

## PROGRAM

### INTERNSHIP PROGRAM

## INFECTIOUS DISEASES MODELLING: SOFTWARE DEVELOPMENT, DATA ANALYSIS and MATHEMATICAL MODELLING with MSc and PhD OPPORTUNITIES

### 1. About the Program

This is an inter-disciplinary internship program aimed at building and enhancing skills related to data management and analysis, software programming, machine learning and mathematical modelling for potential masters and PhD students with interest in infectious diseases research projects. At least six applicants will be invited to join the program for at least three (3) months. From those, one qualified candidate will be selected to join the University of Glasgow (UK) for a fully funded PhD program (starting October 2020) focused on mathematical modelling of malaria transmission, control, and elimination. Other opportunities will be to join an extended funded internship programs at Institute for Diseases Modelling (IDM) in Seattle, a MSc program at the University of Glasgow, or Masters and/or PhD programs in Tanzania and in our other partner institutions outside Tanzania this year or next year. This program will be extended to undergraduate students in the same field as a talent search approach.

### 2. Host of the Program

Ifakara Health Institute (IHI) is a leading research organization in Africa with a strong track record in developing, testing and validating innovations for health. Driven by a core strategic mandate for research, training and services, the Institute's work now spans a wide spectrum, covering biomedical and ecological sciences, intervention studies, health-systems research and policy translation. This program will be hosted by the Training and Capacity Building Unit at IHI with initial support from Pan-African Mosquito Control Association (PAMCA).

### 3. Partners Supporting the Program

This program will be supported by different partners: Pan-African Mosquito Control Association (PAMCA), [www.pamca.org](http://www.pamca.org), University of Glasgow (<https://www.gla.ac.uk/>), University of Dar es salaam – mathematics department (<https://www.udsm.ac.tz/>), (<https://www.nm-aist.ac.tz/>), Institute for Disease Modelling (<https://www.idmod.org/>), The Swiss Tropical and Public Health Institute – Swiss TPH (<https://www.swisstph.ch/en/>), University of Capetown (<http://www.masha.uct.ac.za/>), Marshall lab at the University of California – Berkeley (<https://www.marshalllab.com/>), Africa Oxford Initiative (<http://www.afox.ox.ac.uk/>), University College Cork - Ireland (<https://www.ucc.ie/en/>) and many more.

### 4. More Info About the Program

For more scientific related enquiries about the program, please feel free to write to Dr. Samson Kiware at [skware@ihi.or.tz](mailto:skware@ihi.or.tz). For general enquiries about this program and other training programs at IHI – please write to Ms. Cecilia Francis at [cfrancis@ihi.or.tz](mailto:cfrancis@ihi.or.tz).