

MASIMBA MANDEYA

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PROFESSIONAL SUMMARY

Molecular biologist with 4+ years of experience in clinical sample processing, qRT-PCR assay development, and scientific documentation. Skilled at optimizing workflows, drafting technical reports, and creating training materials for laboratory personnel. Demonstrated ability to collaborate across functions to support clinical programs and ensure quality control. Good Clinical Practice –certified with peer-reviewed publication experience.

EDUCATION

Yeshiva University, The Katz School of Science and Health

Jan 2027

M.S., Biotechnology Management & Entrepreneurship

• **Coursework:** Foundations of Biotechnology, Biotechnology Management, Applications of Biotechnology, Clinical Trials Research & Management

National Research Ogarev Mordovia State University

Jun 2022

M.S., Biology (Biochemistry & Molecular Biology) (GPA: 3.5)

Harare Institute of Technology

Jun 2018

B.Tech. (Hons), Biotechnology (GPA: 3.4)

RELEVANT WORK EXPERIENCE

Centre for Immunology & Infection Research

Nov 2022 - Dec 2024

Research Assistant

- Optimized DNA extraction workflows from clinical samples (blood & urine) for high-sensitivity qRT-PCR pathogen detection, incorporating data analysis to validate assay performance.
- Designed and validated qRT-PCR and gel electrophoresis assays for detecting SNPs in the interleukin-13 promoter.
- Applied immunoinformatics and peptide microarray technology to identify therapeutic targets and diagnostic epitopes of *Schistosoma* species; co-authored a peer-reviewed publication (2024).
- Drafted technical reports and scientific manuscripts, contributing to successful publication submissions.
- Conducted community outreach programs, translating research into public health awareness initiatives.

Mordovia State University, Department of Biotechnology & Biochemistry

Feb 2021 - Jun 2022

Research & Teaching Assistant

- Performed molecular assays (DNA extraction, qRT-PCR) for parasite detection, supporting pharmaceutical research initiatives and ensuring compliance with good laboratory practices.
- Facilitated learning and teaching in biochemistry, bioinformatics and biotechnology undergraduate courses.
- Implemented strategic planning and quality control protocols, ensuring reproducibility and accuracy of experiments to validate research data and optimize workflows.
- Contributed to a poster presentation in Euro Biotech Journal (2021) through collaborative research on *Conium maculatum* L. and its hematological effects.
- Provided technical support and mentorship to students and lab staff, fostering a culture of accuracy and reproducibility.

University of Zimbabwe, College of Health Science, Department of Medical Microbiology

Aug 2016 - Jun 2017

Laboratory Assistant

- Received and prepared Polio, Measles and Rota-virus samples for testing.
- Performed cell culture (RD and L20B Cells) for Polio virus isolation.
- Conducted ELISA and qRT-PCR assays for viral detection and intratypic differentiation.
- Analyzed and reported data to the World Health Organization for disease surveillance.

SKILLS & CERTIFICATIONS

- **Molecular Biology Techniques:** qRT-PCR, ELISA, Flow Cytometry, Western Blot, Gel Electrophoresis, DNA/RNA Isolation, Cell Culture
- **Bioinformatics Tools:** BLAST, Clustal Omega, MEGA, NGS Analysis, Primer 3 (Primer Designing), PyMOL, Alpha Fold2, Uniprot Tools, Chimera, SPDBV, NCBI ORF Finder, UCSC Genome Browser
- **Analytical Techniques:** Atomic Mass Spectroscopy, Raman Spectroscopy, Immunoprecipitation, Data Analysis
- **Software:** Microsoft Office Suite (Project/Word/ Excel/ PowerPoint)
- **Certifications:** Sustainability Framework for Action Against NTDs 2021-2030 (W.H.O), Good Clinical Practice (NIDA)
- **Industry Knowledge & Experience:** Gene Therapy Knowledge, Pharmaceutical Experience
- **Project Management & Planning:** Clinical Supply Management, Strategic Planning

CERTIFICATION

- **Sustainability Framework for Action Against NTDs 2021-2030:** W.H.O
- **Good Clinical Practice:** NIDA