

OMONDI TYRUS SWAYA CV



BACKGROUND INFORMATION

Nationality:	Kenyan
Contact:	P.O BOX Maseno University, Private bag, Maseno. Email: omondityrus18@gmail.com Mobile phone: 0710 444 587 Year of birth: 30-12-1987
Religion:	Seventh-Day Adventist Christian
OBJECTIVE:	To Promote global public health and medical education through Radio-oncology research and academia while steering the institution to realize its objectives and transform the society at large. To pursue Post Doctorate Fellowship in Oncology program given opportunity.
PERSONAL ATTRIBUTES & STRENGTHS:	Honest, self-motivated, Enthusiastic, result oriented, Focused and Diligent, Critical thinker, Team builder and hardworking person, with Proven Leadership skills, Ready to learn new skills and understand the environment of working with people of diverse cultures and calibers.
EDUCATION:	2017- Dec. 2022: Maseno University: PhD Medical Histopathology and Clinical cytology 2013–2017: Maseno university: Msc. Medical Histopathology and Cytology. 2008-2012: Maseno University: Bsc. Medical Laboratory science and Technology with IT. 2003-2006: Omboga High School KCSE B+ (73points). 1995- 2002: Nyawino Pri. School KCPE 278\500 Marks.
LABORATORY SKILLS:	<ul style="list-style-type: none">• Good clinical and laboratory practices (GCLP) and quality control and assurance (QA/QC); Microtomy and Microscopy.• Primer design and genotyping using restriction fragment length polymorphism (RFLP); Immuno-phenotyping by flow cytometry analysis; DNA extraction from buccal swabs and DNA genomphi amplification assays; Real time PCR; Antibody ELISA; ELISPOT assays, DNA extraction from dry blood spots (DBS) and HIV diagnosis by PCR; Data analysis: SPSS; GraphPad Prism.
CONFERENCE ABSTRACTS AND WORKSHOPS:	<ol style="list-style-type: none">1. 8th International Workshops on Aproaches to Single cell Analysis at Safari Park Hotel, Nairobi Kenya. 10th- 12 September 2014. Poster presentation: Tyrus Omondi, Philip Aduma, Joan Wabwile, Were Obuya, John Tabuti and Sammy Kinuthia (2014). Efficacy of Bioactive molecules from selected medicinal plants used for management of HIV and AIDS by the Communities within Lake Victoria Basin against selected bacterial and fungal pathogens.2. Africa International Biotechnology & Biomedical Conference (AIBBC) at Safari Park Hotel September, 2014.3. H3ABioNet training on Bioinformatics, nuclear and forensic medicine. An online seminar from university of Cape Town, South Africa.4. International conference on community health care from 13th – 17th October at the Kisumu hotel. ‘Evidence based community health care supported by eLearning and

**STUDENTS
SUPERVISION
AND THESIS
EXAMINED:**

funded by Health Africa Development Cooperation (HADCO).

5. **A Biosecurity workshop for Kenyan Universities** aimed at providing an opportunity to strengthen biosecurity awareness. "Awareness raising on biosecurity in Universities for biological threat reduction" at Kisumu Hotel on 22nd September, 2017.
6. **Systematic Reviews and Meta-Analysis Workshop** held on 26th -28June at Acacia Hotel, Kisumu, Evidence health Kenya, Cochrane.
7. **Bio Ventures Global Health 2023:** Introduction to Grant Writing digital training program from 30th Oct 2023-19Feb 2024
8. **Kenya Society of Hematology and Oncology (KESHO):** Breast, Prostate and Leukemia cancer Diagnosis, Treatment in Kenya: Wins, Opportunities and Gaps | Hybrid Invitation - CPD Accredited | Every Thursday | 5PM EAT
9. **6th Africa International Biotechnology & Biomedical Conference (AIBBC 2023),** workshops and conference: Advancing Science & Technology for Sustainable Development in Africa on Oct. 30 – Nov. 4, 2023, Naivasha, KENYA.
<https://aibbc2023.aibbc-society.org/conference.html>

Poster Presentation: Histomorphological profiles based on needle biopsy findings of prostatic adenocarcinoma in Western Kenya

10. **THE 1ST CANCER RESEARCH SYMPOSIUM:** Capacity building for molecular cancer research and care in Kenya, on 6 - 8 December 2023, Confucius institute - Kenyatta University

Oral Presentation: Prostate Cancer Histomorphology, Perineural and Lymphovascular invasion of Archived formalin fixed paraffin embedded prostate biopsies from prostate adenocarcinoma patients in western Kenya.

Undergraduate

1. *Njau Jane Wanjira. Assessing prevalence of Tuberculosis among prisoners. a case study of Thika main prison in Kiambu county. Undergraduate thesis, 2016, Internal examiner.*
2. *Branice Yiamoi Karia. Prevalence of Trichomonas vaginalis and most affected age group among women attending Narok county referral hospital. Thesis Examined 2017.*
3. *Kevin Omondi Ouma, PH/0005/2012. Determination of the Prevalence of Cancer in Kisumu County in the year 2017. GRADUATED, 2017.*
4. *Akinyi Sharon Okoth PH/00070/014: Determination of Antimicrobial activity of Raw Pawpaw Seed extract against Staphylococcus aureus. GRADUATING, 2018.*
5. *Onesmus Muoki PH/00173/014: Factors contributing to non-compliance to anti-tuberculosis drugs among TB patients in Makeni county Makeni level 5 Hospital. GRADUATING 2018.*

Post graduate student supervision

1. MSc. MEDICAL LABORATORY SCIENCES (HISTOPATHOLOGY AND CYTOPATHOLOGY)

- i) *Immunohistochemical expression and potential diagnostic utility of desmoglein 2/3 in detection of esophageal cancer biopsies in patients reporting at moi teaching and referral hospital- CHELANG'A ABRAHAM: HML/G/01-*

**MANUSCRIPT
REVIEWED:**

- 53769/2019. Proposal**
- ii) *Clinical utility of Ki67 and NKX3.1 immunostaining in poorly differentiated prostate cancer at Moi Teaching and Referral Hospital - **MERCY JEPCHIRCHIR NGETICH: HML/G/01-53752/2019. Proposal***
 - iii) *Assessment of fixative properties and cytomorphological features in bone marrow smears fixed using 50% honey and three other cytological fixatives- **KENNEDY OYAMO: HML/01-70521/2022. Concept***
 - iv) *Evaluation of diagnostic utility of urinary prostate specific antigen (PSA) in the differential diagnosis of benign prostate hyperplasia (BPH) and prostate cancer in western Kenya- **BRIAN OJWANG: HML/01-70284/2022. Concept***

2. MSC. FORENSIC MEDICINE

- i) *Forensic characterization of paternity inclusion and exclusion in reported defilement cases reported at Kisumu government chemist- **MERCY AYAGO ONZERE: SBM/G/01-70088/2022. Concept***

1. Phytochemical analysis, total phenolic content, Antioxidant and antidiabetic activity of *Sansevieria cylindrica* leaves extract. *Insight medical Publishing Journal*. iMedPub-17-907.
2. Biomedical and chemical profile of *Cupressus sempervirens*: A mini review. *Insight medical Publishing Journal*. Research Article. iMedPub-17-1071.
3. Isolation and characterization of bioactive terpenoids from the leaves of *Ceriopstagal* Linn. *Research Article*. iMedPub-17-1331.
4. A nationwide study of breast cancer histopathology in Cameroon (Central Africa). *Journal of Cytology & Histology*. *Research article* 18-001.
5. A nationwide study of breast cancer histopathology in Cameroon (Central Africa). *Journal of Cytology & Histology*.
6. Histomorphometric analysis of the alveolar bone for two weeks after bone morphogenetic protein transfer" for *Journal of Cytology & Histology*.
7. Pancreatic metastases from a small cell lung carcinoma: a case report and literature review. *Journal of Cytology & Histology*.
8. Antioxidant modulation of hematological toxicity during chemotherapy for breast cancer. *Journal of Cytology & Histology*.
9. Modulation of Pancreatic β -cells and Antioxidant Status by Cinnamon in Type 2 Diabetic Rats. *Journal of Cytology & Histology*.

PUBLICATION:

1. **Swaya TO, Aduma P, Chelimo K, Were O, Sammy KN, Margaret AO (2017) Assessment of Anti-Proliferative Activities of Selected Medicinal Plant Extracts Used for Management of Diseases around Lake Victoria Basin. *J Carcinogenesis* 8: 286.doi:10.4172/2157-2518.1000286.**
2. **Tyrus Omondi S, Dedan O, Benard G, David A, Mbayah J E, et al. Association Between Prostein Immunohistochemical Expression and Histopathological Aggressiveness of Prostate Cancer in Western Kenya. *Canc Therapy & Oncol Int J*. 2022; 22(1): 556076. DOI: 10.19080/CTOIJ.2022.22.556076.**

3. **Tyrus Omondi Swaya**, Dedan Opondo, David O. Atandi, Benard Guyah, Ng'wena Gideon Magak. *Immunohistochemical Analysis of Prostein in Needle Core Biopsies of Acinar and Intraductal Prostatic Adenocarcinoma in Western Kenya Population. Journal of Cancer Science and Clinical Therapeutics 6 (2022): 259-272.*

**WORKING
EXPERIENCE:**

April 2020- To date: Tutorial fellow at Masinde Muliro University of Science and Technology (MMUST)

Lectures: Molecular Oncology, Cell biology, General Pathology, Medical Histology and cytology, Clinical Cytology, Histopathology and Cytopathology, Forensic Medicine, Clinical Hematology, and Clinical Physiology (April 2020- To date).

Jan, 2019 – April 2020: University of Eastern Africa Baraton- Assistant Lecturer, MLS dept

Jan, 2017-May, 2018: Lab Technologist and QA/QC in charge -St. Jairus Hospital Kisumu.

May, 2015-May, 2017: Laboratory technologist (Contract) at Maseno university health Centre.

September 2014 – April, 2015: Aga Khan hospital Kisumu–Pathology department.

Responsibilities: Histopathology and Cytopathology diagnostic procedures, Routine diagnostic tests in the Microbiology, Hematology and Biochemistry section.

6TH June 2013 - 2ND August 2014: KEMRI/CDC LABORATORIES (HIV R-LAB & MALARIA LAB): Cell separation, HIV serology, PBMCS processing, cell culture, microscopy, quality control and assurance, *in vitro* anti- malarial drug sensitivity test, *Plasmodium falciparum* culture, PCR, Flow Cytometry and ELISA technique.

DECEMBER 2012 – July 2013: Lab assistant– Vices project in Maseno University.

Responsibilities: Anti-cancer assays, Bacterial and fungal culture, HIV Viral culture and cell line culture for sensitivity test against medicinal plant extracts, cytotoxicity and anti- viral properties.

From 2013 - TO 2021: Part Time Lecturer and Courses Taught are;

1. Baraton University: Microbiology, Hematology, Blood Transfusion, Clinical Chemistry
2. Maseno University, School of Public Health and Community Dev't (January, 2014-2021): – General pathology and Histopathology, Medical Histology, Cell biology and Cytology, Hematology, Clinical Chemistry and Chemical Pathology, Medical Ethics, Law and sociology.
3. Kisumu National Polytechnic; Dept of applied sciences- Histology and Cytopathology, Hematology, Immunology, Genetics, and Medical Parasitology. (May, 2015- July, 2018)
4. Kombewa Medical Training college (KMTC) - Histopathology and Cytopathology (January 2017- August, 2018).

August – Nov, 2012: Internship (Clinical instructor) - Department of Medical Laboratory Sciences. University of Eastern Africa, Baraton.

Responsibilities: Guiding the students through laboratory practicals, Maintaining the Laboratory equipments, Preparing the culture media and other biochemical Tests, Teaching the students on lab management and quality Control techniques, Develop SOPs and establish quality control system.

2ndMay, 2012- 31stJuly 31st, 2012: MEDICAL LAB TECHNOLOGIST; MTRH - Eldoret

Responsibilities:

- Preparation of specimen, reagents and Collection of samplespecimens for analysis into various vacutainer and containers. Media preparation and culture techniques, recruiting donors for safe blood transfusion including both Pre- and Post –test counseling and HIV status.Examine and analyze specimens for routine and specialized assays in Histopathology, hematology, clinical biochemistry, immunology, Parasitology, microbiology and blood transfusion techniques.

Knowledge and experience gained: Quality control and serology, Ability to write and review SOP's, Running PCR machine and GEL electrophoresis apparatus for molecular biology.

Sept 2010- April 2012: Volunteer Lab technician; Maseno university health centre.

May 2007 to August 2008: Wikondiek High School. Class teacher form 1. Teaching Physics form 1, Biology form 2 and mathematics form 1, 2&3.

April 2012: Research assistant on farmers' voice radio impact assessment survey in Kakamega and Kisumu districts, Kenya.

Skills: Administration of questionnaire and effective interaction with the Community.

Ref. information: Dr. AnyonaS.(Maseno university) and Prof. Charity G. (Presbyterian University)

**LEADERSHIP
EXPERIENCE
AND
COMMUNITY
INVOLVEMENT:**

PERIOD	ORGANISATION	RESPONSIBILITIES
2007-2008	Wikondiek secondary school	Class teacher form1
2009- 2015	Maseno University SDA CHURCH	Program Coordinator & Elder
2008- 2018	Bible Discover Ministry	Member
2009- 2010	Anchor Choir	Secretary to the choir.
2015- 2016	Kanyaluo Economic &Devt Group	Assistant Chairperson
2021-2022	Victory SDA Church	Church Elder

**RESEARCH
INTEREST:**

Cancer Chemoresistance, Cancer Biology & Climate change, Cancer Genetics & Epigenetics, Cancer Diagnostics and Biomarker & drug discovery

REFEREES:

1. Prof. Gideon Ng'wena Magak
Assoc. Professor of Medical Physiology
School of Medicine
Maseno university
. E-mail: gngwena@hotmail.com
Phone: +254720804606
2. Dr. Evan Raballah, Bsc, Msc, PhD (Molecular Biology)
Dean, School of Public Health, Biomedical Sciences and Technology
Masinde Muliro University of Science and Technology, Kenya
P.O. Box 190-50100
Phone: +254722420658
Email: eraballah@mmust.ac.ke
3. Dr. Edna Ooko Opany, PhD
Lecturer Biochemistry- MMUST
Visiting postdoc Fellow
Lab of cell biology, CCR,NCI
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Masena University

On the recommendation of the University Senate
and by virtue of the authority vested in the University, hereby confer upon

Omondi Tyrus Swaya

the degree of

Doctor of Philosophy in Medical Histopathology and Cytology

In testimony thereof this award was conferred at the congregation held at this University on
Friday the 16th December, 2022

A handwritten signature in black ink, appearing to read "Amos Mwangi".

Vice - Chancellor

A handwritten signature in black ink, appearing to read "M. Kipset".

Deputy Vice - Chancellor,
Academic & Student Affairs