

## **BIODATA**

**Angela Atieno Amayo**

**Date of Birth: 30<sup>th</sup> January 1962**

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### **Personal Statement**

Angela Atieno Amayo is an Associate Professor of Chemical Pathology in the Department of Human Pathology, University of Nairobi. She obtained both her Medical degree and Master of Medicine in General Pathology qualifications from the University of Nairobi, Kenya. She is a Founder Fellow of the College of Pathologists East, Central and Southern Africa (FCPath ECSA). Prof. Amayo is currently the Chair of the Department of Human Pathology.

She is a laboratory professional with several years of hands-on experience in clinical and management aspects of laboratory medicine including strengthening public health laboratory systems to support diagnosis, treatment and surveillance of HIV and TB through policy development, advocacy and capacity building of laboratory staff. She has over 20 years experience teaching at university level in both undergraduate and postgraduate medical and science programs, including medical laboratory sciences. As a Specialist Pathologist she has vast experience working in both public sector and private clinical laboratories, providing clinical correlation of laboratory tests and establishing laboratory quality management systems. She has worked harmoniously with diverse teams and individuals from different professional and social backgrounds because of being respectful and mindful of other people's views. She has management experience in both academic and clinical laboratory environments and has been Team Leader of a Pathology Consulting Consortium. She has managed human, finance and laboratory resources with a high level of integrity.

### **EDUCATION**

Master of Medicine (General Pathology), University of Nairobi 1993.

Bachelor of Medicine and Bachelor of Surgery, University of Nairobi 1978

### **ADDITIONAL QUALIFICATIONS**

Diploma in Total Quality Management, Kenya Institute of Management, Nairobi 2011

### **ADDITIONAL CERTIFICATES**

Advanced Hospital Incident Command System (HICS-02). Nairobi 2009

Basic Hospital Incident Command System (HICS-01). Nairobi 2009

Good Clinical and Laboratory Practice Re-certification Course. Nairobi 2009

Crestcom Bullet Proof Manager. Nairobi 2008

### **PROFESSIONAL CERTIFICATIONS**

1997 Specialist Recognition (Clinical Pathologist) KMPD Board

2014 Founder Fellow of the College of Pathologists of East, Central and Southern Africa

### **PROFESSIONAL AFFILIATIONS**

1. Clinical Chemists of Kenya (CCAK) - Chairperson
2. Kenya Association of Clinical Pathologists (KACP) –Council Member
3. Association of Pathologists of East, Central & Southern Africa (APECESA) – Past President
4. African Association of Clinical Biochemistry (AACB) – Former Treasurer

5. African Society of Laboratory Medicine (ASLM) – Founder Member
6. American Association of Clinical Chemistry - Member

## **PROFESSIONAL EXPERIENCE**

### **University of Nairobi 1993-2011, 2012 to date**

Joined as Lecturer in 1993 and progressed to Associate Professor, Department of Human Pathology in 2014

### **Management Sciences for Health (2011-2012 full time; 2013-September 2015 -LOE) Technical Director and Deputy Project Director Nairobi, Kenya**

Achievements:

- Technical oversight for CDC-funded over \$5.0 M Strengthening Public Health Laboratory Systems in Kenya Project.
- Provided leadership and supportive mentorship supervision to 5 technical advisors. Supported the Kenya Ministry of Health to develop a Draft National Health Laboratory Policy and Strategic Plan as well several laboratory service delivery guiding documents including: Laboratory Specimen Referral guidelines, Laboratory Equipment Management guidelines and Laboratory physical infrastructure guidelines.
- Participated in development of training materials and conducted trainings in laboratory quality management systems and scientific writing as part of the human capacity building for the Ministry of Health. Participated in development of efficient facility based models for scaling up of safer phlebotomy and biosafety training programs nationally.
- Supported the Ministry of Health National Public Health Laboratories and Selected Counties to enhance use of laboratory data for decision making through training and supporting development of M and E plans.

### **University of Maryland/University of Nairobi CDC-Funded Partnership for Advanced Clinical Education (PACE Project) 2009-2010**

#### **Leader of University of Nairobi Laboratory Component**

Achievements:

- Provided trainings for Ministry of Health laboratory staff in laboratory support for HIV diagnosis, care and treatment and laboratory quality management systems
- Supported Kenya Medical Training College to develop strategies for providing short hands on laboratory training programs using cost recovery models.

## **CLINICAL PATHOLOGY CONSULTANCY EXPERIENCE**

Kenyatta National Hospital Biochemistry Laboratories.

Nairobi Hospital 1995 to date.

Gertrude's Children's Hospital Nairobi 1993 – 2011.

Mater Hospital Nairobi 1996 – 2008.

## **PARTICIPATION IN COLLABORATIVE RESEARCH AND PROJECTS**

- REMox TB Study (Completed 2012) - Collaboration with KEMRI Centre for Respiratory Diseases Kenya.  
Role: Investigator and Leader of Laboratory assessment of drug safety.
- Tb Study (Completed 2010) - Collaboration with KEMRI Centre for Respiratory Diseases Kenya.  
Role: Leader of Laboratory assessment of drug safety.

## DISSEMINATION OF PUBLIC LABORATORY SYSTEMS STRENGTHENING OUTPUTS

### A. PUBLICATIONS

1. Wakaria E; **Amayo AA**; Otieno Y, Masila D.  
Partnership to support a structured process towards ISO 15189 Accreditation for EAPHLN Kenya Laboratories.  
6<sup>th</sup> Bulletin EAPHLN.
2. Wakaria E; Gichimu C; Mwangi JW; **Amayo AA**; Masila D.  
Creating Hospital Wide Quality Culture through Introduction to ISO 15189 Sensitization Training at the EAPHLN Supported Laboratories in Kenya.  
7<sup>th</sup> Bulletin EAPHLN.

### RECENT SCIENTIFIC PRESENTATIONS

1. EuroMedLab 2019, Barcelona Spain. May 19th to 23rd 2019  
**Posters Co-authored**
  - i) Weke K, **Amayo A**, Kigundu C  
Levels of Serum Biomarkers for Risk of Cardiovascular Disease in Patients on Highly Active Antiretroviral Therapy in Homa-Bay County Referral Hospital, Kenya
  - ii) K. Kiptim, **A. Amayo**, F. Ndiang'ui, Z. Thaimuta and C. Gichuhi  
Plasma and urine neutrophil gelatinase associated lipocalin (NGAL) levels as markers of acute kidney injury in critically ill children aged 1-12 years at Kenyatta National Hospital
2. Association of Kenya Medical Laboratory Scientific Officers (AKMLSO) Annual Conference Mombasa Kenya 9th to 13th October 2018  
**Paper Presented:** Quality Assurance for POCT in Kenya: Gaps and Gains
3. 69th AACC Annual Scientific Meeting San Diego 2017  
S. Aketch, **A. Amayo**, M. Maritim, W. Mutai. University of Nairobi, Nairobi, Kenya  
Prevalence and factors associated with diabetes mellitus in patients with tuberculosis (B-279) , 2017 S261
4. 2nd Biennial Infectious Disease Conference (BIDCon) 2017. Nairobi Hospital Convention Centre  
Scientific Paper Presented: **Role of diagnostic laboratories in containing infectious diseases**
5. African Society of Laboratory Medicine (ASLM) 3<sup>rd</sup> Biennial Conference. Cape Town, South Africa 2016.  
Papers Co-authored:
  - i) Bota D, Bunyasi A, **Amayo A**, Wachira J, Okello J  
Biosafety Training Program: The process of conducting sustainable biosafety trainings and the role of management in order to minimize occupational exposures to biohazards and enhance laboratory quality
  - ii) Ken Awuondo, Brett Lowe, Horace Gumba, Gabriel Mwambingu, Jedida Wachira, **Angela Amayo**  
Five-pronged approach to strengthening Quality Systems in Public Hospital Laboratories with reference to Port Reitz Hospital Laboratory in Mombasa-Kenya
6. African Society for Laboratory Medicine (ASLM) 2<sup>nd</sup> Biennial Conference. Cape Town South Africa. December 2014.

**Paper Presented:** Use of Clinical Laboratory Data to Determine Disease Prevalence and Diagnostics Services Provided in Kenya

7. Infection Prevention and Control Annual Conference. Mombasa, Kenya. November 2011.

**Papers Co- Authored:**

- i) Occupational Exposure to Blood and Body Fluids among Health Care Workers in Five Provincial Hospitals in Kenya.
- ii) Safe phlebotomy training program: A sustainable competency based training model in Kenya.

**CONTRIBUTION TO MOH GUIDELINES**

- National Guidelines for Laboratory Specimen Referral Networks. MOH. 2012
- National Policy Guidelines for Medical Laboratory Equipment Management. MOH 2012
- National Guidelines for Cancer Management. Kenya 2013

**TECHNICAL REVIEW OF MOH GUIDELINES**

- National Laboratory Quality Policy Manual 2011.
- National Standard Guidelines for Laboratory Physical Infrastructure 2012.

**PEER REVIEWED PAPERS**

1. M. Mwachinga, J. Mecha, KM Bhatt, **A. Amayo** and P. Wanzala  
Association between change in serum procalcitonin and 28-day outcomes in patients with presumed bacterial sepsis.  
East African Medical Journal 2018; Vol. 95 No. 5 May
2. Aketch S, **Amayo A**, Maritim M, Mutai W  
Prevalence of diabetes mellitus and associated factors in patients with tuberculosis at Kenyatta National Hospital and Mbagathi Level 5 Hospital Nairobi  
EAJP December, 2017; Vol. 4: 33-40
3. Geoffrey Omuse Daniel Maina, Mariza Hoffman, Jane Mwangi, Caroline Wambua, Elizabeth Kagotho, **Angela Amayo**, Peter Ojwang, Zulfiqarali Premji, Kiyoshi Ichihara, Rajiv Erasmus  
Metabolic syndrome and its predictors in an urban population in Kenya: A cross sectional study  
BMC Endocrine Disorders 2017; **17**:37
4. Omuse, Geoffrey; Maina, Daniel; Mwangi, Jane; Wambua, Caroline; Kanyua, Alice; Kagotho, Elizabeth; **Amayo, Angela**; Ojwang, Peter; Erasmus, Rajiv  
Comparison of equations for estimating glomerular filtration rate in screening for chronic kidney disease in asymptomatic black Africans: a cross sectional study  
BMC Nephrology 2017; Vol. 18:1-8.
5. Maruti PM, Mulianga EA, Wambani LN, Wafula MN, Mambo FA, Mutisya SM, Wakaria EN, Mbatia EM, **Amayo AA**, Majani JM, Nyary B and Songwe KA  
Creating a sustainable culture of quality through the SLMTA programme in a district hospital laboratory in Kenya  
African Journal of Laboratory Medicine 2014; 3:2
6. **Amayo AA**, Ayunga AO and Oyoo GO  
Performance characteristics of Anti-cyclic citrullinated peptide and rheumatoid factor tests in rheumatoid arthritis and undifferentiated arthritis at Kenyatta National Hospital.  
East African Journal of Pathology 2014;1: 23 -28

7. Ayunga A.O; Oyoo G.O; Amayo E.O, **Amayo A.A**  
Prevalence of rheumatoid factor antibodies in patients classified as rheumatoid and undifferentiated arthritis at Kenyatta National Hospital.  
East Afr Med Journal 2012; 89: 82 – 87
8. Kwasa J.K, **Amayo A.A**, Ndavi P.M and Kwasa T.O  
Bone Metabolism in Healthy Ambulatory Pre-Menopausal Women and in Epileptics on Anti-convulsant drugs  
East Afr Med J 2010; 87: 151 – 155
9. Kayima JK, Mbugua PK, **Amayo AA**, McLigeyo SO.  
Prognostic factors in patients hospitalised with diabetic ketoacidosis at Kenyatta National Hospital, Nairobi.  
East Afr Med J 2010; 87: 28-34
10. **Amayo A.** Kuria JG  
Clinical applications of tumour markers.  
East Afr Med J 2009; 86: Suppl S76 –S83
11. Ndungu P.W, **Amayo AA**, Qureshi Z.A, Kigundu C.S.  
Thyrotoxicosis among Kenyan women with emesis in early pregnancy.  
East Afr Med J 2009; 86: 45 – 49.
12. Kuria JG, **Amayo AA.**  
Antithyroid antibodies in patients with primary thyroid diseases at Kenyatta National Hospital.  
East Afr. Med J 2008; 85: 22-27.
13. CF Otiemo, AN Huho, EO Omonge, **AA Amayo** and EN Njagi.  
Type 2 Diabetes: Clinical and aetiological types, therapy and quality of glycaemic control of ambulatory patients.  
East Afr. Med J 2008; 85: 24- 29.
14. Busakhala W, Joshi MD, Abinya NO, **Amayo A**, Abwao HO  
Incidence of Chemotherapy related Tumour lysis syndrome at KNH.  
East Afr. Med J 2007; 84: 100- 9.
15. **Amayo AA.**  
Reference values in laboratory medicine. (Editorial)  
East Afr. Med J. 2006; 83: 1-2
16. Mbugua PK, Otiemo CF, Kayima JK, **Amayo AA**, and McLigeyo SO  
Diabetic Ketoacidosis: clinical presentation and precipitating factors at Kenyatta National Hospital.  
East Afr. Med J 2005: 82 (Suppl); S191-196.
17. **Amayo A.A**, Kirera S  
Comparison of calculated and direct LDL-Cholesterol determinations in a routine laboratory.  
East Afr Med J 2004; 81: 154-158
18. **Amayo AA**, Obara W  
Serum Prostate Specific Antigen (PSA) levels in men with benign prostatic Hyperplasia (BPH) and Cancer of Prostate .  
East Afr Med J 2004; 81: 22-26
19. Wambua J.V., **Amayo A.A**, Gachii A, Orinda D.A.O.  
Serum fructosamine in Diabetics at Kenyatta National Hospital, Nairobi.  
Healthline 1998: 2 ; 3-6.

20. Amayo E.O., Kayima J.K., **Amayo A.A.**  
Transient focal neurological deficits in patients with hypoglycemia and hyperglycemia; report of 4 cases.  
East Afr Med J 1998; 75 ; 53-54.

#### **POSTGRADUATE RESEARCH PROJECTS RECENTLY CO-SUPERVISED**

1. NT- pro brain natriuretic peptide and Highly sensitive c-reactive protein in asymptomatic steady state sickle cell disease patients  
Joyce Maganga MSc Clinical Chemistry (ongoing)  
Supervisors: **A. Amayo**, F.Okinyi, F.Ndiang'ui, K.C Wafula
2. Plasma and urine neutrophil gelatinase associated lipocalin (NGAL) levels as markers of acute kidney injury in critically ill children aged 1-12 years at Kenyatta National Hospital Kibet. Kiptim MSc. Clinical Chemistry (ongoing)  
Supervisors: **A. Amayo**, F. Ndiang'ui, Z. Thaimuta and C. Gichuhi
3. Levels of Serum Biomarkers for Risk of Cardiovascular Disease in Patients on Highly Active Antiretroviral Therapy in Homa-Bay County Referral Hospital, Kenya  
Ken Weke MSc Clinical Chemistry 2018  
Supervisors: **Amayo A**, Wandolo G, Ndiangui F, Kigonda C
4. Utility Of Physiochemical And Modified Physiological Approach In The Diagnosis Of Metabolic Acidosis at The Kenyatta National Hospital  
Dr. Lallet Tasneem Essaji MMed Internal Medicine 2017  
Supervisors: Kayima J, Joshi M.D, Otieno C.F, **Amayo A.A**, Gachii M and Achieng L.
5. Prevalence of Type 2 Diabetes Mellitus in patients with Tuberculosis at Kenyatta National Hospital and Mbagathi Level 5 Hospital  
Dr. Susan Aketch MMed Pathology 2017  
Supervisors: **Amayo AA**; Maritim M
6. Thyroid hormone profiles in patients with chronic kidney disease at Kenyatta National Hospital.  
Dr. Sarah Kagia. MMed. Pathology 2012.  
Supervisors: Kigonda C.S, **Amayo A.A** and Kayima J.
7. Prevalence of diabetes, hypertension and associated risk factors among Somalis in Garissa  
Dr. Hassan MMed Internal Medicine (2011).  
Supervisors: Joshi M and **Amayo A.A**
8. Serum High Sensitivity C-Reactive Protein Concentration In Blood Donors at The National Blood Transfusion Centre, Nairobi, Kenya.  
Dr. C. Kipkulei MMed Internal Medicine (2011).  
Supervisors: Joshi M and **Amayo A.A**
9. Prevalence of Diabetes and associated risk factors among adults in Nairobi  
Dr. Wanjiru MMed Internal Medicine (2011)  
Supervisors: Joshi M and **Amayo A.A** and Otieno C.F

10. Prevalence of Hypertension and associated risk factors among adults in Nairobi Dr.NjauMMed, Internal Medicine (2011)  
Supervisors: Joshi M and **Amayo A.A** and Otieno C.F
11. Thyroid profiles in women with pre-eclampsia at the Kenyatta National Hospital.  
Dr.Obiero MMED. Pathology 2010  
Supervisors: **Amayo A.A**, Kigonde C.S and Quereshi Z
12. Glycemic control, cardiovascular risk profile and the therapeutic interventions in Type 2 diabetes mellitus patients at the New Nyanza Provincial General Hospital Kisumu.  
Dr.Wafula Z. Nalwa MMED Internal Medicine 2010  
Supervisors: Joshi M, Acharya K, **Amayo A.A** and Ogutu J
13. Magnesium levels in neonates following intra-partum magnesium supplementation.  
Dr. Virginia Muviku MMED Paediatrics 2009  
Supervisors: Were F and **Amayo A.A**
14. Prevalence of Anti-CCP antibodies among patients with inflammatory arthritis at KNH.  
Dr. Paul Ayunga MMED Internal Medicine 2009  
Supervisors: Oyoo G.O, **AmayoA.A** and Amayo E.O
15. Cardiovascular Status of Children with Ricketts.  
Dr. Grace Akinyi Odhiambo MMED (Paediatrics 2009)  
Supervisors: Jowi C and **Amayo A.A**

Angela A. Amayo  
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