

Post Details		Last Updated:	21/01/25	
Faculty/Administrative/Servic e Department	Veterinary Health Innovation Engine, School of Veterinary Medicine			
Job Title	vHive Laboratory Technician			
Job Family	Technic	cal	Job Level	3
Responsible to	Susan Armstrong and Sneha Pinto (laboratory matters)			
Responsible for (Staff)	Not app	plicable		

<u>Job Purpose Statement</u> This should be an accurate, concise, un-detailed statement (short paragraph) of what the post is and why the post exists in terms of its contribution or result e.g. improved student/staff experience, increasing University funds etc.

We have extensive capabilities in measuring biosamples, with the aim of using these to improve human and veterinary health. The job holder will contribute to the team's mission by recording the use of and preparing samples for measurement techniques to be run and also running these measurement techniques, recording results.

<u>Key Responsibilities</u> This document is not designed to be a list of all tasks undertaken but an outline record of the main responsibilities (5 to 8 maximum)

- Proficiently assay miRNA and protein levels in a number of different sample types using nucleic acid measurement techniques, affinity binding techniques (e.g. ELISA assays) and/or liquid chromatography/mass spectrometry
- 2. Be prepared to receive training as appropriate in and apply nucleic acid measurement techniques, inclusive of polymerase chain reaction-based assays and mass spectrometry/proteomics techniques to prepare and measure molecular cell biology and clinical samples.
- 3. Use of and optimisation of sample preparation Standard Operating Procedures (SOPs), including preparation of samples for miRNA analysis, preparation of plasma samples and lysis of tissue and cellular samples for omics techniques, including Neotryx and similar devices.
- 4. Optimisation of liquid chromatography profiles as measured by coupling to Mass Spectrometry (MS) data acquisition.
- 5. Assist newly recruited staff, other staff and students with SOPs, address/discuss issues that may impact the achievement of research objectives and deadlines, assist in the smooth operation of the laboratories, including general housekeeping duties, and ensure equipment servicing and maintenance is up to date
- 6. Collate and store accurate records using paper and computer-based systems and the preparation of data for inclusion in presentations and publications, assist with monitoring general consumable stock levels and procurement of consumables and equipment
- 7. Take delivery of goods and store in accordance with local and statutory guidelines, this includes veterinary sample collection from other sites on campus.
- 8. Carry out risk assessments for the preparation and use of reagents, chemicals, equipment and procedures by self and others in the research group.
- N.B. The above list is not exhaustive.

# All staff are expected to:

UNIVERSITY OF

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities Policy.
- Work to achieve the aims of our Environmental Policy and promote awareness to colleagues and students.
- Follow University/departmental policies and working practices in ensuring that no breaches of information security result from their actions.
- Ensure they are aware of and abide by all relevant University Regulations and Policies relevant to the role.
- Undertake such other duties within the scope of the post as may be requested by your Manager.
- Work supportively with colleagues, operating in a collegiate manner at all times.

## 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.

## **Elements of the Role**

This section outlines some of the key elements of the role, which allow this role to be evaluated within the University's structure. It provides an overview of what is expected from the post holder in the day-to-day operation of the role.

**Planning and Organising** Where does the work come from? What planning is required, how complex is the planning and over what timescale e.g. days/weeks/months/annually/longer?

Samples are provided to the job holder or will be received and logged in to storage by the post holder. The job holder must prepare and continuously update the sample inventory until project completion (learning use of Labkey software to do so). They will plan the assay of biochemicals in the samples under the supervision and guidance of academic staff and supervisors. A member of the management team will be meeting the job holder daily. The post holder will run basic assays for miRNA and proteins (using a mass spectrometer under supervision). They will keep a full record of their work in their lab book. They will record where all data is stored and inform their supervisors of this upon completion of each experiment.

**Problem Solving and Decision Making** What types of problems or challenges are faced by the post holder and how are they solved? What kind of guidance is in place to support the problem solving process e.g. policies/procedures/protocols/legislation. You should detail the nature of the post holder's role in solving these problems, indicating whether the post holder thinks independently or in collaboration with others and how much freedom there is to provide solutions/make these decisions. You should also state what the impact of wrong decisions/judgement is and what happens in cases where the post holder is unable to find a resolution.

The post holder will work according to the Standard Operating Procedures provided. They will be given training for any job they are asked to undertake. The important aspect of the job is rigorously adhering to standard procedures and, if things go wrong, discussing troubleshooting with the supervisory team. We encourage and seek discussion on workflow improvements.

<u>Continuous Improvement</u> You should state whether the post holder is responsible for making any improvements within their area of responsibility, what level of improvement they may be required to make and what freedom they have to make those changes independently.

- We seek input to improve standard operating procedures and sample storage operations inclusive of the use of Labkey.
- We seek input on laboratory health and safety.

## **Accountability**

What level of control has the post holder got for the achievement of their end results? How frequently does the post holder require supervision? What freedom do they possess to act with or without reference to guidance/procedures and/or supervision? Detail the discretion given to the post holder to direct resources, their answerability for the consequences of decisions and actions taken by



themselves/their team and the impact. Detail the nature of the impact which the role exerts on end results and the area of the institution on which the role has impact.

- The postholder will have approximately daily meetings with a member of the supervisory team about tasks to be undertaken
- The post holder will be responsible for ordering stock items and recording all experiments in their lab book/online inventory.
- The role is central to high-quality scientific outputs as the postholder is part of a data collection and interpretation pipeline process.

**Dimensions of the role** Dimensions describe the statistics relevant to the job. Where relevant, you should cover the operational, financial or staffing aspects of the role. Relevant factual, quantitative information that describes the scope of the role, e.g. number of staff directly/indirectly reporting to them, financial aspects (budgets, contract, cash handling etc. and approximate figures), approximate number and type of student/customers the job affects directly/indirectly should be given.

- The post holder has no responsibility for any staff, although they may advise new staff and undergraduate and postgraduate students on standard operating procedures.
- The postholder has no role in financial management and does not directly supervise other staff.

<u>Supplementary Information</u> You may wish to include some information here that has not been captured in the other sections of the form, but still has a significant impact on the size of the job. This may include details such as for example the importance in some roles to influence, develop and change the motivation and behaviour of people.

**Person Specification** This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role.

Qualifications and Professional Memberships			
A qualification at NQF level 6 (such as a bachelor's degree) in a relevant biological science or chemistry subject <b>or</b> QCF level 2 passes (such as GCSE's) in English and Mathematics <b>and</b> at least one Science subject <b>and substantial</b> relevant experience of working in a research laboratory.			
<b>Technical Competencies (Experience and Knowledge)</b> This section contains the level of competency required to carry out the role (please refer to the Competency Framework for clarification where needed and the Job Matching Guidance).	Essential / Desirable	Level 1-3	
Knowledge of and compliance with relevant Health and Safety regulation, the Data Protection Act , Standard Operating Procedures and risk assessments including COSHH risk assessments.	E	2	
Mass spectrometry or nucleotide measurement experience	Е	3	
Excellent communication and interpersonal skills	E	3	
Ability to work to a high standard with good reproducibility of results.	E	3	
Competent computer skills.	E	2	
Ability to evaluate quality control data	E	3	
<b>Core Competencies</b> This section contains the level of competency required to carry out this role. (Please refer to the competency framework for clarification where needed). n/a (not applicable) should be placed, where the competency is not a requirement of the grade.			
Communication		2	
Adaptability / Flexibility		2	



Customer/Client service and support	n/a		
Planning and Organising			
Continuous Improvement	2		
Problem Solving and Decision Making Skills	2		
Managing and Developing Performance	2		
Creative and Analytical Thinking	2		
Influencing, Persuasion and Negotiation Skills	n/a		
Strategic Thinking & Leadership	n/a		
This Job Purpose reflects the core activities of the post. As the Department/Faculty and the post holder develop, there will inevitably be some changes to the duties for which the post is responsible, and possibly to the emphasis of the post itself. The University expects that the post holder will recognise this and will adopt a flexible approach to work. This could include undertaking relevant training where necessary. Should significant changes to the Job Purpose become necessary, the post holder will be consulted and the changes reflected in a revised Job Purpose.			
Organisational/Departmental Information & Key Relationships			
<b>Background Information</b> You should include a short statement on the background of the Faculty and/or the department in which the post holder will be operating. You may also wish to include any other useful information to an applicant e.g. why the project exists, what the strategy of the department is etc. The Veterinary Health Innovation Engine is a cross-disciplinary entity dedicated to the generation of data and then taking such data, turning it into information and thereby developing tools, approaches and devices to improve animal health. It is based in the School of Veterinary Medicine and collaborates extensively with the School of Biosciences. There has been a significant development in measurement technologies applied to human medicine research and diagnostic tool generation. We are applying these same approaches to veterinary medicine. Thus, much of the platform development work has been achieved in our lab and the labs of others. Our role is the application of relatively standard procedures to veterinary medicine research.			
•Ch	ristos Dadousis		
Anna Wildner Strategic Partnerships Eleanor Telling vHive Administrator Hannah Rideout Clinical Project Coordinator Coordinator Coordinator	ah Aitchison ve Incubator Manager		
description of those that play an important part in the post holder successfully carrying out	the role. It		

description of those that play an important part in the post holder successfully carrying out the role. It should identify the significant internal and external relationships and contacts that the post holder has in their job and describe the overall purpose and nature of those relationships (i.e. exchanging information, negotiating, networking, etc.)

#### <u>Internal</u>

- Susan Armstrong (see above)
- Sneha Pinto (see above)
- Anthony Whetton (see above)
- Cecile Frampas (postdoctoral research associate in Sneha Pinto and Anthony Whetton's lab)

# <u>External</u>

• Service engineers for SCIEX mass spectrometry suppliers

Service engineers for liquid chromatography, nitrogen generator and minor equipment items.