



June 2020

CURRICULUM VITAE

1.0 PERSONAL INFORMATION

NAME: NICHOLAS KAMINDU GIKONYO

TITLE: ASSOCIATE PROFESSOR

Department of Pharmacognosy & Pharmaceutical Chemistry

School of Pharmacy, Kenyatta University.

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SUMMARY

As an Associate Professor in the School of Pharmacy at Kenyatta University (KU), my expertise is in teaching, research and innovation in the areas of Pharmacognosy, Complementary and Alternative Medicine, Nutrition in therapy and Chemical Ecology.

I am the founding Director of the “National Phytotherapeutics Research Centre” based at Kenyatta University.

Previously, I was Director of KU Funeral Home, the founding Chairman of the department of Pharmacy, Complementary and Alternative Medicine (PCAM) at KU (currently the School of Pharmacy), the founding chairman of the KU Ethics Review Committee.

I am the Board Chairman of the Chandaria Business Innovation and Incubation Centre (CBIIC) at KU, and previously board member of the KU Research Review and Advisory Board (URRAB), Confucius Institute, KU Funeral Home. I am the Deputy Editor of the Kenya National R&D Journal and an Editor of the East and Central Africa Medical Journal.

I am a member of the Traditional and Alternative Medicine Technical Working Group – on the Kenya Health Act no 21 of 2017. In addition to publishing several scientific papers in peer reviewed journals, I have one Patent granted by KIPI.

My passion is use and promotion of natural solutions to health problems.

2. QUALIFICATIONS

a) ACADEMIC

- 2000 PhD (Semiochemistry). University of Nairobi (UON).
1992 Master of Science Degree (Phytochemistry). UON.
1988 Bachelor of Science Degree (Chemistry). UON.

b) PROFESSIONAL COURSES RELATED TO ACADEMIC AREA

- 2013: Bioethics: University of Nairobi, KAVI – Institute of Clinical Research. Silver Springs Hotel, Nairobi. Kenya. 3rd – 5th July 2013.
2012: Peer Reviewer of academic programmes and institutions: Commission for Higher Education. Gigiri, Nairobi, Kenya. 6th – 7th Nov. 2012.
2012: Biosafety: Kenyatta University. Kenya. 22nd August 2012
2012: Vaccines development: By Novartis Institute for Biomedical Research (NIBR). Accra, Ghana. Best Western Premier Accra Airport Hotel. Accra, Ghana. 4th Aug. 2012.
2012: Clinical Pharmacology. By Novartis Institute for Biomedical Research. Best Western Premier Accra Airport Hotel. Accra, Ghana. 4th Aug. 2012.
2012: Natural Products. By Novartis Institute for Biomedical Research. Best Western Premier Accra Airport Hotel. Accra, Ghana. 3rd Aug. 2012
2012 Bioethics: Kenya School of Law, Nairobi, Kenya. 16th – 18th January 2012.
2010 Visiting Research Fellowship: Novartis Institute for Biomedical Research (NIBR), Massachusetts USA. Department of Developmental & Molecular Pathways (DMP).
2007 Advanced Training in Research and Development of Medicinal Plants. Tianjin University of Traditional Chinese Medicine, Tianjin, China.
2001 Postdoctoral Research Fellowship in Semiochemistry. International Centre of Insect Physiology and Ecology (ICIPE), Kenya.
2004 Good Laboratory Practice (GLP). Jakarada Hotel, Nairobi, Kenya. Sponsor: UNDP/WHO/WORLD BANK.
1999 Doctor of Philosophy. African Regional Postgraduate Programme in Insect Science (ARPPIS), ICIPE, Kenya.
1997 Biostatistics. ARPPIS. ICIPE, Nairobi, Kenya.
1987 Quality Control of Pharmaceuticals: Dawa Pharmaceuticals Company Ltd. Nairobi, Kenya.

c) OTHER PROFESSIONAL COURSES

- 2013 Teaching and Examining Methodologies. Kenyatta University. Kenya
2012 Performance Contracting: Kenya School of Monitory Studies, Nairobi, Kenya
2009 Management of University Departments /Schools /Directorates. *Sponsor:* Kenyatta University. Kenya

- 2006 Proposal writing. NCKK Jumuia Center – Nakuru, Kenya.
Sponsor: Kenya Agricultural Productivity Project (KAPP).
- 2006 Proposal writing. Kenya Utalii College. Nairobi, Kenya. *Sponsor: KU.*
- 2004 Modern methods for Ecogeographic studies. AVU, KU. Nairobi, Kenya
Sponsor: IPGRI-SSA.
- 2003 Peak Performance (Unleashing Power), Nairobi, Kenya. *Sponsor: UoN*
- 1985 Serviceman: National Youth Service (NYS). Gilgil, Kenya.
Sponsor: Kenya Government.

3.0 FELLOWSHIPS

- 2010 Visiting Research Fellow: Novartis Institute for Biomedical Research (NIBR) in Massachusetts USA, in the department of Developmental & Molecular Pathways (DMP).
- 2007 Fellowship for the Advanced Training in Research and Development of Medicinal Plants. Tianjin University of Traditional Chinese Medicine, Tianjin, China.
- 2002 Visiting Scientist: Behavioural and Chemical Ecology Department (BCED). ICIPE.
- 2000 - 1 Postdoctoral Fellow: BCED, ICIPE.
- 1996 - 9 ARPPIS Scholar: BCED, ICIPE.
- 1990 Project Evaluation Intern: UNESCO, ROSTA, Nairobi.
- 1987 Quality Control Analyst: Dawa Pharmaceuticals Company Ltd.

4.0 EMPLOYMENT HISTORY/WORK EXPERIENCE

- Sept. 2011 ----- **Associate Professor:** Department of Pharmacy and Complementary /Alternative Medicine. Kenyatta University
- Feb. 2006 –Sept. 2011 **Snr Lecturer:** Department of Pharmacy and Complementary /Alternative Medicine. Kenyatta University.
- June 2000 - Feb 2006 **Lecturer:** Department of Pharmacology and Pharmacognosy, Faculty of Pharmacy, UON.
- Feb. 2000 - Oct. 2001 **Postdoctoral Fellow:** BCED, ICIPE. Senior
- July 1997 – June 2000. **Tutorial Fellow:** Department of Pharmacology and Pharmacognosy, Faculty of Pharmacy, UON.
- July 1991- Aug.1996 **Associate Scientific Officer:** BCED, ICIPE.
- Jan – June 1991 **Graduate Assistant:** Department of Chemistry, UON.
- Jan. 1984 - May 1985 **Teacher:** St Mary's Secondary School - Nyeri.

5.0 ADMINISTRATIVE RESPONSIBILITIES

a) **Kenyatta University (KU).**

1. April 2020 -: **Chairman:** Committee to Support Development and Production of Ventilators for the Management of Patients with Severe Covid-19 Disease.
2. Oct 2019 – **Director:** “National Phytotherapeutics Research Centre” based at Kenyatta University.
3. Sept 2017 – August 2019 **Director:** KU Funeral Home
4. 2017 ---- **Chairman:** Chandaria Business Innovation and Incubation Centre, KU
5. 2015 ---- August 2019 **Board Member:** KU Funeral Home
6. 2013 ---- 2015 **Board Member:** Board of Postgraduate studies, KU
7. 2013 --- 2016 **Board Member:** Research Review and Advisory Board, KU
8. 2012 --- **Editor:** East and Central Africa Medical Journal
9. 2008 – 2015 **Chairman:** KU Ethics Review Committee
10. 2009 – 2013 **Chairman:** Dept. of Pharmacy and Complementary /Alt.Medicine
11. 2008 - 2012 **Board Member:** Confucius Institute at KU
12. 2012 **Member:** Students Disciplinary Re-Appeals Committee.
13. 2012 **Member:** KU Open Access Policy Committee
14. 2012: **Member:** Establishment of Molecular Diagnostic Laboratory Committee.
15. 2011- **Member:** KU Teaching and Referral Hospital Equipment Committee
16. 2011 **Member:** Intra-ACP Grant Application Committee
17. 2010 - **Member:** Industrial and Research Park Committee
18. 2010 **Member:** Committee to receive books from Sabre Foundation, MA, USA.
19. 2009 **Member:** Science and Technology Park – KU Proposal Sub-Committee
20. 2009 **Member:** Committee on Israel Collaboration
21. 2009 **Member:** Committee on official opening of facilities at KU
22. 2008 **Member:** Committee to review the KU Strategic and Vision Plan.
23. 2008 **Member:** Kenyatta University Website Development Committee
24. 2007 **Member:** KU Documentation Committee.
25. 2007 **Member:** Rapid Results Initiative (RRI) of Kenyatta University
26. 2007 **Member:** Review of the Medical Practitioners and Dentists Board Act
27. 2006 **Member:** KU Research Policy Committee.

b) **University of Nairobi (UON).**

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|-------------|---|
| 2001 - 2006 | Section Head: Pharmacognosy. Department of Pharmacology and Pharmacognosy. School of Pharmacy. |
| 2002 – 2003 | Chairman: Curriculum Review Committee. School of Pharmacy. |
| 2003 | Member: Faculty of Pharmacy Committee on Sharing of Module II Income |
| 2002 – 2003 | Member: Faculty of Pharmacy Committee on Attachments |
| 2001- 2006 | Acting Chairman (on short periods) Department of Pharmacology and Pharmacognosy. School of Pharmacy. |

c) International Centre of Insect Physiology and Ecology (ICIPE).

2000 – 2001 **Section Head:** Semiochemistry Section. African Fruit fly Initiative.

6.0 POSTGRADUATE SUPERVISION

a) Successful PhD Theses

1. **Onyancha Misonge Jared (2020)**
Evaluation of Antitumour Activity of Selected Kenyan Medicinal Plants used Ethnomedically to Manage Cancer. PhD in Pharmacognosy. Department of Pharmacy and Complementary /Alternative Medicine, KU.
2. **Gordon Oluoch Ogweno (2016)**
The effects of crystalloid solutions on the human coagulation system. PhD in Medical Physiology. Department of Medical Physiology, KU.
3. **Meshak Ondora Onyambu (2016)**
Development of a chromatographic fingerprint and other quality control methods for *Warbugia ugandensis* herbal materials. PhD in Pharmacognosy. Department of Pharmacy and Complementary /Alternative Medicine, KU.
4. **Murigi Elishiba Muthoni (2016)**
Social marketing mix and behavioural change on substance users among youth in the slums of Nairobi County, Kenya. PhD in Marketing, KU.
5. **Everlyne N. Wanzala (2015)**
Identification of antitrypanosomal constituents of some Meliaceae species and screening of selected structural variants by *in vitro* and *in vivo* assays. PhD in Pharmaceutical Chemistry. Department of Pharmacy and Complementary /Alternative Medicine, KU.
6. **Judith Kanensi Okoth (2014)**
Development and utilization of amaranth-sorghum grains product to enhance nutritional status of malnourished children in Thika district, Kenya. PhD in Foods, Nutrition and Dietetics. Department of Foods, Nutrition and Dietetics, KU.
7. **Geoffrey Kariuki Kinuthia, 2013**
Efficacy of combined crude extracts from selected plants of Kenya against *Leishmania major*. PhD in Medical Parasitology. Dept. of Pathology, Kenyatta University (KU).

8. **Florence Wanja, 2013**
Quality and Safety of Herbal Products Used in Oral Health by Traditional Medical Practitioners in Nairobi, Kenya. PhD in Pharmacognosy. Department of Pharmacy and Complementary /Alternative Medicine, KU.
9. **Salome Muthoni Guchu, 2007**
Studies on *Desmodium* species for the allelochemicals involved in *Striga* suppression. PhD in Chemistry. Department of Chemistry. University of Nairobi (UON).
10. **Ester Innocent, 2007**
Bio-prospecting for botanical larvicides and repellents for the malaria vector, *Anopheles gambiae* Giles. PhD in Chemistry. Department of Chemistry. University of Dar Es Salaam.

PhD Thesis submitted for examination

11. **Njoroge G. Kimani. (2019)**
Antidiabetic activities of *Triticum aestivum*, *Hordeum vulgare*, *Urtica massaica* and *Cynanchum viminale*. Department of Biochemistry and Biotechnology, KU.
12. **Titus M. Kahiga (2020)**
Evaluation of anti-ulcer activity and safety of Mupal®: A herbal product used for the management of peptic ulcer disease in Kenya. PhD in Pharmacology. Department of Pharmacology and Clinical Pharmacy, KU.

b) Successful Master's Theses

13. **Yahuza Nantomah Abdulai (2019)**
Anti-inflammatory and wound healing assessment of two Ghanaian mushrooms: preliminary formulation of a topical ointment against wounds and wound infections. Pan African University. University of Ibadan, Nigeria.
14. **Mbulo Thomas Mutua (2017)**
Effect of *Artemisia annua* L. as a mosquito repellent in schools in Mwea Rice Scheme, Kirinyanga County, Kenya. MPH. School of Public Health, KU.
15. **Tabitha Nyanchoka Ong'era (2016)**
Screening for antimicrobial compounds present in *Bersama abyssinica* Fresen. MSc. Department of Chemistry, KU.
16. **David Mwikya Nzuki (2016)**
Use of herbal medicine among children under 5 years in Chogoria Hospital, Maara District, Kenya. MPH. School of Public Health, KU.
17. **Mbithi Justus Muema (2015)**

- Phytochemical investigation of the antimicrobial activity of *Ochna thomasiana*
Engl. & Gilg. MSc. Department of Chemistry, KU.
18. **Peter Kaguru Githinji (2015)**
Determination of organic contaminants in selected alcoholic beverages consumed in Muthithi location in Muranga County, Kenya. MSc. Dept. of Chemistry, KU.
 19. **Francis Githinji (2014)**
Factors driving the utilisation of herbal medicine in Githunguri division, Kiambu County, Kenya. MPH. School of Public Health, KU.
 20. **Bibiana Kanduka Njue (2013)**
Quality assessment of four fixed dose combination anti-tuberculosis drugs in government facilities in Coast and Nairobi provinces. MPH. School of Health Sciences, KU.
 21. **Kipyegon Ngeno (2012)**
Determination of selected essential and non essential trace-elements in *Amaranthus cruentus* and *Amaranthus hypochondriacus* species from different areas of Kenya. MSc. Department of Chemistry, KU.
 22. **Ndungu Zipporah Wanjiru, 2012**
Use of amaranth grain to improve health and nutrition status among PLWHA in Mweiga home based care group– Nyeri district. MSc. Department of Foods, Nutrition and Dietetics. KU.
 23. **Margaret C. Mburu, 2012**
Evaluation of GenoType® MTBDRplus assay as a screening tool for Multi-drug-Resistant tuberculosis surveillance among patients at high risk in Nairobi. MPH. School of Health Sciences, KU.
 24. **Okoth Kevin Otieno, 2011**
Analysis of amarathus oil from different agro-ecological zones in Kenya. MSc. Department of Chemistry, KU.
 25. **Cheruiyot Nicholas, 2011**
Determination of levels some vitamins in amaranth leaves and grains from selected regions of Kenya. MSc. Department of Chemistry, KU.
 26. **Tonui Mathew Kipngetich, 2011**
Determination of some inorganic anions in amaranthus from selected parts of Kenya. MSc. Department of Chemistry, KU.
 27. **Philimon Majwa Omondi, 2010**

- A comparison of the use of long lasting insecticide treated nets in the Control of Malaria among children under five years in Kisumu district, Kenya. MPH. School of Health Sciences, KU.
28. **Richard Kamau Thuo, 2009**
The influence of gender related factors on access to art in selected treatment sites in Nairobi, Kenya. MPH. Dept. of Public Health. KU.
29. **Ng'ang'a Monica Wanjiku, 2009**
Nutritional and functional properties of grain amaranth (*Amaranthus cruentus*) complementary food. MSc. Department of Food Science and Nutrition. Jomo Kenyatta University of Agriculture and Technology (JKUAT).
30. **Elijah Njeru Mbiti, 2009**
Adherence to antimalarial combination therapy with Artemether-Lumefantrine in children below five years in Embu District. MPH. Dept of Public Health. KU.
31. **Patrick Musyoki Shem, 2006**
Kinetics of the release of waterbuck-repellent blend for tsetse flies from different dispensers under field conditions. MSc. Department of Chemistry. UON.
32. **Martin Thuo Mwangi, 2002**
Enantioselective synthesis of (R)- and (S)- δ -octalactone and their effects on *Glossina morsitans morsitans* host seeking behaviour. MSc. Department of Chemistry. KU.

c) Draft theses

PhD

33. **Fidensio Kinyamu Ndegwa**
Phytochemistry and pharmacology of medicinal plants used by the Ameru of Kenya. PhD in Pharmacognosy. Department of Pharmacy and Complementary /Alternative Medicine, KU.
34. **Gladys W. Mwangi**
Antivenin activity of commonly used African herbs on venom of *Dendroaspis polylepsis* (Black Mamba) at the neuromuscular junction. PhD in Pharmacology and Drug Design. KU.

Master

35. **Jane Githinji**
An investigation of the factors influencing the management of type 2 diabetes in Thika and Kirwara hospitals in Kenya. MPH. School of Public Health, KU.

d) On-going supervision

PhD

36. Pauline Wairimu Ikumi. (Progress: data collection)

Nutritional, physical and functional properties of Chia seeds (*Salvia hispanica* L.) grown in Kenya. PhD in Food Science and Technology in the Institute of Food Bioresources Technology, Dedan Kimathi University of Technology.

37. Rotich Winnie. (Progress: proposal development).

Evaluation of Antiviral Activity and Safety of a Herbal Product Used for the Management of HIV in Kenya Using HIV-2 Infected Kenyan Baboons. PhD in Pharmacology. Department of Pharmacology and Clinical Pharmacy, KU.

Master

38. Stephen Omondi. (Progress: proposal development).

Disposal of pharmaceutical waste in Bomet County community pharmacies.

39. Martha Gacuiya. (Progress: data collection)

Assessment of emerging psychoactive substances and drugs abused in some secondary schools in Kiambu County. MSc, KU.

40. John Jarha Tola (Progress: data collection)

The Socio-Economic Factors Contributing to Inappropriate Use of Emergency Contraceptive Pills by the Youth in Mombasa County. MPH, KU.

41. Betty Opuodho (Progress: Data Collection).

Use of Herbal Medicine for Non-Communicable Diseases among Adults in Kisumu East, Kisumu County. MPH, KU.

42. Stewart Kabaka (Progress: Data Collection).

Assessing salt iodine content at production, household levels and determining the iodine status of the population in Gongoni location, Malindi Sub-county. MPH, KU.

43. Maima Austine Juma (Progress: Data Collection).

Extent of counterfeit antimalarial drugs in the treatment of malaria in Nairobi County. MPH, KU.

44. Ombong'o Maurice Juma (Progress: data collection)

Evaluation of protein food allergies using compounds present in *Thunbergia alata* Bojer Ex Sims. MSc. Department of Chemistry, KU.

1. Successful Undergraduate Project supervision

2014 - 2019 Twenty five (28) B. Pharm undergraduate projects. KU
2007-2009 Ten (10) Bachelor of Science in Public Health (B.Sc. PH) projects at KU.
1997-2005 Nine (9) B. Pharm projects. UON.

7.0 CONFERENCES /SEMINARS /WORKSHOPS

7.1 Participation /Attendance of Conference /Workshops

➤ Over 80

7.2 Presentations of Papers at Academic and Professional Conferences

➤ Over 75

7.3 Exhibitions

➤ About 2

7.4 Convening and Coordinating Conferences

➤ About 10

8.0 RESEARCH AND PUBLICATIONS.

1. Njoroge, G.K., Njagi, E.N.M., Gikonyo, N.K. and Piero, M.N. (2020). In vivo Glycemic and Toxicity Effects of Aqueous Extracts of *Urtica massaica*. *International Journal of Medicine and Pharmaceutical Sciences*. **10(3)**: 35-44.
2. Onyambu MO, **Gikonyo NK**, Nyambaka HN and Thoithi GN. (2020). Macroscopic and microscopic features of diagnostic value for *Warburgia ugandensis* Sparague leaf and stem-bark herbal materials. *Journal of Pharmacognosy and Phytotherapy*. **12(2)**: 19-27.
3. Onyancha JM., **Gikonyo NK.**, Wachira SW., and Gicheru MM. (2019). An ethnobotanical survey of plants used for the treatment and management of cancer in Embu County, Kenya. *Journal of Medicinal Plants Studies*. **7(4)**: 39-46.
4. Onyambu MO, **Gikonyo NK**, Nyambaka HN and Thoithi GN. (2019). A Review of Trends in Herbal Drugs Standardization, Regulation and Integration to the National Healthcare Systems in Kenya and the Globe. *Int. J. Pharmacogn. Chinese Med*. **3(3)**: 000168.
5. Onyancha JM, **Gikonyo NK**, Wachira SW, Gicheru MM. (2019). Isolation and antiproliferative characterisation of bergenin from root extract of *Uvariadendron anisatum* Verdec (Annonaceae). *Drug Discovery*. **13**, 55-78.

6. Florence W Ngari, **Nicholas K Gikonyo**, Eliud NM Njagi and Ruth N Wanjau. (2018). The practice of herbal medicine in management of oral health in Nairobi County, Kenya. *International Journal of Herbal Medicine*. **6(5)**, 05-09
7. Onyancha, J.M., **Gikonyo, N.K.**, Wachira, S.W., Mwitari, P.G. and Gicheru, M.M. (2018). Anticancer activities and safety evaluation of selected Kenyan plant extracts against breast cancer cell lines. *Journal of Pharmacognosy and Phytotherapy*. **10(2)**, 21-26.
8. Everlyne N. Wanzala, **Nicholas K. Gikonyo**, Grace Murilla, Mercy Githua, Ahmed Hassanali. (2017). In vitro and in vivo anti-trypanosomal activities of methanol extract of *Azadirachta indica* stem-bark. *Afr. J. Tradit. Complement. Altern. Med.* **14(6)**: 72-77
9. Kanensi, J. O., Ochola, S., **Gikonyo, N.K.** and Makokha, A (2017). Efficacy of amaranth sorghum grains porridge in rehabilitating moderately acute malnourished children in a low-resource setting in Kenya: A randomized controlled trial. *Integr Food Nutr. Metab.* **4(4)**, 1-7.
10. Ndungu, Z. W., Kuria, E. N., **Gikonyo, N. K.** and Mbithe, D. K. (2017). Efficacy of amaranth grain consumption on CD4 count and morbidity patterns among adults living with HIV in Nyeri, Kenya. *J. AIDS HIV Res.* **9(4)**, 81-88.
11. Njoroge, G.K., Njagi, E.N.M., **Gikonyo, N.K.** and Piero, M.N. (2017). In vivo antidiabetic potential and safety of aqueous extract of *Triticum aestivum* (wheatgrass). *Int. J. of Med. and Pharm. Sci.* **7(1)**, 77-84.
12. Murigi, E.E., Muathe, S.M.A., Kuria, T.J. and **Gikonyo, N.K.** (2017). Social Marketing Price and Behavioural Change on Substance Users among Youth in the Slums of Nairobi County, Kenya: 12th SIMSR Global Marketing Conference. *Compendium of conference proceedings* – ISBN: 9789385537042. 9th-10th February, 2017. ELK Asia Pacific Journals publishers. pp 119-124.
13. Ong'era T.N., Amuka O., Machocho A.K. and **Gikonyo N.K.** (2017). Antimicrobial activities screening of some phytochemicals from the stem bark extracts of *Bersama abyssinica* (Fresen). *Medicinal Plants – Int. J. of Phytomed. & Related Inds.* **9(1)**. 20-28. Print ISSN : 0975-4261. Online ISSN : 0975-6892. Article DOI : 10.5958/0975-6892.2017.00003.X.
14. Tonui M. Kipngetch, Ruth N. Wanjau, **Nicholas K. Gikonyo** and Jane Murungi. (2016). Levels of Iodide, fluoride and Chloride in Amaranth grain in Kenya. *Journal of Applied Chemistry*. **9(10)**. 97 – 104. Online e-ISSN: 2278-5736. DOI: 10.9790/5736-09100297104.
15. Judith Kanensi Okoth, Sophie Atieno Ochola, **Nicholas K. Gikonyo** & Anselimo Makokha. (2016). Development of a nutrient-dense complementary food using amaranth-sorghum grains. *Food Science & Nutrition*. 1-8.

16. Justus M. Mbithi, Mohamed M. Awadh, **Nicholas K. Gikonyo**, Paul K. Tarus and Alex K. Machocho. (2016). Phytochemical and Antibacterial Investigation of the Plant *Ochna thomasiana* Engl. & Gilg. *Journal Kenya Chemical Society*, **9**(1), 82-90.
17. Kinuthia G.K., Anjili C.O, Kabiru E.W, Kigonde E.M., Ingonga J.M. and **Gikonyo N.K.** (2015). Toxicity and efficacy of aqueous crude extracts from *Allium sativum*, *Callistemon citrinus* and *Moringa stenopetala* against *L. Major*. *Kabarak Journal of Res. & Innov.* **3**(1), 9 – 20.
18. Ndungu Z.W., Kuria E., **Gikonyo N.** and Mbithe D. (2014) Contribution of amaranth grain (*A. cruentus*) on dietary intake and nutritional status of adults living with HIV in Mweiga, Nyeri, Kenya. *J. Basic. Appl. Sci. Res.*, 4(4) 196-203.
19. Tonui M.K., Wanjau R.N., **Gikonyo N.K.**, Murungi J., Cheruiyot K.N. and Ngeno K.S. (2014). Influence of soil and rain on the levels of inorganic anions in amaranth leaves from selected parts of Kenya. *Food Sci. and Quality Management.* **31**:12-20.
20. Ngari, F. W; Wanjau, R. N; Njagi, E. N, and **Gikonyo, N.K.** (2014). Antimicrobial and phytochemical investigation of herbal suspensions used in management of oral health in Nairobi County, Kenya. *Journal of Biology, Agriculture and Healthcare.* **4**(14): 17-22.
21. Ngari, F. W; Wanjau, R. N; Njagi, E. N, and **Gikonyo, N.K.** (2014). Herbal materials used in management of oral conditions in Nairobi, Kenya. *Journal of Oral Health and Community Dentistry.* **8**(1): 30-36.
22. Kinuthia, G.K, Kabiru, E.W, **Gikonyo, N.K.**, Ingonga, J.M, Kigonde, E.M, Anjili, C.O. (2014). In vitro activity of aqueous and methanol extracts of *Callistemon citrinus* (Family Myrtaceae) against *Leishmania major*. *Afr. J. Health Sci.* **27**(2):118-133
23. Rugutt, J.K., Okoth, K.O., Wanjau, R.N., **Gikonyo, N.K.** Machocho, A., Rugutt, K.J. Rykhlya, K.Y., Harris, K.B., Wilson, K.R. and Koech. J. (2014). US-Africa Collaboration in a Chemical Education Project Involving Analysis of Amaranthus Grain Oil from Selected Agro-Ecological Zones in Kenya. *The Chemical Educator.* **19**, 50-54.
24. Rugutt, J.K., Okoth, K.O., Wanjau, R.N., **Gikonyo, N.K.** Machocho, A., Rugutt, K.J., Obel, M.C. and Mibei, E. (2014). A Quantitative Analytical Chemistry Research-based Experiment Involving Comparative Analysis of Amaranth Grain Oils Extracted from Embu and Meru Districts in Kenya. *The Chemical Educator.* **19**, 91-95.
25. Kinuthia G.K., Kabiru E.W, Anjili C.O, Kigonde E.M., Ngure V.N, Ingonga J.M. and **Gikonyo N.K.** (2014). Efficacy of crude methanolic extracts of *Allium sativum* L. and *Moringa stenopetala* (Baker f.) Cufond. against *Leishmania major*. *Int. J. Med. Arom. Plants.* **4** (1), 16 - 25

26. Nderitu F.W., **Gikonyo N.K.** and Sinei K.A. (2013) Detection and Management of Adverse Drug Reactions Related to Antiretroviral Drugs among HIV/AIDS Patients in Kiambu Sub-County, Kenya. *East and Centr. Afr. J. Pharm. Sci.* 16, 3-12
27. Ngari, F. W., **Gikonyo, N.K.**, Wanjau, R. N. and Njagi, E. M. (2013). Investigation of selected pathogenic microorganisms and toxic elements in herbal materials used in management of oral health in Nairobi County, Kenya. *J. Appl. Environ. Biol. Sci.* 3(12): 1-7.
28. Ngari, F. W., **Gikonyo, N.K.**, Wanjau, R. N. and Njagi, E. M. (2013). Safety and Antimicrobial Properties of *Euclea divinorum* Hiern, Chewing Sticks Used for Management of Oral Health in Nairobi County, Kenya. *J. Pharm. Biomed. Sci.* 3(3)1-8.
29. Kinuthia, G.K., Anjili, C.O., **Gikonyo, N.K.**, Kigundu, E.M., Ingonga, J.M. and Kabiru, E.W. (2013). In vitro and in vivo activities of blends of crude aqueous extracts from *Allium sativum* L, *Callistemon citrinus* (Curtis) Skeels and *Moringa stenopetala* (Baker F) Cufodontis against *Leishmania major*. *Int. J. Med. Arom. Plants.* 3(2), 234-246
30. Kanensi, J. O., Ochola, S., **Gikonyo, N.K.** and Makokha, A. (2013). Effect of Steeping and Germination on the Diastatic Activity and Sugar Content in Amaranth Grains and Viscosity of Porridge. *J. Agric. Food Tech.* 3(1): 1-7.
31. Mburu M.W., **Gikonyo N.K.**, Kenji G.M. and Mwasaru A.M. (2012). Nutritional and functional properties of a complementary food based on Kenyan amaranth grain (*Amaranthus cruentus*). *Afr. J. Food, Agric., Nutr. and Devel.* 12(2), 5959 – 5977.
32. Mburu M. W., **Gikonyo N.K.**, Kenji G.M. and Mwasaru A. M. (2011). Properties of a Complementary Food based on Amaranth Grain (*Amaranthus cruentus*) Grown in Kenya. *J. Agric. Food. Tech.* 1(9): 153-178.
33. Kanensi, J. O., Ochola, S., **Gikonyo, N.K.** and Makokha, A. (2011). Optimization of the Period of Steeping and Germination for Amaranth Grains. *J. Agric. Food Tech.* 1(6): 101 - 105.
34. Kamau, R.T., Mwanzo, I. and **Gikonyo, N.K.** (2010). The Influence of Gender Related Factors on Access to Antiretroviral Therapy in Nairobi, Kenya. *East Centr. Afr. J. Pharm. Sci.* 13: 35-42.
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37. **Gikonyo, N.K.** (2009). Tsetse and wild hosts: Lessons from waterbuck on how to protect cattle from tsetse and sleeping sickness. In, Proceedings of the 7th ASA Scientific Conference. Edited by Kioko, E.N., Okeyo-Owuor, J.B., Kariuki, S. and Osogo, D. Publisher, ICIPE Science Press, Nairobi. pp 3–18. ISBN-92-9064-211-4
38. Innocent, E., Cosam, C.J., **Gikonyo, N.K.**, Nkunya, M.H.H. and Hassanali A. (2009). Larvicidal properties of some Tanzanian plant species against *Anopheles gambiae s.s.* Gile (Diptera: Culicidae) mosquitoes. *Int. J. Biol. Chem. Sci.* **3**(2): 266-270.
39. Mbiti, E.N., **Gikonyo, N.K.**, Mbugi, J.P. and Mwanzo, I. (2009). Adherence to Artemether- lumefantrine (AL) in the treatment of malaria in children below five years in Embu district, Kenya. *Kenya Nursing Journal.* **38** (2): 5 - 12.
40. Innocent, E., Cosam, C.J., **Gikonyo, N.K.**, Nkunya, M.H.H. and Hassanali A. (2008). Growth disruption activity of polar extracts from *Kotschya uguenensis* (Fabaceae) against *Anopheles gambiae s.s.* (Diptera: Culicidae) larvae. *Int. J. Tr. Insect Sci.* **28**. 220-224.
41. Innocent, E., Joseph C. Cosam, C.J., **Gikonyo, N.K.**, Mainen, M.J., Nkunya, M.H.H. and Hassanali, A. (2008). Mosquito larvicidal constituents from *Lantana viburnoides ssp viburnoides var kisi* (A. rich) Verdc (Verbenaceae). *J. Vector Borne Dis.* **45**. 240–244.
42. Mwangi, M.T., **Gikonyo, N.K.** and Ndiege, I.O. (2008). Repellent properties of δ -octalactone against the tsetse fly, *Glossina morsitans morsitans*. *J. Insect Sci.* **8**. 43.
43. Innocent, E., **Gikonyo, N.K.** and Nkunya, M.H.H. (2008). Repellency property of long chain aliphatic methyl ketones against *Anopheles gambiae s.s.* *Tanzania Health Research Bulletin.* **10**: 50 – 54.
44. Guchu, S.M. Yenesew, A. Tsanuo, M.K. **Gikonyo, N.K.** Pickett, J.A. Hooper, A.M. and Hassanali A. (2007). Isoflavonoids from the allelopathic root extracts of *Desmodium uncinatum*. *Phytochemistry.* **68**(5), 646 - 651.
45. **Gikonyo, N.K.** and Lux, S.A. (2004) Evidence of male attractants for fruit flies in the leaf extract of *Schinus molle*. *East Centr. Afr. J. Pharm. Sci.* **7**, 27 - 33.
46. **Gikonyo, N.K.**, Lwande, W. Hassanali, A. and Lux, S.A. (2003) Periodicity in the quantity and ratio of pheromone components in volatile emissions from virgin females of the spotted stalk borer moth *Chilo partellus* (Swinhoe). *East Centr. Afr. J. Pharm. Sci.* **6**, 36 - 42.

- 47. Gikonyo, N.K.**, Lux, S.A. and Nemeje, P.S. (2003) Variation in volatiles from fruits of mango and marula attractive to fruit fly, *Ceratitis cosyra*. *East Centr. Afr. J. Pharm. Sci.* **6**, 3 - 8.
- 48. Gikonyo, N.K.**, Hassanali, A., Njagi, P.G.N. and Saini, R.K. (2003) Responses of *Glossina morsitans morsitans* to blends of electroantennographically active compounds in the odors of its preferred (buffalo and ox) and unpreferred (waterbuck) hosts. *J. Chem. Ecol.* **29**, 2331 - 2345.
- 49. Gikonyo, N. K.**, Hassanali, A., Njagi, P. G. N., Gitu, P. M. and Midiwo, J.O. (2002) Odor composition of preferred (buffalo and ox) and nonpreferred (waterbuck) hosts of some savanna tsetse flies. *J. Chem. Ecol.* **28**:969-981.
- 50. Gikonyo, N. K.**, Hassanali, A., Njagi, P. G. N., and Saini, R. K. (2000) Behaviour of *Glossina morsitans morsitans* Westwood (Diptera: Glossinidae) on waterbuck *Kobus defassa* Ruppel and feeding membranes smeared with waterbuck sebum indicates the presence of allomones. *Acta Tropica.* **77**:295-303.
- 51. Gikonyo, N.K;** Mwangi, R.W. and Midiwo, J.O. (1998). Toxic and growth-inhibitory activity of *Polygonum senegalense* (Mesin) surface exudate against *Aedes aegypti* larvae. *Insect Sci. Applic.* **18**:229 - 234.
- 52. Midiwo, J.O; Gikonyo, N.K;** Wanjau, D.O; Matasi, J.J. and Waterman, P.G. (1992). Flavonoids of *Polygonum senegalense* (Meisn) Part II. More surface and internal tissue flavonoid aglycones. *Bull. Chem. Soc. Ethiop.* **6**:119 - 122.

9.0 CHAPTERS IN BOOKS

- 53. Innocent, E., Gikonyo, N.K.,** Moshi, M.J., Nkunya, M. H.H., Cosam, C.J. and Hassanali, A. (2009). Identification of Interaction of Mosquito Larvicidal Compounds from *Lantana viburnoides ssp.viburnoides var. kisi* by Using Subtraction Bioassay. In, Traditional and Alternative Medicine: Research and Policy Perspectives. Edited by De Silva, T., Bahorun, T., Sahu, M. and Huong, L. M. Publisher, Daya House, New Delhi. Part II. Phytochemistry. Chapter 38. pp 594. ISBN-81-7035-614-8.
- 54. Gikonyo, N.K.** (2009). Dr. Nicholas Kamindu Gikonyo: ARPPIS Alumni – Showing Science Leadership in Africa and Beyond. In, Building capacity for science-led development in Africa. Edited by Musewe, V.O. and Odindo, M. Publisher, ICIPE Science Press, Nairobi. Chapter 6. pp 72. ISBN-92-9064-210-6
- 55. Gikonyo, N.K.** (2008). Biography. In Nurturing African Talent for Leadership in Insect Science: 25 Years of the ARPPIS Experience. Edited by Ochieng'-Odero, J.P.R., Ng'ang'a, L., Osogo, D., Mating'i, D.T.P and Ogendo, I. Publisher, ICIPE Science Press, Nairobi. Chapter I. pp 55-58. ISBN-92-9064-204-1.

56. **Gikonyo, N.K.**, Hassanali, A., Njagi, P.G.N. and Saini, R.K. (2000). Investigations on tsetse repellents from the body surface of waterbuck, *Kobus defassa* Ruppel. Animal Health Management. In 1998/1999 ICIPE Annual Scientific Report. Edited by Ngeny-Mengech A., Osogo, D., Mwanjyky, S. And Ndungu, A.C. Publisher. ICIPE Science Press, Nairobi. pp. 27-29. ISBN-92-9064-134-7.

10.0 PATENTS

57. Kanensi, J. O., Ochola, S., **Gikonyo, N.K.** and Makokha, A. (2014) Complementary food for moderately malnourished children. *Kenya Industrial Property Institute*. Applic. No. KE/U/2013/000334. Date of grant: 2/7/2014.

11.0 THESES AND DISSERTATIONS

1. **Gikonyo, N.K.** (1999). Semiochemical basis of feeding preferences on waterbuck *Kobus defassa*, buffalo *Syncerus caffer* and ox, by some *Glossina morsitans* group of tsetse. PhD Thesis. University of Nairobi.
2. **Gikonyo, N.K.** (1991). Hydrophilic flavonoid components of leaves and flower heads of *Polygonum senegalense* and larvicidal and antifeedant activities of its hydrophobic principles. MSc. Thesis. University of Nairobi.
3. **Gikonyo, N.K.** (1988). Development of a mini - pilot plant for large-scale extraction of essential oils. BSc. Project dissertation. University of Nairobi.

12.0 NETWORKING AND COLLABORATION WITH EXTERNAL ORGANISATIONS

1. Collaborating in Research

1. Kenya Industrial Research and Development Institute (KIRDI)
2. National Aids and STI Control Program, NASCOP- Kenyatta Hospital
3. Kenya Agricultural Research Institute- KARI
4. Strategic Poverty Alleviation Systems (SPAS)
5. Allgrain Company Ltd
6. Farm Concern International (FCI)
7. Institute of Primate Research (IPR)
8. International Centre of Insect Physiology and Ecology (ICIPE), Behavioural and Chemical Ecology Department (BCED).
9. Jomo Kenyatta University of Agriculture and Technology (JKUAT), Department of Food Science and Post Harvest Technology.
10. Makerere University, Uganda.

2. **Establishment of Departmental Library (Donation of Books and Journals)**
 1. Harvard University, Department of Chemistry and Chemical Biology. MA, USA
 2. Abha Light Foundation, Kenya
 3. Seeding Labs Organisation. MA, USA.
3. **Equipping laboratories (2009-2010)**
 1. Seeding Labs Organisation, USA.
 - Equipment valued at about KSh. 63 Million
4. **Quality Assurance**
 1. Kenya Bureau of Standards
 2. Pharmacy and Poisons Board

12.0 **PROJECT /RESEARCH GRANTS**

As the Principal Investigator (PI)

1. **National Phytotherapeutics Research, Upscaling and Quality Assurance Centre. From February 2018 - 2021**

Donor: National Research Fund: Government of Kenya: **Value:** \$700,000.

2. **Integration of Production, Value Addition and Marketing of Grain Amaranth to Sustainably Manage household health including HIV/AIDS in Kenya. From 2008**

Kenya Agricultural Productivity Project (KAPP)

Donor: Kenya Government and World Bank: **Value:** \$110,000

Collaborators:

- i. Kenya Industrial Research and Development Institute (KIRDI)
- ii. National Aids and STI Control Program, NASCOP- Kenyatta Hospital
- iii. Kenya Agricultural Research Institute- KARI
- iv. Strategic Poverty Alleviation Systems (SPAS)
- v. Allgrain Company Ltd
- vi. Farm Concern International (FCI)

3. **Poverty Reduction, Household Nutritional Security and Sustainable HIV/AIDS Management through Grain Amaranth. From 2008.**

Donor: Kenyatta University (Vice – Chancellor’s Research Grant)

Value: KSh. 300,000

Collaborator: Strategic Poverty Alleviation Systems (SPAS)

3. As Co-Investigator

4. **Transformation of Pharmacy and Chemistry Degree Provision Project.**
Donor: UK Department for International Development (DFID) - SPHEIR. Value: £4 million. From 2017 – 2021
5. **The role of language and culture in screening, prevention and management of cancer in Kenya. 2014 - 2015**
Donor: Kenyatta University (Vice – Chancellor’s Research Grant)
Value: KSh. 1,500,000
6. **Scaling up production of a nutrient dense complementary food based on amaranth-sorghum grains. 2014 - 2017**
Donor: Jomo Kenyatta University of Agriculture and Technology
Value: KSh. 4,500,000
7. **Testing the efficacy and safety of cheetan and cheetan/cfc by assessing the CD₄ counts, viral load, liver, renal, bone marrow functions using HIV infected baboons. From 2009**

Donor: National Council for Science and Technology. Kenya.
Value: KSh. 2,983,530
Collaborator: Institute of Primate Research (IPR)

4. Student Grants

8. The effects of crystalloid solutions on the human coagulation system.
Student: Gordon O. Ogweni (PhD).
Donor: National Council for Science and Technology (NCST). Kenya. 2010/2011
9. Identification of antitrypanosomal constituents of some Meliaceae species and screening of selected structural variants by in vitro and in vivo assays.
Student: Everlyne N. Wanzala (PhD)
Donor: National Council for Science and Technology (NCST). Kenya. 2012/2013
10. Quality and Safety of Herbal Products Used in Oral Health by Traditional Medical Practitioners in Nairobi, Kenya.
Student: Florence Wanja (PhD).
Donor: National Council for Science and Technology (NCST). Kenya. 2009/2010

13.0 NATIONAL AND INTERNATIONAL RECOGNITION.

- a) **Member of the Traditional and Alternative Medicine Technical Working Group** – on the Kenya Health Act no 21 of 2017.
2018: Ministry of Health, Kenya

b) Invitation as a Visiting Professor

2019, 2018: Pan African University based at University of Ibadan, Nigeria

c) Invitation as a Visiting Professor.

2017: Catholic University of Health and Allied Sciences. Mwanza, Tanzania.

d) Pre-qualified Peer reviewer.

2015 – 2019. Commission for University Education, Kenya

e) External Examiner in Other Universities

2017. Commission for University Education (CUE): Resource person for “reviewing proposed degree programmes”.

2015. Commission for University Education (CUE): Resource person for “reviewing proposed degree programmes”.

2015. Commission for University Education (CUE): Resource person for “verification of academic resources to support academic programmes”.

2015- Mt. Kenya University, Thika, Kenya
External Examiner - Pharmacognosy

2014- Kenya Methodist University, Meru, Kenya.
External Examiner – Pharmacognosy and Pharmaceutical Chemistry.

2014- Catholic University of Health and Allied Sciences. Mwanza, Tanzania.
External Examiner - Pharmacognosy

2013- University of Nairobi.
External Examiner – Postgraduate thesis.

2009-2013. Jomo Kenyatta University of Agriculture and Technology.
External Examiner – Postgraduate thesis.

2011-2012. Commission for Higher Education (CHE): Resource person for “reviewing proposed degree programmes”.

2012. Commission for Higher Education (CHE): Resource person for “verification of academic resources to support academic programmes”.

2012. Masinde Murilo University of Science and Technology (MMUST)
External Peer Reviewer.

f) Internal Examination at KU

2009-2014: Postgraduate Theses

g) Invitation as Chief Guest.

Occasion: Medicinal trees planting day.
Mount Kenya University, Thika, Kenya.
30th April 2015.

h) Invitation to Conference as a Guest Speaker.

National.

2018: National Phytotherapeutics Research, Upscaling and Quality Assurance Centre.
Presentation to the National Research Fund, Nairobi, Kenya. 11/9/2017

2015: Nicholas K. Gikonyo and Gideon K. Njoroge. The Role of Traditional Medicine
In Prevention and Treatment of Non-communicable Diseases. The Eleventh
Annual Meeting of African Science Academies (Amasa 11). Hilton Hotel,
Nairobi. 29th November - 2nd December 2015.

2015: Nutraceuticals based on amaranth grain for management of nutritional disorders.
1st Global Conference on Patient Centered Care: *Kenyatta University*
Amphitheatre: 29th September – 2nd October, 2015

2015: Amaranth Grain Nutraceuticals for Management of Nutritional Disorders
“Utilization of Indigenous Knowledge for Sustainable Economic Development”.
Kenya National Academy of Sciences. Laico Regency Hotel, Nairobi. 26th June 2015.

2015: Topic. Ethical Considerations in Research Involving Humans. To postgraduate
supervisors in the School of Applied Human Sciences. Kenyatta University,
Main Campus. 19th May 2015.

2015: Topic: Research Ethical Concerns (Bioethics) and Clearance for Data Collection.
New postgraduate students. KU, SZ39 Hall. 24th April 2015.

2014: Ethical and Responsible Conduct of Research. The Role of Bioethics Committees.
KUCC, 15th and 16th Sept 2014.

2014: BIOMedical Research and Institutional Review Board (IRB) application Process at
KU. Ethical and responsible conduct of research. KUCC, KU, Nairobi.
Kenya. 27th -28th March 2014.

2014: Topic: Ethical Considerations in Research Involving Human Subjects.
New postgraduate students. KU Amphitheatre. 22nd Jan 2014.

- 2013: Topic: Ethical Consideration in Research Involving Humans (BIOETHICS)
CODESRIA Comparative Research Network, Kenya and Uganda.
Emmaus Pastoral Centre, Nairobi. 20/10/2013
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects.
Newly graduated PhD staff. KUCC, Kenyatta University, Main Campus.
4/9/2013
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects.
Kenyatta University, Migori Campus. 17/8/2013
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects. Biomedical
Engineering Summer School, KUCC, KU, Nairobi. 14/8/2013
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects.
Kenyatta University, Migori Campus. 20/7/2013
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects.
Kenyatta University, Nanyuki Campus. 20/7/2013
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects.
Kenyatta University, Mombasa Campus. 28/6/2013
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects.
Kenyatta University, Nyeri Campus.
- 2013: Topic: Ethical Considerations in Research Involving Human Subjects.
Kenyatta University, Nairobi CBD Town Campus.
- 2012: Topic: Ethical Considerations in Research Involving Human Subjects.
School of Applied Human Sciences. Kenyatta University, Main Campus
- 2008: Topic: Non-insecticides in Tsetse Control: Solutions from the Wild Animals,
Buffalo and Waterbuck. Tsetse suppression methods. 3rd – 4th Dec. 2008. Merica
Hotel, Nakuru.

International

- 2020: Quality and policy in complementary and alternative medicine (the place of
complementary and alternative medicine in UHC). 33rd Federation of African
Medical Students Association Scientific Conference held on 27th-29th Feb 2020.
Kenyatta University, Nairobi, Kenya,
- 2012: Topic: Grain Amaranth Nutraceuticals for Management of Nutritional Disorders:
Ghana Biomedical Convention: 30th July -1st August 2012.

Noguchi Memorial Institute for Medical Research, Ghana.

- 2012: Topic: Academic Programmes in TRADITIONAL CHINESE MEDICINE: A Proposed Collaboration of Kenyatta University and Shandong University of Traditional Chinese Medicine: Shandong University of Traditional Chinese Medicine. Jinan, China. 23rd May 2012.
- 2006: Topic: Evidence of paraperomones for control of fruit flies based on lessons from volatiles of mango fruits. ASA Scientific Conference. 27th -29th Nov 2006. Dar es Salaam, Tanzania.

i) Awards

- 2010: Visiting Research Fellow: Novartis Institute for Biomedical Research (NIBR) in Massachusetts USA, in the department of Developmental & Molecular Pathways.
- 2007: Fellowship: Advanced Training Program of Research and Development of Medicinal Plants at Tianjin University of Traditional Chinese Medicine in China. Sept. 2007.
- 2003: Certificate and Cash Award: African Association of Insect Scientists Conference. Best Scientific Conference Paper. 13th June 2003.
- 2000: Postdoctoral Fellowship: African Fruit Fly Initiative, ICIPE. 1st Feb 2000–Oct 2001.
- 1996: Scholarship for PhD: African Regional Postgraduate Programme in Insect Science (ARPPIS) and German Academic Exchange Service (DAAD) tenable at The International Centre of Insect Physiology and Ecology (ICIPE). September 1996 – November 1999.
- 1988: Scholarship for MSc: German Academic Exchange Service (DAAD). Tenable at the University of Nairobi. Sept 1988 – Oct 1990.
- 1981: Certificate: Kenya National Student's Science Congress. Design and Fabrication of an Automatic Sweet Seller. 20th June 1981

j) Appointments to Boards

- 2017: Chairman, Chandaria Business Innovation and Incubation Centre
- 2015-2019: Chairman, Board of Management: Mweiga High School, Mweiga, Nyeri
- 2015: Member: Kenyatta University Funeral Home.
- 2013: Graduate School Board of KU
- 2013: Editor. East and Central Africa Medical Journal
- 2013: Research Review and Advisory Board (URAB) of KU.
- 2011: Board of Governors Member: Mweiga High School, Mweiga, Nyeri

2009: Deputy Editor: Ministry of Higher Education: National R&D Journal Editorial Board.
 2008: Board Member: Confucius Institute at KU. 2008-2014
 2008: Chairman: KU Ethics Review Committee. 2008 - 2015
 2009: Technical Committee Member: Pharmaceutical and Alternative Medicine: Kenya Bureau of Standards. 31st March 2009 – 30th March 2012
 2006: Vice – President of the ARPPIS Scholars Association. 2006 - 2008
 2001: Board of Governors Member: Amboni Secondary School, Nyeri. 2001 – 2007.
 1992: Governing Council Member: Kenya Chemical Society. 1992 - 1998

k) Community Outreach

30/4/2015. Medicinal trees planting. Mount Kenya University, Thika, Kenya.

2008 – 2009: Campaign for Poverty Reduction, Household Food and Nutrition Security. Mweiga in Nyeri and Laikipia.

14.0 ACADEMIC LEADERSHIP

2019: Establishing a centre of excellence: The National Phytotherapeutics Research, Upscaling and Quality Assurance Centre at KU.
 2017: Developing a New Academic Programme: Curriculum for Masters Degree in Medicinal Plants: Pan African University.
 2013: ... Editor. East and Central Africa Medical Journal
 2009: ... Deputy Editor. National R&D Journal
 2010: Spearheading the donation of books from Sabre foundation of MA, USA valued at KSh 300 million to KU.
 2009: Developing the KU Ethics Review Operational Guidelines for Biomedical Research.
 2008/9: Establishing the Department of Pharmacy and Complementary /Alternative Medicine at KU.
 2006 –8: Developing a New Academic Programme: Curriculum for Bachelor of Pharmacy at Kenyatta University.
 2008: Leading 2 Research Projects as the Principal Investigator at KU.
 2008: Reviewing the KU Strategic and Vision Plan (aligning it with Kenya Vision 2030).
 2007: Developing the KU Research Policy
 2007/8: Developing Academic Programmes in 2 Other Universities: Curriculum for Bachelor of Pharmacy.
 2007: Developing the KU Research Policy
 2006: Developing a Policy on Traditional Medicine and Traditional Medical Practitioners at Kenyatta University.

15.0 MEMBERSHIP OF SOCIETIES/ORGANISATIONS

- 1) Member of the ARPPIS Scholars Association (ASA).
 - Vice – president from 29/11/06 – September 2008
- 2) Member of the African Association of Insect Scientists (AAIS)

- 3) Member of the Natural Product Research in East and Central Africa (NAPRECA)
- 4) Founding member of The Kenya Chemical Society (KCS),
 - Member of KCS Inaugural Governing Council from 1992 to 1998
- 5) Member of Nature Kenya: (Kenyan section of East Africa Natural History Society)