

Johnbosco Tayebwa

BIOINFORMATICIAN

School of Allied Health Sciences, Kampala International University (KIU), Uganda

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Research Focus: My broad interest is integrating various high-dimensional omics datasets such as genomics, transcriptomics, proteomics, metabolomics etc to develop personalized immunotherapy approaches for cancer patients. I am also interested in the application of Single-Cell RNA-Seq for personalized immunotherapy. My Research Focus area is Cancer Immunotherapy especially immune cell infiltration in the Tumor Microenvironment (TME). I am also interested in using AI/ML for computational modeling to develop better prognostic models for Cancer patients. This includes biomarker discovery.

Education

Master of Science in Bioinformatics

UNIVERSITY OF SKOVDE

2011-2012

Sweden

Bachelor of Biomedical Laboratory Technology, Second Class Honours – Upper Division

MAKERERE UNIVERSITY

2005-2008

Uganda

Professional Experience

Assistant Lecturer/Research Scientist

SCHOOL OF ALLIED HEALTH SCIENCES, KAMPALA INTERNATIONAL UNIVERSITY

- Uganda

Current

Head of Department

DEPARTMENT OF MEDICAL LABORATORY SCIENCES, KAMPALA INTERNATIONAL UNIVERSITY

- Uganda

2021-2023

Bioinformatician

DEPARTMENT OF CLINICAL GENETICS, LUND UNIVERSITY HOSPITAL

- Sweden

2012-2014

Visiting Postgraduate Researcher

SCHOOL OF BIOSCIENCES, UNIVERSITY OF EXETER

- United Kingdom

2010-2011

Skills

PROGRAMMING

- Advanced skills in Linux-Unix bash/shell, R statistical programming, GitHub and Perl

HIGH PERFORMANCE COMPUTING

- Experience with HPC clusters (UPPMAX, SNIC) and cloud computing (Amazon AWS, docker)

NGS DATA ANALYSIS

- More than 5 years of experience in management and analysis of high-throughput data from Next-Generation Sequencing Platforms, especially Illumina

- Experience with gene expression array and microarray (SNP-array) data analysis

Research Experience

Department of Clinical Genetics, Lund University Hospital

BIOINFORMATICIAN

2012-2014

- Analyzed NGS data (WGS, WES, TruSeq, RNA-Seq) for bone and soft tissue tumor studies. Developed pipelines for variant calling, fusion gene detection, and differential expression analysis.

School of Biosciences, University of Exeter

VISITING POSTGRADUATE RESEARCHER

2010-2011

- Developed competence in Linux environment and Perl scripting. Assembled bacterial genomes and developed in-silico primers for *Xanthomonas* species.

Selected Publications

I have a dozen publications including one where I'm First Author (shared), one in *Nature Genetics*, and a Review Article on the Methods used in Cancer Research.

For a complete list of publications, please visit: [Google Scholar Profile](#).

Professional Membership

Member of the International Society for Computational Biology (ISCB)

Honors & Awards

Top 500 Scientists in Uganda - AD Scientific Index

POSITION 136 IN UGANDA; POSITION 16 AT KIU; CATEGORY: DIGITAL HEALTH TECHNOLOGIES | HEALTH INFORMATICS

2022

Swedish Institute Scholarship

SWEDISH INSTITUTE

2011-2012

Millennium Science Initiative Research Grant

NARO/WORLD BANK PROJECT

2010-2011

Muljibhai Madhvani Foundation scholarship

MULJIBHAI MADHVANI FOUNDATION

2006-2008

References

1. **Anthony Mukwaya, PhD**
Research Scientist/Research Fellow
Department of Ophthalmology, Harvard Medical School
Schepens Eye Research Institute, Boston, MA, USA
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2. **David Studholme, PhD**
Associate Professor in Bioinformatics
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Exeter, UK
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3. **Fredrik Mertens, MD, PhD**

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