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ANDREW NYERERE KIMANG'A

## 1.0 PERSONAL INFORMATION

NAME : Dr. ANDREW NYERERE KIMANG'A ADDRESS : P.O. Box 22955-00100 Nairobi, Kenya

MOBILE : 0722 689073

EMAIL : <a href="mailto:knyerere@jkuat.ac.ke">knyerere@jkuat.ac.ke</a>, <a href="mailto:kinyerere@yahoo.com">kinyerere@yahoo.com</a>

NATIONALITY : Kenyan GENDER : Male

#### **2.0 QUALIFICATIONS**

## 2.1 Academic Qualifications

1) 2015: PGD in Medical Laboratory Science of Jomo Kenyatta University of Agriculture & Tech.

2) 2010: PhD in Microbiology of Jomo Kenyatta University of Agriculture & Tech.,

3) 2003: MSc. in Microbiology of Jomo Kenyatta University of Agriculture & Tech.

4) 1999: Bachelor of Education Science (Botany and Zoology) Kenyatta University

#### 2.2 Professional Courses

1) 2014: Completed a course on Innovative Teaching Methodologies and Clinical Mentorship Conducted by PACE at African Institute for Capacity Development (AICAD)

#### 3.0 EMPLOYMENT HISTORY

- 1) 2012 to date: Microbiology Lecturer, Department of Medical Microbiology, Jomo Kenyatta University of Agriculture and Technology
- 2) 2010-2012: Microbiology Lecturer, Department of Botany, Jomo Kenyatta University of Agriculture and Technology
- 3) 2006-2010: Assistant Microbiology lecturer, Department of Botany, Jomo Kenyatta University of Agriculture and Technology
- 4) 2003 2006: Part-time Microbiology Lecturer, Department of Botany, Jomo Kenyatta University of Agriculture and Technology
- 5) 2003 2006: BOG Biology Teacher, Mang'u High School

#### 4.0 ADMINISTRATIVE RESPONSIBILITY

#### 4.1 At Jomo Kenyatta University of Agriculture and Technology

- 1) **2013 to Date:** Chairman, Department of Medical Microbiology
- 2) **2010-2013:** 4<sup>th</sup> Year Class Advisor and Project Coordinator
- 3) **2010-2013:** Faculty of Science Post-graduate Committee Member

#### **Other Responsibilities**

- 1. 8<sup>th</sup> August to 19<sup>th</sup> August, 2016: Acting Dean, School of Biomedical Sciences
- 2. **2014 to date:** Serving as committee member in the subtask force (international center for molecular biology and biochemistry) of the AFRICAN-*ai*-JAPAN Project.

## 5.0 RESEARCH AND PUBLICATIONS

#### **5.1.1** Articles in Refereed Journals

- 1. D.N. Maina, A.N. Kimang'a, R.W. Gicho, J Mwangi, K Mutai, R.W. Lihana. Genotypes of HBV and HCV among HIV-1 co-infected individuals in Ngong Sub-County, Kenya. East African Medical Journal -- Vol 93, No 12 (2016) pg 640-645.
- 2. P.M. Impwi, P Wambugu, **A.N. Kimang'a**, S Kariuki. Pathogenic E.coli and other pathogenic gram negative enteric strains from foecal samples of children without diarrhoea living in Mukuru slums, Nairobi. *East African Medical Journal* Vol. 93 No. 7 (**2016**) pg 271-277
- 3. Maina Susan Muthoni, **Andrew Nyerere K** and Caroline Wangari Ngugi. Assessment of Level of Knowledge in Medical Waste Management in Selected Hospitals in Kenya. Appli Micro Open Access 2016, 2:4 DOI: 10.4172/2471-9315.1000124
- **4.** Victor Dinda and **Andrew Kimang'a**. Co-occurrence of Helicobacter pylori with faecal bacteria in Nairobi river basin: public health implications. African Health Sciences Vol 16 Issue **1, March 2016**
- 5. **Kimang'a Andrew, Gikunju** Joseph, Kariuki Daniel, Ogutu Millicent. Safety and analgesic properties of ethanolic Extracts of *Toddalia asiatica* (L) lam. (rutaceae) ased for central and peripheral pain management among the east African ethnic Communities. Ethiop J **Health Sci. Vol. 26, No. 1 January 2016**
- 6. Lawrence Guantai M'itonga, **Andrew Nyerere Kimanga**, Caroline Wangari NgugiThomas M. Mutie. Clinical Relevance of CagA EPIYA Motifs In Helicobacter pylori Among the DyspeptPatients in Kenya. Int J Med Health Sci. **Oct 2015**,Vol-4;Issue-4
- 7. Lawrence Guantai M'itonga, **Andrew Nyerere Kimang'a**, Caroline Wangari Ngugi, Thomas M. Mutie. Association of Helicobacter Pylori VacA Gene Polymorphisms and CagA Gene with Clinical Outcome in Dyspeptic Patients. International Journal of Health Sciences & Research (www.ijhsr.org). **Sep. 2015**Vol.5; Issue: 9
- 8. Limo Jacqueline, Bii Christine, Musa Otieno Ngayo, Galgalo Tura, Mutua Daniel, Nkirote Rose, **Nyerere Andrew**. Infection rates and correlates of Non-Tuberculous Mycobacteria among Tuberculosis retreatment cases In Kenya. Prime Journal of Social Science (PJSS). ISSN: 2315-5051. Vol. 4(7), pp. 1128-1134, July 31st, **2015**.
- **9.** Lily Chepkurui, Zainab Gura, Fredrick Odhiambo and **Andrew Nyerere**. Hepatitis B seroprevalence among HIV infected individuals seeking care at selected hospitals in Kericho County, Kenya, 2014. Prime Journal of Social Science (PJSS). ISSN: 2315-5051. Vol. 4(7), pp. 1135-1139, **July 1, 2015**
- 10. Peter Shigoli, Gunturu Revathi, Elusah Juliet, **Kimang'a Nyerere**. Performance of Statens Serum Institut Enteric Medium for Detection of Enteric Pathogens in Stool in Routine Laboratory

- Diagnostics. Universal Journal of Clinical Medicine 3(2): 11-14, **2015** http://www.hrpub.orgDOI: 10.13189/ujcm.2015.030201.
- 11. Ingato, S.P., **Kimang'a, A.N.,** Omuse, G., Kariuki, S., Gunturu, R. and Dinda, V. (2014) Characteristicsof Archived Coagulase Negative *Staphylococci* Isolates at a University Hospital, Nairobi, Kenya. *Open Journal of Medical Microbiology*, **2014**, 4, 236-241.
- 12. Catherine Wanjiru Gichuhi, Daniel Kariuki, **Andrew Nyerere**, MalkitRiyt. Studies on Vitamin D Levels in Serum of HIV Infected Patients: Their Effect on Progression towards AIDS. World Journal of AIDS, 2014, 4, 422-429.http://dx.doi.org/10.4236/wja.2014.44050
- 13. Welday, S.H., <u>Kimang'a, A.N.</u>, Kabera, B.M., Mburu, J.W., Mwachari, C., Mungai, E., Ndwiga, S.M., Mbuthia, J.K. and Revathi, G. (**2014**) Stool as Appropriate Sample for the Diagnosis of *Mycobacterium tuberculosis* by Gene Xpert Test. *Open Journal of Respiratory Diseases*, **4**, 83-89. http://dx.doi.org/10.4236/ojrd.2014.43012
- 14. Laving A1, Kamenwa R, Sayed S, <u>Kimang'a AN</u>, Revathi G. Effectiveness of sequential v. standard triple therapy for treatment of Helicobacter pylori infection in children in Nairobi, Kenya. S Afr Med J. **2013** Oct 23; 103 (12):921-4. doi: 10.7196/samj.7012.
- 15. Dinda Victor, GunturuRevathi, Kariuki Sam, Hakeem Abdi, Raja Asad, <u>Kimang'a Andrew.</u> Pattern of Pathogens and Their Sensitivity Isolated from Surgical Site Infections at the Aga Khan University Hospital, Nairobi, Kenya. Ethiop J Health Sci. July **2013** Vol. 23, No. 3 pg 141-149.
- 16. <u>Kimang'aAN.</u> Prevalence of Helicobacter pylori cagA and vacAallelic variants and associated disease outcomesin Kenyan patients with dyspepsia. South Afr J Epidemiol Infect. July **2013**; 28 (2):112-116
- 17. Daniel Maina, Paul Makau, <u>Andrew Nyerere</u> and GunturuRevathi. Antimicrobial resistance patterns in extended-spectrum β-lactamase producing *Escherichia coli* and *Klebsiellapneumoniae*isolates in a private tertiary hospital, Kenya. *Microbiology Discovery* 2013, doi: 10.7243/2052-6180-1-5
- 18. <u>Kimang'a AN.</u>IL-1B-511 ALLELE T and IL-1RN-L/L play a pathological role in *Helicobacter pylori* (*H. pylori*) disease outcome in the African population. **Ethiop J Health Sci. Vol. 22, No. 3**November 2012. Pg 163 169
- 19. <u>Kimang'a AN.</u> A Situational Analysis of Antimicrobial Drug Resistance in Africa: Are We Losing the Battle? Ethiop J Health Sci 2012; 22(2): 135-143
- 20. <u>Kimang'a, A.</u>Revathi, G; Kariuki, S, Shahin, S; Smita, D; Matiru, V; Kuester, D; Roessner, A; Moenkemueller, K; Malfertheiner, P; Wex, T. (2010). IL-17A and IL-17F gene expression is strongly induced in the mucosa of *H. pylori*-infected subjects from Kenya and Germany. <u>Scand J Immunol</u>. 72(6):522-528.
- 21. <u>Kimang'a, A.</u>Revathi, G; Kariuki, S, Shahin, S; Smita, D. (2010). *Helicobacter pylori:* Prevalence and antibiotic susceptibility among Kenyans. <u>S. Afri. Med. J.</u> 100 (1): 53 57.
- 22. Kimang'a, A: Shahin, S; Revathi, G; Ojwang, P; Matiru, V; Smita, D; Mahesh, S; Kariuki, S. (2009). Prevalence of gastric mucosal interleukin-1 polymorphisms in Kenyan patients with advanced gastric cancer. S. Afri. Med. J. 99 (2): 95 97.

#### **6.0 CONFERENCES AND SEMINARS**

## 6.1 Presentation of Papers at Academic and Professional Conferences

1. Edson Edson Kemoi, Nyerere A, Mashedi O, Sigei E, Bii C. Triazole resistance and sequence analysis of Aspergillus Fumigatusfrom experienced and naïve soils in Naivasha Sub-County and Nairobi County. The 6th East African Health and Scientific Conference and International Health Exhibition and Trade Fair29March 2017 to 31 March 2017 Bujumbura – Burundi. *The East African Health Research Journal*. Volume 1 Supplement 1 March 2017 Pg. S 20

- 2. T. Ouko, J. Ouko, C. Bii, P. Mwitari, **A. Nyerere**, F. Tolo. Antimicrobial Activity of Aqueous and Organic Extracts of *Chrysanthemum cinerariaefolium* (Pyrethrum) Flowers from Nakuru and Bomet Counties, Kenya. The 6th East African Health and Scientific Conference and International Health Exhibition and Trade Fair29March 2017 to 31 March 2017 Bujumbura Burundi
- 3. **Kimanga AN.** A Situational Analysis of Antimicrobial Drug Resistance in Africa: Are We Losing the Battle? Infection prevention network-Kenya in collaboration with infection control Africa network. Regional Infection prevention and control conference. **Date:** 6<sup>th</sup> to 8<sup>th</sup> November 2013. The Sarova White sands Beach resort and Spa. Posta No. 1478. Pg 38-39.
- 4. **Kimang'a AN.** Role of host pro-inflammatory genetic polymorphisms and Helicobacter pylori cagA and vacA allelic variants in Helicobacter pylori associated disease outcomes in Kenyan patients with dyspepsia. Workshop for capacity building in molecular biology and bioinformatics held at icipe, Nairobi, Kenya on the **14**<sup>th</sup> **to the 16**<sup>th</sup> **of August 2013**. Oral presentation
- 5. **Kimang'a, A;**Revathi, G; Kariuki, S; Shahin, S; Smita, D; Matiru, V; Kueste, D; Mönkemüller, K; Malfertheiner, P; Wex, T. (2011). *Helicobacter pylori* infection is associated with similar mucosal cytokine expression pattern in patients from Kenya and Germany. 20. Kongress der MitteldeutschenGesellschaftfürGastroenterologie, Magdeburg, 12.-14.5.2011-05-14. Der Gastroenterologe 2011, 6(3): 252. Poster
- 6. Kimang'a, A;Revathi, G; Kariuki, S; Shahin, S; Smita, D; Matiru, V; Kueste, D; Mönkemüller, K; Malfertheiner, P; Wex, T. (2010). Helicobacter pylori infection is associated with similar mucosal cytokine expression pattern in patients from Kenya and Germany. E. H. S. G, XXIII International Workshop, September 16-19, 2010, Rotterdam, Netherlands, Helicobacter 15(4):350.Poster
- 7. **Kimang'a, A**;Revathi, G; Kariuki, S; Shahin, S; Smita, D. (2009). Prevalence of *Helicobacter pylori* Infection, the Virulence Genotypes of the Infecting Strain, and Associated Disease Outcomes in the Kenyan Population. *American Journal of Clinical Patholology*. **132:621-640**, Abstract no: 42
- 8. **Kimang'a, A;**Revathi, G; Shahin, S; Ahamad, L; Devani,S. (2008). Prevalence and Outcome of *H. pylori* Infection in Kenya: a Cultural Cross Roads. E. H. S. G, XXI International Workshop, September 18 20, 2008, Riga, Latvia. **Helicobacter**, Volume 13, Issue 5 (**p 427-430**) Abstract, no.: P039
- 9. **Kimang'a, A;** Vilaichone, R., Tumwasorn, S; Sawatpanich, A; Mahachai, V. (2008). *H. pylori* Infection and IL-1 Polymorphism in Gastric Cancer Comparison between Thailand and Kenya. E. H. S. G, XXI International Workshop, September 18 20, 2008, Riga, Latvia. **Helicobacter**, Volume 13, Issue 5 (p 475-479)Abstract, no.: P165

## **6.2 Participation in Conferences**

- 1. 11th International Scientific Conference. Quality Health Care and Health Professional ... Conference Secretariat. Aga Khan University Hospital, Nairobi, November 12-14, 2008
- 2. 9th Biennial International APECSA Conference and KESHO Scientific Conference October 22nd 25th 2008White sands Beach Resort, Mombasa. Theme: Challenges of Pathology and Oncology Practice in Africa
- 3. 2nd Regional Microbiology Conference 16th-19th March. 2004. Venue: Kenya School of Monetary Studies, Nairobi, Kenya

#### **6.3** Participation in Workshops

- 1. Second DAAD Alumni Workshop in Lagos Nigeria, November 27th 29th, 2009
- 2. Roche Applied Sciences "Inspiring Discovery" Workshop for Molecular and Cellular Sciences. 2nd October 2008, Nairobi, Kenya.

3. Participated in a workshop on "benefits of open access for research dissemination, usage, visibility and impact" organized by JKUAT in collaboration with (EIFL.net) held at AICAD on 30<sup>th</sup> August, 2010

## **6.4 Convening and Coordinating Conferences**

- 1. Facilitator, Workshop on Quality Issues in Antimicrobial Susceptibility Testing on 2nd August 2008 at The Aga Khan University Hospital, Nairobi, Kenya.
- 2. Facilitator, Workshop on Quality Issues in Antimicrobial Susceptibility Testing on 21st November, 2009 at The Aga Khan University Hospital, Nairobi, Kenya.

## 7.0 LOCAL, REGIONAL AND INTERNATIONAL APPOINTMENTS

#### 7.1 International Committees

**2014 to date:** Serving as committee member in the subtask force (international center for molecular biology and biochemistry) of the AFRICAN-ai-JAPAN Project.

#### 7.2 Consultancies

Consultancy: Appointment as External Subject Expert

**Institution:** Maasai Mara University

**REF:** MMU/AA03/016/2023/VoL1137

**Date:** 2016

## 8.0 MEMBERSHIP IN BOARDS/SOCIETIES

- 1) Infection Prevention Control Network-Kenya (IPNET)- Membership Number: IPNET-K49
- 2) Infection Prevention and Control Africa Network (ICAN)- Complimentary Membership

#### 9.0 FELLOWSHIPS AND GRANTS

#### 9.1 RESEARCH GRANTS

I have, together with my postgraduate students, made successful applications and worn the following grants

- 1. NACOSTI/RCD/005/ 171 (Grant Amount KS. 800,000)
- 2. NCST/ACC/003/006/138 (Grant Amount KS. 800,000)
- 3. JICA/Africa-ai-JAPAN 2015 (Grant Amount KS. 1,250,000)

## 9.2 OTHER GRANTS/FELLOWSHIPS

- 1. 2007: I was awarded The German Academic Exchange Service In-Country-Scholarship.
- 2. 2009 to 2010: I have received travel grant from the German Academic Exchange Service (DAAD for the DAAD Second DAAD Alumni Meeting in Lagos Nigeria, November 27 29, 2009

3. 2007: Received a three months Training grant on *H. pylori* culture and Molecular Techniques at the Division of Gastroenterology, Department of Medicine and Department of Microbiology, Chulalongkorn University Hospital, Bangkok, Thailand, and University of Thammasat, Bangkok, Thailand.

#### 10.0 EXTERNAL AND INTERNAL GRANTS

## **10.1 External Grants**

- 1. 2007: I was awarded The German Academic Exchange Service In-Country-Scholarship.
- 2. 2009 to 2010: I have received travel grant from the German Academic Exchange Service (DAAD for the DAAD Second DAAD Alumni Meeting in Lagos Nigeria, November 27 29, 2009
- 3. 2007: Received a three months Training grant on *H. pylori* culture and Molecular Techniques at the Division of Gastroenterology, Department of Medicine and Department of Microbiology, Chulalongkorn University Hospital, Bangkok, Thailand.
- 4. JICA/Africa-ai-JAPAN 2015 (Grant Amount KS. 1,250,000)
- 5. NACOSTI/RCD/005/ 171 (Grant Amount KS. 800,000)
- 6. NCST/ACC/003/006/138 (Grant Amount KS. 800,000)

## 10.2Internal Grants

2006: I was awarded The JKUAT research grant for my PhD

## 11.0 POSTGRADUATE SUPERVISION

#	Name of Student	Thesis Title	MSc/PhD,	Year enrolled	Year graduated	Status of project (Graduated, Ongoing)
1	Lawrence Guantai M'itonga	Association of <i>Helicobacter pylori cag</i> A and Specific <i>vac</i> A Gene Polymorphisms with Clinical Outcome in Patients with Dyspepsia Presenting at Kenyatta National Hospital, Kenya	PhD	2013	2016	Graduated
2	Catherine N. Mwangi	Differential antibiotic resistance of <i>Helicobacter pylori</i> in dyspeptic patients: a study on genetic and phenotypic diversity among clinical isolates from gastric corpus and antrum	PhD	2015		Ongoing
3	Stephen Njoroge	Determination of Antimicrobial activity of selected medicinal plants on clinical isolates of <i>Helicobacter pylori</i>	PhD	2015		Ongoing
4	Maina Susan Muthoni	Evaluation of Medical Waste Management and Characterization of Pathogenic Microorganisms Present in Medical Waste in Selected Hospitals in Kenya.	PhD	2014		Ongoing
5	Tom Turbine Ouko	Molecular epidemiology and genetic diversity of campylobacter among patients presenting with diarrhea in Busia District Hospital, Kenya	PhD	2016		Ongoing
7	Millicent Ogutu	diversity of colon microbiome in healthy voluneers and in colorectal cancer patients attending cancer clinics in Kenya	PhD	2016		Ongoing

8	Dinda Victor Odhiambo	Studies on the Origin and Nature of Carbapenemase-Producing Gram-Negative Bacteria in Kakamega County, Kenya	PhD	2014		Ongoing
9	Josephine Wahogo- Mburu	Characteristics of Diabetes in Tuberculosis infected patients in Nairobi and Kiambu Counties, Kenya (P81/02/2014	PhD	2014		Ongoing
10	Peter Mochama Onkware	Prevalence and Characteristics of Bacterial Co-infections among Tuberculosis Patients at Kenyatta National Hospital	PhD	2014		Ongoing
11	Tseghereda Yohannes Ghebremedhin	Molecular Characterization of Eritrean Glucose-6-Phospate Dehydrogenase Alleles Diversity and Effect on Malaria	PhD	2016		Ongoing
12	SEBLE HAILE WELDY	Xpert MTB/RIF Testing Of Stool Samples for the Diagnosis of Pulmonary Tuberculosis in Children Under 15 Years	MCc.	2012	2015	Completed
13	CATHERINE WANJIRU GICHUHI	Studies on Vitamin D Levels in Serum of HIV Infected Patients: Their Effect on Progression towards AIDS	MCc.	2012	2015	Completed
14	NYAMBANE CLIVE ONTITA	Prevalence and Susceptibility Profiles of Urinary Tract Infections in Children Presenting At Kisii Level 5 Hospital, Kisii County, Kenya	MCc.	2012	2015	Completed
15	Macharia John Macharia.	Prevalence, Characteristics and Risk Factors Associated with <i>Staphylococcus aureus</i> Presence in Marketed Milk and Milk Products Within Nairobi County, Kenya.	MCc.	2013	2016	Completed

16	Kinankau Kiunga Virginiah	Genotypic and Phenotypic Characterization and Antibiotic Resistance of Diarrhoeagenic <i>Escherichia Coli</i> Isolated from Children Below Five Years in Korogocho and Viwandani Slums, Nairobi	MCc.	2013	2016	Completed
17	Jacqueline Jepkemboi Limo:	Prevalence and characterisctics of non tuberculous Mycobacterium tuberculosis among retreatment cases in National Reference Laboratory, Kenya	MCc.	2013	2016	Completed
18	Odhiambo Winnie Odhiambo	Prevalence of <i>Campylobacter Jejuni</i> and other Food Pathogens In Foods and Drinks Served In Nairobi Fast Food Restaurants	MCc.	2013	2016	Completed
19	Phyllis Mwari Impwi	carriage of pathogenic e.coli and other pathogenic gram negative enteric strains from fecal samples of childrenwithout diarrhoea living in mukuru slums, nairobi	MCc.	2013		Completed
20	Senelwa Davis Lugano	Isolation And Characterisation of Gut Microbes Present In Wild and Captured Baboon Population	MCc.	2015		Ongoing
21	Moses Odanga	Determining the presence of fungal pathogens and concentration levels of aflatoxin in commonly used food spices in Kiambu county and the public health risks associated with consumption of the spices.	MCc.	2014		Ongoing
22	LUCY WANGUI MUITA	Hepatitis B Seroprevalence among HIV Infected Individuals Seeking Care at Selected Hospitals in Kericho County, Kenya 2014	MCc.	2011		Ongoing
23	PATRICIA INGATO SHIVACHI	Characteristics of Archived Coagulase Negative <i>Staphylococci</i> Isolates at A University Hospital in Nairobi County	MCc.	2011		Ongoing

# **REFEREES**

Prof. Dr. med. Gunturu	Prof. Sam Kariuki (PhD),	Dr. Joseph Ng'ang'a (PhD),		
Revathi,  Department of Pathology  Aga Khan University Hospital,  P.O. BOX 30270, NAIROBI Email: gunturu.revathi@aku.edu	Center for Microbiology Research, Kenya Medical Research Institute.  P.O. BOX 19464, NAIROBI  Email: <a href="mailto:samkariuki2@gmail.com">samkariuki2@gmail.com</a>	Dean,  School of Biomedical Sciences, Jomo Kenyatta University of Agriculture and Technology  Email:		
Tel: 0722829517	Tel: 0722232467	Tel:		