

The Swiss Tropical and Public Health Institute (Swiss TPH) is a world-leading institute in global health with a particular focus on low- and middle-income countries. Associated with the University of Basel, Swiss TPH combines research, services, and education and training at the local, national, and international level. About 850 people from more than 80 nations work at Swiss TPH focusing on infectious and non-communicable diseases, environment, society, and health as well as health systems and interventions.

The Department of Epidemiology and Public Health (EPH), within the Swiss Tropical and Public Health Institute, develops and applies epidemiological, statistical and mathematical methods to advance innovation, validation, and application in the field of public health. Within the Disease Modelling Unit of the EPH we are looking for a:

PhD student in Mathematical Modelling of Malaria (100%)

We are seeking a PhD student for an exciting opportunity in malaria modelling. The successful candidates will join a globally leading team of scientists with established expertise in mathematical and statistical modelling of the dynamics of malaria, in the context of international collaborations. This position is linked to a Bill & Melinda Gates Foundation project of Professor Melissa Penny for core model development.

Your responsibilities include:

The PhD position will involve developing mathematical and statistical models of malaria dynamics and burden of severe disease, and the use of models to assess of interventions for control and elimination of malaria.

You should have the following experiences and skills in:

Required qualifications for the PhD position are

- a Master's degree in Mathematics, Statistics, Ecology or other quantitative relevant field;
- Strong mathematical and statistical modeling skills,
- Strong quantitative, analytical and programming skills (preferably in at least one of R, C++, or Python);
- Interest and/or expertise in the areas of infectious disease modelling, epidemiology, public health;
- Ability to communicate effectively in spoken and written English, with good presentation skills;
- Ability to work independently and as part of a team on large research projects;
- Ability to initiate, plan, implement and deliver programs of work to tight deadlines.

Applicants with previous expertise in infectious disease modelling are especially encouraged to apply. Swiss TPH is an equal-opportunity employer. Applicants from backgrounds that are traditionally underrepresented in academia are encouraged to apply.

We offer:

The successful applicant will be registered for a PhD degree at the University of Basel, Switzerland. The studentship provides support for 3 years at a doctoral salary at Swiss National Science Foundation scale.

The position is **available immediately** or preferably starting before 1 November 2021. There is no closing date for application, but we encourage applicants to submit their application as soon as possible. Applications will be considered as soon as submitted. Interviews will begin immediately. As long as the positions are published on the website of the Swiss TPH, they are still open.

Please submit your application online via the link provided below:

If you are interested, please submit your application with:

- Motivation letter
- CV
- Publication list
- Diploma, complete course grades and transcripts
- Names and contact information (email) of 2-3 referees

Please note that we can only accept applications via our online recruiting tool: <https://recruitingapp-2698.umantis.com/Jobs/All> Applications via e-mail or external recruiter will not be considered.

Contact:

For further information about the position please visit our website <https://www.swisstph.ch/en/about/eph/disease-modelling/> or contact Professor Melissa Penny melissa.penny@unibas.ch

Job Profile:

Start Date: Start immediately

Location: Basel, Switzerland

Duration: Three year PhD contract

Percentage: 100%

Travel Required? No