

The **Cluster of Excellence „Physics of Life (PoL)“** offers a position in the **Junior Research Group Biophysics of epithelial growth and tumorigenesis** (Dr. Natalie Dye) focused on the **“Self-organized 3D epithelial morphogenesis”** 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 12 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:** The Junior Research Group (<https://physics-of-life.tu-dresden.de/en/research/core-groups/dye>) seeks an independent, passionate, and motivated postdoc to start a new project examining the dynamic, self-organized behaviors of human gastrointestinal cells in culture. The project involves using advanced light microscopy methods and biophysical techniques to probe the mechanisms by which these cells organize into particular collective morphologies. The successful applicant will work closely with our theory collaborators at the TU-Dresden and MPI-PKS.

**Requirements:**

- university and PhD degree in biology, physics, or related fields
- strong interest in working in an interdisciplinary environment at the interface of physics, medicine, and cell/developmental biology
- excellent communication and presentation skills in English
- practical experience with cell culture and light microscopy methods is advantageous
- experience with programmatic image analysis methods (ideally Python) and/or physical modeling is desirable.

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

Applications from women are particularly welcome. The same applies to people with disabilities.

Please submit your complete applications (letter of motivation, CV, and contact details for 3 references) by **August 19, 2022** (stamped arrival date applies) by sending it as a single pdf-file via the SecureMail Portal <https://securemail.tu-dresden.de> to [natalie\\_anne.dye@tu-dresden.de](mailto:natalie_anne.dye@tu-dresden.de) with the subject “Open postdoc in self-organized 3D morphogenesis” or by mail to: **TU Dresden, Exzellenzcluster "Physik des Lebens", z. Hdn. Frau Dr. Natalie Dye, Arnoldstrasse 18, 01307 Dresden**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

**DRESDEN  
concept**



**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>.