





PhD position (m/f/d, E 13 TV-L, 65%) in the Biomechanical Modeling of Morphogenesis Lab



A fully funded PhD position (initially 3 years) is available in the <u>Biomechanical Modeling of Morphogenesis Lab</u> (BM^2 Lab) at the ZMBP, University of Tübingen (Germany). The position can be filled starting **November 2025** but will stay open until a suitable candidate will be found.

Research

The BM^2 Lab is an interdisciplinary research group at the interface of physics, computer science & biology interested in understanding morphogenesis, bio-mechanics and their interaction in living systems, mainly plants. The BM^2 Lab is predominantly computational and uses ad-hoc developed modeling tools such as MorphoMechanX to provide explanatory and predictive scenarios for developmental problems. We are currently focusing on organ bending during ovule growth, chirality establishment in plant tissues, cell wall mechanics and feedback between genetic signaling and mechano-sensing (for more background see Mosca et al. 2024 Curr Biology, Hernandez-Lagana, Mosca et al. 2021 eLife).

Your profile

We are looking for a **highly motivated** candidate with excellent written and oral English, good communication and teamwork skills, who can work independently and in a goal-oriented manner. The ideal candidate should have an <u>MSc or equivalent</u> in a field connected to **computational sciences** (i.e. <u>physics, mathematics, computer science, engineering, computational biology</u>) and is fascinated by biological processes. Strong **mathematical** and analytical **skills** are desirable as well as some **programming experience**, while initial exposure to **Finite Element Methods** & object-oriented **C++** programming language would be a **plus**, but is not required. We also welcome applicants with an MSc degree in biology and who possess a solid aptitude for mathematics and coding.

Environment

The BM^2 lab is part the **University of Tübingen**. It is located on the science campus, at the Center for Molecular Plant Biology (**ZMBP**), a world-renown institution for its research on plant science. The campus fosters connections with the proximal faculties of Physics, Mathematics and the Inter-faculty Institute of Microbiology and Infection Medicine.

Tübingen is an international, dynamic, and lively university town in the Swabian Jura.

How to apply

Interested applicants should submit a single PDF comprising a <u>motivation letter</u> describing their research interests, an <u>up-to-date CV</u>, and <u>the names and contact information of 2 references</u> to **bm2lab@uni-tuebingen.de**. The screening of the applications will start in September 2025 and will continue until a suitable candidate has been found. For more information, please **contact** Dr. Gabriella Mosca via **email** (gabriella.mosca@uni-tuebingen.de).

The University of Tübingen is committed to **equal opportunity**, **diversity** and **inclusion** and wishes to enhance the share of women and under-represented categories employed in research. Applications from equally qualified candidates with disabilities will be given preference. The employment will be handled by the central administration of the University of Tübingen.





