

Job offer No. 2021_45

The Leibniz Centre for Photonics in Infection Research (LPI, <http://lpi-jena.de>) is a project of the National Roadmap for Research Infrastructures of the Federal Ministry of Education and Research (BMBF). As one of the supporting institutions of the LPI, the Leibniz Institute of Photonic Technologies (Leibniz-IPHT, <https://www.leibniz-ipht.de/>) is looking to recruit a

PhD candidate on Microfluidic Assay Development (f/m/d)

for **3 years on a part-time basis (65 %)**. An extension will be sought upon suitability.

The LPI is being established by a consortium of four supporting institutions ([Leibniz-HKI](#), [Leibniz-IPHT](#), [FSU Jena](#), [Universitätsklinikum Jena](#)) In future, it will combine photonic technologies with infection research and thus contribute to the development of new methods for diagnosis, monitoring and therapy for human medicine. Research results will be transferred to clinical practice along the entire value chain. The LPI's research programme is divided into basic technologies, in which the four supporting institutions jointly address various scientific and technological focal points in an interdisciplinary approach. As a user-open translational infrastructure, LPI makes newly developed demonstrators and methods available to external partners within the framework of joint projects.

The Microfluidics Research Group of the Leibniz IPHT supports the development of the basic technologies required for research at LPI with the development of digital microfluidic measurement methods for the analysis of immunologically relevant microorganisms and single cells. A review and introduction to the subject matter can be found at: Kaminski, T. S., Scheler, O., & Garstecki, P. (2016). Droplet microfluidics for microbiology: techniques, applications and challenges. *Lab. Chip*, 16(12), 2168-2187, DOI: <https://doi.org/10.1039/C6LC00367B>.

In this context, the position of a doctoral candidate is to be filled for the development of digital microfluidic cellular assays for application in immunology.

Your tasks

- Research and implementation of a system infrastructure for performing digital microbiological assays in microfluidic devices
- Evaluation of the system for medically relevant cells and microorganisms
- Verification and validation in a clinical environment

We expect

- A completed university degree (Diploma/Master) of the Natural- or Engineering sciences
- Knowledge of microbiology, bioanalytics and data processing
- Willingness and interest in interdisciplinary scientific work
- Good command of written and spoken English and German
- Willingness to take on teaching tasks in the context of supervising internships and courses

We offer

- An open welcoming culture
- A family-friendly atmosphere with work-life balance as a central concern
- Working in an interdisciplinary environment
- Intensive support for doctoral studies and publications
- Support and further development for employees

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Salary is in accordance with the regulations of the TV-L. The Leibniz-IPHT aims to increase the proportion of women among its staff and strongly encourages qualified women to apply. Severely disabled persons will be given preferential consideration in case of equal suitability.

Further information: Dr. Thomas Henkel | 03641 206 307 | thomas.henkel@leibniz-ipht.de

Please submit your complete application documents (curriculum vitae, degrees, certificates, references, other) with two reference addresses **until January 31th, 2022 with Code 2021_45** preferably by e-mail (Personal_Abtl@leibniz-ipht.de) in a pdf file via the Personnel Office of the Leibniz-IPHT:

Leibniz-Institut of Photonic Technology
Personnel Office
Albert-Einstein-Straße 9, 07745 Jena / Germany
Personal_Abtl@leibniz-ipht.de

Code: 2021_45

Privacy Notice:

By sending us your application documents, you consent to the processing of your personal data in connection with the application process. This consent can be revoked in writing or electronically at any time without giving reasons. Please note that revocation of consent may mean that the application can no longer be considered in the current procedure.

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