

2020

# Curriculum Vitae

Dr. Wycliffe Arika Makori

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C.V.



## 1.0 PROFILE AND CAREER ASPIRATIONS

### 1.1 Personal Information

Name: Wycliffe Arika Makori  
Address: P.O.Box 6054 - 00100 (GPO)  
Nairobi.  
Email: [arika.makori@ku.ac.ke](mailto:arika.makori@ku.ac.ke) / [arikamakori@gmail.com](mailto:arikamakori@gmail.com)  
Phone no: +254722863595/+254722873150  
Nationality: Kenyan  
Gender: Male  
Date of Birth: 22<sup>nd</sup> June, 1988

### 1.2 Personal/Career/Professional Aspirations

To positively influence scientific research and transformative training in life sciences through diverse, hands-on, experiential opportunities so as to advance our understanding of the living world and enhance the quality of life through better medical care, disease prevention measures, nutrition, and environmentally sound and sustainable agricultural and manufacturing processes.

## 2.0 QUALIFICATIONS

### 2.1 Academic Qualifications

- ❖ **December 2019:** Doctor of Philosophy (Ph.D)  
Medical Biochemistry  
Kenyatta University
- ❖ **July 2016:** Master of Science  
Medical Biochemistry  
Kenyatta University
- ❖ **July 2016:** Bachelor of Science  
Biochemistry (Second Class Honors, Upper Division)  
Kenyatta University

### 2.2 Other Professional Qualifications

- ❖ **February 2019:** Completed a Certificate Course in Experimental Animal Handling and Manipulation for Experimental Purposes by the Universitatetechnikum Ulm, Institute fur Tierforschungszentrums.
- ❖ **October, 2018:** Completed German Language Certificate Course Level B1.

### 3.0 EMPLOYMENT HISTORY/WORK EXPERIENCE ✖

- ❖ **1<sup>st</sup> July, 2020 – To date**  
Lecturer, Department of Biochemistry, Microbiology and Biotechnology, Kenyatta University
- ❖ **1<sup>st</sup> September, 2017 – 31<sup>st</sup> April, 2018**  
Part-Time Lecturer, Department of Physical Sciences, Chuka University
- ❖ **November 2019 – To Date**  
Peer Reviewer, Journal of Pharmacy and Pharmacology (Wiley Online)
- ❖ **January 2013 – December 2014**  
Coordinator of Research and Development, Mwananchi's Health Consultancy Firm
- ❖ **July 2010– September 2010**  
Quality Analyst, National Quality Control Laboratory (NQCL), Nairobi, Kenya

### 4.0 ADMINISTRATIVE RESPONSIBILITIES

#### 4.1 Responsibilities at Mwananchi's Health Consultancy Firm

- ❖ Coordinator of Research and Development

##### Terms of Reference

- ❖ Ensure the implementation of the company's Research policy.
- ❖ Formulate Healthcare Provision Survey questionnaires and monitor their implementation.
- ❖ Ensure that capacity building in research is undertaken regularly.
- ❖ Conduct market surveillance of the company's products and services.
- ❖ Participate in proposal writing.

## 5.0 UNDERGRADUATE AND POSTGRADUATE SUPERVISION

### 5.1 Ph.D (Medical Biochemistry) Supervision

#### 5.1.1 Ongoing Ph.D Supervisions (Proposal submitted to Graduate School)

**Name:** Ndile Michael Musila (Reg.No.: I84/26596/2018)

**Title:** Antidiabetic, Antioxidant and Safety Profile of DCM Extracts of *Xerophyta spekei* (Baker) in Streptozotocin-Induced Diabetic Swiss Albino Mice.

**Institution:** Kenyatta University

### 5.2 Master of Science (Medical Biochemistry) Supervision

#### 5.2.1 Ongoing Masters Supervisions (Proposal submitted to Graduate School)

**Name:** Aketch Ochieng Elvis (Reg.No.: I56/CTY/PT/30518/2015)

**Title:** Cardioprotective Potential, Antioxidant and Phytochemical Profiles of Aqueous and Dichloromethane Leaf Extracts of *Gnidia glauca* (Fresen).

**Institution:** Kenyatta University

### 5.3 Undergraduate Supervisions

#### 5.3.1 Completed Bachelors Supervisions

**Name:** Joshua Mulele Machayo (Reg.No.: EB4/15696/14)

**Title:** *In Vivo* Antinociceptive Activity of Methanolic Leaf Extract of *Catha edulis* (Celastraceae) in rat models.”

**Institution:** Chuka University

**Names:** Ngurari Samson Wainaina (Reg.No.: EB4/15736/14), Abigael Bwaley (Reg.No.:EB4/15684/14), Mutai Cornelius (Reg.No.:EB4/15703/14), Magdalene W Makau (Reg.No.: EB4/15726/14)

**Title:** *In Vitro* Anti-Inflammatory Effects and Phytochemical Analysis of Methanolic Leaf Extract of *Bidens pilosa* (Carl Linnaeus).

**Institution:** Chuka University

## 6.0 CONFERENCES/ SEMINARS/WORKSHOPS

### 6.1 Presentation of Papers at International Seminars and Conferences

❖ 4<sup>th</sup> April, 2020.

International Seminars on “Role of Research in Management of Bladder Cancer”

Paper Presented:

“Loss of ORP3 Induces Genome Instability and Cancer” held in the Institute for Clinical Transfusion Medicine and Immunogenetics, Ulm, Germany.

### 6.2 Participation in International Conferences, Seminars and Workshops

❖ 16<sup>th</sup> August, 2019

Workshop on “Early detection of the Bladder cancer and Initiatives for better implementation of clinical studies in urology”, Co-hosted by the Clinics of Urology at the University Hospital and Bundeswehr Hospital Ulm, Germany.

### 6.3 Participation in Local Seminars/ Conferences and Workshops

❖ **24<sup>th</sup> – 26<sup>th</sup> August, 2016**

Attended 4<sup>th</sup> International Annual Scientific Conference of the Society for the Advancement of Science in Africa (SASA) at Kenyatta University, Kenya.

❖ **31<sup>st</sup> November, 2015 – 4<sup>th</sup> December, 2015**

Attended the 31st postgraduate seminar at Kenyatta University. **Theme:** Supporting the Economy through Research.

❖ **29<sup>th</sup> September – 2<sup>nd</sup> October, 2015**

Attended the 1st Global Conference on Patient Centered Care at Kenyatta University. **Theme:** Training and delivery of universal healthcare.

❖ **1<sup>st</sup> – 3<sup>rd</sup> July, 2015**

Attended the 30th postgraduate seminar at Kenyatta University. **Theme:** Spearheading economic growth through research.

❖ **3<sup>rd</sup> – 6<sup>th</sup> December, 2013**

Attended the 27th postgraduate seminar at Kenyatta University. **Theme:** Supporting devolved government systems in Kenya through research.

❖ **10<sup>th</sup> – 13<sup>th</sup> December, 2012**

Attended and participated in a seminar on transformative leadership Skills held at Kenyatta University Student Business Centre organized by Kenyatta University Mentoring Programme.

❖ **10<sup>th</sup> October, 2009**

Attended a public lecture at Kenyatta University on Emerging Viruses-Arbovirus, rotavirus, H1N1 and virus detection techniques organized by KUBIOC and facilitated by KEMRI/WRP.

## 7.0 RESEARCH AND PUBLICATIONS

### 7.1 Papers in Refereed Journals/ Peer Reviewed Volumes

#### 7.1.1 Individual Publications

1. **Arika, W.M.**, Kibiti, C.M., Njagi, J.M., & Ngugi, M.P. (2019). Anti-Obesity Effects of Dichloromethane Leaf Extract of *Gnidia glauca* in High Fat Diet-Induced Obese Rats. *Heliyon*, 5: 1-15. doi.org/10.1016/j.heliyon. 2019.e02800.
2. **Arika, W.M.**, Kibiti, C.M., Njagi, J.M., & Ngugi, M.P. (2019). *In Vitro* Antioxidant Properties of Dichloromethanolic Leaf Extract of *Gnidia glauca* (Fresen) as a Promising Antiobesity Drug. *Journal of Evidence-Based Integrative Medicine*, 24:1-17. doi.org/10.1177/2515690X19883258.
3. **Arika, W.M.**, Kibiti, C.M., Njagi, J.M., & Ngugi, M.P. (2019). Modulation of Cognition: The Role of *Gnidia glauca* on Spatial Learning and Memory Retention in High-Fat Diet-Induced Obese Rats. *Neural plasticity*, 2019: 1-16. doi.org/10.1155/2019/2867058.
4. **Arika, W.M.**, Kibiti, C.M., Njagi, J.M., & Ngugi, M.P. (2019). Effects of DCM Leaf Extract of *Gnidia glauca* (Fresen) on Locomotor Activity, Anxiety, and Exploration-Like Behaviors in High-Fat Diet-Induced Obese Rats. *Behavioural Neurology*, 2019: 1-14. doi.org/10.1155/2019/7359235.
5. **Arika, W.M.**, Nyamai, D.W., Musila, M.N., Ngugi, M.P., Njagi, E.N.M (2016). Hematological Markers of *In Vivo* Toxicity. *Journal of Hematology and Thromboembolic Diseases*, 4: 236. doi:10.4172/2329-8790.1000236.
6. **Arika, W.M.**, Nyamai, D.W., Osano, K.O., Ngugi, M.P., Njagi, E.N.M (2016). Biochemical Markers of *In Vivo* Hepatotoxicity. *Journal of Clinical Toxicology*, 6: 297. doi:10.4172/2161-0495.1000297.
7. **Arika, W.M.**, Nyamai, D.W., Agyirifo, D.S., Ngugi, M.P., Njagi, E.N.M. (2016). *In Vivo* Antidiabetic Effect of Aqueous Leaf Extract of *Azadirachta indica*, A. Juss in Alloxan Induced Diabetic Mice. *Journal of Diabetic Complications and Medicine*, 1: 106. doi:10.4172/jdcm.1000.106.
8. **Arika, W.M.**, Ogola, P.E., Nyamai, D.W., Mawia, A.M., Wambua, F.K., et al. (2016). Mineral Elements Content of Selected Kenyan Antidiabetic Medicinal Plants. *Advanced Techniques in Biology and Medicine*, 4: 160. doi: 10.4172/2379-1764.1000160.
9. **Arika, W.M.**, Rachuonyo, H.O., Muchori, A.N., Lagat, R.C., Mawia, A.M., et al. (2016) Hypoglycemic Effect of *Ocimum Lamiifolium* in Alloxan Induced Diabetic Mice. *Med Aromat Plants* 5: 228. doi:10.4172/2167-0412.1000228

10. **Arika, W.M.**, Abdirahman, Y.A., Mawia, M.A. et al. (2015). *In Vivo* Antidiabetic Activity of the Aqueous Leaf Extract of *Croton macrostachyus* in Alloxan Induced Diabetic Mice. *Pharmaceutica Analytica Acta*, 6: 447. doi: 10.4172/21532435.1000447.
11. **Arika, W.M.**, Abdirahman, Y.A., Ogola, P.E., Kiboi, N.G., Njagi, S.M., et al. (2015). Hypoglycemic Effect of *Lippia javanica* in Alloxan Induced Diabetic Mice. *Journal of Diabetes and Metabolism*, 6: 624. doi:10.4172/2155-6156.1000624.
12. **Arika, W.M.**, Ogola, P.E., Abdirahman, Y.A., Mawia, A.M., Wambua, F.K., Nyamai, D.W., et al. (2015). *In Vivo* Safety of Aqueous Leaf Extract of *Lippia javanica* in Mice Models. *Journal of Physiology and Biochemistry*, 5: 191. doi: 10.4172/2168-9652.1000191.

### 7.1.2 Joint Publications

1. Xu, P., Richter, J., Blatz, A., Gärtner, F., Alberts, R., Azoitei, A., **Makori, W.A.**, ... & Günes, C. (2020). Downregulation of ORP3 Correlates with Reduced Survival of Colon Cancer Patients with Advanced Nodal Metastasis and of Female Patients with Grade 3 Colon Cancer. *International Journal of Molecular Sciences*, 21: 5894.
2. Ruth, K.M., Warutere, P.N., Nyamari, J., & **Arika, W.** (2020). Levels of Ionizing Radiations in Selected Quarries in Nyamira County, Kenya. *Heliyon*, 6: e04363.
3. Njogu, S.M., **Arika, W.M.**, Machocho, A.K., Ngeranwa, J.J., & Njagi, E.N. (2018). *In Vivo* Hypoglycemic Effect of *Kigelia africana* (Lam): Studies with Alloxan-Induced Diabetic Mice. *Journal of Evidence-Based Integrative Medicine*, 23: 1-10. doi.org/10.1177/2515690.
4. Ouko, R.O., Koech, S.C., **Arika, W.M.**, Njagi, S.M., & Oduor, R.O. (2017). Bioefficacy of Organic Extracts of *Ocimum basilicum* against *Sitophilus zeamais*. *Entomology, Ornithology and Herpetology*, 6: 1-7. doi: 10.4172/2161-0983.1000190.
5. Stephen, N.M., **Wycliffe, A.M.**, Alex, M.K., Joseph, N.J., & Eliud, N.N. (2017). *In vivo* antidiabetic activity of aqueous and ethyl acetate leaf extract of *Senna singuena* (Delile) in alloxan induced diabetic mice. *The Journal of Phytopharmacology*, 6: 84-92. X 18768727.
6. Nyamai, D.W., **Arika, W.M.**, Ogola, P.E., Njagi, E.N.M., Ngugi, M.P. (2016). Medicinally Important Phytochemicals: An Untapped Research Avenue. *Journal of Pharmacognosy and Phytochemistry*, 4: 35-49. e-ISSN:2321-6182.
7. Ogola, P.E., **Arika, W.M.**, Nyamai, D.W., Osano, K.O., & Rachuonyo, H.O. (2016). Determination of Background Ionizing Radiations in Selected Buildings in Nairobi County, Kenya. *Journal of Nuclear Medicine and Radiation Therapy*, 7: 2. doi:10.4172/2155-9619.1000289.



8. Nyamai, D.W., **Arika, W.M.**, Rachuonyo, H.O., Wambani, J.R., & Ngugi, M.P. (2016). Herbal Management of Benign Prostatic Hyperplasia. *Journal of Cancer Science and Therapy*, 8: 130-134. doi:10.4172/1948-5956.1000404.
9. Muruthi, C.W., Lwande, O.W., Makumi, J.N., Runo, S., Otiende, M., & **Makori, W.A.** (2016). Phenotypic and Genotypic Identification of Ticks Sampled from Wildlife Species in Selected Conservation Sites of Kenya. *Journal of Veterinary Science and Technology*, 7: 2. doi:10.4172/2157-7579.1000293.
10. Njogu, S.M., **Arika, W.M.**, Nyamai, D.W., Ngugi, M.P., Machocho, A.K., Ngeranwa, J.J.N., & Njagi, E.N.M. (2016). Hypoglycemic Effect of Aqueous and Ethyl Acetate Leaf Extract of *Maytenus putterkloides* in Alloxan Induced Diabetic Mice. *Journal of Diabetes and Metabolism*, 7: 2. doi:10.4172/2155-6156.1000685.
11. Wambani, J.R., Ogola, P.E., **Arika, W. M.**, Rachuonyo, H.O., & Burugu, M.W. (2016). Global Situation and Trends of HIV, Influenza and Marburg Viruses: An Epidemiological Perspective. *Emerging Infectious Diseases journal*, 1: 2. doi:10.4172/jeid.1000105.
12. Wambani, J.R., Kiboi, N.G., **Makori, W.M.**, Ogola, P.E., & Rachuonyo, H. O. (2016). Immunological Profiles in HIV Positive Patients with or Without Opportunistic Infections and The Influence of Highly Active Antiretroviral Therapy: A Systematic Review and Update. *Journal of Clinical and Cellular Immunology*, 7: 2. doi:10.4172/2155-9899.1000429.
13. Osano, K.O., Nyamai, D.W., Ogola, P.E., Ouko, R.O., & **Arika, W.M.** (2016). Evaluation of *In Vivo* Toxicity of Dichloromethane: Methanolic Leaf Extracts of *Prosopis juliflora* in Female Wistar Albino Rats. *Journal of Drug Metabolism and Toxicology*, 7: 1-11. doi:10.4172/2157-7609.1000200.
14. Njagi, S.M., Lagat, R.C., Mawia, A. M., **Arika, W.M.**, Wambua, F.K., Ouko, R.O., ... & Mwitari, P.G. (2016). *In Vitro* Antiproliferative Activity of Aqueous Root Bark Extract of *Cassia abbreviata* (holmes) Brenan. *Journal of Cancer Science and Clinical Therapeutics*, 8: 114-121. doi:10.4172/1948-5956.1000402.
15. Rachuonyo, H., Ogola, P., **Arika, W.**, Wambani, J., & Gatheri, G. (2016). Combined Effect of Crude Leaf Extracts of Selected Medicinal Plants Against Selected Enteric Bacterial Pathogens and *Candida albicans*. *Journal of Antimicrobial Agents*, 2: 110. doi:10.4172/2472-1212.1000110.
16. Wambani, R.J., Ogola, P.E., **Arika, W.M.**, Rachuonyo, H.O., & Burugu, M.W. (2016). Ebola Virus Disease: A Biological and Epidemiological Perspective of a Virulent Virus. *Journal of Infectious Diseases and Diagnosis*, 1: 103. doi: 2. 10.4172/jidd.1000103.



17. Rachuonyo, H.O., Ogola, P.E., **Arika, W.M.**, Kiboi, N.G., & Wambani, J.R. (2016). Antimicrobial Potency of Methanolic Leaf Extracts from Selected Medicinal Plants against *Staphylococcus aureus*. *Journal of Medical Microbiology and Diagnosis*, 5: 219. doi:10.4172/2161-0703.1000219.
18. Kioko, W.F., Mawia, M.A., Piero, N.M., Muriira, K.G., Wavinya, N.D., Chemutai, L. R., **Arika, W.M.**... & Mwenda, N. S. (2015). Phenotypic Characterization on Selected Kenyan And Tanzanian Rice (*Oryza sativa* L.) Populations Based on Grain Morphological Traits. *Journal of Rice Research*, 3: 4. doi:10.4172/2375-4338.1000155.
19. Nyamai, D. W., Mawia, A. M., Wambua, F. K., Njoroge, A., Matheri, F., Lagat, R., **Arika, W.M.**, & King'ori, E. (2015). Phytochemical Profile of *Prunus africana* Stem Bark from Kenya. *Journal of Pharmacognosy and Natural Products*, 1:1-8. doi:10.4172/2472-0992.1000110.
20. Wambani, J.R., Ogola, P.E., **Arika, W.M.**, Rachuonyo, H.O., Kemboi, N.G., Lihana, R., & Burugu, M. W. (2015). Anti-Retroviral Drug Hepatotoxicity and Risk Factors in HIV Patients with or Without Hepatitis B and C: a review. *Journal of Infectious Diseases and Therapy*, 3: 1-5. doi:10.4172/2332-0877.1000258
21. Mawia Musyoki, A., Wambua Kioko, F., Daniel, A., Nyamai Wavinya, D., **Arika, W.**, & Felix, M. (2015). Phenotypic Diversity Studies on Selected Kenyan and Tanzanian Rice (*Oryza sativa* L) Genotypes Based on Grain and Kernel Traits. *Journal of Rice Research*, 3: 2-4. doi:10.4172/2375-4338.1000150.
22. Abdirahman, Y.A., Juma, K.K., **Makori, W.A.**, Agyirifo, D.S., Ngugi, M.P., Gathumbi, P.K., ... & Njagi, E.N.M. (2015). Blood Glucose Lowering Effect and Safety of The Aqueous Leaf Extracts of *Zanha africana*. *Pharmaceutica Analytica Acta*, 6: 1-9. doi:10.4172/21532435. 1000422.
23. Wambani, R.J., Ogola, P.E., **Makori, A.W.**, Nyamai, D.W., Lihana, R., et al. (2015) Hepatitis B and C Co-Infections among HIV-1 Infected Patients Attending the Academic Model Providing Access to Healthcare Clinic, Kenya, 2014. *Journal of Infectious Diseases and Diagnosis*, 1: 102. doi:10.4172/jidd.1000102.
24. Nyamai DW, Mawia AM, Wambua FK, Abdirahman YA, Osano K, Lagat, R., Mumbi, B., **Arika, W.**, Juma, K.K., et al. (2015) Growth Performance of Domesticated *Prunus africana* Population in Muguga, Kiambu County, Kenya. *Biochemistry and Physiology*, 4: 185. doi: 10.4172/2168-9652.1000185.

## 7.2 Papers in Conference Proceedings

- ❖ Arika, Wycliffe, (2020). “ORP3 Contributes to Tumorigenesis in Bladder Cancer by Modulation of MAP- and AKT- Signaling Pathways” at Universitaet Klinikum Ulm, Germany.

## 8.0 THESES & PROJECTS

2019: PhD. THESIS TITLE:

- ❖ Anti-Obesity, Cognitive Enhancing, Neurobehavioral, Antioxidant Effects and Phytochemical Profile of Dichloromethane Leaf Extract of *Gnidia glauca* (Fresen).

2016: MSc. THESIS TITLE:

- ❖ Bioprospecting for Hypoglycemic and Safety Activities of Selected Plants Traditionally used in the Management of Diabetes Mellitus.

2011: BSc. PROJECT TITLE:

- ❖ Identification and Characterization of Amino Acids in Human Hair Among Residents in Kahawa Sukari and Kahawa Wendani, Nairobi, Kenya.

## 9.0 AWARDS/RECOGNITION

- ❖ 2019 – Awarded Ph.D Degree in Medical Biochemistry of Kenyatta University.
- ❖ 2016 – Awarded Masters of Science Degree in Medical Biochemistry of Kenyatta University.
- ❖ 2011 – Awarded Bachelors of Science Degree in Biochemistry of Kenyatta University.

## 10.0 COMMUNITY OUTREACH

- ❖ Organized and successfully coordinated celebrations of World Diabetes Day, 2014 in conjunction with KUSA and Directorate of University Health Services at Kenyatta University.
- ❖ Routine delivery of motivation talks to high school students and societal youths through ‘Tufaane Initiative’ of ‘Gofar Africa’.
- ❖ Carrying out HIV/AIDS, Non-Communicable Diseases as well as Drugs and Substance abuse awareness and campaigns.
- ❖ Providing contraceptive information to students and the university community.

## 11.0 REFEREES

- 1. Prof. Dr. Eliud N.M. Njagi, Ph.D**  
Professor of Medical Biochemistry  
Department of Biochemistry Microbiology and Biotechnology,  
Kenyatta University, P.O.BOX 43844, Nairobi.  
Mobile No: +254 711 279 171  
Email: [njagieliudku@gmail.com](mailto:njagieliudku@gmail.com)
- 2. Dr. Mathew Piero Ngugi, Ph.D**  
Senior Lecturer (Section Head, Medical Biochemistry Unit)  
Department of Biochemistry Microbiology and Biotechnology,  
Kenyatta University, P.O.BOX 43844, Nairobi.  
Mobile No: +254 710349485/+254732264557  
Email: [piero.mathew@ku.ac.ke](mailto:piero.mathew@ku.ac.ke)/[piero.mathew@ku.ac.ke](mailto:piero.mathew@ku.ac.ke)
- 3. Dr. Cromwell Mwiti Kibiti, Ph.D**  
Lecturer  
Department of Pure and Applied Sciences  
Technical University of Mombasa.  
P.O Box 43844-00100, Nairobi.  
Mobile No: +254 727 346 496  
Email Address: [cromwellkibiti@yahoo.co.uk](mailto:cromwellkibiti@yahoo.co.uk)
- 4. Dr. George Isanda Omwenga, Ph.D**  
Lecturer (Head of Post Graduate Studies)  
Department of Biochemistry, Microbiology & Biotechnology,  
Kenyatta University,  
P.O. BOX 43844-00100, Nairobi.  
Mobile: +254 705 304 774  
Email: [george.omwenga@yahoo.com](mailto:george.omwenga@yahoo.com)