

CURRICULUM VITAE

1.0 PERSONAL INFORMATION

NAME : Mathew Piero Ngugi

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NATIONALITY : Kenyan

GENDER : Male

DATE OF BIRTH : 25th December 1977

2.0 QUALIFICATIONS

2.1 Academic Qualifications

- 2013: PhD in Molecular Biology, Kenyatta University, Kenya
- 2006: Master of Science in Biotechnology, Kenyatta University, Kenya
- 2002: Bachelor of Science in Biochemistry, Kenyatta University, Kenya

2.2 Professional Courses

- 2013: Completed a 5-day training on Application of Bioscience Technologies in Sorghum Production and Value Addition at Kenyatta University, organized by ASARECA
- 2011: Completed a course on Basic Skills in Teaching Methodology and Course Examination at Kenyatta University, organized by Regional Centre for Capacity Development
- 2008: Completed a Short Course on Environmental Biosafety, at Moi University, Chepkoilel Campus

3.0 EMPLOYMENT HISTORY

- **2014 to date:** Lecturer, Department of Biochemistry and Biotechnology, Kenyatta University
- **2010-2014:** Tutorial Fellow, Department of Biochemistry and Biotechnology, Kenyatta University
- **Jan, 2010 – Aug, 2010:** Assistant Lecturer in the Department of Pure and Applied Sciences, Technical University of Mombasa

4.0 ADMINISTRATIVE RESPONSIBILITIES

4.1 At Kenyatta University

- **July, 2017:** Appointed by the Chairman, Department of Biochemistry, Microbiology and Biotechnology as a member of a committee to develop a Master of Science (Forensic) degree programme.
- **June, 2015 to January, 2019:** Appointed Examinations Coordinator, Department of Biochemistry, Microbiology and Biotechnology
- **2016 to date:** Departmental representative in the School Research Committee
- **2014 to date:** Expert Trainer of Departmental Staff on Smart Board Use in Teaching
- **March, 2014-Nov, 2016:** Chairman, Departmental Board of Postgraduate Studies (DBPS)
- **5th October, 2016:** Appointed by DVC (Research, Innovation & Outreach) to Proposal Writing Committee to prepare a fundable proposal in Agriculture and Food Security.
- **17th August, 2016:** Appointed by DVC(Academic) to the Dean, Graduate School's **Committee on Data Analysis for Development of Guidelines on Thesis Supervision and Code of Conduct** to guide postgraduate research activities in Universities in Kenya (*Commissioned by Commission For University Education*).
- **9th July, 2015:** Appointed by the Chairman, Department of Biochemistry and Biotechnology as a Member of the Committee on Preparation for Inspection of Medical Biochemistry Programmes by the Kenya Medical Practitioners and Dentists Board (KMPDP).
- **February 2015:** Appointed by the Vice Chancellor in a committee to develop a concept note to be submitted to World Bank for financing centers of excellence in capacity development in the field of Biotechnology in East and Central Africa
- **April 2014:** Appointed by the Vice Chancellor in a committee to develop

a concept note to be submitted to ASARECA entitled “Capacity Development for sustainable Plant genetic resources (PGRS) utilization and conservation in eastern and central Africa”

- **2013 to date:** Member, Departmental Strategic Plan Development Committee
- **2013 to 2019:** Departmental Co-ordinator for University Website Updates
- **2013 to date:** Chairman, Kenyatta University Biochemistry and Biotechnology Staff Welfare (KUBBSWA)

4.2 At Other Institutions

- 2016 to date:** External Examiner, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Mombasa CBD Campus
- 2018 to date:** External Examiner, Technical University of Mombasa, Department of Pure and Applied Sciences
- 2016 to date:** Editorial Board Member, *Archives of Microbiology and Immunology*

5.0 POSTGRADUATE SUPERVISION

5.1 PhD SUPERVISION

5.1.1 COMPLETED

14th December, 2018

- **Nzaro Gona Makenzi (I84/21326/2010):** “*In vitro* Regeneration and Evaluation of Salt Stress Tolerance of Selected Kenyan Sweetpotato (*Ipomoea batatas*) Genotypes”
- **Purity Gacheri Limbua (I84/28502/2014):** “*Agrobacterium tumefaciens*-Mediated Introgression of IPT Gene in Selected Kenyan Ground Nut Genotypes to Enhance Drought Tolerance”.

5.1.2 ONGOING

- **Eliakim Mbaka (I84/29467/2014):** “Hepatoprotective, Nephroprotective and Antioxidant Activities of Selected Medicinal Plant Extracts in Mice”.
- **Njoroje Gideon Kimani (I84/27460/2014):** “*In vivo* Hypoglycemic activity and Safety of *Tricum aestivum*, *Hordeum vulgare*, *Urtica massaica* and *Cynanchum viminalis*”.
- **Njagi Martin Mugendi (I84/28651/2014):** “Antiobesity and Cardioprotective Effects of Aqueous and Hexane Extracts of *Momordica charantia* L. and *Solanum incanum* L. in Obese Mice”.

- **Kimuni Susan Nyawira (I84/31988/2015).** “Antipyretic, Antinociceptive and Antiinflammatory Properties of Methanolic Extracts of *Osyris lanceolata*, *Cissampelos parreira* and *Vernonia branchycalyx* in Rat Models”
- **Juma Kelvin Kisaka (I84/32315/2015):** “Effects of *Urtica dioica*, *Cucurbita pepo* and *Spinacea oleraceae* Extracts in Amelioration of Alcohol-Induced Toxicity in Rat Models”.
- **Wambani Japheth Rapando (P97/33760/2015):** “Immunomodulatory and Antibacterial Effects of Ethylacetate Leaf Extracts of *Occimum basilicum* on Vancomycin-Sensitive and Methicillin-Resistant *Staphylococcus aureus*”.
- **Mawia Amos Musyoki (I84/37009/2016):** “Development of Dwarf Local Kenyan Basmati Rice (Variety 370) Using Marker-Assisted Selection”.
- **Kiambi Joseph Mworira (I84/37011/2016):** “Antipyretic, Antinociceptive and Antiinflammatory Potential of Dichloromethane Leaf Extracts of *Eucalyptus globules* and *Senna didymobotrya* in Animal Models”.
- **Wycliffe Arika Makori (I84/37010/2016):** “Antiobesity and Antioxidant Effects of Dichloromethane Leaf Extracts of *Gnidia glauca* (Fresen) in High Fat Diet-Induced Obese Rats”.

5.2 MASTERS SUPERVISION

5.2.1 COMPLETED

18th December, 2015

- **Gitahi Stephen Maina (I56/CE/24660/2012):** “Antipyretic and Antinociceptive Properties of Dichloromethane:Methanolic Leaf and Root Bark Extracts of *Carisa edulis* (Forssk.) Vahl in Rats”.
- **Njagi Jim Muriithi (I56/1014/2008):** “Determination of Hematological Effects of Methanolic Leaf Extracts of *Vernonia lasiopus* (O. Hoffman) and Seeds Extracts of *Solanum incanum* (Linnaeus) in Mice”.
- **Marigi N. Emma (I56/21971/2012):** “Transformation of selected cassava germplasm for enhanced resistant to CBSD”.
- **Mwangi Boniface Maina (I56/CE/24661/2012):** “Evaluation of Antinociceptive and Antiinflammatory Properties of Dichloromethane: Methanolic Extracts of *Caesalpinia volkensii* and *Maytenus obscura* in Rats Models”.

15th July, 2016

- **Mawia Amos Musyoki (I56/25517/2013):** “Diversity Studies and Molecular Characterization of Kenyan Rice (*Oryza sativa* L.)

Varieties Based on Amylose Content and Gelatinization Temperature”.

- **Joseph Kiambi Mworio (I56/CE/24613/2012):** “Determination of antinociceptive activity of acetone leaf extracts of *Caesalpinia volkensii* and *Carissa spinarum* in mice models”.
- **Wambua Festus Kioko (I56/27393/2013):** “Diversity Studies and Molecular Characterization of Kenyan Rice (*Oryza sativa* L.) Based on Aroma and Kernel Elongation”.
- **Aliyu Umar (I56F/23555/2013):** “Evaluation of Anti-Aphids properties of Aqueous Ripen Fruit Sap Extract of *Solanum incanum*”.
- **Makori Wycliffe Arika (I56/20181/2012).** “Bioprospecting of Plants used Traditionally in the Management of Diabetes Mellitus”.

16th December, 2016

- **Jorum Humphrey Obel (I56/CTY/PT/24942/2013):** “Effects of Dichloromethane: Methanolic Leaf Extracts of *Carissa edulis* (forsk.) Vahl on Hematological and Serum Lipid Profiles in Rat Models”.
- **Anne W. Njoroge (I56/26837/2013):** “Determination of *in vitro* Anti-cholinesterase Activities of *Carphaela glaucescens* and *Gnidia glauca* in Stem Borer (*Chilo partellus*)”.
- **Wanyonyi Christine Nakhumicha (I56/20412/2012):** “Tissue Culture Responsiveness and *Agrobacterium*-Mediated Transformability of Selected Kenya Cassava Varieties”.
- **David Easter Syombua (I56/21974/2012):** “Optimization of Regeneration Protocol and Evaluation of *Agrobacterium* Infectivity of Selected Kenyan Cassava Genotypes”.
- **Ogola Philip Einstein (I56/20183/2012):** “Levels of Background Ionizing Radiations from Human Premises and Selected Quarries around Nairobi County”.
- **Onyango Kenneth Osano (I56/24933/2013):** “*In vivo* Toxicity of Dichloromethane and Methanol Leaf Extracts of *Prosopis juliflora*”.
- **Lagat Rose Chemutai (I56/28992/2013):** “Physicochemical Characterization and Selected Quality Trait-Based Genetic Diversity Studies on Selected Kenyan and Tanzanian Rice (*Oryza sativa* L.) Varieties”.
- **Njagi Shadrack Mwenda (I56/24935/2013):** “*In Vitro* Antiproliferative Activity of Aqueous Root Bark Extract of *Cassia abbreviate*”.

- **Felix Matheri (I56/26862/2013):** “Determination of Genetic Variability of *Passiflora edulis* (Sims) *f. flavicarpa* (Deg) in Mbeere South Sub-County”.
- **Mwangi Peter Nthiga (I56/27046/2014):** “Antipyretic and Antinociceptive Properties of *Harrisonia abyssinica* and *Landolphia buchananii* in Animal Models”.
- **Milcah Wagio Kigoni (I56/22433/2012):** “Evaluation of Molecular Interfaces to Identify Immune Responsive Epitopes in *Theileria parva* and the Tick Vector *Rhipicephalus appendiculatus*”.
- **Kamau Kimani James (I56/27066/2014):** “Antipyretic and Antiinflammatory Properties of Methanolic Extracts of *Kigelia africana* and *Acacia hockii* in Rat Models”.

4th August, 2017

- **Duncan Maina Kariuki (I56/CTY/PT/27310/2014):** *In Vivo* Safety of Dichloromethane: Methanolic Extracts of *Allium sativum* in Rat Models.
- **Gaichu Daniel Muthee (I56/CTY/PT/27105/2014):** “Antipyretic and Antiinflammatory Potential of Dichloromethane: Methanolic Leaf and Stem Bark Extracts of *Ximenia americana* in Laboratory Animals”.
- **Samson Koech Cheruiyot (I56/28505/2014):** “Analgesic, Antipyretic and Anti-inflammatory Potential of Dichloromethane Root Extract of *Clusia abyssinica* in Rats and Mice Models”.

15th December, 2017

- **Robert O. Odhiambo (I56/28877/2014):** Bioefficacy of Organic Blend Extracts of *Allium sativum* L. and *Ocimum basilicum* L. Against Maize Weevils (*Sitophilus zeamais*)”.
- **Ngai David Nyaga (I56/CE/28568/2013):** “Antioxidant Effects of Dichloromethane:Methanolic Extracts of *Pappea capensis* in Alloxan-induced Diabetic Rats”.
- **Stephen K. Mwihia (I56/CE/25292/2014):** “Antibacterial and Antioxidant Activities of Seed Extracts of *Annona squamosa* Collected from Kirinyaga County, Kenya”.
- **Muia Prominah Kavinya (I56/CE/20256/2012):** “Performance of Genexpert Test in Detecting Pulmonary Tuberculosis and Rifampicin Resistance in Patients Attending Kitui County Hospital, Kenya”.

- **Onyango Tonny Omondi (I56/CTY/PT/24940/2013):** “Effects of Maalaox Plus^R Antacid and Purecal^R Calcium Supplements on Liver and Kidney Functions Following Heavy Alcohol Intake in Rats”.

4th August, 2018

- **Ndile Michael Musila (I56/CE/24317/2013):** “*In Vivo* Toxicity of Methanolic Extracts of *Caesalpinia volkensii* (Harms) and *Vernonia lasiopus* (O. Hoffman) in Rat Models”.
- **Veronica A. Sindani (I56/28876/2014):** “*In Vivo* Antiinflammatory, Analgesic and Antipyretic Effects of Dichloromethane Stem Bark Extracts of *Acacia mellifera* (Vah) Benth”.
- **Kibiwott Scolar Jepkorir (I56/28828/2013):** “Antioxidant Activity of Dichloromethane and Methanol Blend Extracts of *Carissa edulis* and *Caesalpinia volkensii* in Alloxan-induced Diabetic Rats”.
- **Maoga Jane Bosibori (I56/28879/2014):** “*In Vitro* Antioxidant Effects of Dichloromethane:Methanolic Extracts of *Clusia abyssinica* and *Maytenus obscura*”.
- **Fridah Machani (I56/27937/2013):** “Genetic Variation Among *Sclerocary birrea* (Marula) Populations Using AFLP Markers”.

14th December, 2018

- **Ngari Loise Ngithi (I56/24137/2013):** “Phenotypic and Genotypic Diversity of *Catha edulis* (Vahl) Grown in Embu County, Kenya”.
- **Wilhelmy Marion Jebet (I56/CTY/PT/33457/2014):** “Bioefficacy of Organic Extracts of Fish Poison Bush (*Gnidia glauca*, Fresen) Against Cowpea Weevil (*Callosobruchus maculatus*, Fabricius)”
- **Sieberi Berick Moturi (I56/CE/26345/2014):** “*In Vitro* Antibacterial Activities of Dichloromethane:Methanol Extracts of *Fuerstia Africana*, *Polygala sphenoptera* and *Centella asiatica* against Selected Bacteria”.

26th July, 2019

- **Kenedy W. Wafula (I56/CE/24744/2011):** Antioxidant Activities of Dichloromethane Extracts of *Strychnos heningsii* and *Ficus sycomorus* in Pancreas of Alloxan-Induced Diabetic Mice.
- **Ochola Celestine Anyango (I56/28567/2013):** “Antibacterial Effects of Methanolic Leaf Extracts of *Acacia ataxacantha* and *Pilostigma thonningii*”.

- **Wambua Rachel Kitondo (I56/CE/25790/2014):** “*In Vitro* Antibacterial Activities of Dichloromethane: Methanolic Extracts of *Croton megalocarpus* Hutch, *Strychnos henningsii* Gilg and *Psorospermum febrifugum* Spach”

5.2.2 ONGOING

- **Makori P. Monari (I56/23456/2012):** “*Agrobacterium*-mediated Transformation of Tropical Maize for *Striga hermonthica* Resistance”.
- **Kerubo Cashline (I56/CE/24139/2013):** “Hepatoprotective Activities Of DCM: Methanolic Extracts Of *Ximenia americana* On Carbon Tetrachloride (CCl₄) - Induced Liver Damage in Mice”.
- **Audrey Chepkemoi (I56/27773/2014):** “Antiinflammatory, Antinociceptive and Antipyretic Activities of Acetone Stem Bark Extracts of *Pappea Capensis* in Animal Models”.
- **Kakuta George Musyoki (I56/CE/20543/2012):** “Determination of Reference Intervals for Selected Biochemical Parameters for Adolescents in Kilifi County, Kenya”.
- **Ayienda C. Kerubo (I56/CTY/PT/27774/2014):** Antimicrobial Activities of Dichloromethane:Methanolic Leaf and Stem Bark Extracts of *Psidium guajava* (Linn).
- **Awino Duncan (I56/CE/25502/2011):** “Development of Health Associated Reference Intervals for Commonly Requested Haematological Parameters in Adolescents Living in Kilifi County, Kenya”.
- **Gatambia Herman (I56/28371/2014):** “*In vivo* Hepatoprotective Properties of Acetone Seed and Leaf Extracts of *Solanum incanum* in Mice”.
- **Muinde Mary Nthenya (I56/CE/28569/2013):** “Antinociceptive Activity of Methanolic Stem Bark Extract of *Acacia ataxacantha* in Mice Model”.
- **Were Yvonne Nyambura (I56/22991/2012):** “Nutritional and Phytochemical Analysis of Different Dried and Fresh African Indigenous Leafy Vegetables Grown in Nairobi, Kenya”.
- **Guchu Beatrice Muthoni (I56/CE/25204/2014):** “*In Vitro* Antioxidant Activity of Methanolic Extracts of *Caesalpinia volkensii*, *Acacia hockii* and *Vernonia lasiopus*”.
- **Ileri Moses Munene (I56/CE/26169/2014):** “Analgesic and Antiinflammatory Potential of Methanolic Extracts of *Pistacia aethiopica* and *Warbugia ugandensis* in Mice Models”.

- **Wanjira Michael Mumbe (I56/CE/25172/2014):** “Phenotypic and Genetic Characterization of Selected Kenyan Groundnuts (*Arachis hypogaea*. L) Varieties”.
- **Oloo Quenter Pendo (I56/CTY/PT/28573/2013):** “Effects of Paracetamol on the Liver and Kidney Functions of Rats Following Alcohol Intake”.

6.0 CONFERENCES/SEMINARS/WORKSHOPS

- Attended 4th International Annual Scientific Conference of the Society for the Advancement of Science in Africa (SASA) at Kenyatta University on 24th -26th August, 2016 and presented a paper titled “Regeneration and RNAI-mediated down-regulation of cyanoglycoside biosynthesis in Cassava (*Manihot esculenta* Crantz)”.

7.0 RESEARCH AND PUBLICATIONS

7.1 Articles in Refereed Journals

7.1.1 Jointly Authored

2018

- Asunta Mukami, Alex Ngetich, Cecilia Mweu, Mutemi Muthangya, Richard O Oduor, **Mathew Ngugi**, Wilton Mbinda (2018). Rapid and efficient plant regeneration from shoot apical meristems of finger millet [*Eleusine coracana* (L.) Gaertn.] via direct organogenesis. *African Journal of Biotechnology*, 17(29): 898-905, 18 doi: 10.5897/AJB2018.16562

2017

- Mwangi J Mukundi, Njagi EN Mwaniki, **Ngugi M Piero**, Njagi J Murugi, Juma K Kelvin, Abdirahman A Yusuf, Mwonjoria K John, Ngetich K Alex, Agyirifo S Daniel, Gathumbi K Peter, Muchugi N Alice (2017). Potential Anti-diabetic Effects and Safety of Aqueous Extracts of *Urtica dioica* Collected from Narok County, Kenya. *Pharmaceutica Analytica Acta*, 8:5. doi: [10.4172/2153-2435.1000548](https://doi.org/10.4172/2153-2435.1000548)
- Kathryn Wanjiku Nderitu, Njagi Shadrack Mwenda, Ndegwa John Macharia, Stephen Super Barasa, and **Mathew Piero Ngugi (2017).** Antiobesity Activities of Methanolic Extracts of *Amaranthus dubius*, *Cucurbita pepo*, and *Vigna unguiculata* in Progesterone-Induced Obese Mice. *Evidence-Based Complementary and Alternative Medicine*, Article ID 4317321. <https://doi.org/10.1155/2017/4317321>

2016

- Nyamai DW, Arika W, Ogola PE, Njagi ENM, **Ngugi MP** (2016). Medicinally Important Phytochemicals: An Untapped Research Avenue. Research and Reviews: Journal of Pharmacognosy and Phytochemistry, 4(1):35-49. e-ISSN:2321-6182; p-ISSN:2347-2332
- Nyamai DW, Arika WM, Rachuonyo HO, Wambani JR and **Ngugi MP** (2016). Herbal Management of Benign Prostatic Hyperplasia. Journal of Cancer Science & Therapy, 8(5): 130-134. doi:[10.4172/1948-5956.1000404](https://doi.org/10.4172/1948-5956.1000404).
- Safari VZ, **Ngugi MP**, Orinda G, Njagi EM (2016). Anti-pyretic, Anti-inflammatory and Analgesic Activities of Aqueous Stem Extract of *Cynanchum Viminale* (L.) in Albino Mice. Medicinal and Aromatic Plants, 5(2):236. doi:[10.4172/2167-0412.1000236](https://doi.org/10.4172/2167-0412.1000236)
- Safari VZ, **Ngugi MP**, Orinda G and Njagi EM (2016). Anti-pyretic, Anti-inflammatory and Analgesic Activities of Aqueous Leaf Extract of *Urtica Dioica* (L.) in Albino Mice. Medicinal and Aromatic Plants, 5(2):237. doi:[10.4172/2167-0412.1000237](https://doi.org/10.4172/2167-0412.1000237).
- Safari VZ, Kamau JK, Nthiga PM, **Ngugi MP**, Orinda G and Njagi EM (2016). Antipyretic, Antiinflammatory and Antinociceptive Activities of Aqueous Bark Extract of *Acacia Nilotica* (L.) Delile in Albino Mice. Pain Management and Medicine, 2(2): 113. doi:[10.4172/jpmme.1000113](https://doi.org/10.4172/jpmme.1000113).
- Joan M. Njagi, Daniel N. Akunga, Martin M. Njagi, **Mathew P. Ngugi**, Eliud M.N. Njagi (2016). Heavy Metal Pollution of the Environment by Dumpsites: A Case of Kadhodeki Dumpsite. International Journal of Life Sciences and Scientific Research, 2(2):191-197. ISSN: 2455-1716.
- Thomas M Musyoka, Nyamai W Dorothy, Arika M Wycliffe, Kelvin K Juma, Mutua D Nzioka, David Maina, Stanely K Waithaka, **Mathew P. Ngugi**, George O Orinda, Geoffrey M Karau, Eliud NM Njagi (2016). In Vivo Antianaemic Effect and Safety of Aqueous Extracts of *Erythrina abyssinica* and *Zanthoxylum usambarensis* in Mice Models. Journal of Hematology & Thromboembolic Diseases, 4 (3): 242. doi:[10.4172/2329-8790.1000242](https://doi.org/10.4172/2329-8790.1000242)
- Mugweru FG, Nyamai DW, Arika MW, **Ngugi MP**, Gathumbi PK, Njagi ENM and Ngeranwa JJN (2016). Antimicrobial Activity of Aqueous Extracts of *Maytemus putterlickoides*, *Senna spectabilis* and *Olinia usambarensis* on Selected Diarrhea-Causing Bacteria. Journal of Bacteriology and Parasitology 7(2): 270. doi: [10.4172/2155-9597.1000270](https://doi.org/10.4172/2155-9597.1000270).
- Miccah S. Seth, Leta T. Bedada, Steven M. Runo, **Mathew P. Ngugi**, Revel Iyer, Jennifer A. Thomson, Emmarold E. Mneney and Richard O. Oduor (2016). Drought tolerance in transgenic tropical maize (*Zea mays* L.) by heterologous expression of Peroxiredoxin 2 gene - *XvPrx2*. African Journal of Biotechnology, 15(25):1350-1362. doi:[10.5897/AJB2016.15371](https://doi.org/10.5897/AJB2016.15371). ISSN: 1684-5315.
- Mbiri J. Wanja, Sichangi Kasili, Kisangau Patrick, Wilton Mbinda, **Ngugi M. Piero** (2016). Anti-inflammatory Properties of Methanolic Bark Extracts of *Terminalia brownii* in Wistar Albino Rats. International Journal of Current Pharmaceutical Research, 8(3):100-104. ISSN- 0975-7066.

- Njogu SM, Arika WM, Nyamai DW, **Ngugi MP**, Machocho AK, Ngeranwa JJN and Njagi ENM (2016). Hypoglycemic Effect of Aqueous and Ethyl Acetate Leaf Extract of *Maytenus putterkloides* in Alloxan Induced Diabetic Mice. *Journal of Diabetes and Metabolism*, 7(6):685. doi:[10.4172/2155-6156.1000685](https://doi.org/10.4172/2155-6156.1000685).
- Mwonjoria K. John, Umar Aliyu, Juma K. Kevin, Kahiga M. Titus, **Ngugi M. Piero**, Mburu David, Wanyonyi W. Alphonse, Githinji G. Charles, Ngeranwa N. Joseph (2016). Anti-inflammatory activity of *Craterostigma pumilum* (hochst) is associated with hyperalgesia. *International Journal of Pharmacology and Toxicology*, 4 (2): 169-173. doi: 10.14419/ijpt.v4i2.6497.
- Mbiri JW, Kasili S, Mbinda W, Kisangau PD and **Piero NM** (2016). Anti-Pyretic Properties of Methanolic Bark Extracts of *Terminalia brownii* in Wistar Rats (*Rattus novogicus*). *Journal of Pharmacognosy & Natural Products*, 2(3): 121. DOI: [10.4172/2472-0992.1000121](https://doi.org/10.4172/2472-0992.1000121).
- Mbiri WJ, Kasili S, Kisangau DP, Musila NM, **Piero NM** and Mbinda WM (2016) Antinociceptive Properties of Methanolic Bark Extracts of *Terminalia brownii* in Wistar Rats. *Journal of Pain and Relief*, 5 (5): 261. doi:[10.4172/2167-0846.1000261](https://doi.org/10.4172/2167-0846.1000261)

2015

- **Ngugi M Piero**, Murugi N Joan, Oduor O Richard, Mgotu A Jalemba, Ombori R Omwoyo and Cheruiyot R Chelule (2015). Determination of Cyanogenic Compounds Content in Transgenic Acyanogenic Kenyan Cassava (*Manihot esculenta* Crantz) Genotypes: Linking Molecular Analysis to Biochemical Analysis. *Analytical and Bioanalytical Techniques*, 6(5):264-271. doi:[10.4172/2155-9872.1000264](https://doi.org/10.4172/2155-9872.1000264)
- **Piero NM**, Murugi NJ, Okoth OR, Ombori OR, Jalemba MA and Chelule CR (2015). RNAi-Mediated Downregulation of Cyano-Glycoside Biosynthesis in Kenyan Cassava (*Manihot esculenta* Crantz) Genotypes. *Plant Biochemistry and Physiology*, 3 (3):148-153. doi:[10.4172/2329-9029.1000148](https://doi.org/10.4172/2329-9029.1000148)
- **Ngugi M Piero**, Njagi NM Eliud, Kimuni N Susan, Orinda O George, Njagi J Murugi, Maina David, Agyirifo D Sakyi, Gathumbi K Peter, Kinge W Stanley and Ngeranwa JN Joseph (2015). In Vivo Antidiabetic Activity and Safety in Rats of *Cissampelos pareira* Traditionally Used in The Management of Diabetes Mellitus In Embu County, Kenya. *Journal of Drug Metabolism and Toxicology*, 6(3):184-194. doi:[10.4172/2157-7609.1000184](https://doi.org/10.4172/2157-7609.1000184).
- **Ngugi MP**, Oduor RO, Omwoyo RO, Njagi JM, Mgotu AJ and Cheruiyot RC (2015). Regeneration of Kenyan Cassava (*Manihot esculenta* Crantz) Genotypes. *Plant Biochemistry and Physiology*, 3: 147. doi:[10.4172/2329-9029.1000147](https://doi.org/10.4172/2329-9029.1000147).
- **Ngugi M Piero**, Kimuni NS, Ngeranwa NJ, Orinda OG, Njagi MJ, Maina D, Agyirifo SD, Gathumbi K, King'e WS and Njagi Eliud EN (2015).

- Antidiabetic and Safety of *Lantana rhodesiensis* in Alloxan-induced Diabetic Rats. *Developing Drugs*, 4: 129. doi:10.4172/2329-6631.1000129.
- **Ngugi M Piero** and Njagi M Joan (2015). Cancer: A Molecular Curse? *International Journal of Current Pharmaceutical Research*, 7(3):1-3.
 - Joan Murugi Njagi, **Mathew Piero Ngugi**, Cromwell Mwiti Kibiti, Joseph Ngeranwa, Wilson Njue, Peter Gathumbi and Eliud Njagi (2015). Hypoglycemic effect of *Helichrysum odoratissimum* in Alloxan-induced Diabetic Mice. *Phytopharmacology*, 4:1-6
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7.1.3 Co-Authored with Other Researchers

7.2 Book Chapter

- Richard Oduor, **Mathew Ngugi**, Vivian Tuei, Trizah Milugo and Joel Ochieng (2015). Chapter Title: How Ready is Sub-Saharan Africa to Adopt Biotech Crops? Lessons from Kenya (Chapter Six). In: Emma Arogundade (2015): USHEPiA Crossing Boundaries: Knowledges from the Continent. Siber Ink, South Africa, ISBN: 9781928309079.

8.0 NETWORKING AND COLLABORATION WITH EXTERNAL ORGANIZATIONS

- **2018 to date:** Carrying out a joint research with Jomo Kenyatta University of Agriculture and Technology (JKUAT) and Pwani University on “Pathogen Diversity, Host-Plant Resistance and Disease Management Strategies of Finger Millet Blast in Kenya
- **2016 to date:** Carrying out a joint research with Agricultural Research Council (ARC) of South Africa on “Proteomics and Contained Laboratory Assessment of Locally Developed Transgenic Drought Tolerant Maize”

9.0 EXTERNAL AND INTERNAL GRANTS

- **2018 to date:** Awarded Ksh 1 Million (as a Principal Investigator) by Kenyatta University under Vice chancellor’s Research Grant for research on “Advancing Locally Developed Biotech Drought Tolerant Maize towards Commercialization for Enhanced Food Security”
- **2018 to date:** Jointly awarded Ksh 17,505,000 (as a Co-Principal Investigator) from National Research Fund, Kenya to undertake a Multi-Disciplinary Research on “Pathogen Diversity, Host-Plant Resistance and Disease Management Strategies of Finger Millet Blast in Kenya”
- **November, 2016:** Awarded KSh 3 Million research grant from the 5th Kenya-South Africa Joint Call for proposals awarded by the National

Research Fund (NRF) of Kenya and National Research Foundation
(NRF) of South Africa

10.0 LOCAL, REGIONAL AND INTERNATIONAL APPOINTMENTS

10.1 External Examiner in other Universities

- **2016 to date:** External Examiner, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Mombasa CBD Campus
- **March, 2016:** Dphil Thesis external Examiner, Department of Pharmacy, University of Zimbabwe.

10.2 Review of Professional Periodicals

- **2016 to date:** Editorial Board Member, *Archives of Microbiology and Immunology*

10.3 Appointment to Boards

- **January, 2017:** Appointed Chairman, Board of Management of S.A Gikuyari Day Secondary School
- **March, 2019:** Reappointed Chairman, Board of Management of S.A Gikuyari Day Secondary School
- **January, 2016:** Appointed Member, Board of Management of Gitiburi Day Secondary School
- **March, 2019:** Appointed Chairman, Board of Management of Gitiburi Day Secondary School

11.0 AWARDS/RECOGNITION

- **10th September, 2002:** Awarded Msc Scholarship by Kenyatta University
- **12th October, 2002:** Awarded a Certificate of Merit by the Biochemical Society of Kenya (BSK) for being the Best Overall Biochemistry student in Kenyatta university in 2001/2002 Academic year.
- **2nd February, 2007:** Awarded PhD Scholarship by Danish International Development Agency (DANIDA)
- **23rd December, 2012:** Awarded a Scientific Credit certificate by OMICS Publishing Group as a prestigious author in the Journal of Diabetes and Metabolism whose paper had the highest number of full text downloads and citations

12.0 COMMUNITY OUTREACH

- Chairman, Kenyatta University Biochemistry and Biotechnology Staff Welfare Association (KUBBSWA)
- July, 2014: Chief Guest, Prize Giving Day at Mt. Kinangop Girls' Secondary School
- Chief Guest in several fundraisers to raise money for schools, churches and needy students
- Routine delivery of motivation talks to high school students and youth

13.0 ACADEMIC LEADERSHIP

13.1 Development of Teaching/Academic Programmes at Kenyatta University

- **2015:** Review of Bsc (Biochemistry) and Bsc (Molecular and Cellular Biology) programmes
- **2016:** Review of Bsc (Forensic Science) programme
- **2011:** Development of Diploma (Forensic Science) and Postgraduate Diploma (Forensic Science) Courses

13.2 Developing Programmes External to Kenyatta University

- **2014:** Developed Bsc (Forensic Science) Curriculum for the University of Rwanda to be offered to Senior Police Officers at Rwanda National Police College

13.3 Leading Research Project

- **March, 2017:** Principal Investigator for a collaborative research project funded by The National Research Fund (NRF) of Kenya and National Research Foundation (NRF) of South Africa on "Proteomics and Contained Laboratory Assessment of Locally Developed Transgenic Drought Tolerant Maize"
- **August, 2017:** Principal Investigator for research on "Advancing Locally Developed Biotech Drought Tolerant Maize towards Commercialization for Enhanced Food Security" funded under Vice chancellor's Research Grant in Kenyatta University

14.0 OTHERS

14.1 Membership to Professional Bodies

- **January, 2015 to date:** Member, Kenya Chemical Society

15.0 REFEREES

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