CURRICULUM VITAE OF CASTORY GABRIEL MUNISHI

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Profile:

Castory Munishi is a visionary and charismatic leader with a bachelor degree in Pharmacy from Muhimbili University of Health and Allied Sciencies (MUHAS). He is an aspiring health data scientist with particular interests in clinical trials, big data analytics, Artificial Intelligence (AI), global health research and pharmacometrics. He has held more than 10 leadership positions, volunteered and assisted in more than 40 impactful projects. He has co-authored 2 publications and 4 are in review.

Formal education Training:		
2022 to Present	Master of Philisophy Cand: Universitetet i Bergen (UiB)	
2016 to 2020	Bachelor of Pharmacy at the Muhimbili University of Health and Allied	
	Sciences (MUHAS), G.P.A 4.2/5.0	
	University Awards:	
	 December 2017: Vice Chancellor Prize of Best First Year Student in Bachelor of Pharmacy Class of 56 top students in Tanzania. 	
	 December 2020: NIMR Award of Best Final Year Student in Research Project. 	
	 December 2020: Felix-Weimers Prize of Best Highly Engaging and Responsible Final Year Student. 	
	4. November 2021: Rhodes Scholarship Finalist for East Africa Region	
2014 to 2016	Advanced Certificate of Secondary School Examination (ACSE), at	
	Mzumbe Special Secondary School, Division 1 of 4 points	
	Awards:	
	1. July 2016: Award of being the 5 th Best Student out 73,940 students	
	in Tanzania in National Examinations for Advanced Certificate of	
	Secondary Education Examination (ACSEE).	
	2. July 2016: Award of being the 2 nd Best Student in Chemistry Subject in Tanzania 2016 ACSEE.	
	3. April 2016: Best and Outstanding Leader in Students Government	

Work Experience:

1. September 2020 – Date: Researcher at Muhimbili University Main Duties and Responsibilities

- Participated as an investigator in 4 impactful research projects.
- Assisted in the development of 10 important research proposals.
- Project coordinator of 6 consultancies
- Tutor of R programming language
- Participated in the analysis of 40 complex research datasets using R programming language, SPSS and Jamovi.

- Participated in drafting and disseminating Policy Briefs
- Committee member in the organization of 5 national wide conferences

2. August 2021 – January 2022: Intern Pharmacist Tanzania Medicines and Medical Devices Authority (TMDA)

Main Duties and Responsibilities

- Data clerk and analyst in a team following up (Vigilance) a Cohort of 36,000 people who have been vaccinated for COVID-19 in Tanzanzia to ensure vaccine safety.
- Directly following up a cohort of 1000 people to check adverse events following COVID-19 Vaccination.
- Participated in the development of national COVID-19 Vaccine safety manual
- Participated in the design and coordination of Clinical Trial assessment training need survey and the development and organization of training for clinical trial assessors in Tanzania
- Participated in the design and coordination of Good Clinical Practice (GCP) need survey and the development and organization of training for GCP Inspectors in Tanzania

3. November 2020 – July 2021: Intern Pharmacist Pharmacy Council of Tanzania Main Duties and Responsibilities

- Participated in the inspection of 200 pharmacies both new and existing to ensure patients get the best services.
- Analyzed 5 complex organization datasets to ensure the organization operates efficiently.
- Participated in the translation of 5 regulations and guidelines to Kiswahili language to ensure the majority of the population understand it.
- Participated in the review and improvement of digital healths systems at the organization

4. June 2019 – October 2020: President of Tanzania Pharmaceutical Students Association

Main Duties and Responsibilities

- Designed and Organized more than 200 public health awareness events in Tanzania.
- Lead a campaign on Antimicrobial resistance conducted in 22 regions in Tanzania, reached 50835 secondary school students, 9095 primary school students, 6 Television stations, 21 radio stations and 138 students under my leadership championed the campaign.

5. April 2018 – Present: Team Leader and Co-founder: <u>Pharmlinks</u> – A digital Medicines Retailing Solution

- Participated in the development of a digital platform for ordering medications that will be used by more than 10,000 clients as it grows and will have public health impact through the data it generates.
- Led in writing of 4 winning proposals in very competitive innovation competitions worth \$ 20,000.

Special Achievements:

- 1. October 2019: Finalist out 160 applicants in the international WHO-ReACT Innovate4AMR Competition.
- 2. November 2020: Best Project in Chakou Health Innovation Awards (CHIA) out of over 100 applicants
- 3. June 2021: Top Project in Twiga Innovation Awards organized by Tanzania Commission for Science and Technology (COSTECH)

Professional, Online Courses and Training Attended:

- 1. Health Data Science Course, Harvard T.H Chan School of Public Health, 2021
- 2. Training of Practitioners for Tanzania on the Universal Treatment Curriculum for Substance Use Disorders (UTC 1-8), 2020 2021
- 3. MOOC on Implementation Research (IR) with a focus on Infectious Diseases of Poverty (IDP), University of Ghana and WHO, 2020
- **4.** 10 Week Online Course on Clinical Pharmacology and Pharmacometrics by Pharmacometrics Africa, 2020
- 5. Introduction to Bioinformatics Course, University of Capetown and H3Africa, 2019

Conferences:

- 1. Presenter in the 7th Tanzania Health Summit (THS), Theme: "Transforming the success of Middle Income Economy Into a Healthier Nation", November 2020
- 2. Presenter in the 7th East African Health And Scientific Conference, Theme; Technology for Health Systems Transformation and attainment of the UN Sustainable Development Goals", March 2019
- 3. Exhibitor in the Sahara Sparks and Afrilabs Annual Gathering, Theme: "Innovation in the Data age", October 2018
- 4. Presenter in the 7th World Healthcare Students' Symposium (WHSS) themed at "Towards the SDGs Agenda 2030: The role of A Multidisciplinary Approach in Healthcare", November 2017

Volunteering and Leadership:

- 1. Judge and Mentor in the 15th Win and Learn Academic Event, July 2021
- 2. Fundraiser in organizing Tanzania Pharmaceutical Society Annual General Meeting, May 2021
- 3. Lead coordinator and data manager in Anti Substance Use Campaign in Tanga, April 2021 Present
- 4. Championed Livestreaming of the 9th MUHAS Annual Scientific Conference, July 2021
- 5. Championed Livestreaming of <u>Tanzania Public Debate on COVID-19 Vaccines</u>, August 2021
- 6. Bachelor of Pharmacy, Class Representative, Oct 2016 Sept 2020
- 7. Digital health consultant in developing National Social and Behavioural Change Communication Strategy for Non-Communicable Diseases, Oct 2020
- 8. Organizing member and Presenter in 2nd National NCD Scientific Conference, Nov
- 9. Regional leader in Anti Substance Use Campaign in Tanzania, Sept Nov 2019

- 10. Lead organizer of World Antibiotic Awareness Week, November 2019
- 11. Chairperson of Scientific Committee in the 11th Tanzania Pharmaceutical Students Association Annual Scientific Conference theme "Contribution of Pharmaceutical Personnel's towards Universal Health Coverage (UHC) archivement", June 2019
- 12. Pioneer and Chairperson of Muhimbili University Students for Debate (MUSSD) themed on Deployment of Artificial Intelligence in Tanzania Healthcare, April 2019
- 13. Pioneer and Chairperson of Medical Hackathon on Artificial Intelligence in Tanzania, June 2019
- 14. Pioneer and Chairperson of Students Satellite Session in MUHAS Annual Scientific Conference, June 2019
- 15. Media and Publications Committee Member at the International Pharmaceutical Students' Federation (IPSF), African Region, 2018 2019
- 16. Minister of Outreach and Innovations at MUHAS, 2018 2019
- 17. Regional coordinator in Anti Microbial Resistance Campaign, 2018
- 18. General Secretary in Students Government at Mzumbe Secondary School, 2015 2016
- 19. Academic Prefect, Debate Chairperson and Chairperson of Junior Leaders Club at Star High School, 2011 2013
- 20. Student's Leader, Class Monitor and Prefect, 2005 2015

Extra	skil	ls:

MS Office	Proficient: MS Word, MS PowerPoint, MS Access
Data Analysis	Proficient: MS Excel, IBM-SPSS v20, Gephi, jamovi, JASP
Programming	R, Python, Javascript ,MySQL, HTML and CSS
Potential Skills	Leadership, Public Speaking, Proposal Writing, Project Management
	and Event Organization

Consultancy

1. US – Depertment of Defence (DoD) (May 2022 – Present)

 Conducting Data Quality Assessments (DQAs) at DoD/WRAIR-supported facilities through funding from the US President's Emergency Plan for AIDS Relief (PEPFAR) in Tanzania

2. CDC - Tanzania Office (May 2022 – Present)

 Rapid programmatic assessment to inform scale up of U=U and COVID-19 vaccination uptake among people living with HIV and health cares in CDCsupported HIV Care and Treatment Centers in Tanzania

3. Applied Epi Organization (Nov 2021 – Present)

- Member and part of Swahili Translating team for the Epidemiologist R Handbook
- Tutor R Programming

4. FIND - Diagnosis for All (March 2022 - August 2022)

- Evaluation of Target Product Profile for Non-Invasive and Minimally-Invasive Glucose Monitoring Devices in Tanzania
- 5. Jhpiego HPV+ Project (Nov 2021 June 2022)

- Evaluation Of HPV Integrated Adolescents' Friendly Services Program In Songwe And Mbeya Regions

6. Touch Foundation m-Mama Progam (Jan 2022 – June 22)

- End line Evaluation of the m-Mama Program on Strengthening Health Systems to Reduce Maternal Mortality and Morbidity in Shinyanga Region, Tanzania
- 7. Tanzania Non Communicable Diseases Association (Dec 2021 Jan 2022)
 - Development of Tanzania Non Communicable Diseases Research Agenda
- 8. Casa Famiglia Rosseta (August 2020 March 2022)
 - Local focal person for the project "Awareness in a Caring Community, Response preparedness and interventions supporting people with substance use disorder (SUD) and other vulnerable groups in Tanga, Tanzania"

Experience in Research and Innovation:

A. On-Going Projects and In Review:

- Developed a Recovery and Service Access Mobile and Web Application for people with Drug Use Disorder in Tanga Municipality and Muheza District, 2021 (<u>HuruApp</u>)
- Automating the Migration of Sickle Cell Disease Data from Muhimbili National Hospital into an Upgraded Database for Easy Usability in Patient Care and Clinical Research, 2021
- 3. Evaluation of Dose Adjustment in Patients with Renal Impairment at Muhimbili National Hospital, 2020
- 4. Developed a Dose Adjustment Web Application in Patients with Renal Impairment Using R Shiny, 2020
- 5. Active Surveillance of COVID-19 Suspected Cases Using Pharmacies: Approaches and Lessons Learnt During the COVID-19 Outbreak in Dar es Salaam, Tanzania, 2020

B. Publications

- 1. Assessment of Implementation of Antimicrobial Resistance Surveillance and Antimicrobial Stewardship Programs in Tanzanian Health Facilities a Year After Launch of the National Action Plan, August 2020, https://doi.org/10.3389/fpubh.2020.00454
- Drug utilization pattern and adverse drug reactions of chemotherapy in pediatric patients at Muhimbili National Hospital, Tanzania, https://doi.org/10.12688/f1000research.110079.1

Reference:

1. Prof. Bruno Sunguya

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2. Prof. Eliangiringa Kaale

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3. Mr. Pietro Cipolla

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Trustee of the Casa Rosetta Association in Tanga, Tanzania |
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4. Dr. Gloria Karungo Ngaiza

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