

## UNIVERSITY OF LINCOLN JOB DESCRIPTION

JOB TITLE	Postdoctoral Research Fellow				
SCHOOL	Life Sciences				
LOCATION	Brayford				
JOB NUMBER	COS033	GRADE	7	DATE	June 2015
REPORTS TO	Professor of Veterinary Behavioural Medicine				

#### CONTEXT

This position involves close liaison with the Professor of Veterinary Behavioural Medicine, and a multidisciplinary team including computer scientists, working on automated visual detection systems. The post holder will primarily focus on the clinical behavioural aspects of the project and its translation into practice, but will be expected to develop a working knowledge of how to integrate their work with the computer systems employed to support their work.

Understanding pain is obviously central to protecting animal welfare as it is one of the core negative emotional states (alongside fear and frustration) which evolved early within the neural development of animals. In order to provide appropriate pain management, it is necessary to be able to first recognise and then assess the pain of an animal, before deciding on appropriate intervention. This project is aimed at identifying and validating the facial expression of pain to allow early detection and monitoring. Objectivity of assessment will be reinforced by using computer based predictions. No animals will be deliberately harmed in the course of the study, but you will be expected to work with individuals seeing clinical cases requiring analgesia.

A systematic approach to the assessment of emotions in animals has been developed as a framework by the Professor of Veterinary Behavioural Medicine over recent years at Lincoln, and this project provides an excellent opportunity to illustrate the power of this approach for addressing a wide range of animal welfare challenges, using early detection of pain in cats as an exemplar.

#### **JOB PURPOSE**

The Research Fellow is responsible for conducting research on the project, as directed by the Professor of Veterinary Behavioural Medicine, and is expected to operate with a significant degree of autonomy.

The post holder may be required to help supervise the work of more junior researchers. A critical element of this position is the liaison with clients and stakeholders throughout the research process, including the presentation of reports to both academic communities and lay audiences.

This project has three aims:

- 1. The first aim is to develop a system to allow owners to recognise pain in cats
- 2. The second aim is to develop a system to allow owners and/or vets to assess pain in cats
- 3. The third aim is to validate the scale produced by achieving the second aim.

Thus the first aim is qualitative addressing the question – is my cat in pain? The second aim is quantitative, addressing the question – how much pain is my cat in? We therefore need to identify the potential signs indicating pain recognised by owner to achieve the first aim and scale them to achieve the second aim.

To achieve the first aim will have undertaken a review of the scientific literature to identify potentially relevant measures used to assess pain in non-human animals, with a particular focus on the cat and undertaken qualitative interviews and semi-structured interviews to identify signs of pain in cats, especially early signs. This work has been published in part, with other elements being prepared for publication.

To achieve the second aim, the researcher will need the following additional skills:

- Data collation and analysis
- Ethological methods to be applied to facial expressions from subjects in pain
- Communication skills relating to the translation of science into an accessible medium for the public
- Interpersonal skills to work with stakeholders at all levels
- Quantitative research methods

To achieve the third aim, the researcher will need the following additional skills:

- Veterinary clinical and communication skills to manage cats in pain
- Clinical trials design, execution and analysis (knowledge of GCP is useful)
- Self management, to operate in a both a clinical and research capacity

We are seeking a postholder to help ensure we deliver on these latter two aims.

#### **KEY RESPONSIBILITIES**

#### **Literature Surveys**

Undertake literature surveys and other investigations of the state-of-the-art, and prepare reports as required.

#### Programme of Research

Design and undertake programme of research under the direction of the Professor of Veterinary Behavioural Medicine, demonstrating a significant level of autonomy.

Lead in the production of high quality research outputs, including reports, papers and other publications of national/international standing.

#### **Project Management**

Perform project management activities, planning, scheduling, monitoring and reporting on progress of research projects.

#### Liaison and Networking

Identify and liaise with internal and external collaborators, and with colleagues in the School, maintaining positive and effective working relationships.

#### **Internal Research Activities**

Participate in and help to organise internal research activities, including seminars, research meetings and conferences.

#### **Continuous Professional Development**

Undertake continuous professional development activities.

#### **Grant Applications**

Contribute to the production of grant applications.

## **Teaching Support**

Engage in teaching support activities, up to a maximum of six hours per week, possibly including leading a small number of units (no more than two per annum).

Aid in the supervision of postgraduate research students.

In addition to the above, undertake such duties as may reasonably be requested and that are commensurate with the nature and grade of the post.

### **ADDITIONAL INFORMATION**

## Scope and dimensions of the role

This role requires an individual who is both an excellent communicator with the public and behavioural researcher, with a good knowledge of pain in animals. Please refer to further details given in the job purpose section above.

Key working relationships/networks							
Internal	External						
<ul> <li>Professor of Veterinary Behavioural Medicine</li> <li>Head of Research Centre</li> <li>Head of School</li> <li>Other research and academic staff within the school of Life Sciences</li> </ul>	<ul> <li>Research collaborators, including computer scientists</li> <li>Sponsors and clients</li> </ul>						



# UNIVERSITY OF LINCOLN PERSON SPECIFICATION

JOB TITLEPostdoctoral Research FellowJOB NUMBERCOS033
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Selection Criteria	Essential (E) or Desirable (D)	Where Evidenced Application (A) Interview (I) Presentation (P) References (R)
Qualifications:		
PhD or equivalent (good candidates may be accepted with a PhD pending, subject to publication record)	E	Α
Veterinary degree which is registerable with the RCVS	D	Α
Experience:		
Extensive knowledge of animal welfare and the assessment of affect	E	A/I
Extensive experience of relevant research methods and associated clinical practice e.g. qualitative and quantitative research methods, Matlab software	D	A/I
Authorship of research outputs of national/international standing	D	A/I
Experience of research or practice in feline pain	D	A/I
Teaching support	D	A/I
Skills and Knowledge:		
Ability to design, conduct and project manage original research in the subject area	E	A/I
Excellent written communication, including the ability to write reports and research outputs	E	A/I
Ability to prioritise own workload and work to specified deadlines under pressure	E	A/I
Ability to communicate complex subjects orally	E	A/I
Competencies and Personal Attributes:		
Flexible approach to workload	E	A/I
Ability to work on own and as part of a team	E	A/I
Enthusiasm and commitment	E	I
Business Requirements:		
Ability to communicate science using a range of formats to maximise its impact outside of academia	E	I

**Essential Requirements** are those, without which, a candidate would not be able to do the job. **Desirable Requirements** are those which would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements.

Author	DM	HRBA	HDR
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