## **CURRICULUM VITAE**



NAME	PROF. BENSON B.A. ESTAMBALE
CURRENT POSITION	DEPUTY VICE CHANCELLOR (RESEARCH, INNOVATION & OUTREACH)
UNIVERSITY ACADEMIC POSITION	PROFESSOR OF MEDICAL MICROBIOLOGY AND INFECTIOUS DISEASES
INSTITUTION	JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
POSTAL ADDRESS	P.O. Box 210 – 40601 Bondo, Kenya. TEL +254 57 2501804
POSTAL ADDRESS	FAX +254 57 2523851
PERSONAL DATA	
PLACE OF BIRTH	EMUHAYA SUB COUNTY, VIHIGA
NATIONALITY	KENYAN
	P.O. BOX 19483 -00202 NAIROBI- KENYA
CONTACT ADDRESS	CELL: (+254) 722 700 185/ 713 464 619/ 733 348 153
CONTACT ADDRESS	EMAIL: <a href="mailto:bestambale@gmail.com">bestambale@gmail.com</a> ;

## 1. SUMMARY OF EXPERIENCE

A Medical doctor specialized in the management and control of tropical and infectious diseases. I have been Involved in various health research activities of public health importance. These include HIV/AIDS, Malaria and other neglected diseases of the poor. I have spearheaded the completion of research work on the relationship between climate change, population health and vector borne diseases including malaria and rift valley fever. I have served in various capacities either as a principal investigator, project director or programme coordinator as well as committee/board member of various research projects and programmes. Principal Investigator in the WHO/TDR/IDRC multi-country project on population health vulnerabilities and resilience to climate sensitive vector borne diseases in Africa as well as Coordinator of the JOOUST component of the CDC funded University HIV Fellowship Training Programme. Have also been involved in the scale-up programmes for antiretroviral therapy (ART) in health facilities within Nairobi County. I served as the founder and pioneer Director of the University of Nairobi's Institute of Tropical and Infectious Disease (UNITID) for 9 years where I was instrumental in establishing the Institute and setting up of the infrastructure for graduate degree training in health research and fellowship programs as well as the bio-containment advanced Level 3 Laboratories.

bestambale@jooust.ac.ke

# 2. UNIVERSITY EDUCATION

Year (from – to)	Degree, Institution
1990 – 1992	Doctor of Philosophy (PhD) University of Nairobi
1986 – 1987	MSc. Applied Parasitology and Medical Entomology, Liverpool School of Tropical Medicine (LSTM), University of Liverpool, UK.
1987	Diploma in Tropical Medicine and Hygiene(DTM&H), Liverpool School of Tropical Medicine, University of Liverpool
1976 – 1981	Bachelor of Medicine and Bachelor of Surgery (M.B;Ch.B.), University of Nairobi

# 3. PRIMARY& SECONDARY EDUCATION

Year (from – to)	Certificate, Institution
1974 - 1975	East African Advanced Certificate of Education/ Higher School Certificate. (EAACE/HSC). Njiiri's High School, Murang'a.
1970 - 1973	East African Certificate of Education (EACE).
	Cherangani Secondary School, Trans Nzoia.
1963 - 1969	Certificate of Primary Education (CPE)
	Kapretwa Primary School, Trans Nzoia.

# 4. AWARDS

Years	Name/Description
1986	Commonwealth Medical Scholarship Award for the MSc and DTM&H studies at the Liverpool School of Tropical Medicine in the UK.
1990	Danida Fellowship Award for a PhD sandwich Programme at the Danish Bilharziasis Laboratory in Denmark
1995	IDRC/University of Manitoba Award for postdoctoral work at the University of Manitoba, Winnipeg, Canada

## 5. CURRENT EMPLOYMENT

Years since	Company / Institution
AUG 2013 TODATE	DEPUTY VICE CHANCELLOR IN CHARGE OF RESEARCH, INNOVATION & OUTREACH
	JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

# 6. POSITIONS HELD

Year from - to	Position, Project / Programme, Company / Institution / Client Description of roles and responsibilities
FEB-JULY 2013	Ag. Deputy Vice Chancellor (Research Innovation & Outreach; and Ag. Deputy Director (Academic Affairs) Jaramogi Oginga Odinga University of Science and Technology
JAN 2013	Deputy Principal (Research Innovation & Outreach) Bondo University College
2004 – 2012	DIRECTOR, University of Nairobi Institute of Tropical and Infectious Diseases (UNITID), College of Health Sciences
2011	PROFESSOR, Medical Microbiology and Tropical Medicine
2002 – 2011	ASSOCIATE PROFESSOR/CLINICAL CONSULTANT, Medical Microbiology, College of Health Sciences and KNH.
1995 – 2002	SENIOR LECTURER/CLINICAL CONSULTANT, Medical Microbiology, University of Nairobi and KNH
1988 – 1995	LECTURER/CLINICAL CONSULTANT, Dept of Medical Microbiology, College of Health Sciences, University of Nairobi and Kenyatta National Hospital
1984 – 1987	ASSISTANT LECTURER, Medical Parasitology, Department of Medical Microbiology, University of Nairobi
1982 – 1984	MEDICAL OFFICER, Machakos Provincial General Hospital in charge of various departments of the hospital
1981 – 1982	MEDICAL INTERN, Machakos Provincial General Hospital

# 7. TEACHING RESPONSIBILITIES AT THE UNIVERSITY OF NAIROBI

School/Institute	Class/ Level/Discipline		
School of Medicine	<ul> <li>Bachelor of Medicine and Bachelor of Surgery (Levels 2 and 3)</li> <li>Master of Medicine (MMed) Surgery Part I (Medical Parasitology)</li> <li>Master of Medicine (MMed) Pathology I &amp; II (Medical Parasitology &amp; Entomology)</li> <li>Master of Medicine (MMed) Paediatrics Part I (Tropical Medicine)</li> </ul>		
School Dental Sciences School of Pharmacy	<ul> <li>Medicine)</li> <li>Master of Medicine (MMed) Medicine Part I (Tropical Medicine)</li> <li>MSc. Medical Microbiology Part I &amp; II (Parasitology &amp; Entomology)</li> <li>Bachelor of Dental Sciences (Level 2)</li> <li>Master of Dental Sciences (Parasitology/Infections)</li> <li>Bachelor of Pharmacy (Level 2)</li> </ul>		

## School of Nursing Sciences UNITID

- Bachelor of Science in Nursing (Level 2)
- Master of Science (MSc.) Part I (Parasitology & Entomology)
- Master of Science (MSc.) Part II (Tropical & Travel Medicine)

## 8. PhD STUDENTS SUCCESSFULLY SUPERVISED

8. PhD STUDENTS SUCCESSFULLY SUPERVISED				
Year Qualified	Name / Title of thesis/Dept/Institution of Registration			
2016	DAMARIS ONYANGO OCHANDA: Evaluation of the Implementation of Essential under-five Healthcare Interventions in Kisumu East sub-County, Kenya. School of Health Sciences, Jaramogi Oginga Odinga University of Science and Technology – [Lead Supervisor].			
2016	<b>BENEDICT MUGO MWENJI:</b> Cognitive functions in school children infected with intestinal helminths in Kajiado and Ngong districts. Department of Zoological Sciences, School of Pure & Applied Sciences, Kenyatta University [Co – Supervisor]			
2014	<b>SILVANUS KONYOLE OCHIENG:</b> Effects of Improved complementary foods on growth and iron status of infants in Kenya. Institute of Tropical and Infectious Diseases (UNITID) – [Lead Supervisor]			
2014	<b>SELLINA AYOMA ONYANGO:</b> Effect of Improved Complementary Foods on lean body mass, lipid profile and gross motor development of Kenyan children. Institute of Tropical and Infectious Diseases, (UNITID) – [Lead Supervisor]			
2015	<b>SHADRACK OIYE:</b> Effects of maternal HIV status on growth and breast milk intake of Kenyan infants at six week postpartum and six months of age <b>[Co-Supervisor]</b>			
2012	<b>HUMPHREY NJAANAKE KARIUKI:</b> Morbidity patterns and spatial distribution of <i>Schistosoma haematobium</i> and intestinal helminth infections among children in Tana Delta District, Kenya. Institute of Tropical and Infectious Diseases, Institute of Tropical and Infectious Diseases (UNITID). – [Lead Supervisor].			
2012	MARGARET N. OLUKA: The occurrence of cytochrome P450 enzyme genotypes and their influence on the pharmacokinetics of commonly used psychotropic agents in a Kenyan population. Department of Pharmacology & Pharmacognosy, School of Pharmacy, University of Nairobi [Co –Supervisor]			
2011	<b>TERESA NUNGARI KIAMA:</b> The cervico-vaginal microflora and cytokine levels during the menstrual cycle in relation to genital viral shedding of human immunodeficiency virus 1 (HIV-1). Department of Medical Physiology, School of Medicine, University of Nairobi. – [Lead Supervisor]			
2010	<b>LUCY MUCHIRI:</b> The Impact of HIV infection on Cervical Neoplasia in a Kenyan Peri-urban Population Department of Human Pathology, University of Nairobi – [Lead Supervisor].			

WALTER OTIENO Complement Regulatory Protein Levels in Children with Sickle Cell Trait. Dept of Medical Microbiology, University of

2009

Nairobi. – [Lead Supervisor].

ALFRED I. LUOBA: Studies on Geophagy and other Risk Factors in Helminth Infection in Pregnancy (Dept. of Med. Microbiology University of Nairobi). – [Lead Supervisor].

DORCAS ALUSALA: Malaria and Vitamin A interaction in Pregnancy and Infancy. Predictors of Congenital Malaria and Effects of Maternal Vitamin A supplementation on Infant Malaria (Faculty of Life Science, University of Copenhagen, Denmark). – [Lead Supervisor].

PETER GICHANGI: Cervical cancer in Kenya and its relation to HIV infection: A study of epidemiological interactions and treatment outcome (Dept. of Obs. & Gyn. University of Nairobi) – [Lead Supervisor].

JOSEPH KIAMBO NJAGI: The Effect of Chemoprophylaxis using Sulfadoxine/ Pyrimethamine and Permethrin Impregnated bed nets on Malaria related Morbidity in Pregnancy and Child birth weight in Siaya District, Kenya. (Dept. of Med. Microbiology, University of Nairobi) – [Lead Supervisor].

WALTER G. JAOKO: Studies on Immuno-epidemiology of Bancroftian Filariasis in East Africa (Dept. of Med. Microbiology, University of Nairobi) – [Lead Supervisor].

DANSTON AKUMBI MUKOKO: Assessment of the Effect of Permethrin Impregnated bednets on the Transmission of Lymphatic Filariasis in Kwale District in the Coast Province of Kenya (Dept. of Med. Microbiology, University of Nairobi) – [Lead Supervisor].

#### 9. PhD STUDENTS CURRENTLY UNDER SUPERVISION

Registration
2012–2016 FRANCIS KIMANI MWIHIA: Improving Health Service Delivery of Public Hospitals in Kenya: The Essential Role of Management. University of Nairobi Institute of Tropical Diseases (UNITID) – [Lead Supervisor].

Name / Title of thesis / Dept/Institution of Registration

**2013–2016 EDWINAH ATIENO SYAGGA:** Evaluation of the Implementation of Community Midwifery Model of Care: A Study of Siaya County, School of Health Sciences, Jaramogi Oginga Odinga University of Science and Technology – [Lead Supervisor].

## 10. MASTERS STUDENTS SUCCESSFULLY SUPERVISED

Year
 Registered/ Name / Title of thesis/Dept/Institution of Registration
 Qualified
 2009 Flora Kanguha Kokwaro. Prevalence of HIV and Sexually Transmitted Infections among street based female Sex Workers in Nairobi. Project Dissert. MSc. Tropical & Infectious Diseases (MSc. TID)
 2009 Josephine Wahito Mwuiruri. Knowledge, Attitude and Practice on

Year of

HAART adherence among female sex workers in Majengo and SWOP Clinics in Nairobi. Project Dissert. for MSc. Tropical & Infectious Diseases (MSc. TID)

- 2009 <u>Irene Nyambura Njuguna.</u> Alcohol use and high rist behaviour among female sex workers in Nairobi, Kenya. Project Dissert. *MSc. Tropical & Infectious Diseases (MSc. TID)*
- 2009 <u>Wesangula Nelima Eveline.</u> Translating Health Policy into Practice: Successes and Challenges at implementation in Bungoma South District, Western Kenya. Project Dissert. *MSc. Tropical & Infectious Diseases(MSc.TID)*
- 2004 <u>Polycarp Mandi</u>: Prevalence of *Cryptosporidium* in Children aged 6 months to 5 years presenting with diarrhoea at Kenyatta National Hospital, Nairobi. *MMed Paediatric dissertation*. Dept of Paed.(UON)
- 1996 <u>Mwalimu Mutinda Muthisya</u> Intestinal cyst clearance as an index for comparative activity of metronidazole alone and metronidazole/diloxanide furoate combination in intestinal amoebiasis. *MMed Pathology dissertation*
- 1991 <u>Elizabeth I. Odera</u>. The Effect of physical and chemical factors in the development of eggs of *Ascaris lumbricoides* and *Trichuris trichiura*. MMed Pathology dissertation

## 11. EXTERNAL APPOINTMENTS/EXAMINER

Year Appointment as/Institution/Project

- **2011-2015 External Examiner:** Department of Human Pathology, Aga Khan University Hospital, Nairobi
- 2009-2013 Academic Mentor: The Canadian Institute for Health Research (CIHR) International Infectious Disease and Global Health Training Program. A multi country training program involving universities in Canada, Kenya, India and Colombia.
  - < http://www.iidandghtp.com/icid program supervisors.html>
- Special Member, on the Student Research Advisory CommitteeUniversity of Maryland Eastern Shore Graduate Faculty, Maryland, USA.
- **External PhD Examiner** at the Faculty of Life Sciences (incorporating DBL-Centre for Health Research and Development) University of Copenhagen, Denmark
- **External PhD Examiner** at the Faculty of Life Sciences (incorporating DBL Centre for Health Research and Development) University of Copenhagen, Denmark.
- **External PhD Examiner** at the Faculty of Life Science (DBL- Institute for Public Health Research) University of Copenhagen, Denmark
- 2003- External Examiner, Department of Parasitology and Medical

- 2005 Entomology, Muhimbili University College of Health Sciences, University of Dar es Salaam, Tanzania
- **2001-2004 External PhD Supervisor**, Faculty of Life Science, University of Copenhagen, Denmark.
- 1992 External Resource Person at the International course on Epidemiology and Control of Filariasis for participants from Filariasis endemic regions of the world, held annually in Tanga, Tanzania. Sponsored by the Danish Bilharziasis Laboratory and the Danish International Development Agency (DANIDA).

## 12. OTHER LEADERSHIP POSITIONS

Year Position/Programme/Institution

- 2008-2012 <u>Deputy Programme Director</u>, HIV Programs Management Fellowship. A collaborative programme of UNITID, University of Washington, Seattle and Centre for Diseases Control and Prevention (CDC).
- 2008-2012 Project Technical Leader Improved Counselling on Implants to Prevent Unintended Pregnancy under the Contraceptive and Reproductive Health Technologies Research and Utilization Program W0118 FHI ID. No. 112140 0118.0294
- 2008-2012 Project Technical Leader Safety of Implant Use Among Women on Antiretroviral Therapy under the Contraceptive and Reproductive Health Technologies Research and Utilization Program W0118 FHI ID. No. 112141 0118.0293
- 2004-2007 Project Director, Incorporating anti-retroviral therapy into research-based care at the collaborative centres clinics and the University of Nairobi Health Services. A PEPFAR sponsored collaborative program between UNITID and Family Health International (FHI). Responsibilities: Coordination of the scale-up activities of the antiretroviral drugs and general administration.
- 1998-2003 Head, Parasitology Section, Dept of Medical Microbiology. Responsible for preparing the teaching timetables, coordinating examinations (continuous assessment tests and end year examinations) for undergraduate and postgraduate students.
- 1996-2002 Deputy Director in charge of administration for the STD/HIV Collaborative Projects in the Department of Medical Microbiology. Responsibilities include designing the day to day rosters for the projects staff, approval of annual leave for project staff, disciplinary matters.
- 1999-2000 Coordinator, Health Research Methodology Course, organized by the Department of Medical Microbiology, University of Nairobi and the Nairobi Clinical Epidemiology Unit (CEU) sponsored by the Flemish Inter University Council (VLIR).

## 13. RESEARCH PROJECTS

Period Position / Title / Sponsor

2018-2021 Principal Recipient: Research Infrastructure Grant. Supporting the Research, innovation and Incubation Centre

Granting Agency – GOK/National Research Fund

**2013-2018** Program Director: University HIV Fellowship Training Program Granting Agency – CDC/University of Nairobi

- 2013-2017 Principal Investigator: Early warning systems for improved human health and resilience to climate sensitive vector borne diseases in Kenya. Granting Agency World Health Organization/Special Programme for Research and Training in Tropical Diseases and International Development Research Centre, Canada (WHO/TDR/IDRC)
- **2014-2016 Principal Investigator:** Vascular endothelial dysfunction: The putative interface of emerging cardiovascular risk factors affecting populations living with and without HIV in Sub-Saharan Africa.

Granting Agency: (ERAFRICA/Ministry of Education/NACOSTI).

#### 14. OTHER CURRENT AND PAST RESEARCH ACTIVITIES

Period of Position /Title / Sponsor study

- 2011-2015 Co-Principal Investigator: Impact of insecticide resistance on malaria vectors and the effectiveness of vector control interventions in Rachuonyo, Nyando, Bondo and Teso Districts of Kenya: A Multidisciplinary Approach involving KEMRI, University of Nairobi (UNITID), Division of Malaria Control and CDC Kisumu. Sponsored by the Gates Foundation through the World Health Organization (WHO)
- 2009-2014 National Principal Investigator: Treatment of Childhood Under nutrition: Development of and Access to Improved Foods (TREATFOOD). In collaboration with the Dept of Human Nutrition, Faculty of Life Sciences, University of Copenhagen (KU-LIFE), University of Nairobi Institute of Tropical and Infectious Diseases (UNITID), Dept of Paediatrics and Child Health, Jimma University Specialised Hospital (JU), Ethiopia and Dept of Child & Adolescent Health and Development, WHO, Switzerland. <a href="https://www.treatFood.org">www.treatFood.org</a>
- 2008-2013 National Principal Investigator, Alleviating childhood malnutrition by improved utilization of traditional foods (WINFOOD). A collaborative programme between Copenhagen University, University of Nairobi Institute of Tropical and Infectious Diseases and the Inland Fisheries and Research Institute, Cambodia. Responsibilities: Overall in-charge of the project in Kenya. Supervision of all project activities including the students. <a href="http://www.winfood.org/index.php/kenya">http://www.winfood.org/index.php/kenya</a> Call No. FP7-KBBE-2007-1
- 2010-2013 Co-Principal Investigator: Phase 3 Open Label Randomised Comparative Study to Evaluate Azithromycin plus Chloroquine and Sulphadoxine plus Pyrimethamine Combinations for Intermittent Preventive Treatment (IPT) of falciparum malaria infection in pregnant women in Africa. A collaborative multicentre clinical trial project involving Siaya District Hospital, UNITID and Pfizer Pharmaceutical Company. Protocol #. A0661158 1004
- 2010-2013 Co-Principal Investigator: An Open Label, Non Comparative Study to Evaluate Parasitological Clearance Rates and Pharmacokinetics of Azithromycin and Chloroquine following administration of a fixed dose combination of Azithromycin and Chloroquin (AZCQ) in asymptomatic pregnant women with *Plasmodium falciparum* parasitaemia in Sub-Saharan Africa Protocol #. A0661201 1004

- 20042006 Principal Investigator Intermittent preventive treatment in schools: randomized controlled trial of the impact of IPT on malaria, anaemia and education amongst schoolchildren in western Kenya. A collaborative project between the University of Nairobi Institute of Tropical and Infectious Diseases (UNITID), London School of Hygiene and Tropical Medicine UK, Imperial College UK, DBL-Institute for Health Research and Development in Denmark and Division of Malaria Control, MOH, Kenya
- 1999-2008 Project Leader HIV/AIDS/Reproductive Health Component of the Kenyan-Belgium VLIR Project, a multidisciplinary project involving collaboration between the Flemish Universities in Belgium and the University of Nairobi, Kenya.
- 2004- Project Director Incorporating anti-retroviral therapy into research-based care at the Collaborative Centre Clinics and the University of Nairobi Health Services. A PEPFAR sponsored collaborative program between UNITID and Family Health International (FHI).
- 2001-2004 Co-Principal Investigator Double blind randomized controlled phase I human trial to evaluate the safety and immunogenicity of WRAIR's MSP-1 malaria vaccine (FMP-1) adjuvanated in Glaxo-SmithKline Biological A SO2A vs. Rabies vaccine in western Kenya. A joint collaborative programme between the US Army Medical Research Institute (Walter Reed) and the Kenya Medical Research Institute (KEMRI) Kisumu

#### 15. CONSULTANCIES

Year Position, Project / Programme, Company / Institution / Client from – to Description of roles and responsibilities

Oct. 2010 - Consultant - National Consultants Team to Review and Develop a costed Research and Evaluation Strategy for the National AIDS Control Council (NACC). Task: Assessment and Gap Analysis

May – July <u>Lead Consultant</u> – Malaria case management training for frontline 2010 healthcare workers in Central Province **Phase II**. Ministry of Public Health & Sanitation and Global Fund

Jul–Sept 2009 <u>Lead Consultant</u> – Malaria Case Management Training Programme for Frontline Health Workers **Phase I.** A programme of the Division of Malaria Control (Kenyan Ministry of Public Health and Sanitation). Sponsored by Global Fund and WHO. Provide training on malaria case management to frontline health workers in government and faith based health facilities in Kenya.

Sept. 2009 Proposals Technical Review Team – Kenya HIV and AIDS Research Coordinating Mechanism (KARSCOM). Consultancy of the National AIDS Control Council (NACC), Nairobi, Kenya. Technical review of submitted proposals for funding

2007 - 2009 <u>Lead Consultant/Team Leader</u> — Nomadic Clinics and Healthcare Provision to the Nomadic Populations of North-Eastern Province of Kenya. The assessment of nomadic clinics and their role in the provision of healthcare to the nomadic population of NEP. DANIDA financed Health Sector Programme Support II (HSPS 2), Ministry of Medical Services.

- Project Coordinator and Consultant The Kenyan-Danish Health Research (KEDAHR) Project. A multi-disciplinary project involving Division of Vector Borne Diseases (DVBD) of the Kenya Ministry of Health in collaboration with the Kenya Medical Research Institute (KEMRI), Institute of African Studies (IAS), University of Nairobi, Department of Psychology, Kenyatta University and the Danish Bilharziasis Laboratory (DBL) collaborating with the Department of Human Nutrition of the University of Copenhagen, Denmark. Responsibilities: Coordination of institutions involved in the project, supervision of Masters and PhD students on the project and general administration of the project.
- Project Leader, HIV/AIDS/Reproductive Health Component of the Kenyan-Belgium VLIR Project, a multidisciplinary project involving collaboration between the Flemish Universities in Belgium and the University of Nairobi, Kenya. Responsibilities: Coordinator of project activities, students supervision and general administration of project funds

## 16. LINKAGES AND COLLABORATIVE AGREEMENTS ESTABLISHED

- Pfizer Pharmaceutical Company, USA: A clinical trial agreement on phase III open label randomised comparative study to evaluate Azithromycin + Chloroquine and Sulphadoxine + Pyrimethamine combinations for intermittent preventive treatment (IPT) on falciparum malaria infection in pregnant women in Africa. A multicentre clinical trial project involving Siaya District Hospital. Protocol #. A0661158 1004
- Pfizer Pharmaceutical Company, USA: A clinical trial agreement on phase III open label, non comparative study to evaluate parasitological clearance rates and pharmacokinetics of Azithromycin and Chloroquine following administration of a fixed dose combination of Azithromycin and Chloroquin (AZCQ) in asymptomatic pregnant women with Plasmodium falciparum parasitaemia in sub-Saharan Africa. Protocol #. A0661201 1004
- 2008–2011 Department of Human Nutrition, Faculty of Life Sciences, University of Copenhagen: Agreement on a research project entitled "Alleviating Childhood Malnutrition in Developing Countries through Improved Utilization and Processing of Traditional Foods".

DANIDA Grant No. 57 – 08 – LIFE.

- DBL Centre for Health Research and Development, Faculty of Life Sciences, University of Copenhagen, Denmark. Support for specific research in lymphatic filariasis, Mansonella perstans, schistosomiasis and neglected tropical diseases of the poor; support of training programmes including postgraduate research methodology and a short course on Multivariate Statistics using STATA version 10.
- 2009-2013 University of Washington, School of Medicine. Subcontract between UON and UW for Training HIV Program Managers under the UNITID Fellowship Program.
- 2008-2012 Family Health International Master sub-Agreement under the

Contraceptive and Reproductive Health Technologies Research and Utilization Program USAID GPO-A-00-05-00022-00.

2007 – 2009	Medicines for Malaria Venture, Geneva /Shin Poong Pharmaceuticals Co. S. Korea. A phase III comparative (double blind, double dummy) randomized multicentre clinical study to assess the safety and efficacy of fixed dose formulation of oral pyronaridine artesunate versus artemether lumefantrine (Coartem) in children and adult patients with acute uncomplicated <i>Plasmodium falciparum</i> malaria.		
2004–20008	London School of Hygiene and Tropical Medicine: Gates Malaria Partnership Project: Intermittent preventive treatment in schools: Randomized controlled trial of the impact of IPT on malaria, anaemia and education among school children in western Kenya.		
2004 – 2008	Family Health International on scaling up of antiretroviral drugs (ARVs) in research clinics of Nairobi City Council and Tigoni District Hospital		
2006 – 2009	International Agency for Research on Cancer, Lyon, France: On		
	human papillomavirus (HPV) type distribution in case series of cervical cancer and pre-cancer patients in Nairobi, Kenya		
2006 - 2009	<b>Tufts University Boston</b> – Agreement on Improving HAART adherence in ARV Treatment Expansion programmes in Kenya. An Operational Evaluation and Cost Analysis under a grant from the Doris Duke Charitable Foundation. Grant No. 2005046		
2006 - 2009	<b>Tufts University Boston</b> - Agreement on Understanding the Dynamics of HAART Delivery in five clinics in Nairobi. A health services and outcome research project under a grant from the Center for AIDS Research (CFAR)		

# 17. RESOURCE MOBILIZATION AT JOOUST

17.1 Fund Raising at Individual Level			
YEAR	DONOR	PROJECT TITLE	AMOUNT (in KES)
2013-2017	WHO/TDR/IDRC	Early warning systems for improved human health and resilience to climate—sensitive vector borne diseases	85,500,000.00
2014-2017	ERAFRICA/MOE/ NACOSTI	Vascular endothelial dysfunction: The putative interface of emerging cardiovascular risk factors affecting populations living with and without HIV in Sub-Saharan Africa.	8,914,808.00
2014-2018	CDC/UON	UHIV Fellowship Training Programme	16,222,905.00
2018-2021	GOK/National Research Fund	Research Infrastructure Grant (Supporting the Research, innovation and Incubation Centre)	33,556,900.00
		Total Amount	144,194,613.00
17.2 Fund Raising at Institutional Level through Supported grant writing workshops			
2017-2021	World Bank	African Centre of Excellence in Sustainable Use of Insects as Food and	569,942,219.10

2017-2021		Feed (INSEFOODS) Solar powered milk cooling system for the small dairy farmers in Kenya	14,929,895.00
2018-2021	GOK/NRF	Promoting awareness and participation of PWDs in education and other community based programmes in Siaya County, Kenya	18,929,895.00
2015-2016	USAID/SERVIR Africa/RCMRD	Development of Decision Support System for Sustainable Participatory sub-catchment Water Resources Management in the Face of Deteriorating Climatic Conditions.	2,400,000.00
2015-2016	USAID/SERVIR Africa/RCMRD	Resilience to Climate Change through Building Capacities in SDI for uptake by Selected County Governments in Lake Victoria Region in Kenya.	2,400,000.00
		Total	608,602,009.00

## 18. OTHER ACTIVITIES /PROJECTS I HAVE FACILITATED AT JOOUST

Research Infrastructure Development

## 18.1 CENTRE FOR RESEARCH INNOVATION AND OUTREACH (CRIT)

A proposal to establish and operationalized CRIT was developed under my guidance and approved by University Management Board (UMB) in February 10<sup>th</sup>, 2015. The Centre is one of the University's Vision 2030 Flagship projects to drive Science and Technology in the Institution. The Centre currently has 4 staff members.

# 18.2 AFRICAN CENTRE OF EXCELLENCE IN SUSTAINABLE USE OF INSECTS AS FOOD AND FEED (INSEFOODS)

Through support from World Bank Group, Researchers in the University competitively won and received funding to support the establishment of INSEFOODS. A proposal to operationalize the Centre is under implementation

# 18.3 CAPACITY BUILDING THROUGH TRAINING IN GRANT WRITING FOR STAFF AND STUDENTS

The University has been holding Annual grant proposal writing to build capacity of staff and students in fundraising for research. RIO has organized for five (5) training for the period 2014-2018 where on average, 120 participants have been trained.

The division has also organized training of staff on Intellectual Property Rights, Management of research grants and academic and research discourse.

## 18.4 POLICIES DEVELOPED AND APPROVED

- Research and Development Policy 2013
- Income Generation Policy 2013 (Revised 2016)
- Intellectual Property Rights Policy 2016
- Copyright Policy 2017

19. FUND RAISING EFFORTS AT UNITID/UNIVERSITY OF NAIROBI				
YEAR	DONOR	PURPOSE	AMOUNT (in US\$)	
2010 - 2012	<ol> <li>Pfizer Pharmaceuticals (Pty) Ltd, 85 Bute Lane, Sandton 2196 SA</li> </ol>	Two clinical drug trial studies on malaria in pregnancy in Siaya District Hospital.	1,434,472	

2010	2.	Ministry of Public Health and Sanitation and <b>Global Fund</b>	Consultancy on phase 2 of the Malaria training for health care workers in Kenya	151,900
2009	3.	Division of Malaria Control of MOPHS and WHO	Phase I Malaria training consultancy of health care workers	85,000
2008 – 2010	4.	DBL-CHRD Faculty of Life Sciences Univ. of Copenhagen	Clinical Research on interaction between <i>Sch. haematobium</i> and intestinal helminths	60,000
2008 – 2012	5.	University of Copenhagen, <b>DANIDA</b>	Research on alleviating childhood malnutrition and the promotion of locally available foods	466,010
2008 – 2012	6.	Centres for Diseases Control and Prevention (CDC)	UNITID Fellowship training programme	1,200,000 ( x 5yrs)
2007 – 2008	7.	World Health Organization Geneva	Research on the occurrence of ADR in two hospitals	29,000
2007 – 2009	8.	International Cancer Research Centre, (IARC)	Research on the association between cervical cancer and human papilloma virus	32,000
2007 – 2009	9.	Shin Poong Pharmaceutical Co. and the MMV, Switzerland	Clinical trial study on the comparative efficacy of pyrolidine-artesunate against artemisinin-lumefantrine	214,286
2006 – 2008	10.	Pathfinder International/ PEPFAR/CDC	Continuation of ARV drugs scale up among HIV infected persons in research clinics	180,000
2006 – 2009	11.	TUFTS University (DORIS DUKE)	Research Understanding the dynamics of HAART delivery in five clinics in Nairobi	94,000
2006 – 2009	12.	TUFTS University ( <b>CFAR)</b>	Research on Improving medication adherence in HIV treatment expansion program in Kenya	10,000
2005 – 2007	13.	Gates Malaria Partnership	Intermittent preventive treatment of Malaria in school going children	260,890
2004 – 2006	14.	Family Health International/ PEPFAR/USAID	Antiretroviral (ARV) drugs scale up among HIV infected persons in research clinics	231,760
2004	15.	DBL- Centre for Health	Research in <i>Mansonella</i>	10,000
I D				

Research and Development (Univ. of CPH)

perstans

2003 - 2012

16. DBL – Centre for Health for Health Research and Development (University of Copenhagen)

- Infrastructure support, 358,552.5
- Workshop -Curriculum development,
- Workshops
- PGDRM scholarships,
- Short course on STATA.

#### 20. OTHER CONTRIBUTIONS

- 2006-12 Managed to obtain scholarships for the Postgraduate Diploma in Research Methodology course students since 2006/2007 academic year. A total of 77 students so far benefited from partial scholarship totalling Ksh. 6,107,030.00
- 2006-12 Successfully presided over the running of a 2-week multivariate statistical course using STATA versions 9&10. A total of 109 participants from Kenya, Uganda, Tanzania, Zambia, Zimbabwe, Malawi, Mozambique and Rwanda, Nigeria, the Gambia, Ivory Coast, Ethiopia and Sudan have benefited
- Successfully applied to VLIR-IUC for the supply of 80 computers and 10 printers to the College of Health Sciences, UON through the CLOSE-THE-GAP Project
- Donated Ksh. 100,000.00 to the Universities sports festival held at the University of Nairobi in December 2009
- 2005 -10 Managed to develop 2 Masters programmes, 1 postgraduate diploma programme and currently registered 2 PhD students at UNITID. All programmes in place and running.

#### 21. TRAININGS /WORKSHOPS/SYMPOSIA ATTENDED

- 2<sup>nd</sup> Capacity Strengthening Workshop for the WHO/TDR/IDRC research initiative on Population Health Vulnerabilities to Vector-Borne Diseases: Increasing Resilience under Climate Change Conditions in Africa. Held at the Regional Centre for Mapping of Resources for Development (RCMRD) Nairobi, Kenya 24<sup>th</sup> 28<sup>th</sup> June 2013.
- 1st East African MicroResearch Forum: Research Presentations, networking and Scientific Writing Skills. Organized by Dalhouse University, Nova Scotia, Canada in collaboration with IDRC at the College of Health Sciences, Makerere University, Mulago Hospital 25th 26th March 2013.
- Proposal Development Workshop for the WHO/TDR/IDRC Research Initiative on Population Health Vulnerabilities to Vector-Borne Diseases: Increasing Resilience under Climate Change Conditions in Africa. Organized by WHO/TDR/IDRC, held at Noguchi Memorial Research Institute, University of Ghana, Legon, Accra (4<sup>th</sup> 7<sup>th</sup> Nov. 2012).
- Joint Academies Symposium on Changing Patterns of health problems in sub-Saharn Africa(SSA): Impact of communicable and Non-Communicable

Diseases, Organized by the Germany National Academy of Sciences, Leopoldina, the Ghana Academy of arts and Sciences (GAAS), and the Network of African Sciences Academies (NASAC), held at Bernhard Nocht Institute of Tropical Medicine, Hamburg, Germany (1st – 3rd Nov. 2012).

- Moderators' meeting of the International Society for Infectious Diseases (ISD). Organized by the ISID. Venue: **Dakar, Senegal** (11th 14th Nov. 2010).
- Project Investigators' workshop on the Impact of insecticide resistance on malaria in four African countries. Organized by WHO, Geneva. Venue: Yaounde, Cameroon (28th 29th Oct. 2010).
- 2010 Malaria Vaccine Advocacy Fellowship Workshop. Organized by the Malaria Vaccine Initiative (MVI)/PATH, Bethesda. Venue: Accra, Ghana (6<sup>th</sup> 8<sup>th</sup> July 2010).
- Post Approval Program (PAP) Advisory Board meeting/workshop for the Malaria Vaccine Initiative (MVI), Glaxo SmithKline (GSK) Biologicals S.A. and Bill and Melinda Gates Foundation. Ferney-Voltaire, France (2<sup>nd</sup> 4<sup>th</sup> March 2010).
- Stakeholders Workshop on Strengthening Research for Neglected Diseases of Poverty as a GOK/MOH appointed representative in Berlin, Germany. Organized by GTZ/WHO (16th 18th March, 2009)
- Stakeholders Workshop on Translating Health Research into Policy and Practice. UNITID/DBL-Centre for Health Research and Development Nairobi, Kenya. (10<sup>th</sup>—12<sup>th</sup> October 2007).
- 2007 Workshop on Assessing Malaria vector resistance to insecticides used for indoor residual spraying in Uganda. Organized by **Uganda National** Academy of Sciences (UNAS). Kampala, Uganda (23<sup>rd</sup> 26<sup>th</sup> July 2007).
- 2006: UNICEF/UNDP/World Bank/WHO/TDR Special Programme for Research in Tropical Diseases. Effective Project Planning and evaluation in Biomedical Research KARI, NAIROBI (20th 24th March).
- 1996 Writers' workshop in distance education for private practitioners (doctors, clinical officers and nurses) in the control of sexually transmitted infections (STI) and HIV/AIDS.
- Postdoctoral fellow, Department of Medical Microbiology and Infectious Diseases University of Manitoba, Canada: Working on molecular characterization of *Cryptosporidium parvum*, production and purification of *C. parvum* recombinant antigens and the use of these antigens in serodiagnosis using ELISA tests. (6 months (Jun Nov, 1994)
- 1990: International course on the "Epidemiology and Control of Filariasis" in Tanga Tanzania (Oct Nov 1990)
- 1990: 4month laboratory course on immunological methods and immunodiagnosis of parasitic infections with special emphasis on lymphatic filariasis at the Danish Bilharziasis Laboratory in Denmark (Feb Jun 1990).

## 22. MEMBERSHIP TO EXTERNAL COMMITTEES/BOARDS

Chairman Certification Committee for Guinea Worm Diseases Eradication in

Kenya, Programme for the Ministry of Health

Regional Program for Monitoring Emerging Diseases for English speaking Africa

Moderator (ProMED – EAFR).

**Board Post Approval Program Advisory Board:** RTS,S/AS Malaria Vaccine under the Malaria Vaccine Initiative (MVI/PATH) sponsored by the

under the Malaria Vaccine Initiative (MVI/PATH) sponsored by the Program for Appropriate Technology in Health (PATH), Westlake Av.

Seattle, USA and GlaxoSmithKline (GSK) Rixensert, Belgium.

Member Leadership and Mentors Committee: International Infectious Disease

and Global Health Training Program. A multi-country training program involving universities and Research Institutes in Canada, Kenya, India

and Colombia.

http://www.iidandghtp.com/documents/Leadership and Mentors of t

he IID&GH Trainning Program.pdf

Member Kenya Independent Immunization Technical Advisory Group (KITAG):

Ministry of Public Health and Sanitation, Kenya.

Alternate Nairobi Health Management Board (NHMB)
Member

Member Research Technical Working Group: Ministry of Health, Kenya on

Malaria Epidemiology, Prevention and Control in Kenya

Member Consensus Study Committee: Indoor Residual Spraying as a means to

control Malaria in Uganda. Uganda National Academy of Sciences.

Member Proposals Technical Review Team: National AIDS Control Council

(NACC) - Kenya HIV and AIDS Research Coordinating Mechanism

(KARSCOM).

Special Graduate Advisory Board: University of Maryland Eastern Shore

**Member** Graduate Faculty

Member Malaria Vaccine Decision Making Framework Committee: A joint

initiative between PATH Malaria Vaccine Initiative, WHO (Africa

Region), UNICEF and the Kenya Ministry of Health.

Member Global Lymphatic Filariasis Control Programme Task Force: Ministry of

Health, Kenya.

Member Health Research Capacity Strengthening (HRCS) in Kenya Task Force: A

joint initiative organized by IDRC, Department for International

Development (DfID)-United Kingdom and Welcome Trust.

Member Editorial Review Board: East African Medical Journal (An Organ of the

Kenya Medical Association)

## 23. MEMBERSHIP TO PROFESSIONAL ASSOCIATIONS /BODIES

Member Kenya National Academy of Sciences (KNAS)

Member Kenya Medical Association (KMA)

**Member** Royal Society for Tropical Medicine (RSTM)

Member International Society for Infectious Diseases (ISID)

Member Inter Academy Medical Panel (IAMP)

## 24. LANGUAGE PROFICIENCY

LANGUAGE	PROFICIENCY	SPEAKING	READING	WRITING
ENGLISH	Excellent	Excellent	Excellent	Excellent
KISWAHILI	Excellent	Excellent	Excellent	Excellent
LUHYA	Excellent	Excellent	Excellent	Excellent

## 25. CONFERENCES/WORKSHOPS/MEETINGS ATTENDED

- 2017 Clinical Research Capacity Building Workshop at the Academy of Medical Sciences, 41 Portland Place, London, UK. July 3-4, 2017
- 2017 21<sup>st</sup> Annual Guinea Worm Programme Review Meeting at the Carter Center, Atlanta, Georgia. March 20-21, 2017.
- International Meeting on Emerging Diseases and Surveillance in Vienna, Austria, November 4-7, 2016.
- Health and Climate Colloquium at the International Research Institute for Climate and Society (IRI, Columbia), Earth Institute, Columbia University, Lamont Doherty Campus, 61, New York, USA 6-10 June 2016.
- 2016

  17th International Congress on Infectious Diseases (ICID) in Hyderabad, India, March 2-5, 2016 and ProMED Staff Editorial and EpiCore training meeting preceding the conference on March 1 2 March, 2016.
- 2015
  11th Annual Meeting of African Science Academies (AMASA 11) Nov 29th 2nd
  Dec., 2015 at Laico Regency Hotel, Nairobi, Kenya. Organized by the Kenya
  National Academy of Sciences (KNAS)
- 3<sup>rd</sup> Annual Meeting of Climate and Health (Clim-Health) in Africa. coordinated by WHO/AFRO with financial support from government of Norway (WMO/GFCS) and Germany (GIZ). Johannesburg, South Africa 30<sup>th</sup> Sept. 2<sup>nd</sup> Oct. 2015.
- 5<sup>th</sup> International Meeting on Emerging Diseases and Surveillance (IMED) in Vienna, Austria, October 30-November 3, 2014
- Inter-Academy Medical Panel (IAMP) Conference on Changing Patterns of Non-Communicable Diseases and 4<sup>th</sup> General Assembly. Crowne Plaza Hotel, Johannesburg, South Africa 13<sup>th</sup> 16<sup>th</sup> August 2013
- International Meeting on Emerging Diseases and Surveillance (IMED) at Hilton Hotel, Vienna Austria, 15th 18th February 2013
- XVIII International Congress for Tropical Medicine and Malaria organized by the XLVIII Congress of the Brazilian Society of Tropical Medicine at the Royal Tulip Hotel, Rio de Janeiro, Brazil 23<sup>rd</sup> 27<sup>th</sup> Sept. 2012.
- 15<sup>th</sup> International Congress on Infectious Diseases and Moderators Meeting of the Program for Monitoring of Emerging Diseases (ProMED). Organized by the International Society for Infectious Diseases in Bangkok, Thailand on 13<sup>th</sup> 16<sup>th</sup> June 2012.

- Inter-Academy Medical Panel (IAMP) Scientific Meeting and 3<sup>rd</sup> General Assembly. Organized by the Academy of Sciences Malaysia. Venue: **Kuala Lumpur**, Malaysia on 7<sup>th</sup> 11<sup>th</sup> June 2010.
- 14<sup>th</sup> International Congress on Infectious Diseases and Moderators Meeting of the Program for Monitoring of Emerging Diseases (ProMED. Organized by the International Society for Infectious Diseases. Miami, Florida USA on 9<sup>th</sup> 12<sup>th</sup> March, 2010.
- 2009 19th International Congress on Nutrition (ICN 2009). Bangkok, Thailand on 4th 9th Oct., 2009.
- 2009 5<sup>th</sup> African Regional Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) & 3<sup>rd</sup> African Field Epidemiology Network (AFENET), Scientific Conference. Sarova Whitesands Mombasa, Kenya (30<sup>th</sup>Aug 4<sup>th</sup>Sept. 2009)
- 2009 ACCORDIA Global Health Foundation's Infectious Diseases Summit on Building Healthcare Leadership in Africa in Kampala Uganda (20<sup>th</sup> 22<sup>nd</sup> April, 2009):
- 2009 Stakeholders Meeting on Strengthening Research for Neglected Diseases of Poverty as a GOK/MOH appointed representative in Berlin, Germany. Organized by GTZ/WHO (16<sup>th</sup> 18<sup>th</sup> March, 2009)
- 2<sup>nd</sup> International Congress on Emerging Diseases and Surveillance (IMED). Organized by the International Society for Infectious Diseases. Vienna, Austria (13<sup>th</sup> 16<sup>th</sup> Feb., 2009).
- 3<sup>rd</sup> World Academies of Science (TWAS) workshop on Reducing perinatal and maternal mortality rate in developing countries, Trieste, Italy (14<sup>th</sup> 16<sup>th</sup> Dec. 2007).
- 2007 3<sup>rd</sup> African Science Academies Development Initiative Conference, Dakar Senegal (12<sup>th</sup> 16<sup>th</sup> Nov. 2007).
- The Royal Society of Tropical Medicine Conference in London, England: Celebrating 100 years of Tropical Medicine (13th 15th Sept., 2007)
- 2007 Ministry of Science & Technology Policy Development Workshop on Science, Technology and Innovation in Kenya at Leisure Lodge, Diani (8th – 10th Aug., 2007).
- 2007 Consensus Study meeting in Kampala on Assessing Malaria Vector Resistance to Insecticides used for indoor Residual Spraying (IRS) in Uganda (23<sup>rd</sup> – 27<sup>th</sup> July, 2007).
- 2007 Preparatory meeting of the  $3^{rd}$  African Science Academies Development Initiative, Dakar, Senegal ( $1^{st} 5^{th}$  May, 2007)
- 2007 55<sup>th</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene, Atlanta Marriot Marquis, Georgia
- 2006 2<sup>nd</sup> African Science Academies Development Initiative conference, Yaoundé, Cameroon (11<sup>th</sup> 16<sup>th</sup> Nov., 2006).
- 2006 XVI International AIDS Conference Toronto Canada (13th 18th Aug., 2006)
- 2006 Gates Malaria Partnership Conference, London England (5th 9th June,

2006).

- 2005 1<sup>st</sup> Annual International Conference of African Sciences Academies Development Initiative (ASADI) Nairobi, Kenya.
- 2004 DBL-Institute for Health Research Development 40<sup>th</sup> Anniversary Guest Speaker
- 2000 21<sup>st</sup> African Health Sciences Congress KEMRI- Nairobi, Kenya (24 28<sup>th</sup> April 2000).
- 1998 Good Clinical Practice (GCL) & Good Laboratory Practice (GLP) training in Malaria Research Accra, Ghana (2<sup>nd</sup> 5<sup>th</sup> Nov. 1998).
- 1998 4<sup>th</sup> Filariasis Contract Holders meeting, held in Paris, France (26<sup>th</sup> 30<sup>th</sup> Jan 1998).
- 1997 1st Meeting on Lymphatic Filariasis Research in Africa held in Tanga, Tanzania (14th 18th April 1997).
- 1993 10<sup>th</sup> Annual Scientific Conference of the National Institute of Medical Research (NIMR) Tanzania, Arusha Tanzania (22<sup>nd</sup> 26<sup>th</sup> Feb. 1993)
- Annual Scientific workshop of the Danish Society of Parasitologists and the Danish Society of Tropical Medicine, Copenhagen, Denmark. (29th Feb. 1992).
- 1990 Danish Society of Tropical Medicine & The Danish Society of Parasitologists annual Scientific workshop (March 1990) Copenhagen Denmark.
- 1989 35<sup>th</sup> Annual Scientific Conference of the Association of Physicians of East and Central Africa (APECA) Arusha, Tanzania (10<sup>th</sup>–16th Dec. 1989).
- 1989 10th Annual Medical Scientific Conference KEMRI/KETRI Nairobi-Kenya.
- 1988 12th International Congress for Tropical Medicine and malaria Amsterdam Holland (18<sup>th</sup> 23<sup>rd</sup> Sept. 1988).
- 1988 9th Annual Medical Scientific Conference KEMRI/KETRI Nairobi-Kenya
- 1987 Royal Society of Tropical Medicine (Workshop) at Liverpool School of Tropical Medicine, England.
- 1987 Royal Society of Parasitologists Conference Edinburgh, Scotland.
- 1986 7th Annual Medical Scientific Conference of KEMRI/KETRI, Nairobi.
- 1985 6th Annual Medical Scientific Conference of KEMRI/KETRI, Nairobi-Kenya.
- 1985 7th International Congress of Protozoology, Nairobi, Kenya.
- 1984 12th Annual Kenya Medical Association Conference, Nyeri-Kenya.

#### 26. ABSTRACTS FOR CONFERENCES

- **Estambale B**, Marjorie P., Madoff, L., Wamala J.F., Niwael M.M., Babalobi T.O., Coullibally S. Regional Disease Surveillance Networks. The ProMED experience in East Africa. International Meeting on Emerging Diseases and Surveillance 2011, Vienna, Austria 4<sup>th</sup> 7<sup>th</sup> February 2011. **Abstract 14.002**
- Orech F.O., Friis H., <u>Estambale B.A.</u>, Aargaard-Hansen J. Traditional leafy vegetables: Are they a source for combating malnutrition in low income countries? Poster presented at the 19<sup>th</sup> International Congress on Nutrition (ICN 2009). Bangkok, Thailand (4<sup>th</sup> 9<sup>th</sup> October, 2009). **P66-15**
- 2007 <u>BBA Estambale</u>, SE. Clarke, MCH Jukes, JK Njagi, L. Khasakhala, C. Crudder, J. Otido, B. McGlone, S. Brooker. Randomised controlled trial of intermittent preventive treatment in school children: Impact on malaria, anaemia and school performance. 13<sup>th</sup> 15<sup>th</sup> September 2007 The Royal Society of Tropical Medicine Conference in London, England: Celebrating 100 years of Tropical Medicine
- 2006 SE Clarke, <u>BBA Estambale</u>, MCH Jukes, JK Njagi, L Khasakhala, C Crudder, J Otido, B McGlone, P Magnussen & S Brooker. Randomised Controlled Trial of Intermittent Preventive Treatment in schoolchildren: Impact on Malaria & Anaemia, 55<sup>th</sup> American Society of Tropical Medicine and Hygiene Conference, Marriot Marquis, Atlanta, Georgia
- 2006 <u>BBA Estambale</u>, S Brooker, SE Clarke, MCH Jukes, P Magnussen. Intermittent Preventive Treatment in School Children. Gates Malaria Partnership (GMP) Conference, Chatham House, London England 5<sup>th</sup> 9<sup>th</sup> June 2006.
- 2001 Luoba AI, <u>Estambale BA</u>, Ouma JH, Geissler PW. The role of Geophagy and other risk factors for helminthiasis in pregnant and lactating women. Preliminary findings of a birth cohort study conducted in western Kenya. Workshop on Human Helminthiasis infection: Future Research foci. Dept of Biological Sciences, University of Zambia, Lusaka 5-9 March 2001.
- 2000 Kiambo NJ, Magnussen P, <u>Estambale BBA</u>, Ouma JH, Mugo B. Anaemia in Pregnancy: Intermittent treatment with sulphadoxine/pyrimethamine combination and insecticide impregnated bednets protect primigravidae but not secundigravidae? Oxford 2000, A Congress on New Challenges in tropical Medicine and Parasitology. University of Oxford, England, 11-22 Sept. 2000.
- 2000 Mukoko DAN, Pedersen EM, Masese NN, Ouma JH, <u>Estambale BBA</u>. The effect of permethrin impregnated bednets on the transission of lymohatic filariasis in Kwale District in the coastal region of Kenya. 21st African Health Sciences Congress, KEMRI Nairobi Kenya. **P37/2000**.
- Njagi K, <u>Estambale BBA</u>, Ouma JH, Magnussen P, Mugo B. The effect of intermittent treatment with sulfadixine-pyrimethamine combination and pyrethroid treated bed nets on malaria related anaemai among the pregnant women living in malaria holo/hyper endemic areas of Kenya. 21st African Health Sciences Congress, KEMRI Nairobi Kenya. **P19/2000**.
- Ndiritu W, Kang'ethe SK, Kiliku FB, <u>Estambale BBA</u>, Xiao L. *Cryptosporidium meleagridis* from a human patient. Evidence of Emerging Infections. 21st African Health Sciences Congress, KEMRI Nairobi Kenya. **Ab69/2000**.

- Alusala D, Magnussen P, Ouma JH, Friss H, <u>Estambale BBA</u>. Malaria and vitamin A interactions in pregnancy and infancy. Predictors of Congenital Malaria and Effect of Maternal vitamin A supplementation on infant malaria. 21st African Health Sciences Congress, KEMRI Nairobi Kenya. **Ab61/2000**.
- Mukoko DAN, Pedersen EM, Masese NN, Ouma JH, <u>Estambale BBA</u>. The vectors Of *Wuchereria bancrofti* and their relative importance in the transmission of Lymphatic Filariasis in Kwale District Coastal Kenya. 21st African Health Sciences Congress, KEMRI Nairobi Kenya. **Ab19/2000**.

#### **27. PUBLICATIONS**

- 1. <u>B.B.A. Estambale</u>, R.E. Howells (1989). The efficacy of 22,23-dihydroavermectin B1 (Ivermectin) acting singly or in combination with a benzodiazepine on microfilariae of *Onchocerca* species and *Brugia pahangi* (An *in vitro* study). *Zentrablatt fur Bakteriologie*, *Mikrobiologie und Hygiene Series A:* **271** (2), 249-255.
- 2. <u>B.B.A. Estambale</u>, H.O. Pamba, P.M.Chitayi (1989). The potential of schistosomal skin test as a diagnostic method in the detection of schistosomiasis. *E. Afr. Med. J.* **66** (7), 38-40.
- 3. <u>B.B.A. Estambale</u>, C.R.A. Bwibo, S.Kang'ethe, P.M. Chitayi (1989). The occurance of *Cryptosporidium* oocyst in faecal samples submitted for routine examinations at Kenyatta National hospital. *E. Afr. Med. J.* **66** (12), 792-795.
- 4. H.O. Pamba, N.O. Bwibo, C.N. Chunge, <u>B.B.A. Estambale</u> (1987). Albendazole (Zentel) in the treatment of helminthiasis in children below two years of age. A preliminary report. *E. Afr. Med. J.* **64** (7), 448-452.
- 5. C.N. Chunge, <u>B.B.A. Estambale</u>, H.O. Pamba, P.M. Chitayi P. Munanga, S. Kang'ethe (1988). Pathogenicity of *Trichomonas hominis* in Kenya. *E. Afr. Med. J.* **65** (8), 532-534.
- 6. C.N. Chunge, <u>B.B.A. Estambale</u>, H.O. Pamba, P.M. Chitayi, P.Munanga, S. Kang'ethe (1989). Comparison of four nitroimidazole compounds for the treatment of symptomatic amoebiasis in Kenya. *E. Afr. Med. J.* **66** (11), 724-727.
- 7. H.O. Pamba, N.O. Bwibo, C.N. Chunge, <u>B.B.A. Estambale</u> (1989). A study of the efficacy and safety of albendazole (Zentel) in the treatment of intestinal helminthiasis in Kenyan children less than two years of age. *E. Afr. Med. J.* **66** (3), 197-202
- 8. H.O. Pamba, <u>B.B.A. Estambale</u>, C.N. Chunge, L. Donno (1988). Recent advances in thetreatment of symptomatic luminal amoebiasis. IN: *XIIth International Congress for Tropical Medicine and Malaria*. 18<sup>th</sup> 23<sup>rd</sup> Sept. 1988. Amsterdam, Netherlands. (abstract MoP 5-14) pp 48.
- 9. <u>B.B.A. Estambale</u>, C.N. Chunge, H.O. Pamba, L. Donno (1989). The comparison of aminosidine, nimorazole and etofamide alone or in combination in the treatment of amoebiasis. *KEMRI/KETRI 10th Annual Medical Scientific Conference 6-10th Feb* 1989. Nairobi-Kenya. (Abstract 56/89) pp 99.
- 10. J.O. Ndinya-Achola, I.A. Wamola, N.B. Mirza, <u>B.B.A. Estambale</u>, L. Atieno (1989). Role of primary health workers in prophylaxis against ophthalmia neonatorum. KEMRI/KETRI 10th Annual Medical Scientific Conference 6-10th Feb 1989. Nairobi-Kenya. (abstract 60/89)pp 105.
- 11. Chunge C.N., Estambale B.B.A., Pamba H.O. and Donno L. (1989). Improved

- treatment of symptomatic luminal amoebiasis. Proc. 34th Sci. Conf. Ass. Physicians of East and Central Africa (APECA). Harare, Zimbabwe. (Abstr. 7) pp.26.
- 12. H.O.Pamba, <u>B.B.A. Estambale</u>, C.N. Chunge and L. Donno (1990). Comparative study of aminosidine, etofamide and nimorazole alone or in combination, in the treatment of intestinal amoebiasis in Kenya. *Eur. J. Clin. Pharmacol.* **39**, 353-357.
- 13. <u>B.B.A. Estambale</u> and R. Knight (1992). Protozoan infections and HIV a review. *E. Afr. Med. J.* **69**, 373 377.
- 14. P.E. Simonsen, <u>B.B. Estambale</u>, M. Agger (1991). Antibodies in serum of hamsters experimentally infected with intestinal trematode *Echinostoma caproni*. *J. Helminthol* **65**, 239-247.
- 15. <u>B.B.A. Estambale</u>, R. Knight, R. Chunge (1992). Haematemesis and severe anaemia due to a pharyngeal leech (*Myxobdella africana*) in a child admitted at Kenyatta National Hospital, Nairobi. A case report. *Trans. R. Soc. Trop. Med. & Hyg.* 86, 458.
- 16. <u>B.B.A. Estambale</u>, R. Knight (1992). Protozoan infections and HIV-1 infections: A review. *E. Afr. Med. J.* **69**, 373-377.
- 17. <u>B.B.A. Estambale</u>, P.E. Simonsen, R. Knight, J.J. Bwayo (1994). Bancroftian filariasis in Kwale District of Kenya: I. Clinical and Parasitological survey in an endemic community. *Ann. Trop. Med. & Parasit.* **88**, 145-151.
- 18. <u>B.B.A. Estambale</u>, P.E. Simonsen, B.J. Vennervald, R. Knight, J.J. Bwayo (1994). Bancroftian filariasis in Kwale District of Kenya: II. Humoral immune responses to filarial antigens in selected individuals from an endemic community. *Ann. Trop. Med. & Parasit.* 88, 153-161.
- 19. <u>B.B.A. Estambale</u>, P.E. Simonsen, B.J.Vennervald, J.J. Bwayo (1995). Bancroftian filariasis in Kwale District of Kenya. III. Quantitation of the IgE antibody response in selected individuals from an endemic community. *Ann. Trop. Med. & Parasit.* 89, 287-295.
- 20. N.B. Mirza, I.A. Wamola, <u>B.A. Estambale</u>, E. Mbithi, and M. Piollet (1995). Typhim Vi Vaccine against Typhoid Fever: A Clinical Trial in Kenya. *E. Afr. Med. J.* **72**, 162-164.
- 21. <u>B.B.A. Estambale</u> (1996). Schistosomiasis control in the community. An editorial. *E. Afr. Med J.* **73**, 493-494.
- 22. <u>B.B.A. Estambale</u> (1998). Opportunistic infections in HIV/AIDS. A Distance Education Manual for Postgraduate Diploma in the Control of Sexually Transmitted Infections (STI). University of Nairobi/ Ministry of Health/National AIDS/STD Control Programme.
- 23. T. Mutie, <u>B.B.A. Estambale</u> (1998). Mycobacterial Diseases and HIV/AIDS. A Distance Education Manual for Postgraduate Diploma in the Control of Sexually Transmitted Infections (STI). University of Nairobi/Ministry of Health/National AIDS/STD Control Programme.
- 24. N.B. Mirza, <u>B.B.A. Estambale</u>, I.A. Wamola, N. Kariuki, E. Onyono, P. Kabiru, M. Piollet (1998). Bacterial meningitis in infants and children aged one month and five years admitted in hospitals within Nairobi. *E. Afr. Med. J.* **75**, 73 76.
- 25. J.K. Njagi, <u>B.A. Estambale</u>, P.Magnussen, J.H. Ouma, B.A. Rapuoda, E.W. Kabiru (1998). Comparative efficacy of two commonly used anti-malarial drugs chloroquine (Nivaquine<sup>R</sup>) and sulfadoxine/pyrimethamine combination (Fansidar<sup>R</sup>) in the treatment of falciparum malaria in a malaria endemic area of Kenya. *E. Afr.*

- Med. J. 75, 446 449.
- 26. K. Fonck, N. Kidula, W. Jaoko, <u>B. Estambale</u>, P. Claeys, J. Ndinya-Achola, P. Kirui, J. Bwayo, M. Termmerman (2000). Validity of vaginal discharge algorithm among pregnant and non-pregnant women in Nairobi, Kenya. *Sexually Transmitted Infections* **76**, 33-38.
- 27. <u>Estambale BBA</u> (2001). Parasitic infestations in children. An Editorial: *E. Afr. Med. J.* **78**. 277-278.
- 28. P. Gichangi, H. De Vyust, P. Claeys, <u>B. Estambale</u>, J. Bwayo, K. Rogo, M. Temmerman (2002). HIV and cervical cancer in Kenya: A 10 year retrospective study at Kenyatta National Hospital. *Int. J Gynaecol Obst.* **76** (1), 55-63.
- 29. Simonsen PE, Meyrowitsch DW, Jaoko WG, Malecela MN, Mukoko DA, Pedersen EM, Ouma JH, Rwegeshora RT, Masese NN, Magnussen P, <u>Estambale BBA</u>, Michael E. (2002). Bancroftian filariasis infection, disease and specific antibody response patterns in a high and low endemicity community in East Africa. *Amer. J.Trop. Med. Hyg. 66 (5), 550 559.*
- 30. P.B. Gichangi, J. Bwayo, <u>B. Estambale</u>, H. De Vyust, S. Ojwang, K. Rogo, H. Abwao, M. Temmerman (2003). The Impact of HIV infection on invasive cervical cancer in Kenyan women. *AIDS* 17: 1963 1968.
- 31. A. Blackwell, A.E Stuart, <u>B.A. Estambale</u> (2003). The repellent and antifeedant activity of Myrica Gale oil against *Aedes aegypti* mosquitoes and its enhancement by the addition of salicyluric acid. *J.R. Coll. Physicians Edinb.* **33**: 209 214.
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85.

#### 27. BOOK CONTRIBUTION

Title: Malaria Mosquito Alert: Approaches to Assessing and Managing Malaria Vector Resistance to Insecticides used for Indoor Residual Spray (IRS) in Uganda – Contributing to a National IRS Strategy Professor Dominic

## 28. BOOK REVIEW

Review of the Department of Defence (DoD) - Global Emerging Infections
Surveillance and Response System (GEIS) Influenza Programs. Strengthening
Global Surveillance and Response.
Institute of Medicine, USA

## 29. ACADEMIC/PROFESSIONAL REFEREES

 Professor Francis Mulaa Dept of Biochemistry

University of Nairobi Phone: 0733 876 968

Email: <a href="mulaafj@uonbi.ac.ke">mulaafj@uonbi.ac.ke</a>
2. Professor Walter G. Jaoko

Dept of Medical Microbiology & Kenya Aids Vaccine Initiative

University of Nairobi Phone:0727 555 254

Email: wjaoko07@gmail.com

3. Professor Henrik Friis, MD, PhD.

Professor of International Nutrition and Health Department of Nutrition, Exercise and Sports University of Copenhagen

Rolighedsvej 30

DK – 158 Frederiksberg C Phone: +45 2625 3968

Email: hfr@life.ku.dk