



UNIVERSITY
OF SUSSEX



1 Advertisement

Post Title: Research Fellow in Neuroscience

School/department: School of Life Sciences

Hours: Full time or part time up to maximum of 1 FTE

Requests for flexible working options will be considered (subject to business need).

Contract: fixed term until 30 Sept 2024

Reference: 6071

Salary: starting at £34,304 and rising to £40,922 per annum, pro rata if part time

Placed on: 13 September 2021

Closing date: 29 September 2021 Applications must be received by midnight of the closing date.

Expected start date: from 1 Oct 2021 or as soon as possible thereafter

A full-time postdoctoral position funded by the RNID is available in the laboratories of Prof Corné Kros and Prof Guy Richardson FRS, in the School of Life Sciences at the University of Sussex.

The aims of the Project Grant on which you will be working are to study:

- the properties of volume-regulated anion channels (VRACs) in cochlear hair cells,
- the contributions of VRACs in hair cells to ototoxicity caused by aminoglycoside antibiotics and the chemotherapy drug cisplatin.

Candidates should have a recent PhD degree in neuroscience, biophysics or a related field and have electrophysiology experience, including patch-clamp recording. Some experience with cell and tissue culture will be advantageous.

Please contact Professor Corné Kros, c.j.kros@sussex.ac.uk, for informal enquiries.

The University is committed to equality and valuing diversity, and applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in Science, Technology, Engineering, Medicine and Mathematics (STEMM) at Sussex.

Please note that this position may be subject to [ATAS clearance](#) if you require visa sponsorship.

For full details and how to apply see our [vacancies page](#)

The University of Sussex values the diversity of its staff and students and we welcome applicants from all backgrounds.

2. The School / Division

Please find further information regarding the school/division at <http://www.sussex.ac.uk/lifesci/neuroscience/>

3. Job Description

Job Description for the post of: Postdoctoral Research Assistant

Department: Neuroscience

Section/Unit/School: School of Life Sciences

Location: CRPC

Grade: 7

Responsible to: Principal Investigator, Professor Corné Kros

Responsible for: n/a

PRINCIPAL ACCOUNTABILITIES

To engage in individual and/or collaborative research activity resulting in high-quality publications; and to develop research funding and knowledge exchange income individually or in collaboration with others, as appropriate, depending on the size and scope of the bid.

KEY RESPONSIBILITIES

1. Research, Scholarship & Enterprise

- 1.1 Develop research objectives and proposals for own or joint research, at acceptable levels, with assistance if required.
- 1.2 Conduct research projects individually and in collaboration with others.
- 1.3 Analyse and interpret research findings and draw conclusions on the outcomes.
- 1.4 Produce high-quality research outputs for publication in recognised high-quality journals.
- 1.5 Contribute to the preparation of proposals and applications to external bodies, for example for funding purposes.
- 1.6 Individually or with colleagues, explore opportunities for enterprise activity, knowledge exchange income and/or consultancy, where permissible.

1.7 Build internal contacts and participate in internal networks and relevant external networks in order to form relationships and collaborations.

1.8 Continually update knowledge and understanding in field or specialism, and engage in continuous professional development.

2. Teaching & Student Support

2.1 Undertake teaching duties, if required.

2.2 Assist in the assessment of student knowledge and supervision of student projects if required.

2.3 Assist in the development of student research skills, for example as part of a postgraduate supervision team.

3. Contribution to School & University

3.1 Attend and contribute to relevant School and project meetings.

3.2 Undertake additional duties, as required by the Principal Investigator and/or Head of School.

4. Role-specific duties

4.1 Conduct whole-cell patch clamp recordings of volume-regulated anion currents (VRACs) from mouse cochlear hair cells.

4.2 Determine how aminoglycosides affect VRACs.

4.3 Test how VRAC inhibitors affect aminoglycoside-induced hair-cell blebbing and repair.

4.4 Record VRACs during hair-cell blebbing due to aminoglycosides, with or without VRAC inhibitors.

4.5 Test how the absence of a critical subunit affects aminoglycoside and cisplatin ototoxicity.

4.6 Test how the absence of this subunit affects VRAC currents.

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.

INDICATIVE PERFORMANCE CRITERIA

- A PhD or equivalent scholarly or relevant professional activity

- Pursuing a line of independent research within a research group.
- Publishing research (either from a recently completed PhD or new original research).
- Other forms of externally recognised professional practice of creative output of a standing equivalent to regular publication of original research.
- Initiating, developing or participating in links between the University and external bodies such as business and industry, the professions, community organisations and policy-makers, or in the delivery of outreach activities involving the wider public.
- Evidence of successful engagement in teaching or supervision.

4. Person Specification

ESSENTIAL CRITERIA

1. Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).
2. Evidence of engagement in high-quality research activity.
3. Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.
4. Ability to work individually on own initiative and without close supervision, and as part of a team.
5. Ability to exercise a degree of innovation and creative problem-solving.
6. Excellent organisational and administrative skills.
7. Ability to prioritise and meet deadlines.
8. Excellent IT skills.

ESSENTIAL ROLE-SPECIFIC CRITERIA

1. A PhD in Neuroscience, Biophysics or a related discipline
2. Experience with patch-clamp recording
3. Possess a high level of numeracy
4. Meticulous attention to detail
5. Self-motivating and tenacious

6. Flexibility to work outside normal hours

7. Ability to travel occasionally

DESIRABLE CRITERIA

1. Emerging track record of high-quality publications in reputable journals and other appropriate media of similar standing

2. Experience of generating research or knowledge exchange income

3. Knowledge of neuroscience and sensory systems in particular

4. Experience with cell and/or tissue culture

5. Experience with using standard light and confocal microscopy

6. Experience with data acquisition and analysis programs such as Signal, Origin and Prism