



In the Phytopathology group (Prof. Matthias Hahn) at the Department of Biology, Technical University of Kaiserslautern, the following part-time position (limited to 3 years) is available:

### PhD student (m/f/d)

Our group investigates the infection mechanisms of plant pathogenic fungi, in particular the grey mould fungus *Botrytis cinerea*. attacks a wide range of host plants, with the help of toxic and programmed cell death inducing proteins and metabolites. Until now, no 'golden bullet' or core virulence factor has been identified for *B. cinerea*, but its necrotrophic lifestyle seems to depend on a cocktail of secreted virulence factors, most of them being proteins. We have recently developed a high-efficiency CRISPR/Cas protocol, which allows for the first time to rapidly introduce any changes of choice in the fungal genome without introduction of resistance markers (Leisen et al., 2020, PLoS Pathogens, doi: 10.1371/journal.ppat.1008326). To better understand the role and the interaction of virulence factors, we have started to successively delete and genes encoding infection-related secreted proteins, and to analyse the infection process of the resulting mutants and changes in the responses of the host plants.

#### Your responsibilities:

- Planning, implementation and evaluation of phytopathological, molecular biological and cytological experiments: CRISPR/Cas genome editing of *B. cinerea* (generation of multiple mutants and GFP tagged strains), infection tests, molecular biology studies, MS-based quantitative secretome analyses, live-imaging microscopy.
- Presentations at national and international meetings and congresses
- Publications in international journals
- Co-supervision of students in practicals, Bachelor and Master Theses

#### Our requirements:

- Scientific university degree (master's or comparable) in a live science subject, preferably in plant pathology, plant biology and/or microbiology
- Laboratory experience in molecular cell biology and/or microbiology
- Great interest in plant pathology and high level of research motivation
- Very good written and spoken English skills

**We offer:**

- varied and fascinating areas in current plant pathology research
- state of the art methods
- a varied occupation and a pleasant working atmosphere in a committed team
- Opportunity for a PhD
- Salary according to the collective agreement for the civil service of the federal states (E 13 TV-L 50%, part-time)
- additional pension scheme (VBL)
- Discounted ticket for public transport (job ticket)
- Corporate Health Management

**Please send your application (including one or two letters of reference) only via e-mail until January 15<sup>th</sup>, 2021 to:**

**E-Mail: [hahn@biologie.uni-kl.de](mailto:hahn@biologie.uni-kl.de) (phone: +49 (0) 6312052402)**

Prof. Dr. Matthias Hahn  
University of Kaiserslautern  
Faculty of Biology  
Postfach 3049  
67653 Kaiserslautern

**Further details:**

- The University of Kaiserslautern encourages qualified academics to apply.
- Applicants with children are welcome.
- Severely disabled applicants will be given preference if they are suitable (please enclose proof).
- Applications from elderly people are welcome.
- Submit the application only via email and attach only one PDF-file.
- Data protection-compliant destruction after completion of recruitment process is guaranteed.
- Costs that arise in connection with your application (travel expenses, etc.) will not be reimbursed.
- We might not send any confirmations of receipt.
- With your application you agree to the further internal processing of your data for business purposes in accordance with the European General Data Protection Regulation (GDPR) and the State Data Protection Act RLP