Doctoral scholarship holder in evolutionary computational genomics

*Department: Department of Biology*

*Regime Full-time*

The Department of Department of Biology in the Faculty of Science is looking for a full-time (100%)

Doctoral scholarship holder in the field of evolutionary computational genomics

**Position**

- You will work actively on the preparation of a PhD thesis as part of a funded research project in the [Svardal Lab](#) with the aim to uncover the role of structural genetic variants (inversions, transposons) in the rapid adaptive radiation and speciation of Lake Malawi cichlid fishes.
- Two projects are available:
  - The detection of structural genetic variants across 100s of species of the Lake Malawi cichlid adaptive radiation, using innovative long and linked read sequencing techniques (haplotagging, PromethION, field-based real-time minION sequencing).
  - Using population genomics and machine learning to infer the evolutionary and adaptive history of structural variants across the Lake Malawi cichlid adaptive radiation.
- A combination of aspects of the two project is possible. [Click here](#) for more information on the projects.
In both projects you will use whole genome sequencing and variation data and design and apply computational genomic inference methods.

- Budget for training and field work is available.
- You will publish scientific articles related to the research project.
- You will carry out a limited number of teaching and research support tasks for the Faculty of Science.

Profile

- You hold a Master degree in (Bio-)informatics, Computational Biology, or a related field or you will have obtained it by the time you start work.
- You can demonstrate excellent study results.
- Your teaching competences are in line with the University of Antwerp’s educational vision.
- Your research qualities are in line with the faculty and university research policies.
- You act with attention to quality, integrity, creativity and cooperation.
- You meet two or more of the following criteria
  - Quantitative background in bioinformatics, computational biology or a related field.
  - Experience with population genetic/genomic inference.
  - Experience with and/or interest in machine learning.
  - Good understanding population of genetic principles and coalescent theory.
  - Experience with developing computational algorithms for genomic data and bioinformatic tools for the scientific community.
  - Experience with the analysis of structural genetic variants from genome sequencing data.
  - Experience with ONT data.

What we offer

- We offer a doctoral scholarship for an initial period of one year, extended to a total of four years upon positive evaluation.
- The planned start date is 1 April 2021 or as soon as possible after that date.
• Your monthly scholarship amount is calculated according to the scholarship amounts for doctoral scholarship holders on the pay scales for contract research staff (Dutch: Bijzonder Academisch Personeel, BAP).
• You will do most of your work at Groenenborger Campus in a dynamic and stimulating working environment.
• Find out more about working at the University of Antwerp here.

Want to apply?

• You can apply for this vacancy through the University of Antwerp’s online job application platform up to and including 01 March 2021 (by midnight Brussels time). Click on the 'Apply' button, complete the online application form and be sure to include the following attachments: a motivation letter (max 2 pages, in English) explaining which parts of the suggested projects specifically interest you and how your skills and background make you the right person to tackle these specific questions, your academic CV, your master's grades and percentile in peer group (if available).
• The selection committee will review all of the applications as soon as possible after the application deadline. As soon as a decision has been made, we will inform you about the next steps in the selection procedure.
• If you have any questions about the online application form, please check the frequently asked questions or send an email to jobs@uantwerpen.be. If you have any questions about the job itself, please contact hannes.svardal@uantwerpen.be.

The University of Antwerp received the European Commission’s HR Excellence in Research Award for its HR policy. We are a sustainable, family-friendly organisation which invests in its employees’ growth. We encourage diversity and attach great importance to an inclusive working environment and equal opportunities, regardless of gender identity, disability, race, ethnicity, religion or belief, sexual orientation or age. We encourage people from diverse backgrounds and with diverse characteristics to apply.

Apply