



CURRICULUM VITAE – WILTON MWEMA MBINDA

1.0 Personal Information

Name: Wilton Mwema Mbinda
Current Address: P.O Box 195-80108
Kilifi, KENYA
Cell Phone: 0722723950
Email Address: wilton.mbinda@gmail.com or w.mbinda@pu.ac.ke

2.1 Academic Qualification

2011 - 2014: **Kenyatta University**
Doctor of Philosophy (Biotechnology)
Research title: Enhancement of Drought Tolerance in Sweetpotato by Expressing *XvAld1* and *XvSap1* Genes Isolated from *Xerophyta viscosa*.

2006 - 2010: **Kenyatta University**
Master of Science (Biotechnology)
Research title: Transcriptional profiling of sorghum midge defence responses in sorghum using cDNA-AFLP

1995 - 1999: **Kenyatta University**
Bachelor of Science (Biochemistry and Chemistry)
Second Class Honours, Upper Division

1990 - 1993: **Kwale High School**
Kenya Certificate of Secondary School Education
Mean Grade B+ (Plus)

2.2 Professional Courses

March-October, 2016:	University of Cologne/DAAD Proposal Writing for Research Grants
January 2016:	Karatina University A 3-day Training Workshop on Pedagogy
January-February 2011:	Government Training Institute, Baringo Senior Management Course
December 2010:	KGroup Consultants A 3-day Cluster Facilitators Workshop
October 2010:	Japan International Cooperation Agency Community Small and Medium Enterprise Development and Promotion for African Countries
December 2010:	Ecorys Research and Consulting (Netherlands) Cluster Development Workshop
September, 2008-May, 2009:	Swedish University of Agricultural Sciences Organism Biology
September-December, 2008:	Swedish University of Agricultural Sciences Genetic Engineering

3.0 Employment History

April 2015 to Date:	Pwani University Position: Lecturer in the Department of Biochemistry and Biotechnology
April 2015 to March, 2017:	Karatina University Position: Lecturer in the Department of Physical Sciences (Biochemistry Section)
September 2007 - April 2015:	Ministry of Industrialization & Enterprise Development Position: Chief Industrial Officer, Department of Industry
September 2009 - May 2013:	Ministry of Industrialization Position: Industrial Development Officer I, Department of Industry

4.0 Postgraduate Supervision

S/No.	Student Name	Degree/University	Research Project	Status
1.	Alex Kibet Ng'etich	PhD (Biotechnology), Jomo Kenyatta University of Agriculture and	Enhancement of drought tolerance in transgenic finger millet <i>Eleusine coracana</i> (L) Expressing Isopentenyl transferase	Data collection (60%)

		Technology		
2.	Mary Wandia	PhD (Biotechnology), Jomo Kenyatta University of Agriculture and Technology	Characterization of antimicrobial resistance genes in <i>Neisseria gonorrhoeae</i> isolates from Kenya through whole genome resequencing	Data collection 40%)
3.	Akello Sundy Otieno	PhD (Biotechnology), Jomo Kenyatta University of Agriculture and Technology	Identification of Secondary Metabolites Conferring Resistance to Pests and Diseases in Kenyan Coconut Germplasm and Mass Production of Elite Varieties	Data collection 30%)
4.	Jane Wanja Mbiri	MSc (Biotechnology), South Eastern Kenya University	Antinociceptive, Antipyretic and Anti- Inflammatory Properties of Methanolic Bark Extracts of <i>Terminalia brownii</i> in <i>Rattus norvegicus</i>	Graduated
5.	Michael Musila Ndile	MSc. (Medical Biochemistry), Kenyatta University	<i>In Vivo</i> Toxicity of Methanolic Extracts of <i>Caesalpinia volkensii</i> (Harms) and <i>Vernonia lasiopus</i> (O. Hoffman) in Rat Models	Submitted thesis for examination (95%)
6.	Michael Mumbe Wanjira	MSc (Biotechnology), Kenyatta University	Phenotypic and genetic characterization of selected Kenyan groundnut (<i>Arachis hypogaea.l</i>) varieties	Thesis writing (70%)
7.	Asunta Mukami Njeru	MSc (Biotechnology), South Eastern Kenya University	Genetic engineering of finger millet with aldose reductase gene isolated from <i>Xerophyta viscosa</i> to enhance drought tolerance	Data collection (20%)

5.0 Publications and Conferences and Grants

1. **Mbinda, W.**, Nawiri, S., Nzaro, M., Kinyagia, B., Mgtutu. A., and Oduor R (2015). Evaluation of the phosphomannose isomerase-based selection system for genetic transformation of sweetpotato. *International Journal of Life Sciences*, **9**: 46-53.
2. **Mbinda, W.**, Anami S., Mgtutu A.J., Dixelius C. and Oduor R.O. (2014). Improved drought tolerance in transgenic sweetpotato expressing *Xerophyta viscosa* *XvAld1* and *XvSap1* genes. Paper presented at the 18th The International Consortium on Applied Bioeconomy Research Conference, Nairobi, Kenya.
3. **Mbinda W.**, Anami S, Ombori O, Dixelius C, Oduor R (2016) Efficient Plant Regeneration of Selected Kenyan Sweetpotato (*Ipomoea batatas* (L.) Lam.) Cultivars through Somatic Embryogenesis. *J Tissue Sci Eng* 7: 176. doi:[10.4172/2157-7552.1000176](https://doi.org/10.4172/2157-7552.1000176)
4. Wanja, J., Kasili, S., Patrick, K., **Mbinda, W.**, and Piero, N. M. (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.
5. Mbiri W, Kasili S, **Mbinda W**, Kisangau PD, Piero NM (2016) Anti-Pyretic Properties of Methanolic Bark Extracts of *Terminalia brownii* in Wistar Rats (*Rattus novegicus*). *J Pharmacogn Nat Prod* 2: 121. doi:[10.4172/2472-0992.1000121](https://doi.org/10.4172/2472-0992.1000121)

6. Mbiri W., Sichangi K, Patrick K, Musila M, Ngugi M, and **Mbinda W.** (2016). Antinociceptive Properties of Methanolic Bark Extracts of *Terminalia brownii* in Wistar Rats. J Pain Relief 5: 261. doi:[10.4172/2167-0846.1000261](https://doi.org/10.4172/2167-0846.1000261)
7. Musila MN, Ngai DN, Mbiri JW, Njagi SM, **Mbinda WM**, Ngugi MP. (2017). Acute and Sub-Chronic Oral Toxicity Study of Methanolic Extract of *Caesalpinia volkensii* (Harms). Journal of Drug Metabolism & Toxicology 8: 222. doi:[10.4172/2157-7609.1000222](https://doi.org/10.4172/2157-7609.1000222)
8. Musila M. N., Muthoni B. G., Koech S. C., Ngugi M. P., **Mbinda W. M.** (2017). Evaluation of *In vivo* Toxicity of Methanolic Leaf Extract of *Vernonia lasiopus* (O. Hoffman). J Pharmacogn Nat Prod 3: 133. doi:[10.4172/2472-0992.1000133](https://doi.org/10.4172/2472-0992.1000133)

6.1 Research Grants

1. National Council for Science and Technology. Science, Technology and Innovation Research Grant. KSh. 700,000.00. 2011.
2. Ruforum. USD 15,000. Enhancement of drought tolerance in transgenic finger millet *Eleusine coracana* (L) Expressing *Isopentenyl transferase*, 2017
3. National Research Fund. Pathogen diversity, host-plant resistance and disease management strategies of finger millet *Magnaporthe oryzae* blast in Kenya, 2017

6.1 University Responsibilities

May, 2017 to Date:	Curriculum officer, Department of Biochemistry and Biotechnology, Pwani University
December, 2015 to April 2017:	Board Member, Postgraduate Examination Committee, School of Pure and Applied Sciences, Karatina University
August, 2015 to April 2017:	Departmental Examination Coordinator (Biochemistry Section), Department of Physical Sciences, Karatina University
August, 2015 to April 2017:	Bachelor of Science Programme Course leader, School of Pure and Applied Sciences, Karatina University

6.2 National Responsibilities

February, 2016:	Appointed a committee member to advice the National Museums of Kenya Board of Directors to advice on delinking of Institute of Primate Research from National Museums of Kenya
September, 2010:	Appointed a committee member by the National Institute of Science, Technology and Innovation to draft the Biosciences Bill. The draft Bill completed in December, 2015.

7.0 Employment Objective

- My career aspirations are to find a stimulating and challenging position which builds on my university skills and knowledge, as well as professional experience. I am an ambitious

individual who wants to learn and develop under the guidance of those who are at the top of their field and then use those skills to become an expert myself.

8.0 Personal Interests

Extracurricular: Community service

Hobbies: Traveling, watching soccer and reading journals

9.0 Referees

1. Dr. Richard Okoth Oduor
Department of Biochemistry & Biotechnology
Kenyatta University
Nairobi, KENYA
2. Prof. Christina Dixelius
Department of Plant Biology,
Swedish University of Agricultural Sciences,
Uppsala, SWEDEN
3. Dr. Mathew Piero Ngugi
Department of Biochemistry & Biotechnology
Kenyatta University
Nairobi, KENYA