

Position Title: Research Fellow (Applied Crop Bioinformatics)
Position Classification: Level B
Position Number: 317071
Faculty/Office: Faculty of Science
School/Division: School of Biological Sciences
Centre/Section:
Supervisor Title: Professor
Supervisor Position Number: 313612

Your work area

The School of Biological Sciences formed in 2017 and is research-intensive with expertise spanning the disciplines of Evolutionary Biology, Ecology, Conservation Biology, Marine Biology, Neuroscience and Science Communication.

Reporting Structure

Reports to: Professor (313612)

Your role

A senior experienced bioinformatics researcher is required to support the ongoing research activities of the Edwards group supported by multiple ARC grants with delivery to industry partners. As the appointee you will lead multiple research projects with national and international collaborators in the area of crop genomics, perform data analysis, write reports and publish manuscripts in major journals.

The bioinformatician will also need to develop and maintain extensive research networks within and outside the university on a national and international level, contribute to MSc level courses, as well as plan and teach programming and bioinformatics-related workshops.

Key responsibilities

- Lead several research projects with national and international collaborators.
- Design, execute and disseminate high quality research.
- Write manuscripts, and report progress at conferences, as well as analyse complex data using high performance computing.
- Develop and maintain extensive research networks within and outside the University on a national and international level.
- Contribute to MSc level courses, as well as plan and teach programming and bioinformatics-related workshops.
- Work with several different High Performance Cluster job management systems (PBS Pro/Torque, SLURM).
- Provide wider general bioinformatics support to both UWA and external collaborators.
- Supervise MSc and PhD students on a 10% basis.
- Other duties as directed.

Your specific work capabilities (selection criteria)

- PhD in bioinformatics, computational biology, computational genomics, or related field.
- Demonstrated ability in the development and publication of algorithms and novel approaches to understand large and complex crop genomes as well as experience in teaching MSc-level bioinformatics courses.
- Strong computational background with extensive experience in applied bioinformatics.
- Experience with Linux-based HPC systems (PBS, SLURM) and web design (HTML, JavaScript) as well as system administration of Linux-based work servers.
- Demonstrable ability to interpret, and understand statistical approaches.
- Demonstrable ability to apply and develop novel bioinformatics algorithms.
- Proficiency in at least two programming languages (Python and R preferred).
- Experience in organising, hosting, and teaching programming and bioinformatics workshops would be advantageous.

Special Requirements

- Willingness to undertake interstate and international travel where necessary