



HEIDELBERG
FACULTY OF
MEDICINE

Postdoc position in malaria research

Investigating early oocyst development of *Plasmodium*.

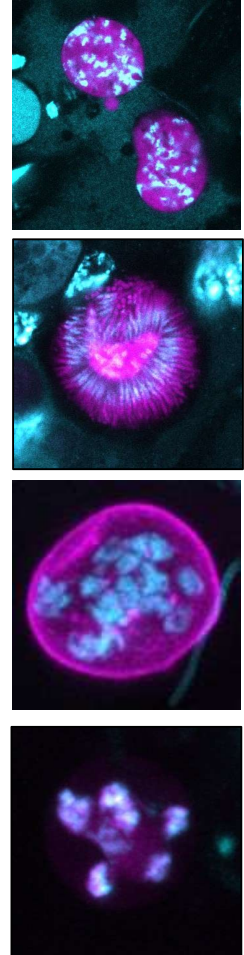
Do you want to develop and apply new tools to investigate how malaria-causing *Plasmodium* parasites develop within mosquitoes?

Join us at Heidelberg University for a postdoc!

Malaria is a devastating infectious disease that kills more than half a million people per year. It is caused by the eukaryotic, single-celled parasite *Plasmodium*, which infects mosquitoes to spread from host to host. At the Hentzschel lab, we investigate the biology of early mosquito infection, particularly how the extracellular form of the parasite, the oocyst, develops at the mosquito midgut. The oocyst is a post-meiotic, but still diploid cell, and how this unusual cell biology is organised and transcriptionally regulated is still not well understood. We have previously identified that parasites lacking parts of the male genome still form oocysts and arrest much later than thought. We now want to understand the molecular and cellular processes underlying this phenotype, which will not only reveal non-textbook cell biology, but might help to develop transmission-blocking drugs in the future.

What we offer

During your fully funded postdoc project (4 years, 100 % TV-L E13), you will develop and use state-of-the-art molecular biology, quantitative live-cell microscopy, transcriptomics, and genetic tools to investigate the cell biology of oocyst development. You will join a young, dynamic group with plenty of opportunities to bring in your own ideas. You can expect a supportive environment and both close mentoring to comprehensively expand your scientific and professional skills, and freedom to develop your own line of research. There will be opportunities to participate in international meetings to extend your scientific network and visibility in the field. Our lab is part of the parasitology department at the Center for Infectious Diseases, located in the new CIID building on the Neuenheimer Feld Campus in Heidelberg. Here you will be part of a vibrant parasitology community and have access to all necessary facilities and equipment. Heidelberg University also has a variety of career development opportunities for postdocs and early career scientists. The postdoc position is funded by an ERC Starting Grant and should start between April and December 2025.



What we are looking for

- Curiosity, passion and enthusiasm for unusual cell biology
- PhD in molecular or cellular biology
- Self-driven motivation, initiative and willingness to drive the project forward
- Ability to work both independently as well as collaboratively in a team
- Good communication skills in English (speaking, reading, writing)
- Willingness to work with experimental mouse models
- Prior experience with molecular biology essential, experience with parasitology, transcriptomics, or live-cell microscopy desirable

How to apply

If you are motivated to explore the unusual biology of *Plasmodium* and join a young lab, please send a single PDF file comprised of a motivation letter, a CV, your PhD certificate, and contact information for two references to franziska.hentzschel@med.uni-heidelberg.de.

If you have any further questions, please do not hesitate to contact Dr. Franziska Hentzschel by email or check out the website (<http://tinyurl.com/hentzschel-lab>). The position will be filled on a rolling basis.

We look forward to receiving your application!