

Technische Universität Dresden (TUD), as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

The **Cluster of Excellence „Physics of Life” (PoL)** offers a position in the **Junior Research Group Mechanics of active Biomaterials** (Dr. Elisabeth Fischer-Friedrich) as

Research Associate / Postdoc (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible**. The position is initially limited to 24 months, with the option of extension and the chance to obtain further academic qualification. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The Cluster of Excellence PoL (<https://physics-of-life.tu-dresden.de/en>) is a central academic unit and growing interdisciplinary research center dedicated to quantitative biology, biophysics and computer science, which is funded by the German Research Foundation (DFG) and offers a wide range of support structures, including state-of-the-art light microscopy and advanced bio-image data science facilities.

Tasks: continue a research project on the feedback between mechanical confinement of tumor spheroids and cell-cycle-progression. Methods include cell culture, confocal fluorescence microscopy, quantitative biochemical assays and atomic force microscopy. Furthermore, analysis of experimental data with custom-made computer codes, writing of scientific manuscripts for publication in the relevant periodicals; conducting detailed literature searches; participation in professional conferences and presentation of the research work of the laboratory and its projects; support of the Junior Research Group in terms of project-related co-supervision of students and preparation of research grant proposals.

Requirements:

- university and - if applicable - PhD degree in biology, biochemistry, biophysics, or related fields,
- strong interest in working in an interdisciplinary environment at the interface of physics, and cell biology,
- excellent communication and presentation skills in English,
- practical experience with cell culture and light microscopy methods.
- Experience with programming image analysis methods (ideally with matlab) is desirable.

The Junior Research Group (<https://physics-of-life.tu-dresden.de/research/core-groups/fischer-friedrich>) seeks an independent, passionate, and motivated postdoc.

What we offer: We offer the opportunity to shape an exciting research project at the interface of cell biology, biophysics and medicine, while developing your academic or professional career. You will be imbedded within the highly interactive, and interdisciplinary research environment of PoL and the

wider Dresden Campus, which includes other high-quality scientific institutions. You will be exposed to world-class research on diverse topics through regular scientific seminars and occasional retreats. You will have the possibility to acquire project management skills, team leading skills, and teaching skills. Employment conditions include a comprehensive package with full social benefits. Dresden offers a high-quality of life with a relatively low cost-of-living.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Please submit your complete applications (letter of motivation, CV, and contact details for 3 references) by **March 15, 2023** (stamped arrival date applies) by sending it as a single pdf-file via the SecureMail Portal <https://securemail.tu-dresden.de> to elisabeth.fischer-friedrich@tu-dresden.de with the subject "Open postdoc in " or to: **TU Dresden, Exzellenzcluster "Physik des Lebens", z. Hdn. Frau Dr. Elisabeth Fischer-Friedrich, Arnoldstrasse 18, 01307 Dresden, Germany**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

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