

## CURRICULUM VITAE

### PERSONAL DETAILS

Full Name Dr. Sarah A. S. Wandili  
Nationality Kenyan  
Contact P.O. BOX 972-60200, Meru, Kenya  
Email: [swandili@must.ac.ke](mailto:swandili@must.ac.ke) or awuor919@gmail.com  
Mobile: 0722944876

**CURRENT RESPONSIBILITY :** Teaching, Research, supervision and examination of both undergraduate and postgraduate students

### EDUCATION AND PROFESSIONAL QUALIFICATIONS

2014 PhD degree in Cell and Molecular Biology, from Maseno University.

**Thesis titled:** “Prevalence, Genetic diversity and Antimicrobial susceptibility pattern of clinical *Salmonella* isolates from Kapsabet and Kisumu District hospitals in Kenya”

2009 MSc degree in Cell and Molecular Biology, from Maseno University.

**Thesis titled:”** Phenotypic and Genotypic characterization of *Salmonella* isolated from *Oreochromis niloticus* along L. Victoria beaches in Western Kenya”

1993 B.Ed (Upper Second Class Honours) degree, in Botany and Zoology from Kenyatta University

1988 K.A.C.E (A-level) from Ngiya Girls’ High School

1986 K.C.E(O-level) from Ngiya Girls’ High School

### RESEARCH GRANTS/COLLABORATIONS

2019 -MUST 6<sup>th</sup> Competitive Call, worth KSh 500.000- Lead scientist

2019 -NRF 1<sup>st</sup> Call, Multi disciplinary research proposal, Collaboration between Kebs, UoN and SEKU& MUST, worth 16M  
Co lead scientist

2018 -Newton Institutional Link grant 2017 collaboration between MUST and Aston University UK, worth 11Million- Co- lead scientist

2015 -MUST 2<sup>nd</sup> Competitive Call, worth Ksh 400,000- Lead scientist

2011 -NACOSTI 2<sup>nd</sup> Competitive PhD Call, worth 1.2 Million- Lead scientist

## COLLABORATIVE RESEARCH

2019 on going	<b>Food Safety and Forensics:</b> Development and use of proteomics and DNA-based technologies for the detection of adulterated and counterfeited meat and meat products in Kenya” project
On going 2018 to 2019	Paradigm shift in faecal sludge management in Kenya for environmental management and food security
2019	Participated in development of: Transfer of IHE Delft MSc in Sanitation Management and related Diplomas and short courses
2018	Biochar Project – supervisory and administrative role
2006 to date	Actively involved in research in Molecular Microbiology with emphasis on environmental bacteria and other enteric microbes focusing on <i>Salmonella</i> prevalence, diversity and antimicrobial susceptibility patterns

## WORK EXPERIENCE

2015- Jan, 2019	Lecturer and Chairperson of Department of Biological Sciences, MUST
2013- 2014	Assistant lecturer, Department of Biological Sciences, MUST
2010- 2013	Part time lecturer in various Universities
1993- Sept 2005	Teachers’ Service Commission:Progressed from Graduate teacher I to Senior graduate teacher and Head of Science Department, until September 2005 when i proceeded for study leave to pursue masters and PhD degrees

## OTHER WORK RELATED EXPERIENCE

- Participated in development of IHE Delft MSc in Sanitation Management and related Diplomas and short courses to be launched in January 2020
- Participated in development of BEd(Science) and review of Biological Science curriculum in MUST
- Reviewed a number of internal research grant proposals
- Reviewed a number of curricula

## COMMITTEE MEMBERSHIP

- Member- MUST-Corruption Prevention Committee;
- Member-MUST- curriculum audit committee;

- Member- Programme Assessment Committee:
- Chairman –Ushering sub-committee on 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> MUST Graduation ceremonies;

## STUDENT ‘S SUPERVISION

- **David M. Nakitare- Reg. HS408/2611/15-** registered at Meru University of Science(MUST) and Technology, School of Health Sciences; **Thesis Title** ‘ Diagnosis Capacity of Tuberculosis among various laboratories in Meru Municipality’
- **Lynn Nkatha Mbaya - Reg. SC410-3007/17** – registered at MUST, School of Pure and Applied Sciences, Project title ‘ Development of PCR- Based method for detection of adulterated meat and selected meat products in Kenya’
- **Wambua Enock Ngui - Reg. SC410-3006/17** – registered at MUST, School of Pure and Applied Sciences, Project title ‘ Prevalence, molecular characterization and Antimicrobial susceptibility profile of bacteria isolates from raw retail meat from Meru and Isiolo Counties in Kenya’
- **Brian Mwangi Machua - Reg. SC410-3001/17-** registered at MUST, School of Pure and Applied Sciences, Project title ‘ Molecular characterization of *Rasitonia solanacearum* and Bio-control of *R.Solanacearum* with rhizospheric bacterial antagonists’
- Supervised several undergraduate students’ research projects and attachments

## CONFERENCE PRESENTATIONS/ WORKSHOPS

- Global Sustainable Blue Economy Conference, held on 26<sup>th</sup> – 28<sup>th</sup> November, 2018 in Nairobi, Kenya”

### Presentation:

“Innovative Approach to Mitigate Environmental Challenges and Promote Trade and Investment” Mworja J.K., Wandili S.A. and Boiyo R. K.

“Quantifying Particulate Matter as a Potential Air and Oceanic Pollutant in Kenya: Implication to the Local Climate Change” Boiyo R.K., Wandili S.A., Mworja J.K and Raghavendra Kumar.

- Lake Region Economic Block (LREB)and Blue Economy Conference, held on 21<sup>st</sup> to 24<sup>th</sup> October, 2018 at Bomet IAAF Stadium, Bomet County

### Presentations:

“Innovative Approach to Mitigate Environmental Challenges and Promote Trade and Investment” Mworja J.K., Wandili S.A. and Boiyo R. K.

- Newton Utafiti Researcher Links Bilateral Workshop entitled “ Learning for Rural Livelihoods” held from 25<sup>th</sup> to 28<sup>th</sup> June, 2018 at Utalii Hotel Nairobi, Kenya.

### Publication contributions/Outcomes :

“ Integrating ICT in indigenous chicken value chain: A case study of farmers in North Kinangop, Kenya.” Wandili S.Awuor <sup>1</sup> and Chemwa G. Wekesa <sup>2</sup>

&

“Exploring Indigenous Chicken Value Chain for Rural Livelihoods in Kinangop Constituency Kenya Using Soft Systems Methodology”. Chemwa G. Wekesa.<sup>a</sup> and Wandili S. Awuor.<sup>b</sup>

- 2<sup>nd</sup> KDSA, Mt. Kenya KDSA Regional Alumni Chapter- International Conference on Higher Education ,held on 4<sup>th</sup>- 6<sup>th</sup> Oct, 2017 at Meru University of Science and Technology.

#### **Presentations:**

“Genetic Diversity of clinical *Salmonella* Typhimurium isolates from Two sub-County Hospitals in Kenya” Wandili S.A, Onyango D.M. and Waindi E.N

&

“Academic Field Visits: A Case Study of the Department of Biological Sciences of Meru University of Science And Technology”. Gachoka, K., Wandili, S. and Mbogo E.

- 23<sup>rd</sup> Medical Laboratory Scientific and Exhibition Conference for the- Association of Kenya Medical Laboratory Scientific Officers , held on 11<sup>th</sup>-14<sup>th</sup> Oct. 2016 at Acacia Premier Hotel, Kisumu City.

#### **Presentation:**

“Antimicrobial profile of clinical *Salmonella enterica* serovars from two District hospitals in Kenya”. Wandili S.A, Onyango D.M., Onyuka J.H.O. and Waindi E.N

- International workshop on Clinical Health Research & Writing grant applications; Michigan Institute for Clinical and Health Research workshop in collaboration with Meru University of Science and Technology, held at Thiiri Center, Meru, Kenya on 23-24 Feb, 2017
- Implementers’ Training on Quality Management Systems ISO 9001:2015

#### **PUBLICATIONS/ARTICLES**

1. **Wandili S.A.,** Kimaru W., Muigai P.K., Kiogora D.M. and Mbogo E.(2018). Antimicrobial profile of non typhoidal *Salmonella* isolates from Meru Teaching and Referral hospital in Kenya. *Elixir Bio. Sci.* **118**: 50711- 50714
2. **Wandili S. A,** Onyango D.M. and Waindi E.N. (2017). Genetic diversity of clinical *Salmonella typhimurium* isolates from two District hospitals in Kenya. *Elixir Appl. Zoology*, **104**:45955-45959
3. **Wandili S.A,** Onyango D.M., Onyuka J.H.O. and Waindi E.N.(2015). Antimicrobial profile of clinical *Salmonella enterica* serovars from two District hospitals in Kenya. *Intnal. J. Pharmaceutical and clinical Sciences*, 5(1):1-7.

4. **Wandili, S.A.,** Onyango, D.M. and Waindi, E.N. (2013). Characterization and antimicrobial susceptibility pattern of clinical *Salmonella* isolates from Nandi county of Rift Valley, Kenya. *Elixir Appl. zoology* 59:15816-1521.
5. **Wandili, S. Awuor,** Onyango D. Miruka and Waindi N. Eliud (2011). Characterization of *Salmonella* isolated from Nile Tilapia (*Oreochromis niloticus*) along lake Victoria beaches in western Kenya. *J. World of Science, Engineering and Technology*, vol: 80.
6. Onyango D. **Wandili S.,** Kakai R. and Waindi E.N. (2008). Isolation of *Salmonella* and *Shigella* from fish harvested along Winam Gulf of Lake Victoria, Kenya. *J. Infect. Dis. In Dev. Ctries.* 2: 106-111.

#### **Thesis/ Dessertation**

1. **Wandili Sarah:** “Prevalence, Genetic Diversity and Antimicrobial susceptibility pattern of clinical *Salmonella* isolates from Kapsabet and Kisumu District hospitals in Kenya”. PhD thesis, Maseno University.
2. **Wandili Sarah:** “Phenotypic and Genotypic characterization of *Salmonella* and other microbes from Nile Tilapia”. LAP Lambert Academic Publishing ISBN 978-3-4082-5,2012. MSc thesis, Maseno University