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” is seeking to appoint a student as

**Research assistant (m/f/x) (15 hrs/week)**

starting **February 1, 2023** and limited until June 30, 2023. 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 an interdisciplinary research center for biology, biophysics and computer science, which is funded by the German Research Foundation (DFG) and offers a wide range of support structures. You will be part of the group “Physics of Embryonic Self-Organization and Morphogenesis” of Otger Campàs, currently hosted at the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG). You will work in a highly interdisciplinary environment. The group focuses on the mechanical principles underlying embryonic development and morphogenesis, using quantitative approaches and relying on the expertise of biologists as well as experimental and theoretical physicists. We seek motivated applicants to help in a project studying relations between genetics and signaling on the one hand, and cell and tissue mechanics on the other.

**Tasks:** Academic support. You will mainly help implementing, in Zebrafish embryo, the use of already existing photoactivatable proteins to perturb actomyosin cortex and cell signaling. The underlying goal is to develop tools allowing precise spatiotemporal control of cell mechanics and signaling in order to dissect finely the interaction between these two phenomena. In particular, you will characterize relevant concentrations and illumination patterns to generate local and transient activation of these proteins. Methods include classical embryologic approaches (embryo handling, injection), molecular biology (mRNA synthesis), fluorescence imaging and tissue labelling (in situ hybridization and immunostaining). Depending on the progress of the project, other approaches might be considered like cloning and transgenesis, as well as analysis of experimental data, detailed literature searches and presentation of the research work to the laboratory.

**Requirements:** A university degree (Bachelor) in biology or biophysics, good command of spoken and written English and high motivation are required. Previous experiences in a biology laboratory as well as a certain degree of autonomy are appreciated.

TU Dresden 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 application by **December 19, 2022** (stamped arrival date of the university central mail service applies) to: **TU Dresden, Exzellenzcluster Physics of Life, Professur für Dynamik von Geweben, z. Hdn. Herrn Dr. Arthur Boutillon, Arnoldstr. 18, 01307 Dresden, Germany** or via the TU Dresden SecureMail Portal [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf-document to [arthur.boutillon@tu-dresden.de](mailto:arthur.boutillon@tu-dresden.de). Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: [https://tu-dresden.de/karriere/datenschutzhinweis](https://tu-dresden.de/karriere/datenschutzhinweis).