

## Curriculum Vitae

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Dr. Annette Wakaanya Okoth

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### PERSONAL PROFILE

I am an Applied Statistician, specializing in Data Analytics and Statistical Modelling.

I teach statistics at Masinde Muliro University of Science and Technology in Kenya.

Given the multidisciplinary nature of Statistics, my research has been focusing on a number of thematic areas, including health, education, gender and Climate Change. Over time, I have developed passion for Health related Research, and I'm slowly carving a niche in this space. I'm a Career, Leadership and Personal Growth Coach at both individual and Organizational levels. I have facilitated at various workshops for Students, Educators and Early Career Researchers (ECRs).

I'm passionate about sound leadership and so I'm involved in mentorship, especially for the youth, with the view to empowering them with leadership skills. As a Scientist and knowing the challenges that youth, especially girls face in charting their career paths in Science, I help them make informed choices on matters of careers and life.

## A. SUMMARY OF QUALIFICATIONS

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### Academic background

□ Masinde Muliro University	<i>PhD.</i> Statistics [2018]
□ Masinde Muliro University	<i>MSc.</i> Statistics [2012]
□ Egerton University	<i>BEd (Science)</i> , Math/chem [Hons] 1998
□ Kuywa Girls' Sec. School	<i>KCSE</i> [1991]
□ Kimalewa Pri. School	<i>KCPE</i> [1987]

## B. COMPUTER SKILLS

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Proficient in Microsoft Office applications including but not limited to Microsoft word, Excel Access, PowerPoint, Internet utilities and data analysis tools including R (Excellent), Stata (Very Good), Python (Very good), SPSS (Excellent), LATEX (Excellent)

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## C. MEMBERSHIP TO PROFESSIONAL BODIES

- **MEMBER – KENYA NATIONAL STATISTICAL SOCIETY**
- **MEMBER – INTERNATIONAL STATISTICAL INSTITUTE [ISI] ID NO: 18751**

## D. MEMBERSHIP TO INTERNATIONAL COMMITTEES

1. **SEPTEMBER 2023 TO DATE** – Steering Committee Member, The African STACK Community Leadership Committee
2. **NOVEMBER 2021 TO DECEMBER 2022** – Steering Group Member, Climate Mobility Africa Research Network (CMARN)

### **E. AWARDS/GRANTS**

1. **2025** – MMUST Workshop Grant, for training Early Career Researchers on Science Leadership.
  2. **2024** – Africa Science Leadership Programme Workshop Grant, for training Early Career Researchers on Science Leadership.
  3. **2023** – Africa Science Leadership Programme Training Award, Training for Facilitators (ToF)
  4. **2023** – Africa Research Excellence Fund Training Award – Essential Grant Writing Skills Programme: September to November, 2023.
  5. **2021** – Africa Science Leadership Programme Training Award, 2021/2022
  6. **2017** – Joint ISI – IBS Young Statisticians’ Award for 2017 World Statistics Congress
  7. **2017** – National Research Fund (NRF)– PhD Award (2017) for the project titled  
*“Construction and analysis of a Multi-stage Adaptive Pool testing model for estimating Prevalence of a Trait in the presence of Test Errors.”*
  8. **2011** – National Council of Science, Technology and Innovation (NACOSTI) Research Fund – MSc. Award (2011) for the project titled *“A generalised Two-Stage Adaptive Pool Screening Procedure with Imperfect Tests.”*
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### **F. BOOK PUBLICATIONS**

1. Harriet Kitonyo, Edwin Masibo, **Annette Okoth** & Joyce Nzisa  
***EXPRESS MATHEMATICS, TEACHERS’ GUIDE BOOK 7***  
***Competency Based Curriculum (CBC)***  
**[One Planet Publishing & Media Services Limited]**  
*First Published, 2022*  
**[ISBN NO. 9789914410533]**
2. Harriet Kitonyo, Edwin Masibo, **Annette Okoth** & Joyce Nzisa  
***EXPRESS MATHEMATICS, LEARNERS’ BOOK 7***  
***Competency Based Curriculum (CBC)***  
**[One Planet Publishing & Media Services Limited]**  
*First Published, 2022*  
**[ISBN NO. 9789914410532]**
3. **Okoth A. W. TWO STAGE ADAPTIVE POOL TESTING FOR ESTIMATING PREVALENCE OF A TRAIT**

*Application to HIV/AIDS prevalence in Western Kenya.*

[Lambert Academic Publishers]

Copyright, November, 2012

[ISBN NO. 978-3-659-27512-8]

4. Sindayigaya S., Okoth A. W. & Mulati O.

***A NOVEL STATISTICAL MODEL FOR POVERTY ESTIMATION***

*Application to one-cow-one-family programme*

[Lambert Academic Publishers]

Copyright, Feb 2013 [ISBN NO. 978-3-659-35612-

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## G. PAPER PUBLICATIONS

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1. F. O. Okoth, A. W. Okoth, K. L. Nyongesa, J. L. Sirengo

***QUEUEING MODEL FOR HOSPITAL CONGESTION WITH APPLICATION***

[International Journal of Mathematical Sciences and Optimization: Theory and Applications]

Vol. 9, No. 2, pp. 90 - 101

<https://doi.org/10.5281/zenodo.10202665>

2. J. L. Sirengo & A. W. Okoth.

***CANONICAL CORRELATION IN MODELING SHORT TERM EXPENDITURE VERSUS POVERTY LEVELS IN INFORMAL SETTLEMENTS: ASSESSING ITS IMPACT ON EDUCATION.***

[Mathematics Education Journals]

Vol. 7 No. 2 August 2023

<http://ejournal.umm.ac.id/index.php/MEJ>

3. Patrick Odhiambo, Harrison Okello, Annette Wakaanya Okoth, Clabe Wekesa &

Patrick Okoth. ***MUTATIONAL SIGNATURES FOR BREAST CANCER***

***DIAGNOSIS USING ARTIFICIAL INTELLIGENCE.***[Journal of the Egyptian National Cancer Institute] (2023) [https://doi.org/10.1186/s43046-023-](https://doi.org/10.1186/s43046-023-00173-4)

[00173-4](https://doi.org/10.1186/s43046-023-00173-4)

4. Lusike Mary, Wakhungu Jacob, Ndiema Alice & Okoth Annette.

***FACTORS INFLUENCING THE USE OF MOBILE PHONE-ENABLED SERVICES IN ACCESSING AGRICULTURAL INFORMATION BY SMALLHOLDER FARMERS IN BUNGOMA COUNTY, KENYA.***

**[African Journal of Empirical Research] (2023)**

Vol. 4 (Iss. 2) 2023, pp. 1105-1118

<https://ajernet.net> ISSN 2709-2607

5. Lucy Mandillah, **Annette Okoth**, Pamela Buhere, Lydia Anyonje, Christine Wanjala, James Bill Ouda & Judith Achoka. ***GENDER INCLUSION IN RESEARCH AMONG ACADEMIC MEMBERS OF STAFF: LESSONS FROM MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY, KENYA.***

**[Nairobi Journal of Humanities and Social Sciences (NJHS)]**

Volume 7, Issue 2, 2023

doi: <https://doi.org/10.58256/njhs.v7i2.1094>

6. Beatrice BARASA, **Annette W. OKOTH**, Selline OOKO, Fridah NJERU, Judith DIPONDO & Jairus OWUNZA. ***EMPLOYEE QUALIFICATIONS AND COMPETENCIES VERSUS DEPLOYMENT: EXISTING GAPS IN THE CONTEXT OF MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST), KENYA***

**[International Journal of Development and Management Review]**

Volume 18, No. 1 September, 2023

<https://dx.doi.org/10.4314/ijdmr.v18i1.4>

7. Ooko S, **Okoth A**, Njeru F Kariaga G, Barasa B, Achoka J, Opiyo R, Omukunda E, Dipondo J, Samoei U and Namazzi E  
***THE IMPACT OF PRIOR KNOWLEDGE ON ADOLESCENTS' SEXUAL AND REPRODUCTIVE HEALTH BEHAVIOR AMIDST THE COVID-19 PANDEMIC: THE CASE OF KAKAMEGA COUNTY, KENYA***  
Proceedings of the International Conference on Future of Education, Vol. 5, Issue. 1, 2022, pp.21-37 Copyright © 2022 Author(s) ISSN 2630-7413 online DOI: <https://doi.org/10.17501/26307413.2022.5102>
8. Ratip A. O., **Okoth A. W.**, Wanyonyi Ronald. W. ***A GENERALISED REGRESSION NEURAL NETWORK MODEL FOR MAIZE PRODUCTION IN TRANS-NZOIA COUNTY.***

**[International Journal of Mathematics Trends and Technology (IJMTT)]**

Volume 65 Issue 10 – October 2019

<http://www.ijmtjournal.org>

9. Oduori Victor, **Okoth Annette. W.**, Wanyonyi R. W. ***THREE STAGE ADAPTIVE BATCH TESTING MODEL FOR ESTIMATING PREVALENCE OF A TRAIT WITHOUT TRUNCATION.***

[International Organization of Scientific Research - Journal of Mathematics] *e-ISSN: 2278-5728, p-ISSN: 2319-765X. Volume 15, Issue 5 Ser. IV (Sept – Oct 2019), PP 19-27*

**10. Okoth A. W. TWO-STAGE ADAPTIVE POOL TESTING WITH ERRORS IN INSPECTION**

[International Organization of Scientific Research - Journal of Mathematics] *e-ISSN: 2278-5728, p-ISSN: 2319-765X. Volume 15, Issue 3 Ser. III (May – June 2019), PP 29-37*

**11. Okoth A. W. A MULTI-STAGE ADAPTIVE POOL TESTING MODEL WITH TEST ERRORS VIS-À-VIS THE NON-ADAPTIVE MODEL WITHOUT TEST ERRORS**

[International Journal of Mathematics Trends and Technology (IJMTT)] *Volume 65 Issue 3 - March 2019*

**12. Okoth A. W. , Nyongesa L. K. & Kwach B. O. A COMPARATIVE STUDY BETWEEN A MULTI-STAGE ADAPTIVE POOL TESTING MODEL WITHOUT TEST ERRORS AND THE NON-ADAPTIVE MODEL**

[International Journal of Applied Mathematical Research] *doi: 10.14419/ijamr.v6i3.7802, 6 (3) (2017) 93-97*

**13. Okoth A. W., Nyongesa L. K. & Kwach B. O. MULTI-STAGE ADAPTIVE POOL TESTING MODEL WITH TEST ERRORS; IMPROVED EFFECIENCY**

[International Organization of Scientific Research - Journal of Mathematics] *Volume 13, Issue 1 Ver. II (Jan. - Feb. 2017), PP 43-55 e-ISSN: 2278-5728, p-ISSN: 2319-765X.*

**14. Okoth A. W., Nyongesa L. K. & Simwa R. O. ESTIMATION OF PREVALENCE IN THE TWO-STAGE ADAPTIVE GROUP TESTING WITH ALLOWANCE FOR ERRORS**

[International Journal of Emerging Technology & Research] *Volume 3, Issue 4, July - August, 2016*

***ISSN (E): 2347-5900 ISSN (P): 2347-6079***

**15. MOLECULAR CLUSTERING OF MICROBIAL FLORA AND BACTERIAL DEGRADATION OF TEXTILE DYES BY ISOLATES FROM CONTAMINATED SOILS.**

*Elixir Bio Tech. 54 (2013) 12452-12459*

[Elixir International Journal]

## H. CONFERENCE PRESENTATIONS

1. **MAY 15<sup>th</sup> to 17<sup>th</sup> 2024: 17<sup>th</sup> Multi-disciplinary International Conference-Masinde Muliro University of Science & Technology (MMUST), Kenya.**  
**Okoth A. W.** Adolescent Sexual and Reproductive Health (ASRH) Behaviour Amidst COVID-19 Pandemic: The Socio-Economic and Cultural Perspective
2. **JUNE 19<sup>th</sup> to 23<sup>rd</sup> 2023: 1<sup>st</sup> International STACK Conference for Undergraduate mathematics-Masinde Muliro University of Science & Technology (MMUST), Kenya.**  
**Okoth Annette W.** *LEVERAGING STACK TO KEEP THE STEM ZEAL ON TRACK*
3. **OCTOBER 29<sup>th</sup> to 30<sup>th</sup> 2020: 3<sup>RD</sup> Virtual International Conference on Future of Education-Kuala-Lumpur, Malaysia.**  
**Okoth A. W.** *CANONICAL CORRELATION IN MODELING SHORT TERM EXPENDITURE VERSUS POVERTY LEVELS IN INFORMAL SETTLEMENTS; ASSESSING ITS IMPACT ON EDUCATION IN KENYA*
4. **JUNE 19<sup>th</sup> to 21<sup>st</sup> 2019: 13<sup>th</sup> International Multi-Disciplinary Conference at MMUST**

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**Sirengo J. & Okoth A. W.** *MODELING EXPENDITURE AND POVERTY LEVELS USING CANONICAL CORRELATION, A CASE STUDY OF KAKAMEGA COUNTY*
5. **JUNE 13<sup>th</sup> to 14<sup>th</sup> 2019: 2<sup>nd</sup> International Conference on Future of Education Bangkok, Thailand**  
**Okoth A. W. & Opiyo R.A.** *KEEPING STEM ENTHUSIASM ON TRACK*
6. **JUNE 2018: First Pan-African International Research Congress on Knowledge Generation and Dissemination (PAIRC 2018 at Grand Swiss Royal Hotel, Kisumu.**  
**Okoth A. W.** *MULTI-STAGE ADAPTIVE POOL TESTING MODEL WITH TEST ERRORS, ESTIMATION OF MASTITIS IN CAMELS.*
7. **JULY 13<sup>th</sup> to 21<sup>st</sup> 2017: World Statistics Congress, Marakech – Morocco.**  
**Okoth A. W.** *A MULTI-STAGE ADAPTIVE POOL TESTING MODEL WITH TEST ERRORS VIS-À-VIS THE NON-ADAPTIVE MODEL WITHOUT TEST ERRORS*

## **I. CONFERENCES ORGANIZED**

1. **MAY 2024:** 17<sup>th</sup> Multi-disciplinary International Conference
2. **NOVEMBER 2021:** STEM Education International Conference 2021 (STEMEIC2021)
3. **NOVEMBER 2020:** STEM Education International Conference 2020 (STEMEIC2020)
4. **JUNE 2019:** 13<sup>th</sup> *International Multi-Disciplinary Conference.*
5. **JUNE 2018:** *First Pan-African International Research Congress on Knowledge Generation and Dissemination (PAIRC 2018).*
6. **JULY 2018:** *World Conference on Transformative Education (WCTE)*

## **J. WORKSHOPS ORGANIZED AND FACILITATED**

1. **FEBRUARY 5<sup>th</sup> TO 7<sup>th</sup> 2025:** *MMUST- Science Leadership Programme (M-SLP) Workshop at the Golf Hotel, Kakamega*
2. **AUGUST 7<sup>th</sup> TO 9<sup>th</sup> 2024:** *Kenya- Science Leadership Programme (Ke-ASLP) Workshop at Savelberg Retreat Centre, Nairobi.*
3. **JULY 9<sup>th</sup> TO 12<sup>th</sup> 2024:** *UKRI/STFC UK-Africa Physics partnership Research Workshop.*

## **K. STRATEGIC TRAINING, SEMINARS & WORKSHOPS**

1. **February 2025:** *Supervision and Mentorship of Female Postgraduate Students in STEM at Bishop Stam Pastoral Centre, Kakamega*
2. **NOVEMBER 2024:** *Systems Thinking in Public Health by Coursera*
3. **APRIL TO JUNE 2024:** *Fundamentals of Data Analytics by Skillup Online in conjunction with IBM Skills Build*
4. **DECEMBER 2023:** *Africa Science Leadership Programme, Training of Facilitators at Future Africa Institute, University of Pretoria, South Africa.*
5. **SEPTEMBER TO NOVEMBER 2023 –** *Africa Research Excellence Fund (AREF) – Women in Research, Essential Grant Writing Skills Programme*
6. **NOVEMBER 2021 TO MARCH 2023:** *Africa Science Leadership Training at Future Africa Institute, University of Pretoria, South Africa.*
7. **NOVEMBER 2022:** *Enhancing Quality and Internationalization of Mathematics Doctoral Supervision, Moi University, Kenya*
8. **NOVEMBER 2016:** *Biostatistics workshop at the Kenya Medical Research Institute (Nairobi) – Regression Analysis using R-GUI software.*
9. **JULY 2016:** *Biostatistics workshop at the University of Nairobi – Statistical data Analysis using R-GUI & STATA software.*
10. **NOV 2015:** *MMUST- UNIVEN workshop on Grant Proposal Writing and Graduate students' supervision at Bishop Stam Pastoral Centre*



- 11. JAN 2012:** *Disability mainstreaming in Education at Kibabii Diploma Teachers' Training College.*
- 12. MAY 2011:** *ISO Quality Systems Management training at Kibabii Diploma Teachers' Training College.*
- 13. APRIL 2011:** *Performance contracting seminar at Kibabii Diploma Teachers' Training College.*
- 14. OCT 2009:** *Fire fighting & Disaster preparedness at Kibabii Diploma Teachers' Training College*
- 15. 2000-2004:** *SMASSE (Strengthening of maths & Science at Secondary Education) at Mukumu Girls' High School.*

#### **L. POST GRADUATE SUPERVISION**

1. Oduori Victor [**Completed**]: Three Stage Adaptive batch Testing Model without Truncation.
2. Ratip Alfred [**Completed**]: A generalised Regression Artificial Neural Network Model for maize production in Trans-nzoia County
3. Okoth Fredrick [**Completed**]: Modelling Queuing phenomenon of Hospital congestion; A case study of MTRH
4. Mary Okumu [**Completed**]: Impact of Mobile Phone-Enabled Services in Accessing Agricultural Information by Small Holder Farmers in Bungoma County, Kenya
5. Bichanga Lawrence Areba [**Ongoing**]: Bayesian Temporal Modelling of Cholera Symptoms with Application to Prison Inmates Data.
6. Usolo Samuel [**Ongoing**]: Modeling the Impact of Devolution on Youth Unemployment in Kenya.

#### **M. EMPLOYMENT**

#### **MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY [CURRENT]** **Specific assignments**

- 1. Fulltime Lecturer – Department of Mathematics**
  - *Probability and Statistics*
  - *Tests of Hypotheses*
  - *Theory of Estimation*
  - *Design and analysis of experiments □ Time Series Analysis and Forecasting.*
- 2. Departmental Examinations' Co-ordinator (2018 To Date)**
- 3. Departmental Quality & standards co-ordinator (2015 - 2018)**
- 4. Departmental Curriculum review & Development co-ordinator (2015 - 2018)**
- 5. Class Advisor, 2<sup>nd</sup> year Bsc. Mathematics & Statistics class (2017 - 2020)**

## **OTHER RESPONSIBILITIES AT MMUST**

1. *Head of Secretariat – National Youth Summit Organizing Committee [Nov 2017 to Date]*
2. *Committee Member – International Conferences Organizing committee [Jan 2018 to Date]*
3. *Secretary – African Women in Science & Engineering (AWSE, MMUST Chapter)*
4. *School Practice Co-ordinator – Bungoma Zone [April 2018 to May 2019]*
5. *Ag. Chairperson of Department [18<sup>th</sup> July – 2<sup>nd</sup> September 2016]*

## **KIBABII UNIVERSITY COLLEGE Specific assignments**

*Tutorial Fellow – Department of Mathematics (Jan 2015 – April 2015)*

- *Probability and statistics*
- *Operations research □ Tests of Hypotheses*
- *Theory of estimation*

## **TEACHERS SERVICE COMMISSION (TSC) KIBABII DIPLOMA TEACHERS' TRAINING COLLEGE Specific assignments**

- |  |                               |
|--|-------------------------------|
| <i>a) Teaching Mathematics</i>   | <i>Sept 2009 to Jan 2015</i>  |
| <i>b) Teaching Practice co-ordinator</i>                               | <i>Jan 2012 to Jan 2015</i>   |
| <i>c) Member- Disciplinary committee</i>                               | <i>Oct 2012 to Jan 2015</i>   |
| <i>d) Member- Strategic planning committee</i>                         | <i>Sept 2009 to Jan 2015</i>  |
| <i>e) Class advisor</i>  | <i>Sept 2009 to Jan 2015</i>  |
| <i>f) Subject head- Mathematics</i>                                    | <i>Sept 2009 to Jan 2015</i>  |
| <i>g) Chair person- ushering &amp; protocol (Graduation committee)</i> | <i>March 2010 to Jan 2015</i> |

## **MUKUMU BOYS' HIGH SCHOOL Specific assignments**

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|--|------------------|
| <i>a) Teaching Mathematics &amp; Chemistry</i> | <i>1998-2007</i> |
| <i>b) Director of Studies</i>                  | <i>1999-2007</i> |
| <i>c) Chemistry Subject Head</i>               | <i>1998-2007</i> |
| <i>d) Class Teacher</i>                        | <i>1998-2007</i> |
| <i>e) Sanitary Mistress</i>                    | <i>2003-2007</i> |
| <i>f) Science Club Patron</i>                  | <i>2002-2007</i> |
| <i>g) PTA Teacher representative</i>           | <i>2004-2007</i> |
| <i>h) Tender procurement committee member</i>  | <i>2004-2007</i> |
| <i>i) Senior management team member</i>        | <i>2001-2007</i> |

## **N. COMMUNITY ENGAGEMENT**

1. April 2019 to Date – BOM Member, Cardinal Otunga Girls' High School, Lirhanda Girls' High School and St. Luke's Kimilili Boys' High School.
2. 2015 to Date – Community Outreach Activities with African Women in Science and Engineering (AWSE)
3. 2013 to Date – Treasurer, Christ's Evangelistic Church (CEC), Town District and Fountain of Life Church
4. 2010 to Date – Partner with Family Media Broadcasting House.

## **O. OTHER WORK EXPERIENCES**

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### **1. SUPPORT ELECTIONS TRAINER - IEBC [JULY-SEPT 2022]**

*Assignments: Training of Election staff and overseeing the 2022 General Election*

### **2. SENIOR SUPERVISOR, KENYA NATIONAL BUREAU OF STATISTICS (KNBS) [JULY-SEPT 2009]**

*Assignments: supervision of the kenya population census- 2009*

### **3. PRESIDING OFFICER, IEC AUG 2010**

*Assignments: Organization, Supervision & Overseeing the Referendum in Lurambi Constituency.*

### **4. DEPUTY PRESIDING OFFICER, ELECTORAL COMMISSION KENYA DEC 2007**

*Assignments: Organization, Supervision & Overseeing the General Election in Lurambi Constituency.*

### **5. EXAMINER (CHEMISTRY) KENYA NATIONAL EXAMINATIONS' COUNCIL [ 2007 - 2011] 6. TREASURER, KAKAMEGA DISTRICT SCIENCE CONGRESS COMMITTEE 2003-2006**

### **7. TREASURER, WESTERN PROVINCE SCIENCE CONGRESS COMMITTEE 2004-2007**

*Specific assignments:*

- a) Preparation of financial records
  - b) Preparation & implementation of Budgets
  - c) Organization of National, Provincial & District science congress events.
  - d) Training of Maths & Science teachers on how to prepare students for competitions in science.
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## **P. RESEARCH EXPERIENCE**

I'm a researcher based at Masinde Muliro University of Science and Technology. My area of specialization is Data Analytics and Statistical Modelling. I have participated in a number of collaborative projects. Below is a list of some of the projects undertaken and ongoing:

### **COMPLETED PROJECTS**

**1. Name of Research Project:** Research Capacity among Academic Staff of Masinde Muliro University of Science and Technology, Kenya

**Funding organization:** Masinde Muliro University of Science and Technology, University Research Fund (URF)

**Year:** 2019/2020

**Role played:** Investigator

**Status:** Completed

**2. Name of Research Project:** University- Community Led Response to Adolescent Sexual and Reproductive Health Crisis in the Wake of COVID-19 Pandemic.

**Funding organization:** Masinde Muliro University of Science and Technology, University Research Fund (URF)

**Year:** 2020

**Role played:** Investigator

**Status:** Completed

**3. Name of Research Project:** Staff Competences and Deployment: A case of Masinde Muliro University of Science and Technology.

**Funding organization:** Masinde Muliro University of Science and Technology, University Research Fund (URF)

**Year:** 2020

**Role played:** CO-PI

**Status:** Completed

**4. Name of Research Project:** Strengthening Gender Inclusion in Career Progression among Academic Staff in Higher Education: A case of Masinde Muliro University of Science and Technology, Kenya.

**Funding organization:** Masinde Muliro University of Science and Technology, University Research Fund (URF)

**Year:** 2021

**Role played:** Investigator

**Status:** Completed

### **CURRENT PROJECTS**

**1. Name of Research Project:** Using System Dynamics to Improve the Efficiency and

Effectiveness of Community Health Promoters in Kenya's Health System

**Funding organization:** WHO

**Year:** 2024

**Role played:** Investigator

**Status:** Grant won

**2. Name of Research Project:** Collaborative Responsible Artificial Intelligence (AI) Solutions for HIV-Related Multimorbidity – CRASH

**Funding organization:** Africa Research Institute for AI (ARIFA)

**Year:** 2024

**Role played:** Co-PI

**Status:** Proposal Submitted

**4. Name of Research Project:** Treatment Outcomes of Visceral Leishmaniasis (VL) in Endemic Regions of Kenya and Factors Affecting Treatment Success

**Funding organization:** United Kingdom Research & Innovation (UKRI)

**Year:** 2024

**Role played:** Investigator

**Status:** Proposal Submitted

## **PROPOSALS UNDER PREPARATION**

**1. Name of Research Project:** Economic and Health Outcomes of Women Living With HIV in Kakamega County in the Wake of COVID -19 Pandemic.

**2. Name of Research Project:** Machine Learning Model Incorporating Risk Factors to Prostate Cancer Screening

**3. Name of Research Project:** Re-Imagining Equity in STEM Education Through GameBased Learning Strategies: A Transformative Multi-Disciplinary Approach

**4. Name of Research Project:** Empowering Future Educators: Enhancing 21st Century Skills through STEM Education in Kenya and Somalia

**5. Name of Research Project:** Empowering Early-Career Researchers in Eastern Africa: Enhancing Writing and Publishing on the Intersection of Gender, Climate Change, and Health Systems

## **REFEREES**


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**1. Prof. Judith S. K. Achoka, PhD**

*Professor of Educational Planning and Administration  
Masinde Muliro University of Science & Technology P.O.  
Box 190-50100, Kakamega.  
Email: [jachoka@mmust.ac.ke](mailto:jachoka@mmust.ac.ke)*

**2. Dr. Lucy K. Mandillah, PhD**

*Senior Lecturer and Deputy Director,  
Institute of Indigenous Knowledge and Cultural Studies (IIKCS)  
Masinde Muliro University of Science & Technology P.O. Box  
190-50100, Kakamega.  
Email: [lmandillah@mmust.ac.ke](mailto:lmandillah@mmust.ac.ke)*



SIGNED..... .....Date..22<sup>nd</sup> January, 2025  
Dr. Annette Wakaanya Okoth