Job Description

Research Fellow/Senior Research Fellow

Department: Sainsbury Wellcome Centre
Grade: 7/8
Salary: G7: £40,524 to £48,769 per annum inclusive of London Allowance
G7: £50,085 to £58,895 per annum inclusive of London Allowance
Hours: 36.5 per week (full-time, 1.00 FTE)
Reports to: Dr Julia Harris

Context

We are looking for an excellent Post-Doctoral Research Fellow, with experience with *in vivo* electrophysiology or optogenetics (or both), to join the Harris Lab at the SWC.

Our lab is interested in one of Biology's biggest mysteries - why do brains need to sleep? We investigate single cell and neural circuit changes during sleep, with a focus on how these changes impact both neural computation and energy use, allowing us to wake up each morning with brains that are increasingly optimised for our environment.

We work with mice, using a combination of electrophysiological and optogenetic techniques alongside olfactory behavioural paradigms to study changes in learning, memory and sensory processing across arousal states.

Main purpose of the job

The Fellow will have a dual role (1) developing a custom area for chronic neuropixels, recordings and sleep, and (2) working directionally with the SWC's central behavioural arena, both analysing existing data and involve a high level of collaboration with

other SWC labs, as well as with SWC's expert engineering and neuroinformatics teams.

You will also have the opportunity to collaborate closely with theorists in the Gatsby Unit and draw on the experimental resources of multiple labs at SWC, the broader neuroscience community at UCL and beyond.

This post is available until 31/10/2025 in the first instance with the expectation of extension subject to funding renewal.

Duties and responsibilities

- To lead and coordinate the design and building of a custom arena, in which mice can perform olfactory tasks and sleep, in combination with chronic neuropixels recording.

- To generate data from the custom arena, tracking neural activity across arousal states, working closely with Julia Harris and other lab members.

- To collaborate with the SWC's central behavioural arena and associated labs to make data formats and experimental components shareable between arenas.

- To analyse sleep data from the central behavioural arena along with data from the custom-built arena to test specific theories

of neural and behavioural changes across arousal states.

- To stay informed about new developments in relevant analytical techniques (e.g. spike sorting) and maintain sharable data formats and code.

- To write research articles for peer reviewed platforms, and present papers and posters at national and international conferences and give seminars to disseminate research findings.

- To act as a source of information and advice to other members of the group on methods and techniques/

- To maintain lab equipment, lam supplies and databases to ensure that they function at the correct levels, and to ensure all work is carried out in accordance with statutory and UCL regulations as appropriate.

- To engage actively with the neuroscience community at SWC and the Gatsby Unit specifically, and UCL more broadly, including giving presentations in lab meetings and journal clubs where appropriate.

- To manage their own academic research and administrative activities. This involves small scale project management, including coordinating multiple aspects of work to meet deadlines.

- To contribute to the scientific development of PhD students in the lab.

- To represent the research group in outreach activities involving the wider public.

- To contribute to an open and inclusive lab environment.

- To adhere to good laboratory practice at all times, follow host lab policies and best practices, and observe all required health and safety procedures.

- To observe all required 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.
- 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.
- 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

Applicants should copy and paste the following essential criteria (which are assessed on the application form) into the "Statement in support of your application" and describe underneath each criterion how they meet it, giving examples.

Essential Criteria	Assessment method
Qualifications, experience and knowledge	
PhD in neuroscience or closely related discipline or have submitted your thesis before commencing in post.	Application
Proven track-record of publishing work in neuroscience or a related field.	Application
Experience with in vitro or in vivo electrophysiology or sleep recording	Application/Interview
Experience with animal handling or behavioural training.	Application/Interview
Experience with building experimental setups and development of software/hardware for experiments.	Application/Interview
Experience analysing neurophysiological data.	Application/Interview
Computer programming expertise (MATLAB, Python, C# or SQL) .	Application/Interview
Grade 8 only: Experience of supervising / mentoring a small team of scientists or PhD students.	Application/Interview
Skills and abilities	
Excellent communication skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings.	Application/Interview
Strong quantitative and programming skills.	Application/Interview
Strong organisational skills and independence, but also willingness to be part of a team, asking for help when needed and freely providing help to other lab members.	Application/Interview
Desirable Criteria **Applicants should copy and paste the following desirable criteria into the "Statement in support of your application" under the Desirable criteria section and describe underneath each criterion how they meet it, giving examples.**	
Experience with chronic extracellular recording.	Application
Experience handling large datasets.	Application
Experience working with the olfactory system.	Application
Experience working with sleep paradigms and 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

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

Probation
Appointments are subject to receipt of satisfactory references and a probationary period of 9 months.

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 the Universities Superannuation Scheme (USS), 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.

About Sainsbury Wellcome Centre

The Sainsbury Wellcome Centre (SWC) brings together world-leading scientists to investigate how brain circuits process information to generate perception, form memories and guide behaviour. Developed through the vision and partnership of the Gatsby Charitable Foundation and Wellcome, and with substantial investment from these partners, the mission of the SWC is to generate experimentally testable theories of brain function.

The Centre comprises 12 highly interdisciplinary experimental research groups accommodated in a new, purpose-designed building, offering an outstanding and unparalleled research environment. SWC scientists use a broad spectrum of the latest advances in molecular and cellular biology, imaging, electrophysiology and behavioural techniques and enjoy state-of-the-art research laboratories, cutting-edge scientific equipment, technologically-advanced prototyping and fabrication laboratories and custom in-house high-performance computing facilities.

SWC is part of the UCL School of Life and Medical Sciences (SLMS). SLMS brings together four UCL Faculties to create one of the largest and most prestigious aggregations of academics in biomedical, life and population health sciences worldwide. The School has a global reputation for teaching, informed by cutting-edge research. SWC is most closely linked with the Faculties of Brain Science and Life Sciences, and is aligned administratively with Life Sciences. The Faculty of Life Sciences leadership team works closely with the SWC leadership to support and enable their mission and facilitate research excellence.

Further details about UCL can be found at www.ucl.ac.uk.

Professional Services at the Sainsbury Wellcome Centre

SWC has a specialist and experienced professional services team. It is structured to efficiently support research activity and deliver effective management and operational leadership of the SWC.SWC prides itself on offering a high quality administrative, technical and operational support function, and fully supports the professional development and progression of its staff, actively encouraging colleagues to learn new skills and broaden their experience. The SWC is supported in this aim by UCL's Organisational Development team who run a wide range of training programmes for all staff types and grades.

Work Environment

SWC offers staff an award-winning work environment in the heart of Fitzrovia with an on-site brasserie, secure bicycle storage, and access to pleasant outdoor spaces.

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, including excellent family-friendly policies such as occupational shared parental pay, a work-life balance policy, career break policy and a range of financial benefits such as a season ticket loan scheme and staff discounts.

Accreditations

The Sainsbury Wellcome Centre and Gatsby Computational Neuroscience Unit recently received an Athena Swan Bronze Award. Find out more about our commitment to promoting gender equality.

SWC recently received full accreditation from the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) International. Find out more about our commitment to supporting a culture of care.