medical Research Institute (KEMRI) to better manage and grow research portfolio and develop an Office of Sponsored Research to support the Institution’s scientists to apply for and manage extramural grants and contracts.

Role: Site Principal Investigator

**NIMH 1K23MH098767-01A1 Meffert (PI) 06/09/14-05/31/18**

Gender Based Violence and HIV Outcomes: Tracking and Treating Mental Illness

This project performs an interpersonal inventory and formulation of the problem areas, pursue the identified focus, using IPT techniques to affect positive change and emphasize success of completing IPT; identify achievements and areas for independent work, include several neurocognitive function assessments in order to examine pathways by which IPT may affect emotional and behavioral change such as ARV adherence.

Role: Site Principal Investigator

**CBEC 1R25 TW010509-01 Elizabeth Bukusi (PI) 06/01/17-06/01/22**

CBEC-KEMRI Bioethics Training Initiative

The study aims are to: Aim 1: To train core faculty for Kenya: Building initial bioethics capacity for a sustainable program. Aim 2: To build an innovative and collaborative curriculum in bioethics for Kenya. Aim 3: To offer locally available Post Graduate Diploma and Masters in Ethics degree courses. Aim 4: To rapidly build capacity for review by offering certificate courses and to design a practicum which includes hands on experience on how to manage an REC secretariat for REC members for both Kenya and Pakistan

Role: Project Director