POSITION DESCRIPTION

THE UNIVERSITY OF MELBOURNE

School of BioSciences
Faculty of Science

Bioinformatician – Invertebrate genomics

POSITION NO	0063147
CLASSIFICATION	Level A
SALARY	$83,468 - $113,262 p.a. (pro rata for part-time)
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Part-Time (0.8 FTE)
BASIS OF EMPLOYMENT	Fixed-Term for 20 Months **FLEXIBLE EMPLOYMENT** The University of Melbourne is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position.
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Nick Bell Tel +61 3 90356780 Email belln@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

Position Summary

The Bioinformatician will work across the Pest and Environmental Adaptation Research Group (PEARG) led by Melbourne Laureate Professor Ary Hoffmann AC and the Climatic and Metabolic Ecology Lab (CAMEL) led by Professor Mike Kearney. The Bioinformatician will bring high-level cutting edge analytical skills to a number of ARC Discovery projects on the genomics of invertebrates, including model and non-model organisms.

The incumbent must have the ability to consistently produce quality data analysis, pipelines and visualisations within deadlines. This work will include genomic characterisation of target species. They will play a key role in designing and undertaking computational analysis to advance work on hybridisation in invertebrates and the evolutionary importance of parthenogenesis.

The incumbent will work collaboratively with peers within the University of Melbourne as well as other institutions to provide a greater understanding of the role of hybridisation in generating biodiversity in harsh environments and the potential fitness advantages of invertebrate parthenogens.

The incumbent will likely be required to assist on other projects within the PEARG and CAMEL lab groups as required including projects on climate change adaptation in invertebrate pests.

We encourage applicants from under-represented groups, including Aboriginal and Torres Strait Islander people. To allow us to consider performance relative to opportunity, we also invite applicants to provide a brief statement (up to 1 page) that describes circumstances that may have affected their career development or progression, including career interruptions or delays, periods of part time work, or forms of bias they have experienced.

1. Key Responsibilities

As with all positions, career achievements will be interpreted relative to opportunity, including career disruptions due to caring responsibilities, time in industry, illness etc.

The position description should be read alongside Academic Career Benchmarks and Indicators. A level A academic is acquiring skills and building academic achievements (oriented towards the benchmarks).

1.1 RESEARCH AND RESEARCH TRAINING

The appointee is expected to undertake research with a high degree of autonomy, and make major contributions towards the research effort of the team through collaborative work with academic peers.

- Contribute to internationally competitive research projects, resulting in publications in high impact journals

- Identify and learn emerging analytical methods in functional genomics to understand potential genes and families involved in climate change adaptation.
- Contribute to academic papers and other scholarly outputs to a high academic standard in accordance with the research expectations of the University of Melbourne.
- Undertake administrative functions and obligations primarily connected with the staff member's area of research.

1.2 EDUCATION AND LEARNING

- Assist with teaching, training, mentoring and supervision graduate students and research staff in the group.
- Contribute to effective supervision of research staff in the appointee's area of expertise with the goal of production of publications.

1.3 LEADERSHIP AND SERVICE

- Present research to the public to elevate public awareness of educational and scientific developments, and promote critical enquiry and public debate within the community where appropriate.
- Demonstrate and promote of University values including diversity and inclusion and high standards of ethics and integrity.

1.4 OTHER DUTIES

- Perform other tasks as requested by the supervisor.
- Actively participate in the University Professional Development Framework.
- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

2. Selection Criteria

2.1 ESSENTIAL

- A degree of Doctor of Philosophy (PhD) in Science and / or an equivalent combination of relevant experience and/or education and training.
- Demonstrated experience in relevant bioinformatics techniques, platforms, and technologies, as well as experience working on high performance computer clusters.
- Familiarity with population genomic software for establishing adaptive patterns and identifying DNA decay.
- Processes involved in genome assembly with the ability to collaborate with other bioinformaticians undertaking assemblies.
- Identifying and modelling species climate niches.
- Demonstrated excellence in data management, quality control, statistical and spatial analysis and in generating informative and innovative graphics for publication.
- Demonstrated familiarity with current molecular laboratory techniques and appropriate genomic analysis.

- Demonstrated ability to work autonomously to deliver quality research work in a timely manner.
- Demonstrated ability to communicate, interact and collaborate effectively with researchers and graduate students, in a courteous, respectful and timely manner.
- Track record of publication in peer-reviewed journals with a demonstrated ability to write and edit manuscripts.
- High-level organisational and time-management skills and a demonstrated capacity to bring projects to timely completion.

2.2 DESIRABLE

- Familiarity with University of Melbourne systems and compliance requirements.
- Thorough knowledge of invertebrate biology and evolution.

2.3 OTHER JOB-RELATED INFORMATION

- This position requires the incumbent to hold a current and valid Working with Children Check.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

http://safety.unimelb.edu.au/topics/responsibilities/

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 THE SCHOOL OF BIOSICENCES

http://biosciences.unimelb.edu.au

The School of BioSciences was formed in 2015 through the amalgamation of the School of Botany and the Departments of Genetics and Zoology thus bringing together a critical mass of 160 Academic staff and 240 Research Higher Degree students undertaking world class teaching and research in the biological sciences. Academics within the School are aligned to 2 research domains - Ecology & Evolutionary Biology and Molecular and Systems Biology. Through cross-disciplinary collaborations within the School and with external partners the School is a major recipient of grant and contract funding.

The School is a major contributor to the Bachelor of Science, Bachelor of Biomedical Science and the Environmental Science programs, its teaching program reflecting the research interests within the School.

5.2 FACULTY OF SCIENCE

http://www.science.unimelb.edu.au

Science at Melbourne is a global leader across fundamental and impactful scientific research and education. Science begins with curiosity, and we are dedicated to understanding the universe from the level of sub-atomic particles to the solar system. We aim to be leaders who positively impact the community locally and globally, addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

Our strength is our breadth of expertise. We are the second largest faculty in the University comprising seven schools: Agriculture, Food & Ecosystem Sciences, BioSciences, Chemistry, Geography, Earth & Atmospheric Sciences, Mathematics & Statistics, Physics and Veterinary Science.

This depth of knowledge positions the faculty to better understand, explore and impact our world and humanity, within a truly comprehensive Faculty of Science.

We have more than 150 years of experience in pioneering scientific thinking and analysis, leading to outstanding teaching and learning and offer a curriculum based on highly relevant research. We aim to train students with the knowledge and intellectual flexibility to drive the industries of tomorrow and lead across all levels of society.

We offer a range of undergraduate, honours, graduate and research degrees, enrolling more than 11,500 undergraduate and 3,750 graduate students.

We are dedicated to delivering leading transformative educational outcomes, underpinned by research, and an inclusive and inspiring student experience.

Excellence comes in many forms and diversity of thought, perspective and disciplines is essential to deliver globally leading science. At the core of our success is our focus on an inclusive environment for all in our community. Our Faculty's focus on equity, inclusion and

belonging is grounded in our endeavour to ensure we are best placed to advance research, teaching and serve diverse national and global communities.

As a Science community we sit across five of the University's campuses – Parkville, Dookie, Burnley, Creswick and Werribee. This reach provides us with a unique perspective that is beneficial to our teaching and research. It also means we can offer our students a greater variety of learning experiences and internships to engage with industry partners to solve real-world issues.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, Melbourne Energy Institute, Melbourne Biodiversity Institute, Office for Environmental Programs, Australian Mathematical Sciences Institute (AMSI) and the Indigenous Knowledge Institute and home to numerous Centres.

5.3 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers.

5.4 ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

- We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.
- We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.
- We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.
- We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and

our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes: place, community, education, discovery and global.

5.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at https://about.unimelb.edu.au/strategy/governance