

<b>Post Details</b>		<b>Last Updated:</b> 06/12/2022	
<b>Faculty/Administrative/Service Department</b>	FEPS/CVSSP		
<b>Job Title</b>	Statistician and Data Analyst		
<b>Job Family</b>	Professional Services	<b>Job Level</b>	4
<b>Responsible to</b>	DataLab Lead		
<b>Responsible for (Staff)</b>	N/A		

### **Job Purpose Statement**

The post holder will provide statistical analysis to support the ongoing data analysis and modelling research activities in The Veterinary Health Innovation Engine where they will define and govern data modelling and design standards, tools, best practices and related development methodologies for the organisation for which they work. They also set standards for document naming, security, and lifecycle & retention architecture whilst creating and displaying data analysis.

Working closely with the Database engineers to create optimal physical datasets, then create and maintain data maps and systems interrelationship diagrams for data domains and systems.

The post holder will provide professional administrative support and play a major role in delivering statistical support and database development within the DataLab. They will work with the Data Scientists and other Research Asisstants/Fellows as needed to develop software support tools, data insight tools and statistical analysis to enhance animal health and welfare. Within the DataLab the post holder will prepare various public and private data sets for ingestion into our DIHAH ([www.dihah.com](http://www.dihah.com)) platform. They will also be a major advocate for professional levels of data governance, whilst assessing the effectiveness and accuracy of new data sources and data gathering techniques.

The post holder will raise understanding of the importance of data quality and its significance and impact, whilst managing data integrity within DataLab, explicitly across our DIHAH plaform and the projects pertaining to its use. The post holder will lead and/or contribute to compilation of regular and ad-hoc management information reports on request to facilitate decision making and data insights across the various animal wefare projects within the DataLab.

### **Key Responsibilities** This document is not designed to be a list of all tasks undertaken but an outline record of the main responsibilities

1. Work closely with the database engineers to create optimal physical data models of datasets, then create and maintain data maps and systems interrelationship diagrams for data domains and systems.
2. Define and govern data modeling and design standards, tools, best practices, and related development methodologies for the organization for which they work. They also set standards for document naming, security, and lifecycle & retention architecture.
3. Assess the effectiveness and accuracy of new data sources and data gathering techniques.
4. Make recommendations for standardization and proper data usage while championing the usage of data to communicate the benefits and return on investment for our platform and stakeholders.
5. Create, manage, and modify logical and physical data models using a variety of data modelling philosophies and techniques.
6. Closely partner with the Data Steward and Data Scientist to understand the needs of stakeholders and what data relationships the models represent along with helping to identify what relationships and dependencies also need to be reflected.
7. Establish and maintain comprehensive data model documentation.
8. Profile source data and meet regularly with IT partners to develop complete source to target data mappings.

**N.B. The above list is not exhaustive.****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.
- 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**

- The post holder will prepare and process numerous customer input files, parsing and reformatting data to meet product requirements.
- The post holder will process and analyse product return files to meet specifications.
- The post holder has specific responsibility for the provision of data visualisation services, within a clearly defined section of work.
- The post holder will carry out tasks within a set of established operational guidelines and procedures with minimum day to day supervision from their Line Manager.

**Problem Solving and Decision Making**

- The post holder will be expected to develop data models that are varying levels which they believe will fit within the understanding of their audiences whose competence on the subject will vary wildly.
- Within the scope of the role the post holder will be presented with a variety of situations, administrative or customer focussed in nature, where the appropriate course of action(s) will be a matter of choice, influenced by prior exposure or experience.
- The post holder will be expected to deal with less routine queries/issues or circumstances that will require logical and reasoned thinking to resolve; they will be able to refer more complex issues to their Line Manager or the Head of Department.

**Continuous Improvement**

- The post holder will be expected to create and keep up-to-date project reports to be delivered at set intervals to varying audiences.
- The post holder is to maintain their education of the latest models and programmes to work with and will be expected to bring these specifics to their line manager for further training if necessary.
- The post holder will be able to generate statistical reports for quality checks and other reports for reporting and billing departments while actively participating in team meetings and inter-departmental workshops.
- The post holder will be expected to assist their Line Manager in reviewing administrative procedures and processes, recommending improvements and implementing them in consultation with their Line Manager.

**Accountability**

- This post holds no budgetary responsibility and impacts upon the department and the wider Faculty.
- The post holder will be privy to sensitive and confidential information and as such is expected to maintain high levels of confidentiality.

### **Dimensions of the role**

- The post holder will be allocated specific project team members to whom they will be expected to provide administrative support
- They will be required to take a flexible approach and from time to time to may be required to provide cover for colleagues in their absence or support during times where workload in another area is particularly busy.
- The post impacts across the Faculty and externally, in terms of its provision of service and promoting a positive image of the School/Department.

### **Supplementary Information**

- This post is external-facing with considerable interactions with subcontracting software development partners and external, veterinary co-investigators.
- This post pertains primarily to the development of a data innovation hub in animal health which will comprise of a secure global repository for animal health data and insights from all stakeholders in the animal health value chain.

**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**

Degree, HND, NVQ 4 qualified or equivalent with several years' relevant experience.

Or

Substantial vocational and relevant experience, acquired through a combination of job-related training or considerable experience, demonstrating development through involvement in a series of progressively more demanding relevant work / roles.

E

### **Technical Competencies (Experience and Knowledge)**

**Essential/  
Desirable**

**Level  
1-3**

Ability to perform statistical analysis and calculation such as power analysis, NOVA/ANOVA Analysis, calculate errors and statistical confidence limits as found in veterinary/clinical medicine research

E

3

Ability to present and explain statistical analysis procedures

E

3

Experience analyzing data profiling, data mining, data cleansing, data content, scrubbing data, and translating data via rules from one database to another. Experience with ER Studio, MySQL, or comparable data base.

E

3

Strong Data Modeling skills to include data quality, source systems analysis source to target mapping design, and preparation of sample data examples

E

3

Strong analytical ability and problem solving skills

E

3

Ability to handle sensitive information in a confidential manner

E

2

### **Core Competencies**

**Level  
1-3**

Communication

2

Adaptability / Flexibility

2

Customer/Client service and support

2

Planning and Organising

2

Continuous Improvement

2

Problem Solving and Decision Making

2

Managing and Developing Performance

N/A

Influencing, Persuasion and Negotiation Skills

2

Strategic Thinking & Leadership

2

Creative and Analytical Thinking

3

## Organisational/Departmental Information & Key Relationships

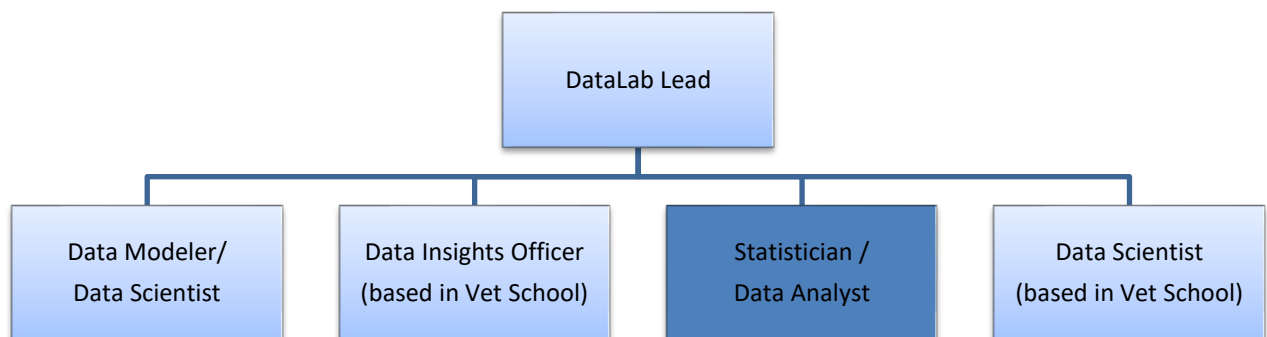
### Background Information

This post will be based in the Centre for Vision, Speech and Signal Processing (CVSSP), within the Faculty of Engineering & Physical Science at the University of Surrey, in collaboration with vHive within the Faculty of Health and Medical Science at the University of Surrey School of Veterinary Medicine. The post holder will be expected to work flexibly across both sites as needed.

The post holder's primary project will be the development and enhancement of the Data Innovation Hub for Animal Health (DIHAH). The vision for the University of Surrey Data Innovation Hub for Animal Health is to build a trusted, bespoke, global animal health ecosystem, which will comprise of a secure global repository for animal health information from all stakeholders in the animal health value chain together with the appropriate tools for its exploration.

The post holder will report to the DataLab Lead and work closely with vHive's Strategy and Delivery Manager to develop and implement the new digital innovation platform within the animal health industry. The post holder will join the Digital Innovation Hub for Animal Health (DIHAH) which is an interdisciplinary team of data science and AI experts developing tools and techniques in the animal welfare / animal health space. The team also develops strategic academic platforms to meet the rising demand for proprietary software in the burgeoning animal health industry.

### DataLab Structure Chart



### Relationships

#### Internal

- Academic research team
- School Secretaries/Administrators
- Faculty Manager
- Staff and students
- Professional Services (HR, Finance, IT Services, Facilities, Hospitality and Catering Services, etc)

#### External

- Partner organisations / institutions
- Suppliers / service providers