

Job description and selection criteria

Job title	Postdoctoral Research Assistant in Cellular Neuroscience (2 posts)
Division	Medical Sciences
Department	Department of Pharmacology
Location	Mansfield Road, Oxford OX1 3QT
Grade and salary	Grade 7: £30,434 - £37,394 per annum
Hours	Full time
Contract type	Two posts available – funded by the European Research Council: <ul style="list-style-type: none">• Post one: fixed term for 5 years• Post two: fixed term for 3 years in the first instance
Reporting to	Professor Colin Akerman (Group Leader)
Vacancy reference	117793
Additional information	Preferred starting date: 1 May – 1 August 2015



Committed to equality and valuing diversity

The University of Oxford holds a Bronze Athena Swan award. The Athena Swan programme supports good employment practices for women in Science, Engineering and Technology (SET).

Introduction

The University

The University of Oxford is a highly stimulating organisation, which enjoys an international reputation as a world-class centre of excellence in research and teaching. It employs over 10,000 staff and has a student population of over 21,000. Most staff are directly appointed and managed by one of the University's 130 departments or other units within a highly devolved operational structure - this includes 5,900 'academic-related' staff (postgraduate research, computing, senior library, and administrative staff) and 2,820 'support' staff (including clerical, library, technical, and manual staff). There are also over 1,600 academic staff (professors, readers, lecturers), whose appointments are in the main overseen by a combination of broader divisional and local faculty board/departmental structures. Academics are generally all also employed by one of the 38 constituent colleges of the University as well as by the central University itself. Oxford is one of Europe's most innovative and entrepreneurial universities: income from external research contracts exceeds £367m p.a., and more than 70 spin-off companies have been created.

For more information please visit www.ox.ac.uk

Medical Sciences Division

The Medical Sciences Division is an internationally recognised centre of excellence for biomedical and clinical research and teaching, and the largest academic division in the University of Oxford. It includes 15 clinical departments and 5 non-clinical departments. World-leading programmes, housed in state-of-the-art facilities, cover the full range of scientific endeavour from the molecule to the population. With our NHS partners we also foster the highest possible standards in patient care.

For more information please visit www.medsci.ox.ac.uk

Department of Pharmacology

The Department of Pharmacology is based in the University's science area in the centre of Oxford. The Department houses around 180 researchers, postgraduate students and support staff, and has excellent facilities. The members of the Department, associated staff and visiting scientists are all engaged in the investigation of basic questions concerning the interaction of chemical substances with biological systems. Research in the Department is focused on neuroscience, cell signalling, cardiovascular pharmacology and ion channel pharmacology. In many of these areas the Department plays a leading role in the international pharmacological community. The research of the Department has consistently been given a very high ranking in the Government's assessments of research in Universities and was rated first in the UK, within Biological Sciences, in terms of quality (ie greatest volume of 4* work) and volume (the power ranking) in the recent Research Excellence Framework (REF) exercise.

For more information please visit: www.pharm.ox.ac.uk

Overview of the role

Please note: two posts are available, one fixed term for 5 years and one fixed term for 3 years in the the first instance. Applications will be considered for both posts depending on skills and experience.

Two dedicated and self-motivated postdoctoral research scientists are required to work on projects investigating the functional organisation of synaptic circuits in the neocortex. The scientist will join an exciting research group that is using a combination of electrophysiological, live cell imaging and molecular-genetic approaches to study synaptic connectivity and synaptic plasticity in rodent cortex. Together with a PhD in a relevant discipline, the successful candidates will be required to have experience in one or more of the following areas: patch clamp electrophysiological recordings and/or live cell fluorescence imaging and/or optogenetic techniques in the rodent brain.

The research group is led by Professor Colin Akerman. Details of the group's research and recent publications may be found at:

<http://www.pharm.ox.ac.uk/academics/akerman/index.html>

Main duties and responsibilities

1. Manage own research and administrative activities. This involves coordinating and conducting small-scale research projects in order to meet deadlines.
2. Test hypotheses and analyse scientific data from a variety of sources, reviewing and refining working hypotheses as appropriate.
3. Adapt existing and develop new scientific techniques and experimental protocols.
4. Contribute ideas for new research projects.
5. Collaborate in the preparation of scientific reports and journal articles.
6. Develop ideas for generating research income and assist in producing research proposals.
7. Act as a source of information and advice to other members of the group.
8. Responsibilities may also include: supervision of project students; carrying out any appropriate administrative duties associated with the work; contributing to the general running of the laboratory.

Selection criteria

Applicants will be expected to have a good research track record for their stage of career. They must be able to demonstrate excellent oral and written communication skills, as the successful candidate will be expected to write research papers for publication and to present work orally. Applicants should be able to work independently but also be good team workers and keen to collaborate with other scientists in the research group and department.

Essential criteria

1. Already hold, or expect to gain shortly, a PhD in a relevant discipline.
2. Research expertise in one or more of the following three areas:
 - (i) Patch clamp electrophysiological recordings.
 - (ii) Live cell fluorescence imaging in neurons (e.g. calcium imaging).
 - (iii) Manipulating or monitoring neuronal activity using optogenetic techniques.

3. Evidence that highlights previous duties requiring:
 - (i) Accuracy and attention to detail.
 - (ii) Methodical work.
 - (iii) Reliability.
 - (iv) Advanced computing skills.
 - (v) Interest in the area of research.
 - (vi) Ability to participate in scientific discussion within the group

Desirable criteria

1. A track record of working in rodent cortex.
2. Experience of in vivo procedures in mice.
3. Experience with histological methods and standard molecular biology techniques.
4. Expertise in quantitative methods for describing neuronal activity.

Working at the University of Oxford

For further information about working at Oxford, please see:

http://www.ox.ac.uk/about_the_university/jobs/research/

Work-life balance and family-friendly policies at the University of Oxford

The University aims to support all employees with parental or caring responsibilities to ensure that they are able to balance work and family life.

This website (<http://www.admin.ox.ac.uk/eop/parentsandcarersinformation/>) provides a hub of information for all parents and carers, with links to university policies, procedures and guidance, as well as details of the facilities and benefits offered to mothers, fathers and guardians of children. In addition, the website highlights university policies, as well as external sources of guidance. You are advised to read the university policies in full; and to see respective guidance on the Personnel Services website for full details. Views expressed on external websites are not necessarily endorsed by the University of Oxford.

How to apply

If you consider that you meet the selection criteria, click on the Apply Now button on the 'Job Details' page and follow the on-screen instructions to register as a user. You will then be required to complete a number of screens with your application details, relating to your skills and experience. When prompted, please provide details of two referees and indicate whether we can contact them at this stage. You will also be required to upload a CV and supporting statement. Please ensure your supporting statement demonstrates how you meet the selection criteria listed above. The supporting statement should describe what you have been doing over at least the last 10 years. This may have been employment, education, or you may have taken time away from these activities in order to raise a family, care for a dependant, or travel for example. Your application will be judged solely on the basis of how you demonstrate that that you meet the selection criteria outlined above and we are happy to consider evidence of transferable skills or experience which you may have gained outside the context of paid employment or education.

Please save all uploaded documents to show your name and the document type.

All applications must be received by **midday** on the closing date stated in the online advertisement.

Should you experience any difficulties using the online application system, please email recruitment.support@admin.ox.ac.uk

To return to the online application at any stage, please click on the following link www.recruit.ox.ac.uk

Please note that you will be notified of the progress of your application by automatic e-mails from our e-recruitment system. **Please check your spam/junk mail** regularly to ensure that you receive all e-mails.

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