



Sainsbury Wellcome Centre

Job Description

Research Assistant

Department: Sainsbury Wellcome Centre

Grade: 6B

Salary: £39,148 to £ 41,833 p.a. including London Allowance

Hours: 36.5 hours per week (full time 1.00 FTE)

Available until: Funded for one year in the first instance with possibility of extension.



Context

The Saxe Lab studies learning in biological and artificial neural networks. We aim to test predictions from network models learning by different principles in rats by measuring evolution of behaviour and neural representations during acquisition of carefully-designed tasks.

The Role of Research Assistant

We are looking for a Research Assistant to assist with the design and delivery of behavioural and electrophysiological experiments investigating neural activity in animal models. Responsibilities will include training rats in two established behavioural training environments in SWC. A subset of rats will be implanted with electrophysiological probes and will be tethered for neural recordings during behavior tasks.

Animal training will involve coordination with a team of technicians, the SWC's Neurobiological Research Facility, and the postdoctoral fellow leading the project.

The successful candidate will be capable of performing these experiments, and willing to develop additional technical skills, including building recording devices, implanting them in surgeries and explanting procedures, and performing histological analysis. Experience in the calibration, maintenance, and repair of animal behavioural setups is desirable.

Applicants should be excellent communicators, with prior experience of working within a research

laboratory and handling rodents, as well as some experience in monitoring rodents and providing post-operative care.

The role will also involve contributing to the design of behavioral experiments, including coding task protocols in MATLAB, analysis of the data in Python, and presenting results.

As a Research Assistant, you will be expected to work under your own initiative in a collaborative and multidisciplinary research environment.

This post is funded for one year in the first instance, with possibility of extension.

Duties and responsibilities

- Handle and monitor rats.
- Run training of freely moving and tethered rats.
- Run neural recording from tethered rats.
- Perform surgical and post-operative care of recovering animals.
- Perform histological procedures.
- Provide support for maintenance of equipment, lab supplies and databases to ensure that all work is carried out in accordance with statutory and UCL regulations as appropriate.



- Maintain a meticulous record, and write up results, maintaining a permanent record of the methodologies and the experiments.
- Ensure the experiments are carried out efficiently and in a proper scientific manner.
- Maintain the lab cleanliness and organisation of the laboratory space.
- Adhere to good laboratory practice at all times and observe all required health and safety procedures.
- Observe all ethical and legal requirements in relation to the use of animal models in research.
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- Observe all ethical and legal requirements in relation to the use of animal models in research.
- Observe all data protection and security requirements.
- All staff are expected to act professionally, co-operatively and flexibly in line with the post.
- Adhere to UCL's Sustainability policies and objectives, attend management meetings and undertake such training and development as may be required for the post.
- The post holder, like all academic, research and teaching staff, is expected to demonstrate their ongoing commitment to excellence in line with the Academic Career Framework.
- Meet UCL's expectations set out in UCL's [Core Behaviours Framework](#).
- The above description is not exhaustive, and the post-holder will be required to undertake any other duties as may reasonably be requested within the scope, spirit, and purpose of the post.

General

- Carry out any other duties within the scope, spirit and purpose of the job as requested by the line manager.
- Actively follow and promote all UCL policies including those on Equality, Diversity and Inclusion.
- Maintain an awareness and observation of Fire and Health & Safety Regulations.
- There may, on occasion, be a requirement to work extended hours.
- Actively participate in UCL networks, meetings and committees relevant to the role, as required.

Person Specification

Selection Criteria

Applicants will be selected based on how well they demonstrate that they meet the essential, and if appropriate, desirable criteria for this particular role. They should give examples of how they meet each criterion.

Essential Criteria	Assessment method (Application/ Interview/Practical Test)
Qualifications, experience and knowledge	
A bachelor's or Master's degree in Neuroscience, molecular biology or a related field.	Application
Demonstratable experience of working in a research laboratory.	Application/ Interview
Practical experience of handling, monitoring health and caring of rodents including post-operative medication.	Application/ Interview
Experience conducting behavioural experiments for rats.	Application/ Interview
Experience of high-density electrophysiology in tethered, behaving rats and related procedures like surgery, and histological verification.	Application/ Interview
Experience analysing behavioural and/or neural data in python.	Application / Interview
Skills and abilities	
The ability to contribute to research projects within the laboratory.	Application/ Interview
Strong written and oral communication skills, with the ability to work collaboratively in a multidisciplinary setting.	Application/ Interview
Able to prioritise, manage your own time, and multi-task to integrate the demands of a range of different activities and deadlines in parallel.	Application/ Interview
Computer literacy, including experience of a range of software packages	Application/ Interview
Works ethically, legally, and with integrity	Application/ Interview
Personal Attributes & UCL Core Behaviours	
Accountable, reliable and resourceful.	Interview
Demonstrates an interest in personal development.	Interview
Having a positive and helpful approach to work.	Interview
Desirable criteria (only be scored if there is a tie break for shortlisting).	
Experience designing behavioural experiments for rats, relying on knowledge of animal cognition or experience in the field of neuroscience.	Application
Home Office Personal Licence Holder	Application
Technical expertise in calibration and maintenance of animal behavioural setups.	Application
Experience with mouse colony management software i.e. PyRAT.	Application