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UNIVERSITÄT
BERN

The ARTORG Center for Biomedical Engineering Research
University of Bern, Switzerland, seeks

PhD Student in Computational Mechanics

for a period of four years starting in the summer 2019

The outstanding candidate will be integrated in a research group in biomechanics combining experimental and computational methods to test original scientific hypotheses and develop new diagnostic methods or medical devices. She/he will work on an international research project jointly funded by the Swiss National Science Foundation and the Indian Department of Biotechnology.

This project is initiated in collaboration with the Narayana Nethralaya Eye Hospital in Bangalore and aims at developing personalized model of refractive interventions based on biomechanical simulations. The global number of people with myopic refractive error is expected to reach 5 billion by 2050. Therefore, delivering an effective correction is of immense clinical need today, as well as in the future. The candidate will develop numerical models accounting for the anatomical and mechanical properties of the cornea derived from high-resolution in-vivo imaging.

The candidate must hold a Master's Degree in mechanics, computer science, biomedical engineering, physics or other related field. Experience with the following is required:

- A solid background in mechanics and computational methods
- Practice in finite element analysis
- Broad programming skills
- Project-related experience in biomechanics
- Strong writing skills in English are indispensable

The University of Bern aims at increasing the proportion of women in its scientific personnel and explicitly encourages qualified women to apply for this position. The salaries correspond to the ones published by the Swiss National Science Foundation (www.snf.ch) and the academic track is managed by the Graduate School in Cellular and Biomedical Sciences of the University of Bern (www.gcb.unibe.ch).

Interested candidates should send their resumes with references and school transcripts to:

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<http://www.istb.unibe.ch>