CURRICULUM VITAE

Name: Date of birth: Sex: Marital status: Nationality:	Mzee Juma Amana September 2, 1970 Male Married Kenyan
National I/D no.:	10958175
Permanent address:	P.O. Box 87675 Mombasa, Kenya
Contact address:	Department of Biochemistry & Biotechnology Pwani University P.O. Box 195 Kilifi-80108, Kenya Mobile phone No. +254-723-459-949 E-mail: amana_juma@yahoo.com

Academic Qualifications:

Ph.D. in Biochemistry.

Egerton University, Njoro, Kenya. Graduation: November 27, 2009 Thesis title: "Molecular Classification of Kenyan wheat varieties".

Master of Science in Biochemistry,

Egerton University, Njoro, Kenya. Graduation: November 10, 2000 Thesis title: "Effects of Hydration-dehydration and Iodination treatments on seed vigor and viability of *Duma* and *Kwale* wheat varieties".

Bachelor of Science in Biochemistry/Chemistry, Egerton University, Njoro, Kenya. Graduation: November 24, 1995 Honors: Second Class (Upper Division) Cumulative Grade: 66.46%

Professional Experiences:

Dec 2015 – To date *Senior Lecturer* Biochemistry & Biotechnology Department, Pwani University

Sept 2015 – Nov 2015*Lecturer*

Biochemistry & Biotechnology Department, Pwani University

2010 – July 2015	<i>Lecturer</i> Chemistry/Biochemistry Department, Pwani University, Kilifi, Kenya
2005 - 2010	<i>Lecturer</i> Biochemistry & Molecular Biology Department, Egerton University, Njoro, Kenya.
2001 - 2005	Assistant Lecturer Biochemistry & Molecular Biology Department, Egerton University, Njoro, Kenya.
1996 – 2001	<i>Graduate Teaching Assistant</i> Biochemistry & Molecular Biology Department, Egerton University, Njoro, Kenya. Supervising Biochemistry practicals and grading students.
1995 – 1996	<i>Analyst</i> Mac's Pharmaceutical Limited, Nairobi, Kenya. Qualitative and Quantitative analysis of the pharmaceutical products and reporting to the Quality Control Manager.

Administrative Responsibilities:

- Acting Chair Department of Biochemistry & Biotechnology 14th 23rd December, 2016
- Acting Chair Department of Biochemistry & Biotechnology 7th 11th December, 2015
- Acting Chair Department of Chemistry and Biochemistry 22th 24th April, 2015
- Member Appeals committee on promotion for the teaching and non-teaching members of staff
- Acting Chair Department of Chemistry and Biochemistry 25th 27th February, 2014
- Acting Chair Department of Chemistry and Biochemistry 13th 19th August, 2013
- Departmental Examination Coordinator
- Member Departmental Curriculum Committee
- Member Departmental Graduate Studies Committee
- In-charge of calendar and brochures preparation in the Department of Biochemistry & Molecular Biology, Egerton University.
- Academic Adviser for Second Year Biochemistry students, Egerton University.

Research Activities:

Research project entitled "Sustainable utilization of agro-industrial wastes through integration of bio-energy and mushroom production" in collaboration with University of Dar es Salaam (Tanzania) and Addis Ababa University (Ethiopia). BioInnovate Program (Bioresource innovation network for Eastern Africa Development). Role: Researcher (2011 - 2015)

Antihypertensive, antimicrobial and antioxidant properties of bioactive peptides from the seed-pulp and leaves of *Zizyphus mauritiana* (2016 – Date)

Proposal:

Submitted to NCST "Promotion of mushroom production for human health livelihood improvements for local community and waste water management systems in Kilifi County at the Kenyan Coast" on 29th August 2012.

Activities:

- Organized Stakeholders curriculum meeting for SPAS held on 13th and 14th December 2016 at Pwani University.
- Participated in Bio-Innovate Business Development and Accelerator Training Program held on $26^{th} 27^{th}$ March 2015 and $7^{th} 8^{th}$ May 2015 in ILRI, Nairobi
- Successfully completed a training in Bioethics and Good Clinical Practice (Lite) held on 1st 3rd October, 2014 in Mombasa, Kenya.
- Participated in Bioinnovate Scientific Conference. "Harnessing Bioresource innovations for Socio-economic Transformation of Eastern Africa". Held at UNECA, Addis Ababa from 25th – 27th February, 2013.
- Attended the launching of Pan-African Mosquito Control Association Kenya Chapter held at KEMRI Training centre, Nairobi on 3rd October 2012
- Participated in Bioinnovate Project 4: Inception workshop at Kilifi Bay Beach Resort held from 18th to 19th march 2011.
- Attended Digital Resources Training workshop on "Promoting Usage of Electronic journals (AGORA, OARE, HINARI and TEEAL" organized by Pwani university College in collaboration with Information Trainnig and Outreach Centre for Africa (ITOCA)" held from 18th to 19th October 2010 at Pwani University College.
- Attended a proposal writing workshop on "Project Proposal Development and Communication Skills Enhancement Training" held from 10th to 12th November 2009 at Crop Management Research Training (CMRT), Njoro.
- Participated in University Academic Advising training held on 18th February 2009 at Egerton University.
- Presiding officer during the October 2008 SUEU elections
- Participated in International Conference on Bioethics Theme: "Bioethical Perspective and Practices in Research, Medicine, Life Sciences and related Technologies in Sub-Saharan Africa" held on 12th to 14th August 2008 at Egerton University
- Patron, Egerton Muslim Students Association- August, 2008 May, 2010
- Secretary, Biochemistry Staff Welfare Association 2003 to May, 2010.
- Participated in the German Academic Exchange Service (DAAD) SEMINAR on "Skills in Research" held from 23rd to 25th January 2002 at Egerton University, Njoro.

- Attended the 13th Annual Ramadhan Convention at Islamic University in Uganda held on 14th 17th December 2000. Theme was "Islam the Solution to Humanity and Enchatology".
- Member, Egerton Muslim Students Union 1990-1995
- Member, Egerton Swimming Club 1990-1995
- Treasurer, Egerton Muslim Students Union 1992-1993

Reviewed ERC Proposals:

- Enhanced Removal Of Residual Oil And Microbes From Petroleum Refineries Industry Effluent Using Chitosan Coated Silver Nanoparticles
- Direct Electrochemical Cyanation of cyclic amines using potassium hexacyanoferrate as a source of cyanide and sunlight as a source of energy
- Assessment of borehole and well water quality in Waa location, Kwale County, Kenya
- Anodic oxidation of azo dyes using Boron doped Diamond electrodes and Silver Nanoparticles
- Assessment of the impact of the resource use conflicts on Community Livelihoods within the Tana Delta, Tana River County in Kenya

Training Modules:	- HNS 104: Medical Biochemistry I
	- HNS 109: Medical Biochemistry II

Student supervision:

- Sustainable utilization of agro-industrial wastes through integration of bio-energy and mushroom production (PhD Student)
- Nutritional analysis of mushroom and baobab fruit (Undergraduate)
- Antimicrobial effect of bioactive peptides from baobab and Jujube plants (Undergraduate)

Scholarships:	 DAAD Scholarship for PhD – 2004 Egerton University Scholarship for MSc – 1997
Interests:	Teaching Biochemistry and carrying out research in the field of mushroom and wheat Biochemistry
Hobbies:	Reading, travelling and cycling. <i>Publications</i>

Mutemi Muthangya, Anthony M. Mshandete, Mzee J. Amana, Suhaila O. Hashim and Amelia K. Kivaisi (2014). Nutritional and antioxidant analysis of *Pleurotus* HK 37 grown on *Agave sisalana* saline solid waste. *International Journal of Research in Biochemistry and Biophysics*. 4(2): 5-12.

Muthangya, M., Mshandete, A. M., Hashim, S. O., Amana, M. J. and Kivaisi, A. K. (2013). Evaluation of Enzymatic Activity during vegetative growth and fruiting of *Pleurotus* HK 37 on *Agave sisalana* saline solid waste. Journal of Chemical, Biological and Physical Science. 4(1): 247 – 258.

Muthangya, M., Hashim, S. O., Amana, J. M., Mshandete, M. J. and Kivaisi, A. K. (2013). Optimisation of *Pleurotus* Mushroom cultivation on saline solid waste. *World Applied Sciences Journal*. 23(9): 1146 – 1150.

Muthangya, M., Hashim, S. O., Amana, J. M., Mshandete, M. J. and Kivaisi, A. K. (2013). Auditing and Characterisation of sisal processing waste: A bioresource for value addition. APRN Journal of Agricultural and Biological Science. 8(7): 518 – 524.

Amana, M. J., Bhattacharjee, M. and Wanjama, J. K. (2003). Effects of Hydrationdehydration and Iodination on seed-borne fungi of *Duma* wheat variety. *African Journal of Science and Technology*. 4(1): 62-66.

Amana, M. J., Bhattacharjee, M. and Wanjama, J. K. (2005). Effects of Iodination on Membrane Integrity of drought resistant *Duma* and Non-drought resistant *Kwale* Kenyan Wheat Varieties. *Discovery and Innovation*. 17 (3/4): 173-179.

Amana, M. J., Bhattacharjee, M. and D. M. Mburu. Molecular composition of the high molecular weight glutenin subunit of Kenyan wheat varieties. (Submitted)

Referees:

Dr. J. O. Maina Senior Lecturer Dept. of Medical Biochemistry School of Medicine Moi University (MTRH) Eldoret, Kenya.

Prof. Mridula Bhattacharjee Retired Professor mridulabhattacharjee@yahoo.co.uk India

Prof. Ali Salim Associate Professor, Mathematics P.O. Box 536 Egerton University <u>Njoro, Kenya</u>

<u>Dr. Amana Mzee Juma</u>

December 10, 2015