

## Job posting

### Type of position

scientific

administrative

### Target group

graduates

post docs

other

**Title** Doctoral researcher (f/m/d) Development of cells for counteracting local infections - redirecting infection signals to therapeutic effectors

**Institution** The research group "Model Systems for Infection" of Prof. Dagmar Wirth at the Helmholtz Centre for Infection Research (HZI) in Braunschweig, Germany is seeking a

**Position** Doctoral researcher (f/m/d)

Starting date: June 2019 or later - Initial contract for 3 years  
Salary: follows TVöD E13 (50%) with the possibility of an additional payment of 15%  
Probation period: 6 months

**Responsibilities** Host cells use signaling networks to sense, transmit and counteract local infection events. This project aims to re-engineer these cellular signaling systems to establish sophisticated strategies of therapeutic effector expression. Therefore, cells (various cell lines, primary cells) will be equipped with synthetic expression cassettes that redirect physiological signals to enzymatic activities that block infection. To this end, advanced tools of genetic engineering including RMCE and CRISPR/Cas9 will be used. Validation of cells is foreseen in in vitro infection models. For proof of concept, the potential of these cells to cure infection will be evaluated in mouse models.

**Requirements**

- Master's Degree/Diploma in biology, biotechnology, or a related field of the life sciences
- Excellent education/training in molecular biology/genetic engineering and high motivation to work in Synthetic Biology
- Excellent English communication skills (written and spoken)
- Ability to work both independently and within an international team

**Application procedure (deadline etc.)** Applicants are required to complete the online application form here: <https://hzi.opencampus.net/> (Please select Job No. 23/2019). Closing date: 31 March 2019

**Contact** For questions regarding the PhD project, please contact Prof. Dagmar Wirth via e-mail [Dagmar.Wirth@helmholtz-hzi.de](mailto:Dagmar.Wirth@helmholtz-hzi.de) or phone +49-531-6181-5040.

Further information about the institute and the research group of Prof. Dagmar Wirth can be found on our website:  
[https://www.helmholtz-hzi.de/en/research/research\\_topics/immune\\_response/model\\_systems\\_for\\_infection\\_and\\_immunity/our\\_research/](https://www.helmholtz-hzi.de/en/research/research_topics/immune_response/model_systems_for_infection_and_immunity/our_research/)