

ACADEMIC STAFF PROFESSIONAL PROFILE FORM



1. Personal Data

Name: Juddy Mwaura
Title/Qualifications: Dr. (PhD)
Department/Unit/Section: Chemistry
Contact Address: P.O Box 16778-80100
Position: Lecturer
Area of Specialization: Biological Chemistry
Research Interests:
<ul style="list-style-type: none"> • Molecular basis of glutamate transport in the mammalian central nervous system (CNS). • The link between glutamate transport in the CNS and neurological/ neuropsychiatric disorders.

2. Conference Presentations

S/No	Presenter	Title of Paper presented	City/Country	Date of Conference
1	Juddy Mwaura	Neuropsychiatric Disorders: <i>Myths vs. Facts.</i>	Cortland, New York, USA	April 4 th -5 th 2014
2	Juddy Mwaura	Is asp-454 necessary for Na ⁺ and K ⁺ binding in the glutamate transporter EAAC1?	Philadelphia, Pennsylvania, USA	February 2 nd -6 th , 2013
3	Juddy Mwaura	The involvement of Asp 454 in potassium counter-transport and relocation of the empty neuronal glutamate transporter EAAC1.	San Diego, California, USA	March 25 th -29 th , 2012
4	Juddy Mwaura	Neurological And Mental Disorders: <i>A Current Threat to Sustainable Development.</i>	Oneonta, New York, USA	March 25 th -26 th , 2011
5	Juddy Mwaura	The role of Asp 454 in the K ⁺ counter-transport branch of Excitatory Amino Acid Carrier 1's transport cycle	Biddeford, Maine, USA	June 19 th – 24 th , 2011
6	Juddy Mwaura	Functional studies of glutamate transporter Excitatory Amino Acid Carrier 1(EAAC1)	Potsdam, New York, USA	June 2 nd – 5 th , 2010

3. Funded projects

S/ No	Researcher	Year	Title	Granting Body	Funding (US\$)
1	Juddy Mwaura	2008-2014	Functional characterization of the highly conserved aspartate-454 in the neuronal glutamate transporter excitatory amino acid carrier 1 (EAAC1)	National Institutes of Health (NIH) - USA	

4. Publications

S/No.	Author	Year	Title	Journal	ISBN/ISSN Reference No.
1	Muse, O., Zengeya, T., Mwaura, J. , Hnedzko, D., McGee, D. W., Grewer, C. T., and Rozners, E.	2013	Sequence Selective Recognition of Double-Stranded RNA at Physiologically Relevant Conditions Using PNA-Peptide Conjugates	ACS Chemical Biology	Vol. 8, Issue 8, pg 1683-1686
2	Mwaura, J. ; Tao, Z.; James, H.; Albers, T.; Schwartz, A.; Grewer, C.	2012	Protonation State of a Conserved Acidic Amino Acid Involved in Na ⁺ Binding to the Glutamate Transporter EAAC1	ACS Chemical Neuroscience	Vol. 3, Issue 12, pg 1073-1083
3	Grewer, C.; Zhang, Z.; Mwaura, J. ; Albers, T.; Schwartz, A.; Gameiro, A.	2012	Charge Compensation Mechanism of a Na ⁺ -coupled, Secondary Active	The Journal of Biological Chemistry (JBC)	Vol. 287, Num 32, pg 26921 - 31

			Glutamate Transporter		
4	Tao, Z.; Rosental, N.; Kanner, B. I.; Gameiro, A.; Mwaura, J. ; Grewer, C.	2010	Mechanism of cation binding to the glutamate transporter EAAC1 probed with mutation of the conserved amino acid residue Thr101.	The Journal of Biological Chemistry (JBC)	Vol. 285, Num 23, pg 17725 - 33

5. Affiliation to Professional Bodies

S/No	Name of professional body
1	American Chemical Society (ACS)
2	Biophysical Society

6. Administrative positions held to date

- Coordinator School of Public Health - Mombasa Campus
- Acting Coordinator School of Environmental Studies - Mombasa Campus