



# THE TECHNICAL UNIVERSITY OF KENYA

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## EDUCATION

LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR
Doctor of Philosophy (PhD)	MOLECULAR MEDICINE	JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY(Kenya)	2018
Masters of Science (M.Sc.)	IMMUNOLOGY	JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY(Kenya)	2011
Bachelor of Science (BSc)	MEDICAL LABORATORY SCIENCES	JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY(Kenya)	2004
O level/Equivalent	KENYA CERTIFICATE OF SECONDARY EDUCATION	NYASIONGO HIGH SCHOOL(Kenya)	1997
KCPE/Equivalent	KENYA CERTIFICATE OF PRIMARY EDUCATION	BUYONGE D.C.B(Kenya)	1993

## WORK EXPERIENCE

PERIOD	INSTITUTION	POSITION
2019 - TO DATE	TECHNICAL UNIVERSITY OF KENYA	LECTURER
2018 - 2019	KENYA METHODIST UNIVERSITY	LECTURER
2011 - 2017	KENYA METHODIST UNIVERSITY	ASSISTANT LECTURER
2009 - 2010	KENYA METHODIST UNIVERSITY	GRADUATE ASSISTANT
2006 - 2009	JKUAT	ADJUNCT FACULTY

## GENERAL STATEMENT ON RESEARCH AREAS

• The Epidemiology and characterization of *Toxoplasma gondii* in animals and at risk humans • Vaccine development in Schistosomiasis, Drug development for Schistosomiasis based on herbal extracts, Development of molluscicides against the snail intermediate host of *Schistosoma* based on herbal extracts. • Development of diagnostic tools and novel drugs for treatment of tropical human diseases • Research on 'One Health' approach in management and control of diseases

## CURRENT RESEARCH PROJECTS

The Epidemiology and characterization of <i>Toxoplasma gondii</i> in animals and at risk humans	Neglected tropical zoonosis
Antischistosomal and Molluscicidal activity of Medicinal Plants used in various parts of Kenya.	Vaccine development in Schistosomiasis, Drug development for Schistosomiasis based on herbal extracts, Development of molluscicides against the snail intermediate host of <i>Schistosoma</i> based on herbal extracts.

## SELECTED PUBLICATIONS

TITLE	LINK TO PUBLICATION	YEAR
Evaluation of Trypanocidal Activity of <i>Bidens pilosa</i> and <i>Physalis peruviana</i> Against <i>Trypanosoma brucei rhodesiense</i> .	<a href="#">View online</a>	2017
Detection Of Natural <i>Toxoplasma Gondii</i> Infection In Olive Baboons ( <i>Papio Anubis</i> ) In Kenya Using Nested PCR. The 11th JKUAT Scientific, Technological and Industrialization Conference and Exhibitions Conference Proceedings.	<a href="#">View online</a>	
Virology for medical laboratory students	<a href="#">View online</a>	
Organ Pathology and Associated IFN- $\gamma$ and IL-10 Variations in Mice Infected with <i>Toxoplasma gondii</i> Isolate from Kenya. DOI: 10.5772/intechopen.79700.	<a href="#">View online</a>	2019
Vitamin B12 blocked <i>Trypanosoma brucei rhodesiense</i> -driven disruption of the blood brain barrier, and normalized nitric oxide and malondialdehyde levels in a mouse model	<a href="#">View online</a>	2023
“Development of Neurological Mouse Model for Toxoplasmosis Using <i>Toxoplasma gondii</i> Isolated from Chicken in Kenya,”	<a href="#">View online</a>	2017
Organ Pathology and Associated IFN- $\gamma$ and IL-10 Variations in Mice Infected with <i>Toxoplasma gondii</i> Isolate from Kenya, Parasites and Parasitic Diseases, Gilberto Bastidas, IntechOpen, DOI: 10.5772/intechopen.79700.	<a href="#">View online</a>	2019
A review on the present advances on studies of toxoplasmosis in Eastern Africa.	<a href="#">View online</a>	2020
Evaluating the Antischistosomal Activity of Crude Extracts of <i>Carica Papaya</i> against <i>Schistosoma Mansoni</i> : the Interplay of Cellular and Humoral Immunity.	<a href="#">View online</a>	2013
Detection of natural <i>Toxoplasma gondii</i> infection in chicken in Thika region of Kenya using nested polymerase chain reaction.	<a href="#">View online</a>	2016
Physico-Clinical and Haematological Changes in Olive Baboon ( <i>Papio anubis</i> ) Model of Latent Toxoplasmosis and Toxoplasmic Encephalitis.	<a href="#">View online</a>	
The Evaluation of the Effects of an Aqueous and Methanol Extracts of <i>Solanum incanum</i> on <i>Schistosoma mansoni</i> Infected Mice.	<a href="#">View online</a>	2012
Isolation and Cryopreservation of <i>Toxoplasma gondii</i> Isolates from Cats and Chickens from Selected Households in the Thika Region, Kenya	<a href="#">View online</a>	2022
Coinfection with <i>Schistosoma mansoni</i> Enhances Disease Severity in Human African Trypanosomiasis	<a href="#">View online</a>	2023
Determination of effective praziquantel dose in different mouse strains: BALB/c and Swiss mice in treatment of <i>Schistosoma mansoni</i> .	<a href="#">View online</a>	2012
Prevalence of Transfusion Transmissible Infections Among Blood Donated At Nyeri Satellite Transfusion Centre, Kenya.	<a href="#">View online</a>	2016
Influence of Caregiver and Peer Support in Adherence to Antiretroviral Therapy amongst HIV Positive Adolescents Attending Murang’a County Hospital.	<a href="#">View online</a>	2020
Natural Latent Toxoplasmosis in Wild and Captivity-born Olive Baboons ( <i>Papio Anubis</i> ) in Kenya	<a href="#">View online</a>	2019

<b>NAME</b>	<b>PROJECT TITLE</b>	<b>PERIOD</b>
Peter Kabugua Ndungu (PHT-3-0434-1-2017) KeMU	Factors associated with non-disclosure of HIV positive status to children infected with HIV in Muranga hospital, Kenya	GRADUATED (2017-2020)
NANCY SALMAH MITALO (SHBU/04242P/2019)	The impact of S. mansoni on disease severity of secondary infection with T. b. rhodesiense in a mouse model	2019-2023 (COMPLETED)
JAMES OCHIENG OULA (SHBU/04985P/2019)	THE PUTATIVE EFFECTS OF CYANOCOBALAMINE IN THE REGULATION OF IMMUNE RESPONSES DURING SEVERE STAGE OF HUMAN AFRICAN TRYPANOSOMIASIS	2019-2023 (COMPLETED)

#### COURSES TAUGHT

<b>NAME</b>	<b>DESCRIPTION</b>	<b>PERIOD</b>
Molecular and genetics Immunology	Studies on current immunological concepts and immunogenetics	2019 - TO-DATE
Forensic Science and Technology	This course is designed to provide students with knowledge and skills of forensic pathology, clinical forensic medicine, and forensic science.	2019 - up to date
Principles of Bioethics	Studies on key areas of principles of Bioethics.	2019 - TO-DATE
Therapeutic and Diagnostic Immunology	Studies in therapeutic and diagnostic applications.	2019 - TO-DATE
Immunology A	Principles and concepts in the diagnosis, control and prevention of human diseases.	2019 - TO-DATE
Immunopathology	Studies on pathologies related to the immune system in the human body systems.	2019 - TO-DATE