# THE TECHNICAL UNIVERSITY OF KENYA

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## NAME: DR WYCLIFFE NYAMONGO ONKOBA

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|---|---|
| Faculty: | Applied Sciences and Technology |
| School: | HEALTH AND BIOMEDICAL SCIENCES |
| Department: | Biomedical Sciences and Technology |
| Current Designation: | Senior Lecturer, BIOMEDICAL SCIENCES AND TECHNOLOGY (DBST) |
| Office Telephone: | +254(020) 2219929, 3341639, 3343672 |
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| Consultation Hours: | 8AM-5PM MON - FRI |

## EDUCATION

| LEVEL | QUALIFICATION NAME | INSTITUTION | YEAR |
|---|---|---|---|
| Doctor of Philosophy (PhD) | Public Health | University Of Kwazulu-Natal(South Africa) | 2016 |
| Masters of Science (M.Sc.) | Applied Parasitology | University Of Nairobi(Kenya) | 2012 |
| Bachelor of Science (BSc) | Medical Laboratory Science | Maseno University(Kenya) | 2005 |

## WORK EXPERIENCE

| PERIOD | INSTITUTION | POSITION |
|---|---|---|
| April 2016 - May 2017 | Institute of Primate Research | Senior Research Scientist |
| May 2007 - March 2016 | Institute of Primate Research | Research Scientist |
| Nov. 2016 - Feb. 2022 | Technical University of Kenya | Lecturer |
| March 2022 - 2027 | Technical University of Kenya | Senior Lecturer |

## GENERAL STATEMENT ON RESEARCH AREAS

Clinical Scientist with a keen interest in Infectious Diseases, R & D, Public Health and Big data.

## CURRENT RESEARCH PROJECTS

| | |
|---|---|
| The role of climate change in transmission of jigger infestation among vulnerable communities in Kenya | Climate change and diseases |
| Bacteriophages as alternate curative measure against multidrug resistant bacterium | alternative use of bacteriophages as treatment strategies against multi-drug resistant bacterium |
| Retrovirus-host biology | Using Non-human primate to understand SIV/HIV pathogenesis |
| Pediatric HIV Immunology | Pediatric HIV |

## SELECTED PUBLICATIONS

| TITLE | LINK TO PUBLICATION | YEAR |
|---|---|---|
| Diana Nyabundi, Nyamongo Onkoba, Rinter Kimathi, Atunga Nyachieo, Gerald Juma, Peter Kinyanjui, Joseph Kamau: Molecular characterization and antibiotic resistance profiles of Salmonella isolated from fecal matter of domestic animals and animal products in Nairobi. 12/2017; 3(1). | View online | |
| Emily Muema, peter kinyanjui, james mbaria, joseph nguta, sharon chepkwony, Joseph Kamau, Nyamongo Onkoba, Atunga Nyachieo: Toxicity and Safety of Khat (Catha edulis) Consumption during Pregnancy using Olive Baboons (Papio anubis) as Experimental Models: A Prospective Randomised Study. DOI:10.15580/GJEPH.2016.3.102116188) | View online | |
| Nyamongo Onkoba, Joseph Kamau, Samson Mukaratirwa, Moses chimbari: Metabolic and adaptive immune responses induced in mice infected with tissue-dwelling nematode Trichinella zimbabwensis. 11/2016; 6(3)., DOI:10.4314/ovj.v6i3.6 | View online | |
| Joseph Michael Ochieng Oduor, Nyamongo Onkoba, Fredrick Maloba, Atunga Nyachieo: Experimental phage therapy against haematogenous multi-drug resistant Staphylococcus aureus pneumonia in mice. 09/2016; 5(1)., DOI:10.4102/ajlm.v5i1.435 | View online | |
| Joseph Michael Ochieng' Oduor, Nyamongo Onkoba, Fredrick Maloba, Atunga Nyachieo: Staphylococcus aureus specific lytic bacteriophages are efficacious against multi-organ bacterial infections in mice. International Journal of Integrative Biology 09/2016; 17(1). | View online | |
| Joseph Michael Ochieng 'oduor, Nyamongo Onkoba, Fredrick Maloba, Washingtone Ouma Arodi, Atunga Nyachieo: Efficacy of lytic Staphylococcus aureus bacteriophage against multidrug- resistant Staphylococcus aureus in mice. The Journal of Infection in Developing Countries 06/2016; 10(11)., | View online | |
| J. M. O. Oduor, W. Nyamongo Onkoba, F. Maloba, W. Ouma Arodi, A. Nyachieo, F. I. Onditi: Safety and therapeutic efficacy of staphylococcus aureus specific lytic phage against multidrug-resistant S.aureus (MDRSA) in BALB/c mice: A prospective study. International Journal of Infectious Diseases 04/2016; 45., DOI:10.1016/j.ijid.2016.02.278 | View online | |
| Maria N. Kiio, Valeria N. Bosire, Damian Adoyo, Elephas Munene, Joseph Kamau, Atunga Nyachieo, Nyamongo Onkoba: Pathogenesis and Immune Responses in Newborn African Green Monkeys (Cercopithecus aethiops) Inoculated with Simian Immunodeficiency Virus (Sivagm). DOI:10.16966/jved.116 | View online | |
| Ruth K Nyakundi, Onkoba Nyamongo, Jeneby Maamun, Mercy Akinyi, Isaac Mulei, Idle O Farah, D'Arbra Blankenship, Brian Grimberg, Jann Hau, Indu Malhotra, Hastings Ozwara, Christopher L King, Thomas M Kariuki: Protective effect of chronic schistosomiasis in baboons co-infected with Schistosoma mansoni and Plasmodium knowlesi. Infection and immunity 02/2016; 84(5)., DOI:10.1128/IAI.00490-15 | View online | |
| Josiah Ogise, Ruth Mumo, Atunga Nyachieo, Joshua Mutiso, Joseph Kamau, Nyamongo Onkoba: Adjuvants in malaria vaccine development strategies: a review. DOI:10.14800/pid.1259 | View online | |
| Faith I Onditi, Onkoba W Nyamongo, Charles O Omwandho, Naomi W Maina, Fredrick Maloba, Idle O Farah, Christopher L King, Julie M Moore, Hastings S Ozwara: Parasite accumulation in placenta of non-immune baboons during Plasmodium knowlesi infection. Malaria Journal 12/2015; 14(1)., DOI:10.1186/s12936-015-0631-5 | View online | |
| Onkoba W Nyamongo, Robert M Nyarango: Prevalence of Canid Gastrointestinal Helminths Eggs in Soils from Play- grounds within the Kisii Municipality, Kenya. | View online | |
| Nyamongo W Onkoba, Moses J Chimbari, Samson Mukaratirwa: Malaria endemicity and co-infection with tissue-dwelling parasites in Sub-Saharan Africa: a review. Infectious Diseases of Poverty 09/2015; 4(35)., DOI:10.1186/s40249-015-0070-0 | View online | |
| W.N. Onkoba, M.J. Chimbari, J.M. Kamau, S Mukaratirwa: Differential immune responses in mice infected with the tissue-dwelling nematode Trichinella zimbabwensis. Journal of Helminthology 08/2015; 90(5)., DOI:10.1017/S0022149X15000723 | View online | |
| Rajesh Kumar, Ruth Nyakundi, Thomas Kariuki, Hastings Ozwara, Onkoba Nyamongo, Godfree Mlambo, Barry Ellefsen, Drew Hannaman, Nirbhay Kumar: Functional evaluation of malaria Pfs25 DNA vaccine by in vivo electroporation in olive baboons. Vaccine 05/2013; 31(31)., DOI:10.1016/j.vaccine.2013.05.006 | View online | |
| Joshua M. Mutiso, John C. Macharia, Maria N. Kiio, Peter M. Mucheru, Wycliffe N. Onkoba, Fredrick C. Maloba, Michael M. Gicheru: Leishmania parasite specific CD4+ synergizes and correlates positively with CD8+ T cells in the production of gamma interferon following immunization of the vervet monkey (Chlorocebus aethiops) model. | View online | |

## POSTGRADUATE STUDENTS SUPERVISION

| NAME | PROJECT TITLE | PERIOD |
|---|---|---|
| Josiah Ogise | Immunogenicity of malaria vaccine candidate pSeBCG/TT co-expressed with natural chemokines. | 2015-2017 |
| Richard Nyachieo | Host-parasite interactions in mice during malaria co-infection with tissue-dwelling parasites; Leishmania donovani and Trypanosoma brucei gambiense. | 2015-2017 |
| Kathyrin Mwangi | The role of immunological parameters in wound healing. | 2015-2016 |
| Samwel Mariera | Host immune responses during multi-infection with Leishmania donovani and Trypanosoma brucei gambiense. | 2016-2018 |

## COURSES TAUGHT

| NAME | DESCRIPTION | PERIOD |
|---|---|---|
| Haematology | Physiology of blood | 2017 - TO-DATE |
| Blood transfusion Medicine | Safety of blood and blood products used in therapy | 2017 - TO-DATE |
| Clinical chemistry | Understanding pathologies and biomolecules that can be assayed for during a disease condition | 2017 - TO-DATE |

## PROFESSIONAL AFFILIATIONS AND SOCIETIES

| TITLE | INSTITUTION |
|---|---|
| Certified Medical Lab. Tech | KMLTTB |