UNIVERSITÄT BERN

PhD position in Quantitative Developmental Biology

A PhD position is available in the recently established group of Prof. Benjamin Towbin at the Institute of Cell Biology, University of Bern, Switzerland. The group studies organismal growth control, combining quantitative experiments with *C. elegans*, mathematical modelling, and genetics (see www.towbinlab.org).

Project description
Correctly sized organs are crucial for the proper functioning of an organism. For example, even small discrepancies between the length of our legs severely hinder motility, and overgrowth of cardiac muscle tissues increases the risk of fatal heart failure. Therefore, the growth of different organs must be tightly coordinated. This project will use live imaging of hundreds of individual animals of *C. elegans* in parallel to determine how organs compensate for stochastic heterogeneities in their growth rate. Using genetics, we will ask how different organs coordinate their growth to ensure the robust development of correct organ size proportions.

Your profile
We look for enthusiastic candidates with a MSc degree in biology, bioengineering, or related fields, and an interest in computational data analysis. We also encourage physicists and computational scientists with a strong interest in learning wet lab biology to apply.

We offer
You will join a young, collaborative, and international research team, and contribute to a new line of research in Quantitative Developmental Biology. Our institute provides state-of-the-art infrastructure for the planned research, including advanced live microscopy and computational infrastructure for automated image processing. The student will be enrolled at the GCB Graduate School (gcb.unibe.ch) with access to advanced courses and an interactive student network. As the capital of Switzerland, Bern provides a high standard of living and is located one hour from major alpine resorts. The position is offered for 4 years with a generous stipend.

Application
Please apply directly to Prof. Benjamin Towbin by email (benjamin.towbin@izb.unibe.ch) by sending a single pdf with the following information:
1. CV and motivation letter explaining why you want to join our lab, what you know, and what you want to learn
2. a short summary (half a page) of your MSc research
3. contact information for 2-3 academic references
4. copies of University transcripts

Applications will be evaluated on a rolling basis until the position is filled.

Contact and further information: benjamin.towbin@izb.unibe.ch
www.towbinlab.org, www.izb.unibe.ch