



Sainsbury Wellcome Centre

Job Description

Research Assistant (Duan, Erlich Lab)

Department: Sainsbury Wellcome Centre

Grade: 6B

Salary: £37,332-£39,980 p.a. including London Allowance

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

Reports to: Ann Duan, Jeff Erlich, Oliver Gauld

Available until: Funded for one year in the first instance



Context

The Duan lab and the Erlich lab are recruiting three Research Assistants. Our research groups aim to understand how neural population dynamics generate flexible, and cognitive behaviours. In particular, we use freely-moving and head-fixed rodent paradigms to study the neural mechanisms underlying decision-making under risk and uncertainty and in a social context. Towards this goal, we combine theory-motivated behavioural designs, quantitative extraction of animals' internal states, large-scale, cellular-resolution monitoring and manipulation of identified neural circuits during decision tasks, and computational modelling.

Our labs are a diverse group, both in scientific training—ranging from fields such as engineering, psychology, and biology—and in cultural backgrounds, with members coming from countries all over the world, as befits a modern systems neuroscience lab located in a world-class neuroscience department in a metropolitan city.

Main purpose of the job

The Research Assistants will run experiments investigating the neural mechanisms of economic decision-making under risk using head-fixed mouse paradigms (2) and social decision-making using freely-moving mouse tasks (1).

You will work closely within a team responsible for training and monitoring mice in a streamlined, semi-automated facility for rodent training.

You will perform stereotaxic surgeries, and assist in recording neural activity with high-density electrophysiology or optical imaging methods, and perturbing activity with optogenetics or pharmacological manipulations.

We seek candidates who are detail-oriented, conscientious, and self-motivated. Additionally, the ideal candidates must be able to demonstrate (or learn) precision and care in tasks involving fine manual skills, and be able to communicate their science in a clear manner.

These positions are ideal for candidates seeking additional research experience before applying to graduate degree programs in Neuroscience or related fields. We welcome applications from all qualified candidates and encourage applications from underrepresented groups in science.

The posts will be for one year in the first instance, with the possibility of extension. Two positions will be under supervision of Dr. Duan and Dr. Erlich, and the 3rd position is part of a Wellcome Early Career grant led by Dr. Oliver Gauld.



Duties and responsibilities

Core duties

- To contribute to the overall activities of the research team and assist other members of the group with experiments when needed
- Handling and monitoring mice.
- Train mice in behavioural tasks.
- Perform aseptic, stereotaxic brain surgeries.
- Participate in vivo experiments including optogenetic manipulations and recordings of neural circuits in behaving animals.
- Maintain and repair experimental setups.
- Work closely with the group leader and other team members to set up experiments, gather and organise data.
- Perform analysis of collected data.

Lab duties

- Monitor and maintain laboratory stocks of consumables and reagents.
- Maintain laboratory cleanliness and organisation of the laboratory space.
- Contribute to the 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 meticulous records of experimental results and methodologies.
- Maintain the safety manual to ensure new members of staff, visitors and students receive the appropriate induction.

Other

- To support or be a primary worker on the given project and ensure it is carried out efficiently and in a proper scientific manner.
- Provide assistance, supervision and teaching to new staff members, visitors and students to the research group in surgical techniques and general laboratory work practices.
- To participate in weekly group meetings.
- 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.

- Observe all data protection and security requirements.

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, or a shifted work week (for example, working Thursday–Sunday with Monday-Wed off).
- Actively participate in UCL networks, meetings and committees relevant to the role, as required.
- 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.

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 degree in Neuroscience, molecular biology, Engineering, Physics or a related field.	Application
Independent research experience, with evidence of achievement within the appropriate subject area.	Application/ Interview
Experience with training rodents in behavioural tasks.	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 present complex information effectively, as evidenced by a short presentation during the interview.	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
Able to work effectively alone, but also contribute and work well as part of a team.	Application/ Interview
Accountable, reliable and resourceful	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 in calibration, maintenance and repair of animal behavioural setups.	Application
Experience with rodent surgeries/ electrophysiology / optogenetics.	Application
Experience with programming in Python or MATLAB	Application
Proficiency in coding and using software for data or statistical analysis.	Application

Apply

To apply for this position visit:

ucl.ac.uk/work-at-ucl/search-ucl-jobs

Please complete the online application form and use the supporting statement section to outline your interest in joining SWC and how you meet the essential and desirable criteria for the role.

If you have any queries regarding the application process, please email: swc.hr@ucl.ac.uk

For informal enquiries about the role please contact: c.duan@ucl.ac.uk

All candidates will be notified of the outcome of their application.

Annual leave

Annual leave is 27 working days for a full-time member of staff + 6 UCL closure days in addition to 8 Bank Holidays.

Pension

Post-holders will be eligible to join SAUL (Superannuation Arrangements of the University of London) subject to the Scheme's rules and eligibility conditions.

Hours of Work

UCL's full time working week is 36.5 hours per week. SWC is willing to consider flexible-working arrangements, subject to discussion and agreement with your line manager.

Other benefits

UCL is a dynamic, global university based in one of the most exciting capital cities in the world. Not only does working at UCL offer the opportunity to work with some of the greatest intellects in the world, it also offers competitive terms, conditions and benefits to its staff.

As part of the UCL community you can access free lunch hour lectures, exhibitions and museums and collections. On campus UCL has the Bloomsbury theatre hosting a range of performances and a series of bars, cafes, and other facilities, which UCL staff can use.

In addition to 41 days annual leave (inclusive of public holidays and closure days) and generous pension schemes, UCL provides a number of other staff benefits which are linked from the page below:

✓ <https://www.ucl.ac.uk/human-resources/pay-benefits/staff-benefits>

UCL benefits and policies apply equally, whatever the sexual orientation and/or gender identity of employees. Benefits and policies relating to employees partners, includes both different sex and same sex partners.