Role profile

Job title	Research Associate/Fellow in Molecular Evolution	Job family and level	Research and Teaching Level 4 (Appointment will be Level 4 Career training grade where an appointment is made before PhD has been completed)
School/ Department	School of Life Sciences	Location	University Park Campus (Life Sciences Building)

Purpose of role

The purpose of this role will be to have specific responsibility for carrying out the computational molecular evolutionary aspects of this large interdisciplinary award. Specifically, the role holder will perform the evolutionary and comparative genomics analyses on large whole genome scale datasets to determine the genomic responses and adaptations to heat stress response in mammals. The person appointed will be expected to plan and conduct work using appropriate approaches or methodologies and techniques (which may include machine learning/systems biology/network biology), and they will be responsible for report writing and writing up their work for publication.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Undertake original research in mammal comparative genomics, using advanced programming and high-performance computing. The research project is part of a larger interdisciplinary consortium and will therefore require strong communication and writing skills. The research carried out will be of international excellence. All data and software produced will be maintained and shared in accordance with international standards and open science requirements.	60%
2	Provide supervision (including co-supervision where appropriate) to undergraduate and/or postgraduate student (MSc and PhD level) research projects as appropriate. To participate in the assessment of student knowledge.	10%
3	Collaborate across the larger team to deliver the overall project goals	10%
4	Prepare manuscripts for publication in leading journals and contribute to dissemination at conferences (national and international)	10%
5	Identify opportunities and prepare proposals/applications for research funding	10%

Person specification

	Essential	Desirable
Skills	▪ Programming (R plus Python) ▪ Phylogenomics ▪ Genome data analytics ▪ Modelling biological data ▪ Molecular Evolutionary models ▪ Scientific Writing and Dissemination	▪ Biochemistry ▪ Molecular Biology ("wet bench experience"). ▪ Algorithm development ▪ Statistics
Knowledge and experience	▪ Molecular Evolutionary Biology ▪ Comparative Genomics ▪ Regulatory evolution ▪ Network theory ▪ Genomics	▪ Knowledge of transcriptomic & translatomic data ▪ Genetics ▪ Machine learning ▪ Experience of working with physiological datasets. ▪ Systems Biology
Qualifications, certification and training (relevant to role)	▪ PhD in molecular evolution, comparative genomics, bioinformatics or related discipline (or close to completion)	

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
Taking ownership	Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
Forward thinking	Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
Professional pride	Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
Always inclusive	Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

Line manager

PI

Role holder

Research Associate/ Fellow

Key stakeholder relationships

Scientific community

Students

Lab members