



**Leibniz-Institut**  
DSMZ-Deutsche Sammlung  
von Mikroorganismen  
und Zellkulturen GmbH

## Internship and/or Master's Thesis

### “Establishment of animal-component-free protocols for cultivation of hematological cell lines”

in the group Tumor Biology of the Department for Human and Animal Cell Lines at the Leibniz Institute DSMZ – German Collection of Microorganisms and Cell Cultures, Braunschweig, Germany.

#### Background

Continuous cancer cell lines represent indispensable *in vitro* models for research. In the 3Rs principle (Replace, Reduce, Refine) they represent a major pillar for replacing animal models in preclinical research. However, despite ethical concerns and scientific drawbacks, the animal-derived component fetal bovine serum (FBS) is still a common supplement of cell culture media. Recently, we have exemplarily shown for some cancer cell lines that they remain their main phenotype and function, when adapted to suitable animal-component-free media. For more details see Koelz *et al.*, 2026 (<https://doi.org/10.14573/altex.2512111>) and <https://research.dsmz.de/group/MuTZ-TB/general-info>.

#### Project aims and methodology

Using a newly established screening approach based on live-cell-imaging, we aim to test the suitability of different animal-component-free media for single leukemia and lymphoma cell lines. For subsequent validation of the FBS-free culture conditions, different techniques including cryopreservation, cell-based assays, and molecular biology techniques will be applied.

#### What you offer

- B.Sc. degree in life sciences, biology, biotechnology or comparable discipline
- Strong interest and ideally first experience in cell culture and live-cell-imaging
- Diligence and strong documentation skills
- Team spirit

#### What we offer

- Thorough training in good cell culture practice and all required methods
- Support from experienced and motivated team members
- Well-equipped laboratories
- Room to bring in your own ideas
- Insights into the tasks of the cell lines bank of Europe's largest bioresource center

Please send your application (containing a cover letter, CV, and a copy of B.Sc. certificate) as single pdf file to Dr. Sonja Eberth ([sonja.eberth@dsmz.de](mailto:sonja.eberth@dsmz.de)) by June 7, 2026. For an internship you will need a letter from your university confirming that it is mandatory as part of your degree program.