

The Department of Microsystems Engineering (IMTEK) at the University of Freiburg is one of the world's largest and leading academic research centers in the field of microsystems technology. The Laboratory for MEMS Applications (Prof. Dr.-Ing. Zengerle) develops tools for diagnostics, microfluidics and life-science research. For a research project, we are looking for a

Postdoc (m/f/d)

in molecular biology for the

Development of new Assay Technologies - real-time PCR, digital PCR and NGS

As part of our Nucleic Acid Analysis Group, you explore new assay technologies to overcome current limitations in molecular diagnostics and DNA analysis. The group focuses on PCR, digital and isothermal amplification and is increasing its activities in the field of next generation sequencing. By the development and integration of novel assay formats, we aim to improve performance and create added value for patients and users. Our projects are characterized by interdisciplinary cooperation with academic, clinical, and industrial partners with the goal of fast technology transfer. Application examples include the detection of antibiotic-resistant pathogens as well as personalized therapy monitoring in oncology and liquid biopsies based on circulating tumor DNA.

Your tasks:

- You develop real-time and digital RT-PCR assays to detect and differentiate new virus strains of plant pathogens
- You apply and further develop our proprietary multiplexing technologies, including optimization of fluorogenic DNA modifications
- In perspective of novel diagnostic tools, you develop and test new concepts for sequencing techniques and DNA methylation analysis

Your profile:

- You are highly motivated with an open mindset and solid communication skills in German and/or English
- You have (or close to have) completed a doctoral degree in biology, molecular biology, biomedicine or a similar field
- You have profound knowledge and hands-on experience in assay development (e.g. in the field of PCR, isothermal amplification, NGS or sample/library preparation)
- You solve challenging tasks with creativity and a deep understanding of the issue
- You are interested in technology transfer
- Experience in project work and/or acquisition would be beneficial

We offer:

- An excellent equipped laboratory and research institute with a highly motivated team and friendly working atmosphere
- A full-time contract for 2 years with the possibility of extension, part-time employment is possible
- Flexible working hours
- Trainings for professional and personal development
- Public working benefits



If you are interested, we are looking forward to hearing from you! Please send your application including cover letter, CV and relevant certificates in one single PDF to:

Dr. Nadine Borst

Laboratory for MEMS Applications

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