



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 Medical Parasitology and Infection Biology (MPI) of Swiss TPH conducts basic and translational research in infection biology with a particular focus on infectious diseases affecting the global poor. The Malaria Host Interactions Unit (MHIU) at MPI is looking for an experienced researcher to join the team as a

Postdoctoral Fellow in Basic Malaria Research (100%)

We are seeking a postdoctoral scientist to help us investigating how malaria parasites interact with their environment. We aim at understanding the molecular mechanisms intra-erythrocytic parasites employ to sense environmental changes and how this information is translated into cellular responses. The candidate will use the human malaria parasite *Plasmodium falciparum* to (i) identify and functionally characterize parasite-encoded as well as host cell-derived factors that control environmental sensing and (ii) identify downstream adaptation responses. Our group uses a diverse set of reverse genetics approaches (e.g. CRISPR/Cas9- and DiCre recombinase-mediated gene editing) in conjunction with state-of-the-art techniques for functional analyses (e.g. high content imaging, CHIP- and RNA-Sequencing, phosphoproteomics). The candidate will work on her/his own specific project as well as in close collaboration with other group members.

Supervised by Prof. Nicolas Brancucci, this position will be funded through a Swiss National Science Foundation (SNSF) Project Grant and is initially limited for up to three and a half years. The salary will be according to the regulations of the SNSF.

Main responsibilities include:

- Generate transgenic *P. falciparum* parasite lines
- Generate transgenic red blood cells via manipulation of erythroid precursors
- Identify signalling pathways using phosphoproteomics approaches
- Test involvement of candidate factors in parasite environmental sensing using inducible knock-down and knock-out strategies.
- Functionally analyse candidates using diverse molecular techniques





You should have the following experience and skills:

- Cell culture (mammalian and ideally *P. falciparum* or other protozoan parasites)
- Molecular cloning and transfection
- Transcriptomics and (phospho-) proteomics techniques, incl. analysis
- Excellent command (speaking and writing) of English

...and most importantly

- Enthusiasm for studying malaria parasite biology

Please submit your application online via the link provided below.

If you are interested, please submit your application including:

- CV
- Motivation letter
- Reference Letters if available and Diploma
- Names and contact information (e-mail or phone) of 3 references

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.

Starting date is upon agreement, between July and December 2021, and the position is based in Basel/Allschwil, Switzerland.

Contact:

For further information about the position, please contact Prof. Nicolas Brancucci (e-mail: nicolas.brancucci@swisstph.ch), Head of Malaria Host Interactions Unit at Swiss TPH.

