

# UNIVERSITY OF NAIROBI

## COLLEGE OF HEALTH SCIENCES

### INSTITUTE OF TROPICAL & INFECTIOUS DISEASES (UNITID)

#### ANNUAL REPORT 2012

**Director:** Prof. Walter Otieno Mwanda  
**Deputy Director:** Prof. James Machoki M'Imunya  
**Administrator:** Ms. Elizabeth Wanjiru Kibuna

#### Introduction

UNITID is in its nine (9) years of existence since its establishment in 2003. Both the Director and Deputy Director remained in office until 17<sup>th</sup> December, 2012, when a new Director was appointed. The Institute has one Administrative Assistant.

#### Courses Offered

As in the past, only Postgraduate courses are offered in the Institute. These include: Postgraduate Diploma in Research Methodology (PGDRM), Master of Science in Tropical and Infectious Diseases (MSc. TID), Master of Science in Medical statistics (MSc. MEDSTAT) and PhDs.

	Programme	Programme Duration	Year of Study	No. of Students
1.	Postgraduate Diploma in Research Methodology (PGDRM)	9 months	2011/2012	6
2.	MSc. Tropical and Infectious Diseases (MSc. TID)	2 Years	Year 1	9
			Year 2	9
3.	MSc. Medical Statistics (MSc. MEDSTAT)	2 Years	Year 1	7
			Year 2	8
4.	UNITID Fellowship	2 Years	Year 1	14
			Year 2	12
5.	PhDs	3 Years	Year 3	7

#### Short Courses

1. A 2-week international course in Multi-Variable Statistics Using Stata 12 Software was held between **20<sup>th</sup> August, 2012** to **31<sup>st</sup> August, 2012**. Participants were drawn from the following countries: Kenya (9), Ethiopia (1), Zimbabwe (1), Uganda (1), Gambia (1) and Tanzania (1). Sponsorship: Danida through the DBL Centre for Health Research and Development, University of Copenhagen.
2. Micro-Research workshop: A two weeks workshop on community based research was held between **15<sup>th</sup> October, 2012** to **28<sup>th</sup> October, 2012** in collaboration with staff from Dalhousie University, Nova Scotia, Canada.
3. UNITID-Fellowship Programme short courses:
  - HIV Epidemiology course was held between **30/1/2012** to **1/2/2012** in Nairobi. 45 Participants were trained.
  - Monitoring and Evaluation for Health Programs course was held between **13/2/2012** to **15/2/2012** in Nairobi, 42 Participants were trained

- Human Capital Development for Health Programs course was held between **5/3/2012** to **7/3/2012**. 40 Participants were trained.
- Project Planning and Implementation course was held between **28/3/2012** to **30/3/2012** in Nairobi. 42 Participants were trained.
- Financial Management course was held between **9/5/2012** to **11/5/2012** in Nairobi. 45 Participants were trained.
- Biostatistics course was held between **25/6/2012** to **29/6/2012** in Nyeri. 40 Participants were trained.
- Development and Implementation of M&E Plans course was held between **2/7/2012** to **6/7/2012**. 45 Participants were trained.
- Biostatistics course was held between **30/7/2012** to **3/8/2012** in Eldoret. 38 Participants were trained.
- Development and Implementation of M&E Plans course was held between **26/8/8/2012** to **1/9//2012**. 45 Participants were trained.
- ICT Enabled Health Data Management course was held between **3/9/2012** to **7/9/2012** in Mombasa. 47 Participants were trained.
- Biostatistics course was held between **30/9/2012** to **6/10/2012** in Nairobi. 33 Participants were trained.

### **Research Activities**

The following research activities took place or continued in 2011/2012 academic year:

1. Alleviating childhood malnutrition by improved utilization of traditional foods (WINFOOD)
2. Treatment of childhood under nutrition: Development of and access to improved foods (TREATFOD)
3. A clinical trial agreement on phase III open label randomized 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 # A06611158 – 1004
4. A clinical trial agreement o phase III open label, non comparative study to evaluate parasitological clearance rates and pharmacokinetics of Azithromycin and Chloroquin (AZCQ) in asymptomatic pregnant women with plasmodium falciparum parasitaemia in sub-saharan Africa. Protocol # A0661201 – 104
5. Harnessing mobile phone usage for HIV and horizontal health systems improvements (PMTCT)
6. A Double blind, randomized trial of monthly treatment with tropical metronidazole co-formulated vaginal suppositories versus placebo for preventing vaginal infections in HIV seronegative women
7. Increased access to quality comprehensive HIV prevention services for most at risk populations in Nairobi County
8. Pregnancy & HIV risk infections (HAPI Study) Nyando District, Kisumu
9. International Extramural Associates Research Development Award (IEARDA)
10. Gender – Specific combination HIV prevention for Youth in High Burden settings (MP3 – Youth)

### **Collaboration & Linkages**

The following links and partnerships were established during the 2011/2012 academic year and are still on going:

### **International**

1. The University of Nairobi/ University of Manitoba, Canada
2. The University of Nairobi/ University of Washington, Seattle
3. The University of Nairobi/ University of Copenhagen, Denmark
4. The University of Nairobi/ Centre for Disease Control & Prevention (CDC)

5. The University of Nairobi/ Pfizer Laboratories, South Africa

### **Local**

1. Nairobi City Council/ Public Health Department
2. Pumwani Maternity Hospital
3. Tigon District Hospital
4. Kenya Medical Research Institute (KEMRI)
5. Kenyatta National Hospital
6. Siaya District Hospital

### **PUBLICATIONS IN REFERRED JOURNALS**

1. Peter Kipkurui Yegon: Predictors of Early Mortality in HIV Infected Patients starting 1<sup>st</sup> Line ART, 2010/2012
2. Hellen W. Kiarie: Risk Factors for Adverse Events to HAART: A Comparison of Poisson and Negative Binomial Regression Models, 2012
3. Dr. Lilian Nkrote Njagi: Antimicrobial Susceptibility Patterns of Bacterial Isolates from Urine Samples Amongst Paediatric Patients As Seen on Routine Bench in Bacteriology Lab in a Private Sector City Hospital. A Retrospective Study, November 2012
4. Dr. Nernard Mokaya Nyakundi: Assessment of Laboratory Diagnostic Tests and Antimicrobial Treatment Typhoid at the University of Nairobi Health Services, November 2012
5. Jacklyne Ashubwe- Jalemba: Prevalence of Astroviruses in Children Under Five Years With Acute Diarrhoea At the Kenyatta National Hospital, November 2012
6. Linda. A. Akach: Statistical Methods for Analyzing Complex Survey Data: An Analysis of ITN and IPTp Usage in Kenya, November, 2012
7. Julia Wanjiru Muthua: A Case Study on the Prevalence and Clinical Presentation of Rotavirus Diarrhoea in Children Less than Five Years Admitted in the Paediatric Ward In Embu Provincial Hospital, November 2012.
8. Irene Nthemba Mutuku: Effectiveness of Insecticide Treated Nets in Reducing Malaria Morbidity Among School Going Children in Kenya, November 2012.
9. Joseph Mutinda Muendo: Serum Cryptococcal Antigen Levels in HIV Infected Patients Asymptomatic of Meningitis in Two Hospitals in Nairobi, Kenya, October 2012
10. Zipporah Bosibori Machuki: In vitro Profiling of Mycobacterium tuberculosis region of Difference 1 antigen Induced Cytokine and Chemokines Production Among Patients with Active Pulmonary Tuberculosis and Latent Tuberculosis, November, 2012.
11. Dr. Eric Munene Muriuki: Appraisal of HIV Post Exposure Prophylaxis Program amongst Sexual Assault Victims at Kenyatta National Hospital, October, 2012
12. James M. M'Imunya, Tamara Kredo and Jimmy Vilmino: Systematic Review: Patient Education and counseling for promoting adherence to the treatment of active latent tuberculosis: Cochrane Data Base of Systematic Reviews 2012, Issue 5.
13. Mutua F. Mueni, James M. M'Imunya, Wiysonge C. Shey U: Systematic Review): Genital ulcer disease treatment for reducing sexual transmission of HIV: Cochrane Data Base of Systematic Reviews 2012, Issue 3.
14. Dr. Evelyn Ndunge N. Determinants of adherence to Postnatal PMTCT Program Among HIV+ Mothers in KNH, November, 2012
15. Samuel Kanerere Njenga: Bacterial Enteropathogens in Adult Acute Diarrhoea: A Retrospective Survey at the Kenyatta National Hospital, July 2012
16. Ochanda Philip Goddings Odhiambo: Monocyte Immune activation and HIV/AIDS Disease Progression Among Patients with Co Infected with TB/HIV, November, 2012

## **Consultancies**

1. Malaria Case Management Training Consultancy in Central Province  
A Phase 3 Open Label, Randomised Comparative study to evaluate Azithromycin plus Chloroquine and sulfadoxine plus pyrimethamine combinations for intermittent preventive treatment of falciparum malaria infections in pregnant women in Africa.
2. 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 Chloroquine (AZCQ) in asymptomatic pregnant women in Plasmodium falciparum parasitemia in sub-saharan Africa.

## **2011/2012 Graduants in the Institute**

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|---|----|
| 1. MSc. Tropical and Infectious Diseases        | 9  |
| 2. MSC. Medical Statistics                      | 5  |
| 3. Postgraduate Diploma in Research Methodology | 12 |
| 4. UNITID-Fellowship Graduants in 2012          | 1  |