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 Masinde Muliro University of Science and Technology  
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<b>BIODATA</b>	<ul style="list-style-type: none"> <li>▪ Nationality: Kenyan</li> <li>▪ Gender: Male</li> </ul>
<b>CURRENT POSITION</b>	
June 2021 to date	Part-time Lecturer at Kaimosi Friends University College
Oct 2020 to date	<b>Courses taught</b> <ul style="list-style-type: none"> <li>• Technical Writing and Reporting</li> <li>• Biological Techniques</li> </ul> Part-time Lecturer at Masinde Muliro University of Science and Technology <b>Courses taught</b> <ul style="list-style-type: none"> <li>• Biosafety and Bioethics</li> <li>• Population genetics</li> <li>• Genetic engineering</li> </ul>
<b>Academic writing experience</b>	
2020-to date	<b>Peerwith</b> <a href="https://peerwith.expert/ferdinandlubobi24cdb35">https://peerwith.expert/ferdinandlubobi24cdb35</a> Editing is one of my specialties, and I can handle a wide range of projects, including grant proposals and manuscripts.  I am a dedicated editor with many years of experience in research. I have edited and proofread for countless authors around the globe. My field of expertise includes the publication of manuscripts, academic theses. My clients have ranged from scientists to health care and from business & agricultural professionals to technical write-ups. I have the skills and ability to review technical manuscripts, edit, and significantly improve any piece of writing to meet the demanding professional standards.  As an excellent communicator, I answer enquiries swiftly and concisely, and I work closely with clients to meet their unique and rigorous requirements. As needed, I ask the right questions and am always open to suggestions. Leave your work to a professional editor with years of experience, and you won't regret it.
<b>EDUCATION</b>	
2016-2020	<ul style="list-style-type: none"> <li>▪ <b>Ph.D. in Crop Biotechnology</b>, Anhui Agricultural University, China.  <b>Dissertation Title: Establishment of Composite Plants and UV-B Elicitation of Flavour Metabolites in Tea Plant</b></li> </ul>

2009 -2011	<ul style="list-style-type: none"> <li>▪ <b>Master of Science in Biotechnology</b>, Periyar University, India.</li> <li>▪ First Class.</li> </ul>
2006-2009	<ul style="list-style-type: none"> <li>▪ <b>Bachelor of Science in Biotechnology</b>, Periyar University, India.</li> <li>▪ First Class.</li> </ul>
<b>SHORT COURSE TRAINING</b>	
June 12th 2021-ongoing	<b>Specialized short course training</b> -University of Cape Town, South Africa <ul style="list-style-type: none"> <li>▪ <b>Introduction to bioinformatics</b></li> </ul>
<b>RESEARCH EXPERIENCE</b>	
Sept 2015- 2020	<i>PhD Student</i> , State Key Lab of Tea Biochemistry and Biotechnology of Anhui Agricultural University. <b>Research interest:</b> <ul style="list-style-type: none"> <li>▪ Domestication of orphan crops through precision genome editing</li> <li>▪ Interactive effects of climate change factors on plant specialized metabolites, under regulatory gene network, including terpenoid volatile production.</li> <li>▪ Abiotic stress responses in plants</li> <li>▪ Genome editing for climate smart crops</li> </ul>
<b>TEACHING EXPERIENCE</b>	
July 2013-Aug 2015	<i>Part time Lecturer</i> , Masinde Muliro University of Science and Technology (MMUST), Kenya: Department of Sugar Technology, Bukura Study Centre. <b>Courses taught:</b> Introduction to Molecular Biology, Fundamentals of Cell Biology, Introduction to Biotechnology, Plant Taxonomy, Tissue, Cell and Organ Culture, Ethics and Risks in Biotechnology, Crop Improvement and Biotechnology, Microbial Genetics, Crop Physiology, Plant Ecology, Plant Breeding.
<b>ACADEMIC ACTIVITIES</b>	
24 <sup>th</sup> Feb 2021	Organized and coordinated a virtual guest lecture on Genome Editing for climate smart crops for agriculture and biotechnology students at MMUST- Lecture delivered by Professor Yunde Zhao, from the department of Cell and Developmental Biology at the University of California San Diego (UCSD) in the USA. <a href="http://mmust.ac.ke/mmust/index.php/news-media/news-and-events/484-mmust-globalizes-students-knowledge-in-genome-editing-through-rare-virtual-lecture">http://mmust.ac.ke/mmust/index.php/news-media/news-and-events/484-mmust-globalizes-students-knowledge-in-genome-editing-through-rare-virtual-lecture</a>
<b>PROFESSIONAL EXPERIENCE</b>	
July 2013- Aug 2015	<i>Programme Manager</i> , Environmental Resources Management Centre for Sustainable Management (ERMCSM).
Jan 2013-June 2013	<i>Intern Biotechnologist</i> , Kenya Agricultural & Livestock Research Organization (KALRO) Biotechnology Centre.
Sep 2012-Dec 2012	<i>Volunteer</i> , Kenya Agricultural & Livestock Research Organization (KALRO) Biotechnology Centre.
<b>CONFERENCES, SEMINARS AND PRESENTATIONS</b>	
March 25, 2021	<ul style="list-style-type: none"> <li>▪ Actively participated in the <b>Innovative Tools in Crop Breeding</b> Webinar Broadcasted from ISAAA.</li> </ul>
Nov 2020	<ul style="list-style-type: none"> <li>▪ Participated in the <b>Genome Editing Workshop</b> during the <b>9th Annual Biosafety Conference</b>.</li> </ul>
Oct 2018	<ul style="list-style-type: none"> <li>▪ Seminar on “Plant terpene secondary metabolites: biosynthesis and function” by Professor Chen Feng (University of Tennessee) at Anhui</li> </ul>

	Agricultural University.
Oct 2018	<ul style="list-style-type: none"> <li>▪ Poster presentation: “Influence of media supplements on inhibition of oxidative browning and bacterial endophytes of <i>Camellia sinensis</i> var. <i>sinensis</i>” in the International Congress on Cocoa, Coffee and Tea Asia 2018 on 17th – 19th October, 2018.</li> </ul>
April 2017	<ul style="list-style-type: none"> <li>▪ Science Academies’ seminar on “Biological Sciences: Research Prospects and Applications” at Anhui Agricultural University.</li> </ul>
Nov 2017	<ul style="list-style-type: none"> <li>▪ Training on Standard Operating Procedures (SOPs) for Confined Field Trials of regulated, GE Plants at Kiboko.</li> </ul>
Feb 2010	<ul style="list-style-type: none"> <li>▪ Seminar on “Recent trends in molecular biotechniques” at AVS College, India.</li> </ul>
Jan 2010	<ul style="list-style-type: none"> <li>▪ Workshop on RAPD and RFLP at Medox Biotech India Pvt Ltd, Chennai India.</li> </ul>
Jan 2010	<ul style="list-style-type: none"> <li>▪ Training in Phytochemistry at Bogar Herbal Research Centre, Chennai India.</li> </ul>

## PUBLICATIONS

### INVITED BOOK CHAPTER

1. **Lubobi Ferdinand Shamala**, and Shu Wei (2020). An Improved In-Vitro Protocol for *Agrobacterium rhizogenes*-Mediated Transformation of Recalcitrant Plants for Root Biology Studies: A Case Study of Tea Plants (*Camellia sinensis* var. *sinensis*) under book entitled Hairy Root Cultures (HRCs) Based Applications, Rhizosphere Biology Springer Nature Singapore, [https://doi.org/10.1007/978-981-15-4055-4\\_12](https://doi.org/10.1007/978-981-15-4055-4_12).

### PEER-REVIEWED ARTICLES WITH PRIMARY AUTHORSHIP

2. **Lubobi Ferdinand Shamala**, Han-Chen Zhou, Xiao-Han Zhuo, Shu Wei. , (2020) UV-B Induces Distinct Transcriptional Re-programing in UVR8-Signal Transduction, Flavonoid, and Terpenoids Pathways in *Camellia sinensis*. *Frontiers in Plant Science*. 11:234. doi: 10.3389/fpls.2020.00234
3. Han-Chen Zhou<sup>1,2#</sup>, **Lubobi Ferdinand Shamala**<sup>1#</sup>, Shu Wei (2020) Analysis of Terpene Synthase Family Genes in *Camellia sinensis* with an Emphasis on Abiotic Stress Conditions. *Scientific Reports*. 1–13. doi:10.1038/s41598-020-57805-1.
4. Karthikeyan Alagarsamy#, **Lubobi Ferdinand Shamala**#, and Shu Wei (2018) Protocol: high-efficiency in-planta *Agrobacterium*-mediated transgenic hairy root induction of *Camellia sinensis* var. *sinensis*. *Plant Methods* 14:17.
5. **Lubobi Ferdinand Shamala**, Matunda C, Kumar V, Omboki B (2016) Isolation of Bioactive Secondary Metabolites from Seaweeds *Amphiroa anceps* against Chicken Meat Associated Pathogens. *J Antimicrob* 2:113. doi:10.4172/2472-1212.1000113

### PEER-REVIEWED ARTICLES WITH CO-AUTHORSHIP

6. Karthikeyan Alagarsamy, **Lubobi Ferdinand Shamala**, Shu Wei (2018) Influence of media

supplements on inhibition of oxidative browning and bacterial endophytes of *Camellia sinensis* var. *sinensis*. 3 Biotech. 8:356.

7. Rana MM, Abdullah M, **Lubobi Ferdinand Shamala**, Wei S. Wild-type *Agrobacterium rhizogenes*-mediated gene transfer in plants: *Agrobacterium* virulence and selection of Transformants. J Plant Sci Phytopathol. 2017; 1: 044-051. DOI: 10.29328/journal.jpssp.1001005
8. Godfrey Omare Mauti, **Lubobi Ferdinand Shamala**, Eliakim Mbaka Mauti, Geoffrey Arasa Ouno (2013). Screening of Bioactive Secondary Metabolites from Sea Sponge-Associated Bacteria Against Urinary Tract Pathogens. HURIA Journal of the Open University of Tanzania. Volume 15 June 2013 ISSN 0856 6739

#### **PATENT**

**2020** Generation of tea composite plant. (20171079329705)

**AWARDS** Chinese Government Scholarship

#### **PROFESSIONAL MEMBERSHIP**

#### **LANGUAGE PROFICIENCY**

	<b>READ</b>	<b>WRITE</b>	<b>SPEAK</b>
<i>English</i>	Excellent	Excellent	Excellent
<i>Swahili</i>	Excellent	Excellent	Excellent
<i>Mandarin/Chinese</i>	-	-	Good

#### **COMPUTER SKILLS**

- Ms Word
- Ms Excel
- Ms Access
- PowerPoint
- Internet

#### **SOFTWARE**

- Primer Premier 5
- Genome workbench
- DNA MAN.8
- SPSS
- MEGA.7

#### **LAB/TECHNICAL SKILLS**

- Manipulation of DNA
- Molecular (gene) cloning
- Use of micropipette
- Molecular cloning
- Use of restriction enzymes
- Use of PCR (Polymerase Chain Reaction) machines
- Replica plating
- Growth of competent cells
- Isolate and analyze DNA, RNA and protein.
- Transcriptomic data analysis

#### **SKILLS AND COMPETENCIES:**

- I can generate, transmit and enhance new knowledge in science, technology and innovation through quality teaching and research.
- I can effectively create and circulate knowledge through effective

	<p>teaching, research and publication in top tier journals.</p> <ul style="list-style-type: none"> <li>▪ I can intellectually challenge students through interactions and academic counselling in biotechnology and related disciplines.</li> <li>▪ I can participate in institutional extracurricular activities such as athletics and science-based competitions.</li> <li>▪ I can learn specific, practical techniques and apply this knowledge to solve technical problems.</li> <li>▪ Have developed excellent hand-eye coordination, to use specialized equipment with accuracy.</li> <li>▪ I can maintain and calibrate specialized equipment.</li> <li>▪ I have developed multi-tasking skills.</li> <li>▪ I have excellent communication skills for working effectively with colleagues from all parts of the organization and explain sophisticated techniques to interested parties.</li> <li>▪ I am excellent at writing technical reports.</li> </ul>
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### **REFEREES**

<p><b>Prof. Wei Shu</b>  <b>PhD Supervisor,</b>  State Key Lab of Tea Biochemistry  and Biotechnology, Anhui  Agricultural University  Hefei 230036, China  +8613721026499  <a href="mailto:chsh1965@163.com">chsh1965@163.com</a></p>	<p><b>Prof. Dr. Philip Wandahwa;</b>  Masinde Muliro University of  Science and Technology;  School of Agriculture,  Veterinary Sciences and  Technology;  Department of Agriculture and  Land use Management;  P.O. Box 190-50100 Kakamega  Mobile Tel: +254727366040  <a href="mailto:wandahwa2002@yahoo.com">wandahwa2002@yahoo.com</a></p>	<p><b>Dr. Felix Mmboyi</b>  <b>Director</b>  Environmental resources  Management Centre for  Sustainable Development  P.O.BOX 46060, 00100  NAIROBI, KENYA  +254726897102  <a href="mailto:director@cerdsconsult.com">director@cerdsconsult.com</a></p>
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