



**Julius Ndirangu Mugweru**

	<b>Certificates</b>	<b>Institution</b>
<b>2014-2017</b>	PhD in Molecular Biology and Biochemistry	Guangzhou Institutes of Biomedicine & Health, Chinese Academy of Sciences
<b>2009-2013</b>	Master of Science in Immunology	Jomo Kenyatta University of Agriculture & Technology-Kenya
<b>January-April 2013</b>	Certificate in Monitoring & Evaluation	Kenya Institute of Management-Kenya
<b>2011-2012</b>	Diploma in Project Management	Kenya Institute of Management-Kenya
<b>2004-2008</b>	Bachelor of Science in Microbiology	Jomo Kenyatta University of Agriculture & Technology-Kenya
<b>1998-2001</b>	Kenya Certificate of Secondary Education	Kiru Mixed Secondary School
<b>1991-1997</b>	Kenya Certificate of Primary Education	Kiriani Primary School

### Research Experience & Publications

1. **Mugweru, J.**, Liu J., Makafe, G., Wang, B., Chiwala, G., Wang, C., Li, X., Tan, Y., Wai W. Y., Tan, S., Zhang, T., (2018). Mutation *ethAW21R* confers co-resistance to Protonamide and Ethionamide in both *M. bovis* BCG and *M. tuberculosis* H37Rv. **Manuscript submitted**
2. **Mugweru J**, Makafe G, Cao Y, Zhang Y, Wang B, Huang S, Njire M, Chhotaray C, Tan Y, Li X, Liu J, Tan S, Deng J and Zhang T (2017). A Cassette Containing Thiotrepton, Gentamicin Resistance Genes, and *dif* sequences Is Effective in Construction of Recombinant Mycobacteria. *Front. Microbiol.* 8:468. doi: 10.3389/fmicb.2017.00468
3. Njire, Moses, Na Wang, Bangxing Wang, Yaoju Tan, Xingshan Cai, Yanwen Liu, **Julius Mugweru** et al. (2017). Pyrazinoic Acid Inhibits a Bifunctional Enzyme in *Mycobacterium tuberculosis*. *Antimicrobial Agents and Chemotherapy*: AAC-00070
4. Islam, M. M., Hameed, H. A., **Mugweru, J.**, Chhotaray, C., Wang, C., Tan, Y.& Yew, W. W. (2016). Drug resistance mechanisms and novel drug targets for tuberculosis therapy. *Journal of Genetics and Genomics*.
5. Makafe, G. G., Cao, Y., Tan, Y., **Julius, M.**, Liu, Z., Wang, C. & Pang, W. (2016). Oxazolidinone Resistance in *Mycobacterium tuberculosis*: What is the Role of Cys154Arg Mutation in the Ribosomal Protein L3? *Antimicrobial Agents and Chemotherapy*, AAC-00152.
6. Njire, M., Tan, Y., **Mugweru, J.**, Wang, C., Guo, J., Yew, W., & Zhang, T. (2016). Pyrazinamide resistance in *Mycobacterium tuberculosis*: Review and update. *Advances in medical sciences*, 61(1), 63-71.
7. Tan, S., Rao, Y., Guo, J., Tan, Y., Cai, X., Kuang, H., Li, Y., Liu, W., **Mugweru, J.**, Wang, B. and Cao, Y., (2016). The influence of pyrazinamide monoresistance on treatment outcomes in tuberculosis patients from Southern China. *Journal of Tuberculosis Research*, 4(01), p.9.
8. Gechemba, O. R., Budambula, N. L., Makonde, H. M., **Julius, M.**, & Matiru, V. N. (2015). Potentially beneficial rhizobacteria associated with banana plants in Juja, Kenya. *Journal of Biodiversity and Environmental Sciences*, 7(2), 181-188.
9. Liu, T., Wang, B., Guo, J., Zhou, Y., **Julius, M.**, Njire, M. & Xu, Y. (2015). Role of folP1 and folP2 genes in the action of sulfamethoxazole and trimethoprim against mycobacteria. *J Microbiol Biotechnol*, 25, 1559-1567.
10. Ouma, S. O., **Mugweru, J.** L., Ngamau, C. N., & Matiru, V. N. (2015). Evaluation of nitrogen fixation ability of endophytic bacteria in Kenyan bananas (*Musa* Spp.) using biochemical and molecular techniques
11. **Julius, M.**, Rebecca, W., Francis, K., Viviene, M., & Muregi, F. W. (2013). Cytokine levels associated with experimental malaria pathology during *Plasmodium berghei* ANKA infection in a mouse model. *Journal of Clinical Immunology and Immunopathology Research*, 5(1), 1-8.

<b>Lecturer</b> <b>January 2018</b>	<b>University of Embu Department of Biological Sciences.</b>
<b>Part-time lecturer</b> <b>September 2017</b>	<b>Jomo Kenyatta University of Agriculture &amp; Technology, School of Biological Sciences.</b>
<b>Research Fellow</b> <b>September - October 2012</b> <b>&amp;</b> <b>October - December 2013</b>	<b>Okayama University Institute of Plant Sciences and Resources, Japan;</b> I worked on <b>genotyping</b> for the <b>stay green gene</b> on the Takakibi and NOG sorghum strains and obtained a <b>Qualitative Trait Loci(QTL)</b> on Chromosome 7.
<b>Part-time Assistant Lecturer</b> <b>September - December 2013</b>	<b>1) Jomo Kenyatta University of Agriculture &amp; Technology-Kenya</b> <b>2) Technical University of Kenya</b>

#### Patent

1. 张天, **Mugweru Julius**, 刘燕 A Cassette Containing Thiostrepton, Gentamicin Resistance Genes and *dif* sequences for Construction of Recombinant Mycobacteria (2016). Patent application number : 201610902985.6. ( **second inventor** )

#### Ongoing projects

1. Construction of Recombinant Drug-Resistant *Mycobacterium bovis* BCG for treatment of Multi-drug resistant tuberculosis (构建用于治疗多重耐药结核分支杆菌的重组耐药 BCG)-To be terminated, late 2020.

#### Awards

1. **2017: GIBH 优秀学生奖学金二等奖**
2. **2017:来华优秀留学生**
3. **2014:UCAS 留学生奖学金()** (三年)
4. **2012–2013: Research fellow:** Institute of Plant Science and Resources-Okayama University, Japan.
5. **2011:** One year fellowship support by the World Federation of Scientists (WFS)
6. **2010:** Higher education loans board tuition scholarship.