Prof. Rob Jelier
CMPG - Predictive Genetics and Multicellular Systems
Kasteelpark Arenberg 20, box 2460, B-3001 Leuven, Belgium
Ph: +32 16 377319; e-mail: rob.jelier@kuleuven.be
Visiting address: Landbouwinstituut, building 20, room 01.209

We are seeking a talented and motivated Computational Biology PhD candidate to join our interdisciplinary team focused on understanding the development of complex multicellular systems. Our current research is centered on understanding *C. elegans* embryogenesis, where we have developed an image processing pipeline to retrieve detailed cell shapes from confocal microscopy images. Building on this tool, we further developed an approach to accurately characterize and compare cell shapes, and we are currently working on inferring forces from our detailed cell shapes and modeling morphogenetic processes to test mechanistic hypotheses.

The specific content of the PhD project will be developed collaboratively during the first months, with research questions that may include biophysical simulations of laser ablations and exploring causal inference on complex biological problems. As a member of our team, the successful candidate will have the opportunity to work closely with experts in the field and contribute to cutting-edge research in this area.

The ideal candidate should have a strong background in computational biology, bioinformatics, biophysics, or a related field. Experience with image processing, modeling, and simulation is a plus. We offer a supportive and intellectually stimulating research environment, excellent opportunities for professional development, and competitive salary and benefit packages.

The lab is part of the bioengineering faculty of KU Leuven, with a strong record of combining advanced modeling with experimentation to study living systems for both applied and fundamental research. Across faculties there is an active community of bioinformaticians and computational biologists. The lab is located on a beautiful campus just outside historic Leuven.

Profile

- Talented and enthusiastic researcher. Master degree in computational biology, bioinformatics, bioengineering/biotechnology, biophysics, or related discipline. Good grasp of computing and statistics, sufficient understanding of molecular biology and genetics.
- Good communicative skills and a collaborative attitude
- Advanced command of English is required (knowledge of Dutch is not required)

Offer

- A project with great scientific potential.
- Excellent scientific environment in a top-ranked university, using state-of-the-art technology and methodology. We publish our research in top journals such asm *Bioinformatics*, *E-life*, *Molecular Biology and Evolution*, *Nature Genetics*, *PLoS genetics* and *Cell Systems*, among others.
- Living in the beautiful medieval university town Leuven, a lively city situated in the heart of Europe, 20 km from Brussels.
- Good remuneration and benefits.
- Funding is guaranteed (4 years).
- Applicants should submit a detailed CV and a cover letter expressing their motivation and interest in the position.
- Contact details for two referees who can provide academic references (no letters are required).
- For further information or to apply you can contact Rob Jelier: Rob.Jelier@kuleuven.be
- KU Leuven JobSite link: https://www.kuleuven.be/personeel/jobsite/jobs/60203971