

Research Role Profile

Job Title:	Research Fellow (1A)
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Responsible to:	Head of research group, or principal investigator
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Responsible for:	Not applicable
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Job Summary and Purpose:
To undertake research in accordance with the specified research project(s) under the supervision of the principal investigator.

Main Responsibilities/Activities
<p>To undertake a range of research activities within a specified research area, assuming responsibility for specific areas of projects and making use of new research techniques and methods, in consultation with the research award holder or supervisor. This may include fieldwork, interviews, laboratory experimentation, critical evaluation and interpretation, computer-based data analysis and evaluation or library research.</p> <p>Using initiative and creativity to identify areas for research develop new research methods and extend the research portfolio. Analysing and interpreting results of own research. Write up results and prepare papers for submission to appropriate journals and conferences, and other outputs as required and/or appropriate. Attend appropriate conferences for the purpose of disseminating research results of personal development. The post holder may also contribute to writing bids for research grants and will contribute to collaborative decision making with colleagues in areas of research.</p> <p>Continually to update knowledge and develop skills, and translate knowledge of advances in the area into research activity.</p> <p>To plan and manage own research activity in collaboration with others. To carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control.</p> <p>To contribute to teaching in the Faculty by carrying out student supervision and/or demonstrating within the post holder's area of expertise and under the direct guidance of a member of departmental academic staff, as appropriate.</p> <p>The post holder may occasionally be required to supervise more junior research staff.</p>

Research Role Profile

Person Specification

The post holder must have:

A doctoral degree in a relevant discipline (although individuals who have almost completed a doctoral degree may be appointed). Consideration may also be given to individuals who do not hold a doctoral degree but have required skills based on a number of years experience in specified / relevant fields.

The post holder will have authority over some aspects of project work and must be capable of providing academic judgement, offering original and creative thoughts and be able to interpret and analyse results.

Relationships and Contacts

Direct responsibility to the principal investigator or academic supervisor. The post holder may be asked to serve on a relevant Faculty committee. There may be additional reporting and liaison responsibilities to external funding bodies or sponsors. The post holder may work on original research tasks with colleagues in other institutions.

Special Requirements

To be available to participate in fieldwork as required by the specified research project

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
 - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
 - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.

Research Role Profile

ADDENDUM

Job Title:	Research Fellow in Equine Gut Inflammation
Project:	“A Healthy Start: Early-life gut bacterial colonisation and immunological priming in the foal”

Main Responsibilities/Activities

This information sheet should be read in conjunction with the accompanying generic Research Fellow (1A) Role Profile and will be used for shortlisting processes. More specifically the post holder will be expected to:

The post holder will provide dedicated research support for a two-year research project: **A Healthy Start: Early-life gut bacterial colonisation and immunological priming in the foal**. The project, funded by Petplan Charitable Trust is part of a programme of work being undertaken by the [Horse Microbiome Research Group](#). The overarching aim of this programme of work is to understand how the microbiome of the foal is associated with health and performance.

The aim of the Healthy Start project is to measure a range of inflammatory biomarkers in the faeces of foals, to correlate these with gut bacterial community structure and with long-term health outcomes. These outcomes will demonstrate the potential of faecal immunological markers for nutritional research as clinical diagnostic markers.

The project will use biobanked faecal samples from the [Alborada Well Foal Study](#). The Research Fellow will be primarily responsible for designing and undertaking laboratory assays of cytokines and other biomarkers in faecal samples. They will be trained in the use of multiplexed, bead-based immunoassays which will be used in addition to ELISAs. This project will be the first use of faeces as a matrix in many of these assay systems; assay validation and calibration will be undertaken.

The appointee to this role will be responsible for integration of biomarker data with pre-existing microbial community structure data (both 16S and shotgun metagenomic) and horse health outcomes. Statistical support will be provided by the academic supervisory team, thereby making this an excellent opportunity for the appointee to develop advanced skills in multivariable statistics.

Preparation of one or more manuscripts for publication, and submission to a scientific journal within the timeframe of the project, will also be a key responsibility of the appointee to this role. Support for manuscript preparation will be provided by the academic supervisors of the project.

The appointee will work alongside other scientists in the School of Veterinary Medicine including 2 other post-doctoral fellows and 2 PhD students in the Horse Microbiome Research Group. This group has strong links with the La Ragione

Research Role Profile

Microbiology Research Group in the School of Bioscience. The appointee will be expected to be a collegial member of this research community, using their research expertise to support others and undertaking tasks to promote the reputation and scientific impact of the university.

Key deliverables for this project are i) timely scientific publications, and ii) presentations to scientific and stakeholder audiences. Experience of ELISA and other immunoassays and of scientific writing are essential attributes. Previous experience of multivariable statistical analysis would be advantageous.

Person Specification

In addition to the criteria outlined in the accompanying generic Research Fellow (1A) Role Profile, the post holder should have (E = Essential; D = Desirable):

A degree in biological sciences, medicine or veterinary medicine (E)

A PhD in a relevant biomedical subject (e.g. microbiology, immunology, diagnostics) or equivalent (E)

Laboratory experience of conducting and interpreting immunoassays (E)

Experience of scientific authorship leading to timely, high-quality publications (E)

Strong organisational skills and the ability to work collaboratively with other scientists (E)

Post-doctoral experience (D)

Experience in multivariable biostatistics (D)

Experience in statistical computing environments such as R (D)

Special Requirements

Willingness to undertake occasional travel for conferences or stakeholder meetings.

Research Role Profile

Background Information

The post is funded by Petplan Trust. It will be based in the Department of Veterinary Clinical Science within the University's School of Veterinary Medicine, with extensive collaboration with scientists in the School of Biosciences. See <https://www.surrey.ac.uk/horse-microbiome-research-group> for further information about the team and our work.