



In the Department of Experimental Toxicology and ZEBET of the Federal Institute for Risk Assessment (BfR), the following two positions are to be filled with immediate effect, subject to the allocation of funds:

PhD student for imaging-based high-throughput screening and organoid cultures (f/m/d)

Reference number 3613	Pay group 13 TVöD	Place of work Berlin	Temporary for three years	Application deadline 14.11.2024	Apply here BfR job portal
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The employment is 65% of the regular weekly working hours (currently 25.35 hours) and is to be used for the doctorate. Participation in the doctoral support programme is mandatory. This serves to impart both scientific and methodological knowledge and offers the opportunity to regularly present doctoral projects at internal events and to benefit from scientific exchange.

The BfR independently prepares expert opinions and statements on issues of food, feed and chemical safety and consumer health protection in Germany on the basis of internationally recognised scientific evaluation criteria. It advises the Federal Government and other institutions and interest groups in these areas. In this way, the BfR makes an important contribution to the protection of human health.

You can find information on the specialist group's remit [here](#) on our homepage.

Im Geschäftsbereich



Tasks

As part of the EU-funded third-party funded joint project "RADAR", imaging-based high-throughput screening methods are to be further developed and used as an alternative method to animal testing for testing chemicals, in particular novel lignin-based aromatic compounds. For this purpose, various in vitro methods such as the E-morph assay or the cell painting (PLUS) assay as well as more complex organoid models are used to determine possible endocrine activities and cytotoxic effects. Building on this, the RADAR project aims to develop a multi-stage test strategy for the efficient assessment of chemicals in accordance with the "Safe and Sustainable by Design" (SSbD) framework. The thematic separation of the two complementary doctoral positions is given. In detail, the activities include

- Further development and application of imaging-based in vitro assays using different cell lines and liver/intestinal organoid models
- Molecular and mechanistic characterisation of the effect of test substances on health-relevant processes, in particular endocrine activities and specific organ toxicity
- Carrying out mechanistic investigations to analyse individual substance effects using cell biological (cell culture, transient/stable transfection, immunofluorescence, siRNA knock-down), molecular biological (reporter gene analyses, qPCR, transcriptome analyses) and protein biochemical methods (Western blot, immunoprecipitation, interaction studies) as well as high-resolution microscopy
- Support for general laboratory organisation
- Close interaction and independent coordination with the joint project partners
- Presentation of scientific results at meetings and congresses
- Support in the supervision of Master's and Bachelor's students and interns

Your profile

- Completed (specialised) university degree (master's, diploma or comparable degree) in biology, nutritional sciences, biochemistry, biotechnology, toxicology, human medicine or a comparable field of study
- Practical experience in the cultivation of cell lines as well as in common cell biological, molecular biological, protein biochemical and/or toxicological methods
- Very good knowledge of English and good knowledge of written and spoken German
- Very good IT skills as well as a conscientious and structured way of working, flexibility, ability to work in a team and resilience

Desired

- Practical experience in the cultivation of organoids
- Practical experience with cell painting methods
- Practical experience with automated image and data analysis (e.g. Cell Profiler, KNIME)
- Knowledge of alternative methods to animal testing and the 3R principle as well as experimental toxicology
- Experience with QM systems (e.g. electronic laboratory notebooks)

Our offer

- As a family-friendly institute, we offer various part-time working models
- Trust-based working hours
- 30 days holiday (5-day week) and days off on 24.12. and 31.12.
- Possibility of claiming additional compensatory days for time credits
- Attractive subsidy (50%) for the Deutschlandticket job/company ticket
- Possibility of hybrid working (up to 60%)
- Very good connection to the public transport network
- Extensive training opportunities for professional and personal development
- VBL company pension / capital-forming benefits
- AWO Family Service

Application procedure

Do you feel addressed?

Then please apply by **14.11.2024** via our online system.

The interviews are expected to take place on **28 November 2024**.

Please direct any questions in connection with the application procedure to: bewerbung@bfr.bund.de. (Please do not send any applications to this e-mail address)

If you are unable to apply online, please send us your application by post:

Federal Institute for Risk Assessment
Personnel Department, Max-Dohrn-Str. 8-10
10589 Berlin

If you have any questions about the position, please contact

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Dr Heuberger: T +49 30 18412-29303
E-Mail: Julian.Heuberger@bfr.bund.de

Further information can be found on our homepage: bfr.bund.de/en/careers



The BfR welcomes applications from people of all nationalities.



As an innovative scientific institution, the BfR offers family-friendly working conditions. For this, the BfR was awarded the "audit berufundfamilie®" certificate. The BfR guarantees the professional equality equality between women and men. Severely disabled people with equal aptitude are given special consideration and are only required to have a minimum level of physical aptitude.