

# BERNARD GUYAH

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## EDUCATION

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
Kenyatta University	BSc	12/1999	Zoology
Kenyatta University	Msc	12/2003	Immunology
Kenyatta University	PhD	12/2009	Immunology
KEMRI-UNM	Postdoctoral	09/2011	Immunogenetics

## RESEARCH EXPERIENCE

Sept 2011 to Dec 2012, KEMRI/University of New Mexico, Kisumu  
Feb 2008 to Dec 2009, KEMRI/Wellcome Trust Research Laboratories-Kilifi  
Sep, 2005 to Jan 2008, KEMRI/US Army Medical Research Unit-Kenya, Kisumu  
Sept 2002 to March 2004, KEMRI/Walter Reed Project, Kisumu  
Jul 2002; RT II, Molecular Biology Unit, International Livestock Research Institute, Nairobi

## TEACHING EXPERIENCE

May 2020 to present: Chair, School Postgraduate Studies, School of Public Health and Community Development  
Oct. 2016 to Present: Lecturer, School of Public Health and Community Development, Maseno University.  
Mar 2016 to Dec 2017: Preceptor for MPH Intern Department of Public Health, University of Arizona.  
Jul 2015 to present: Preceptor for PhD intern, Department of Medical Parasitology Nagasaki University.  
Sep 2012 to May 2014: Part-Time Lecturer, Department of Nursing, Great Lakes University of Kisumu,  
Jan 2012 to Apr. 2012: Part-Time Lecturer, Masinde Muliro University of Science and Technology.  
Jan 2010 to Jun 2011: Lecturer, School of Health Sciences, Kampala International University, Uganda

## HONORS AND AWARDS

2005: Travel Award, 54th American Society of Tropical Medicine and Hygiene, Washington, DC USA,  
2005: Travel Award, Gordon Research Conference on Malaria Vaccine Road Map, Queen's College, Oxford, UK,  
2004 Outstanding Kenyan Young Scientist Award, Kenyatta University, Nairobi, Kenya

## PROFESSIONAL MEMBERSHIP

- Member of Postgraduate Board (School Representative), Maseno University
- Member of Research Committee, Maseno University
- Member of Maseno University Ethics Review Committee
- Member of Board of Management, Uyaw Secondary School
- Member of Management Committee of Minyiri Dispensary

## SKILLS AND TRAINING

Computing skills, Teaching skills, Data collection/analysis skills, Techniques in immunology, Molecular biology/Biotechnology

1. Ottichilo Ronald, **Guyah Bernard**, American Journal and Tropical Medicine and Hygiene, 2018
2. Angela, **Bernard Guyah**, American Journal of Tropical Medicine and Hygiene, 2018.
3. **Guyah Bernard**, 1<sup>st</sup> International Biotechnology and Biomedical conference AIBBC, Safari Park Hotel, Nairobi Kenya. September, 10<sup>th</sup> to 12<sup>th</sup> 2014
4. Daniel Matemo, Sylvia M LaCourse , **Bernard Guyah**, Lusi Osborne, John Kinuthia, David Horne ,Rosebella Onyango. 47<sup>th</sup> Union World Conference on Lung Health 26 to 29 October 2016 – Liverpool, United Kingdom.
5. Caleb Onyango, **Bernard Guyah**, Lilian Ogonda, 8<sup>th</sup> Edition of International Conference on Family Medicine & Primary Care, December 13-14, 2018, Madrid, Spain.

## LEADERSHIP EXPERIENCE

Oct 2018 to Jan 2020: Acting Secretary, Maseno University Ethics Review Committee  
Apr. 2015 to Sep. 2015: Acting Dean, School of Public Health and Community Development, Maseno University.  
Sep 2011 to Dec 2017: Chairman, Department of Biomedical Sciences & Technology, Maseno University  
Sep 2005 to Jan 2008: Head, Molecular Biology section, USAMRU-K

## CONFERENCES AND WORKSHOPS

1. 28<sup>th</sup> to 29<sup>th</sup> November, 2019: Grants and Management Mentorship Training by AMPATHPLUS, Eldoret
2. 16<sup>th</sup> to 22<sup>nd</sup> December, 2018. Curriculum Review for IRECs by NACOSTI, Egerton University, Njoro Kenya
3. 13<sup>th</sup> to 15<sup>th</sup> December 2017: Capacity Building Workshop for Institutional Ethics Review Committees, by UNESCO, Egerton University, Kenya
4. 4<sup>th</sup> to 5<sup>th</sup> December 2017: Women in Vector Control Workshop by University of Arizona, Great Rift Valley Lodge, Naivasha, Kenya.
5. 12<sup>th</sup> to 16<sup>th</sup> April 2014: Partnership in Advanced Clinical Evaluation (PACE), Training workshop, Maseno University, Kenya. Facilitated a course in Innovative Teaching
6. 5<sup>th</sup> to 8<sup>th</sup> September, 2012: Partnership in Advanced Clinical Education (PACE), Training of Trainers Workshop, Silver Spring Hotel, Nairobi, Kenya. Took a course in Innovative Teaching
7. 24<sup>th</sup> to 26<sup>th</sup> January, 2012: Training on Proposal Writing and Grants Management, KEMRI-CDC, Kisumu
8. 29<sup>th</sup> June to 3<sup>rd</sup> July 2009: SETDEV (Science, Ethics and Technological Responsibility in Developing and Emerging Countries) Capacity Building Workshop, Mombasa, Kenya.
9. 18<sup>th</sup> to 29<sup>th</sup> June 2009: Malaria Diagnostics (Microscopy), Malaria Diagnostic Centre of Excellence, KEMRI/WRP Kisumu Kenya
10. November 2004: University of Witwatersrand, Medical School, South Africa. Took a course on Molecular Biology and Immunology of Malaria Vaccine Development

11. August 2004: University of Nairobi (Chiromo Campus) Kenya. Participated in Protein Molecular Biology Training Course
12. Exchange Programme organized by Health Africa Development Co-operation Organization, Finland 2<sup>nd</sup> - 21<sup>st</sup> November, 2015.
13. 21<sup>st</sup> Association of Kenya Medical Laboratory Scientific Officers Exhibition and Conference, The Reef Hotel Mombasa, Kenya 7<sup>th</sup> – 10<sup>th</sup> October, 2014.
14. 20<sup>th</sup> Association of Kenya Medical Laboratory Scientific Officers Exhibition and Conference, Panari Hotel Nairobi, Kenya 8<sup>th</sup>- 11<sup>th</sup> October 2013.
15. International Conference on Harmonization : Good Clinical Practice, GlaxoSmithline; Intercontinental Hotel, Nairobi, 29<sup>th</sup> July 2009.
16. 5<sup>th</sup> MIM Pan-African Malaria Conference, KICC, Nairobi, Kenya 2<sup>nd</sup> to 6<sup>th</sup> Nov. 2009.
17. Kenya Young Scientists (KEYS) Seminar Series, Kenyatta University, Nairobi Kenya 30<sup>th</sup> April 2009.
18. 54<sup>th</sup> American Society of Tropical Medicine and Hygiene, Washington, DC USA, 11<sup>th</sup> to 16<sup>th</sup> December, 2005 (Abstract # 791).
19. Gordon Research Conference on Malaria Vaccine Road Map, Queen's College, Oxford, UK, 21<sup>st</sup> to 26<sup>th</sup> August, 2005.
20. 25<sup>th</sup> African Scientific Conference for Health Sciences ,Intercontinental Hotel, Nairobi, Kenya 4<sup>th</sup> to 8<sup>th</sup> October, 2004 (Abstract #16).
21. Introduction to Biomedical Research Workshop, KEMRI-Kisumu Kenya 26<sup>th</sup>, May to 6<sup>th</sup>, June 2003.
22. Kenyatta University Scientific Conference, Nairobi Kenya 12<sup>th</sup>-16<sup>th</sup> August, 2002 (Abstract #18).
23. 23<sup>rd</sup> African Scientific Conference for Health Sciences, Kampala Uganda 22<sup>nd</sup> to 26<sup>th</sup> April, 2002. (Abstract # 14).
24. Kenyatta University Postgraduate Seminar, Nairobi Kenya 17<sup>th</sup> to 22<sup>nd</sup> August, 2002 (Abstract # 10).
25. 7<sup>th</sup> KU APSC, Nairobi Kenya 8<sup>th</sup> to 12<sup>th</sup> May 2001 (Abstract # 35)

## PUBLICATIONS

1. Bernard Omondi Abudho, MS.c; **Bernard Guyah**, Ph.D; Bartholomew Ondigo, Ph.D; Eric Ndombi, Ph.D; Edmund Ireri, BS.c; Jennifer Carter, BS.c; Diana Riner, Ph.D; Nupur Kittur, Ph.D; Diana Karanja, Ph.D; Daniel Colley, Ph.D (2020). Evaluation of morbidity in Schistosoma mansoni-positive primary and secondary school children after four years of mass drug administration of praziquantel in western Kenya. Infectious Diseases of Poverty
2. Achieng AO, Hengartner NW, Raballah E, Cheng Q, Anyona SB, Lauve N, **Guyah B**, Foo-Hurwitz I, Ong'echa JM, McMahon BH, Ouma C1, Lambert CG4, Perkins DJ (2019). Integrated OMICS platforms identify LAIR1 genetic variants as novel predictors of cross-sectional and longitudinal susceptibility to severe malaria and all-cause mortality in Kenyan children. EBioMedicine. 2019 Jul 2. pii: S2352-3964(19)30424-4. doi: 10.1016/j.ebiom.2019.06.043
3. Silas Agumba, John E. Gimnig, Lilian Ogonda, Maurice Ombok, Jackline Kosgei, Stephen Munga, **Bernard Guyah**, Seline Omondi, Eric chomo, (2019). Diagnostic dose determination and efficacy of chlorfenapyr and clothianidin insecticides against Anopheles malaria vector populations of western Kenya. MALJ-D-18-00660R3.

4. Angela O. Achieng, **Bernard Guyah**, Qiuying Cheng, John M. Ong'echa, Collins Ouma, Christophe G. Lambert and Douglas J. Perkins (2019). Molecular basis of reduced LAIR1 expression in childhood severe malarial anaemia: Implications for leukocyte inhibitory signalling. *EBioMedicine*, <https://doi.org/10.1016/j.ebiom.2019.06.040>
5. Domnick Alwala, **Bernard Guyah** and Frank Onyambu (2018). Clinical Equivalence of Heparinized Arterial Plasma to Venous Serum Samples for Magnesium Measurements in Critical Patients at Moi Teaching and Referral Hospital Eldoret, Kenya. *International Journal of Information and Review Research*. 5(8) 5650-5653
6. Sammy N Kinuthia, Elly O Munde, Evans Odhiambo, Steven Obuya Were, **Bernard Guyah** and Philip R Aduma (2019). Chemotherapeutic Activities of Selected Medicinal Plant Extracts Used in Management. *Acta Scientific Microbiology* 2:8 18-31
7. Abudho, Bernard, Ndombi, Eric, **Bernard, Guyah**, Carter Jennifer, Riner Diana, Kittur Nupur, Karanja Diana, Secor William and Colley Daniel (2018). Impact of Four Years of Annual Mass Drug Administration on Prevalence and Intensity of Schistosomiasis among Primary and High School Children in Western Kenya: A Repeated Cross-sectional Study *Am J Trop Med Hyg*.
8. Caleb Onyango Lilian Ogonda, **Bernard Guyah**, Peter Okoth, Clement Shululi, Felix Humwa and Vallarie Opollo (2018). Seroprevalence and determinants of transfusion transmissible infections among voluntary blood donors in Homabay, Kisumu and Siaya counties in western Kenya.
9. Mary Hayden, Erika Barrett, **Guyah Bernard**, Eunice N. Toko, Maurice Agawo, Amanda M. Okello, Jayleen Gunn, and Kacey Ernst (2018). Barriers and Opportunities to Advancing Women in Leadership Roles in Vector Control: Perspectives from a Stakeholder Survey. *Am J Trop. Med. Hyg*. May; 98(5): 1224–1227.
10. Ronald K. Ottichilo, **Bernard Guyah**, Christina S. Polvak, Benson Singa, Josephat Nyataya, Christa Yuhas, Grace John-Stewart and John N. Waitumbi (2017). Malaria Parasitemia and Parasite Density in Anti-retroviral-Treated HIV-Infected Adults Following Discontinuation of Cotrimoxazole Prophylaxis. *The Journal of Infectious Diseases*.
11. Tuvei Mamusavu, **Guyah Bernard** and Abongó Benard (2017). The Prevalence of Coagulase-Positive Staphylococci Colonization among Diabetes Patients with Foot Ulcers at Vihiga Referral Hospital, Kenya. *Journal of Advances in Microbiology*. 5 (3) 1-8.
12. Angela Omondi, Prakasha Kempaiah, , Manmeet Rawat, John Ongecha, Benhards Ogutu, **Guyah Bernard** and Douglas Jay Perkins (2017). Antimalarials: Molecular drug targets and mechanism of action. *Current Topics in Medicinal Chemistry*", Vol. 17,
13. Joseph Osoga, **Bernard Guyah**, John Waitumbi, , James Sande, Cornel Arima, Michael Ayaya, Caroline Mosei, Collins Moranga Elizabeth Wanja (2017). Comparative evaluation of fluorescent in situ hybridization and Giemsa microscopy with quantitative real-time PCR technique in detecting malaria parasites in a holoendemic region of Kenya. *Malaria Journal*. 16:297.
14. Rispah T. Sawe, Simeon K. Mining, **Bernard Guyah**, Ayub V. Ofulla†, Kirtika Patel, , David Chumba, Jenifer Prospero, Maggie Kerper, Zonggao Shi, Mayra Sandoval-Cooper, Katherine Taylor, Sunil Badve, M. Sharon Stack, and Laurie E. Littlepage (2017). Breast cancer in western Kenya is aggressive with early onset, high

proliferation, and immune cell infiltration with suppression of the adaptive immune response. (in review Breast cancer research; BRCC-D-15-00367).

15. Iddah Maulid Ali, **Bernard Guyah**, Gideon Ng'wena, Kennedy Mutai and Wilfred Emonyi (2016): Gene Xpert MTB/RIF Specificity and Sensitivity in Tuberculosis Diagnosis using Urine Samples from HIV Patients with Signs of Tuberculosis at The Moi Teaching and Referral Hospital in Western Kenya. *Journal of Disease and Global Health* 8(3) 112-117
16. Bonface Abunah, Rueben Onkoba, **Bernard Guyah**, Josephat Nyagero, Samuel Muhula, Edward Omondi, Gregory Barnabas Omondi (2016). Motivators and Barriers to Up-take of Post-operative Voluntary Male Circumcision follow-up in Yala division, Siaya County, Kenya. *The Pan African Medical Journal*. 25 (suppl.2) 7.
17. Iddah. M. Ali, Gideon A. Ng'wena, **Bernard Guyah**, Kennedy K. Mutai and Benard Abong'o (2015). Optimal parameters for Gene Xpert MTB/RIF and LAM Strip determine Test for Diagnosis of Tuberculosis using urine from HIV patients at Moi Teaching and Referral Hospital, Kenya. *Journal of Medical Science and Clinical Research*. 3 (8) 6997-7004.
18. Walter Otieno, Benson B. A. Estambale, Michael M. Odera, Collins O. Odhiambo, Joash R. Aluoch, **Bernard Guyah**, Stacey M. O. Gondi and José A. Stoute (2014). Increased Complement Deposition on Red Blood Cells in Children with Sickle Cell Trait. *British Journal of Medicine & Medical Research*. DOI : 10.9734/BJMMR/2015/12283.
19. Peter C. Bull, Caroline O. Buckee Sue Kyes, Moses M. Kortok, Vandana Thathy, **Bernard Guyah**, José A. Stoute, Chris I. Newbold and Kevin Marsh (2008). Plasmodium falciparum antigenic variation. Mapping mosaic var gene sequences onto a network of shared, highly polymorphic sequence blocks. *Molecular Microbiology* 68: (6) 1519-1534.
20. Vandana Thathy, Joan Moulds, **Bernard Guyah**, Walter Otieno and Jose A. Stoute (2005). Complement Receptor 1 Polymorphisms Associated with Resistance to Severe Malaria. *Malaria Journal* 4:54.
21. **Guyah B**, Orago ASS, Ohas E, Waitumbi, JN and Stoute, JA. (2004). Heterogeneity of Red Cell Invasion Phenotypes of *Plasmodium falciparum* field isolates in western Kenya. *AJTMH*