

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 EPH we are looking for a

Senior Scientist or Postdoctoral Scientist in infectious disease dynamics modelling for vector control interventions against malaria (80-100%)

We are seeking a senior scientist or postdoctoral scientist for an exciting opportunity to develop and implement disease and vector biology models to support decision making in health.

There are many open questions concerning the assessment of new and current vector control interventions for the control and elimination of malaria that can only be answered through quantitative analysis, disease modelling and simulation.

The candidate will undertake mathematical and statistical modelling and simulation to (i) predict the impact of novel vector control interventions; and (ii) improve implementation strategies of current interventions on the transmission and disease burden for malaria. The position focuses on using and developing disease models, analyzing field and semi-field entomological and epidemiological data, as well as aggregating and analyzing results of large numbers of simulations.

The successful candidate will join and collaborate with a multidisciplinary team within Swiss TPH and external partners to provide evidence to global decision-makers, funders and product developers. Projects are funded by the Innovative Vector Control Consortium and the Bill & Melinda Gates Foundation.

The position will be based at the Swiss TPH in Basel and the successful applicant will receive a one or two year contract with possibility of extension. Salary will be commensurate with experience (as a minimum based on the Swiss National Science Foundation Postdoc salary scale). The position is intended to be full-time (100%), but candidates hoping to work part-time will be considered.

We are looking for candidates with:

- Essential: PhD in mathematics, statistics or a related discipline such as quantitative epidemiology, ecology modelling, computational biology
- Strong mathematical and statistical modelling skills

- Strong programming skills (in at least one of Python, R, Matlab, C/C++), preferably with experience in working with a version control system (preferably Git) and in using high performance computing clusters
- Expertise/background and interest in areas of infectious disease modelling
- Expertise/background and interest in the epidemiology of parasitic diseases, especially malaria, vector ecology and/or entomology
- Ability to deliver high quality research and to publish in peer reviewed journals
- Ability to communicate effectively in spoken and written English, incl. good presentation skills
- Ability to work independently and as part of an interdisciplinary team on large research projects in a culturally diverse environment
- 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 committed to excellence through diversity. Applicants from the global South and from backgrounds that are traditionally underrepresented in academia are especially encouraged to apply.

Please submit your application online via the link provided below.

If you are interested, please submit your application with:

- CV
- Motivation letter
- Reference letters and diploma
- Salary expectations
- Names and contact information (email or phone) of 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. The closing date for applications is 12th of March 2021, but applications will be considered on a rolling basis and the job opening will be closed as soon as the right candidate is found.

Contact:

For further information about the position please visit our website <https://www.swisstph.ch/en/about/eph/disease-modelling/> or contact PD Dr. Nakul Chitnis (nakul.chitnis@swisstph.ch).

Job Profile:

Start Date: As soon as possible, but negotiable

Location: Basel/Allschwil, Switzerland

Duration: 1-2 years with possibility of extension

Percentage: Preference 100%, but negotiable