

## **PERSONAL INFORMATION**

**WANJALA LUDWIN CHRISTINE: PhD (Medical Entomology), Masters (Medical Parasitology) and Bsc (Medical Microbiology)**

**Address:** P.O. BOX 190-50100, KAMEGA, KENYA

**E-mail Address:** [cwanjala@mmust.ac.ke](mailto:cwanjala@mmust.ac.ke) [cludwin3@gmail.com](mailto:cludwin3@gmail.com)

**Nationality:** Kenyan

**Date of Birth:** 9<sup>th</sup> May, 1982

**Languages:** English, Kiswahili and Luhya

## **CAREER OBJECTIVE**

- Expect a challenging position that will enable me to offer the best of my service towards the success of the institution, help gain experience and more knowledge.

## **EDUCATION AND TRAINING**

### **TERTIARY:**

**Dates:** 2013 to 2019  
**Qualification** PhD in Medical Entomology  
**Institution** Kenyatta University

**Dates:** 2007 -2011  
**Qualification:** Masters of Science in Medical Parasitology.  
**Institution:** Egerton University.

**Dates:** 2002-2006  
**Qualification:** Bachelor of Science in Medical Microbiology  
**Institution:** Jomo Kenyatta University of Agriculture and Technology (JKUAT).

## **PRINCIPAL SUBJECTS AND OCCUPATIONAL SKILL COVERED**

- Research Methods
- Medical Entomology
- Virology
- Immunology
- Epidemiology
- Pharmacology
- Biochemistry
- Computer packages for scientific application
- Pharmacognosy
- Bacteriology
- Mycology

- Parasitology
- Health management and economics
- Applied microbiology

## SECONDARY

**Dates:** 1996 – 1999

**Qualifications:** K.C.S.E. attained a B- (minus) Aggregate

**Institution:** Moi Girls High School Kamusinga

## PRIMARY

**Dates:** 1987-1995

**Qualification:** K.C.P.E Certificate

**Institution:** Kibingei R.C. Primary School.

## WORK EXPERIENCE

### 2012 March to date

- Working at Masinde Muliro University of Science and Technology as an Assistant Lecturer in Medical Laboratory Sciences Department.

### 2008 – 2011 March:

- Worked at KEMRI as a Research Assistant.

### 2006-2008 May:

- Worked at Nakuru Institute of Medical Sciences as a Lecture in Microbiology and Parasitology.

## RESEARCH EXPERIENCE

- Currently involved in a research on *In silico* determination of potential vaccine and drug targets for SARS-CoV-2.
- Conducted research on the status of insecticide resistance in malaria vectors to the available insecticides used for malaria control in western Kenya.
- Previously I did a research on Identification of malaria transmission and epidemic hotspots in the western Kenya highlands: its application to malaria epidemic prediction.

## PUBLICATIONS

- [Joyce K. Osoro](#), [Maxwell G. Machani](#), [Eric Ochomo](#), [Christine Wanjala](#), [Elizabeth Omukunda](#), [Stephen Munga](#), [Andrew K. Githeko](#), [Guiyun Yan](#) & [Yaw A. Afrane](#). Insecticide resistance exerts significant fitness costs in immature stages of *Anopheles gambiae* in western Kenya. *Malar J* **20**, 259 (2021). <https://doi.org/10.1186/s12936-021-03798-9>
- Osoro, Joyce K., Maxwell G. Machani, Eric Ochomo, **Christine Wanjala**, Elizabeth Omukunda, Andrew K. Githeko, Guiyun Yan, and Yaw A. Afrane. "Insecticide Resistant *Anopheles Gambiae* Have Enhanced Longevity but Reduced biting Frequency and Reproductive Fitness." (2021). DOI: <https://doi.org/10.21203/rs.3.rs-998001/v1>

- Webale, Mark Kilongosi, Bernard Guyah, **Christine Wanjala**, Peter Lokamar Nyanga, Sella K. Webale, Collins Abonyo, Nicholas Kitungulu, Nathan Kiboi, and Nancy Bowen. "Phenotypic and genotypic antibiotic resistant diarrheagenic *Escherichia coli* pathotypes isolated from children with diarrhea in Nairobi City, Kenya." *Ethiopian Journal of Health Sciences* 30, no. 6 (2020). DOI: [10.4314/ejhs.v30i6.5](https://doi.org/10.4314/ejhs.v30i6.5)
- Webale, Mark Kilongosi, **Christine Wanjala**, Bernard Guyah, Nathan Shaviya, Godwil Munyekenye, Peter Lokamar Nyanga, Immaculate Nyaseba Marwa et al. "Epidemiological Patterns and Antimicrobial Resistance of Bacterial Diarrhea among Children in Nairobi City, Kenya." *Gastroenterology and Hepatology from Bed to Bench* 13, no. 3 (2020). <https://doi.org/10.22037/ghfbb.v13i3.1910>
- CL Wanjala and EJ Kweka **Malaria vectors insecticides resistance in different agroecosystems in Western Kenya.** *Frontiers in public health*, 2018.
- **Christine Ludwin Wanjala** and Eliningaya J. Kweka **Impact of Highland Topography Changes on Exposure to Malaria Vectors and Immunity in Western Kenya.** *Front Public Health.* 2016; 4: 227.B. DOI: <https://doi.org/10.3389/fpubh.2016.00227>
- **Christine L.Wanjala**, Guofa Zhou , Jernard Mbugi, Jemimah Simbauni, Yaw A. Afrane, Edna Ototo, Maxiwel Gesuge, Harrisone Atieli, Andrew K. Githeko, Guiyan Yan **Insecticidal decay effects of Long-Lasting Insecticide nets and Indoor Residual Spraying on *Anopheles gambiae* sl. in Western Kenya.** *Parasites & Vectors* 2015, 8:588. DOI: <https://doi.org/10.1186/s13071-015-1194-6>
- **Wanjala CL**, Mbugi JP, Ototo E, Gesuge M, Afrane YA, Githeko AK, Atieli HE, Zhou G and Yan G: **Pyrethroid and DDT-resistance and organophosphate susceptibility among *Anopheles* mosquito Species Western Kenya.** *Emerging Infectious Diseases* 2015 21:12. DOI: <https://doi.org/10.3201/eid2112.150814>
- **Ednah N Ototo, Jenard P Mbugi, Christine L Wanjala, Guofa Zhou, Andrew K Githeko and Guiyun Yan. Surveillance of malaria vector population density and biting behaviour in western Kenya.** *Malaria Journal* 2015, 14:244. DOI: <https://doi.org/10.1186/s12936-015-0763-7>
- Guofa Zhou, Yaw A Afrane, Amruta Dixit, Harrysone E Atieli, Ming-Chieh Lee, **Christine L Wanjala**, Leila B Beilhe, Andrew K Githeko<sup>2</sup>and Guiyun Yan. **Modest additive effects of integrated vector control measures on malaria prevalence and transmission in western Kenya.** *Malaria Journal* 2013, 12:256 DOI: <https://doi.org/10.1186/1475-2875-12-256>
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- **Christine L Wanjala**, John Waitumbi, Guofa Zhou and Andrew K Githeko: **Identification of malaria transmission and epidemic hotspots in the western Kenya highlands: its application to malaria epidemic prediction.** *Parasites & Vectors* 2011, 4:81. DOI: <https://doi.org/10.1186/1756-3305-4-81>

- Ednah N Ototo, Andrew K Githeko, **Christine L Wanjala** and Thomas W Scott **Surveillance of vector populations and malaria transmission during the 2009/10 El Niño event in the western Kenya highlands: opportunities for early detection of malaria hyper-transmission.** Parasites & Vectors 2011, 4:144. DOI: <https://doi.org/10.1186/1756-3305-4-144>
- **Christine L Wanjala**, Andrew K Githeko, John N Waitumbi **Assessing the impact of topography on malaria exposure and malaria epidemic sensitivity in the Western Kenya highlands .** From Parasite to Prevention: Advances in the understanding of malaria Edinburgh, UK. 20-22 October 2010 conference. Malaria Journal 2010, 9 (Suppl 2):P5. DOI: <https://doi.org/10.1186/1475-2875-9-S2-P59>

#### LIST OF PUBLICATIONS IN CONFERENCE PROCEEDINGS

- **C.L. Wanjala**, R.S. Shivairo, R.O. Odhiambo, A.K. Githeko, J.N. Waitumbi. **The influence of topography on malaria exposure and malaria sensitivity in western Kenya Highlands.** 5<sup>th</sup> MIM Pan – African malaria conference abstract Book. 2-6 Nov 2009
- **Christine L Wanjala**<sup>1</sup>, Andrew K Githeko, John N Waitumbi **Assessing the impact of topography on malaria exposure and malaria epidemic sensitivity in the Western Kenya highlands .** From Parasite to Prevention: Advances in the understanding of malaria Edinburgh, UK. 20-22 October 2010 conference. Malaria Journal 2010, 9 (Suppl 2):P5

#### PARTICIPATION IN SCIENTIFIC CONFERENCES

- **2020 December** – Attended the Pan African Mosquito Control Association Virtual Meeting and made a poster presentation
- **2014 November** – attended the 63<sup>rd</sup> American society of tropical medicine and hygiene (ASTMH) annual conference and made a poster presentation.
- **2014 October** – Attended annual Malaria forum and made an oral presentation.
- **2009 September** - I attended the fifth pan – African Conference and made a poster presentation.

#### AWARDS

- 2021 –Masinde Muliro University of Science and Technology Research Fund
- 2020- Masinde Muliro University of Science and Technology Research Fund
- 2012 – Sponsored by grants from National Institute of Health (NIH) 43TW01505 through Kenya Medical Research Institute, Kisumu to study PhD in Medical Entomology.
- 2007 –Sponsored by a grant from International Development Research Centre, Canada (IDRC) and DFID funding this project for (Project ID: 104707-001) through the Climate Change Adaptation in Africa program, to

study Masters in Medical parasitology.

## **PARTICIPATION IN WORKSHOPS**

- 15<sup>th</sup>-19<sup>th</sup> September, 2014: attended a faculty development on instruction and clinical assessment workshop organized by FUNZO Kenya at MMUST, Kakamega.
- 23<sup>rd</sup> – 24<sup>th</sup> January, 2014: attended a workshop on curriculum development and review for public universities in Kenya at MMUST, Kakamega.
- 20<sup>TH</sup> - 21<sup>ST</sup> June, participated in induction training on E-learning at MMUST, Kakamega.

## **COMMUNITY SERVICE**

- Member of Board of Management at St Emanuel Secondary School (Miruri) and Maeni Girls High School.
- Participated in the World Biomedical Laboratory Science day celebrations held at Matioli secondary school, Kakamega County, where we offered medical laboratory services to the community.

## **OTHER RESPONSIBILITIES**

- Chairman of the Department of optometry and Vision Sciences January 2022
- Departmental Post graduate Coordinator in the department of Medical Laboratory Sciences January 2019 to January 2022
- School examination and timetabling coordinator since September 2018 to January 2022
- Departmental examination and timetable coordinator since April 2012 to date
- Coordinator of Medical Biotechnology Programme since 28<sup>th</sup> July, 2015.

## **PERSONAL SKILLS AND COMPETENCES**

### **Social Skills and Competences**

#### **Team Leadership:**

- Very good: gained through Departmental Headship and also through timetabling and examination co-ordination in School of Public Health Biomedical Sciences and Technology, MMUST.

#### **Technical Skills and Competences:**

- Proposal development
- Data Collection and analysis
- Report writing – very good. (Jomo Kenyatta University of Agriculture and Technology, Egerton University and Kenyatta University)

#### **Computer Skills and Competences**

- E-Learning
- Proficient in Microsoft Office Applications

- Data analysis and presentation
- Statistical package of social sciences

**REFEREES**

PROF. CHARLES MUTAI  
MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY  
P.O. BOX 190  
KAKAMEGA  
MOBILE

DR. ANDREW GITHEKO  
KENYA MEDICAL RESEARCH INSTITUTE, KISUMU.  
P.O. BOX 1578,  
KISUMU.  
MOBILE:

DR. JERNARD PETER MBUGI  
KENYATTA UNIVERSITY  
P.O. BOX 43844-00100,  
NAIROBI.  
MOBILE: