



Job title	Research Associate/Fellow (Title will be 'Research Associate' where an appointment is made before PhD is completed)	Job family and level	RT4a/4
School/ Department	School of Veterinary Medicine and Science	Location	Sutton Bonington campus

Purpose of role

The purpose of this role is to deliver a specific grant; '**Development of a non-invasive diagnostic test to assess fetal health in the pregnant mare**'. Since this Horserace Betting Levy Board project started in 2023, we have generated a bank of cell free DNA samples isolated from healthy pregnant mares across gestation. The PDRA will conduct two phases of study. The first phase will use existing cfDNA samples for sequencing to conclusively determine fetal and/or maternal origin. The second phase will comprise transcriptomics whereby cell free RNA isolated from two crucial stages of equine pregnancy will be sequenced. Informed by bioinformatics, samples from pregnancies complicated by umbilical cord torsion will also be examined. The main goal of the study is to develop blood tests to monitor and validate biomarkers of equine maternal and fetal reproductive health. As well as delivering the research, the post holder will be a role model that promotes a positive research culture within the SVMS.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	<p>Research and knowledge exchange</p> <ul style="list-style-type: none"> To conduct research at the highest level in accordance with the aims and objectives of the project and produce useful outputs that lead to peer-reviewed publications of international quality and other types of research impact or knowledge exchange outputs. Co-ordinate and receive samples provided by established collaborators. Samples will require prompt processing including cell free DNA and RNA extractions. Follow up laboratory analyses will include nucleic acid sequencing, PCR and running ELISAs. The associate/fellow will maintain established databases used for archiving and recording clinical submissions. It is also an expectation that the associate/fellow will assist in the interpretation of results and will provide quantitative and qualitative analysis of data. The associate/fellow will also prepare and present progress reports and contribute to scientific publications. 	<p>70%</p> <p>10%</p> <p>5%</p>

	<ul style="list-style-type: none"> ▪ Communicate effectively information/instructions to the project investigators (including collaborators) and mare owners and veterinary surgeons as well as to the department and wider university as required, and ensure the accurate completion of documentation, records and reports in order to comply with research quality standards and grant reporting. ▪ To contribute to the advancement of relationships between the project team and collaborating veterinary practices. To contribute to the development of new or improved methods/techniques/equipment and to undertake further training to develop skills and technique base in reproduction and genetics specialist area. 	5%
2	<p>Administrative/general</p> <ul style="list-style-type: none"> ▪ To actively contribute to meetings by e.g. problem solving, suggestions, etc., to contribute to lab organization, and upkeep, and any other relevant work suitable to the grade 	5%

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Proven problem-solving skills. ▪ Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. ▪ Ability to work accurately with excellent laboratory record keeping, in order to maintain high standards, with the ability to work effectively under pressure. ▪ Ability to build relationships and collaborate with others internally and externally. ▪ Managing project involving teams located at multiple sites and involving contributions from scientists and stakeholders. ▪ Working independently and in a team 	<ul style="list-style-type: none"> ▪ Proven skills in writing clinical notes, reports and research outcomes in English ▪ Capability to organise own and other's activities to meet set deadlines. ▪ An ability to coach and motivate others to meet and exceed set objectives. ▪ Enthusiasm for undertaking high quality research and addressing new challenges in the field
Knowledge and experience	<ul style="list-style-type: none"> ▪ Proven technical experience in relevant techniques and equipment for example DNA isolation, sequencing and ELISA assays. ▪ Generating, processing, managing, analysing and accurately storing data sets essential for a research project. 	<ul style="list-style-type: none"> ▪ Knowledge of reproductive anatomy / methods of tissue handling. ▪ Track record of successful and timely delivery of research projects.
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ A first or upper-second class honours degree ▪ PhD (or very close to completion) in molecular or reproductive biology or related disciplines ▪ Substantial work experience in relevant role 	<ul style="list-style-type: none"> ▪ Master's Degree, or equivalent in molecular or reproductive biology. ▪ Additional qualifications in laboratory skills e.g. Health and Safety
Statutory, legal or special requirements	<ul style="list-style-type: none"> ▪ Satisfactory basic disclosure obtained from the Disclosure and Barring Service 	



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 always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others

