

## DEPARTMENT OF MATHEMATICS

**Name of Faculty/Staff:** Dr. Mobisa Benson, PhD

**Designation/Rank:** Lecturer

**Laikipia University:** School of Science and Applied Technology

**Email:** [bmobisa@laikipia.ac.ke](mailto:bmobisa@laikipia.ac.ke)

### **Educational Background**

- PhD (Applied Mathematics), Masinde Muliro University of Science and Technology, Kenya (2020)
- MSc (Applied Mathematics), Kenyatta University, Kenya (2008)
- Bachelors in Education (Arts), (2<sup>nd</sup> Class Upper Division), Kenyatta University, Kenya (1997)

### **Brief Auto-biography of the Faculty/Staff**

Dr. Mobisa Benson has a teaching experience of 20 years in the area of Mathematics. His research interest lies in mathematical modelling and has conducted research in HIV/AIDS modelling. In July 2019 he participated in a Biophysics conference on: "***Exploring Biophysics Diversity for sustainable industrial and economic development***", held at Masinde Muliro University of Science and Technology, and presented an article titled "***Modelling in vivo HIV dynamics with antiretroviral treatment***". His research titled: "***An Immuno-Epidemiological Model for HIV/AIDS Incorporating Viral and Cellular Transmission with Antiretroviral Treatment***", was among the research topics awarded NRF funding.

### **Selected Publications**

1. Modelling In Vivo HIV Dynamics Under Combined Antiretroviral Treatment, Vol. 2018, *Journal of Applied Mathematics*, [doi.org/10.1155/2018/8276317](https://doi.org/10.1155/2018/8276317).
2. An Immuno-Epidemiological Model for HIV/AIDS Incorporating Viral and Cellular Transmission with Antiretroviral Treatment, *Journal of Applied Mathematical Sciences*, [doi.org/10.12988/ams.2019.910142](https://doi.org/10.12988/ams.2019.910142).

## **Research Interest**

Mathematical Modelling