



Research Associate / Senior Research Associate in Neuroscience

1 JOB DESCRIPTION

Faculty / School or Division: Faculty of Health Sciences and Life Sciences, School of Psychology and Neuroscience

Faculty/School or Division Address: Biomedical Sciences Building, University Walk, Clifton Campus, Bristol BS8 1TD

Job Family:	Research and Teaching		
Grade/Pathway:	I / J - Pathway 2	Salary range:	£40,704 - £45,641 (Grade I) / £45,641 - £51,258 (Grade J) per annum depending on experience
Hours of work:	35 hours per week / 100% time	Contract type:	Open ended (with fixed funding from 05/01/2027 to 31/08/2029)
Work pattern:	Full Time / 1FTE	Vacancy Reference Number: ACAD108767	

1.1 Main Job Purpose

The University of Bristol seeks a postdoctoral research associate/senior research associate to join the laboratories of Dr Paul Anastasiades, Dr Paul Chadderton and Dr Emma Cahill, studying circuit formation in the developing brain. The candidate will contribute to a BBSRC-funded research project exploring the role of the cerebellum in regulating prefrontal cortex circuit formation and function.

The candidate will employ an exciting array of cutting-edge tools in neuroscience. Their main role will involve slice electrophysiology, optogenetics, rodent stereotaxic surgery, rodent behaviour, *in vivo* imaging of neural activity, data analysis, and contributing to the production of scientific manuscripts.

1.2 Main Statement of Responsibilities

Research Responsibilities

- Perform laboratory experiments to achieve the scientific aims of the study
- Perform data analysis
- Generate figures and manuscripts for scientific publication in high impact journals. **For SRA it is expected they would take a lead role in manuscript preparation.**
- Work independently on scientific aims of the project

- Although working under the general guidance of the Principal Investigator(s), they will contribute ideas and use initiative to analyse and interpret research data and findings
- Generate novel ideas and data that will contribute to future experiments and publications. **For SRA it is expected they will also contribute to grant applications.**
- Participate in oral and/or poster presentations at national and international conferences

Administration Responsibilities

- Liaising with team members, particularly the supervisory team and the research technician working on this project. **For SRA it is expected that they will also help co-supervise junior research staff, such as MSc/PhD students.**
- Taking responsibility for the smooth running of the project, including leading on day-to-day tasks.
- Contributing to general laboratory administrative tasks
- Maintaining up-to-date knowledge of relevant scientific literature
- **For SRA it is expected that they will also help the PI develop and manage relationships with internal and external collaborators.**

Teaching Responsibilities

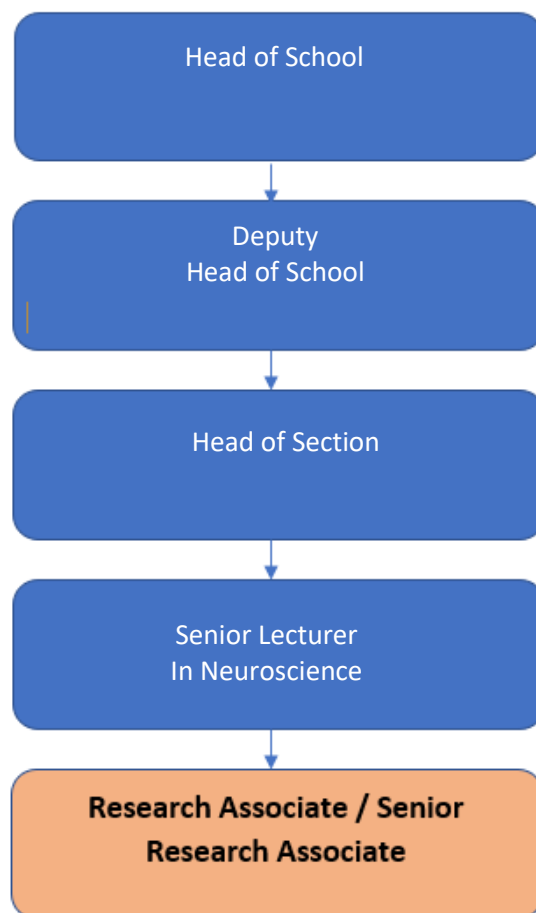
As this role is a Pathway 2 (Research) role, there are no formally specified teaching duties required of the role-holder. However, other commitments permitting, the role-holder may be given development opportunities to undertake activities such as teaching on Masters and Doctoral programmes and/ or supervising MSc dissertations within the School of Psychology and Neuroscience, as appropriate.

1.3 Relationships

Line manager: Dr Paul Anastasiades

Line manager to (where appropriate): N/A

1.4 Organisation Chart



1.5 Job Hazards/Safety Critical Duties (Pre-employment health screening)

The following duties are an intrinsic part of the role and any offer of employment will be conditional upon satisfactory health screening by the University Occupational Health Service:

Biological Hazards

- Work involving potential exposure to recognised allergens through work with laboratory animals and the shared use of a laboratory where such work takes place
- Work with genetically modified organisms, microorganisms or cells under class 2 or class 3 activities on the basis of the hazard to human health.
- Exposure to biohazardous waste including ACDP* Containment Level 1 and 2 biological waste from laboratories.

Chemical Hazards

- Formaldehyde
- Regular use of latex or nitrile gloves
- Work with substances necessitating the use of RPE
- Exposure to possible skin and respiratory irritants and toxic and cytotoxic chemicals

2 PERSON SPECIFICATION

2.1 Relevant Experience, Skills and Knowledge

Essential

- Experience with patch-clamp electrophysiology recordings
- Excellent organisational skills
- Excellent problem-solving skills
- Ability to perform quantitative data analysis
- Attention to detail
- Willingness to obtain Home Office personal licence if not currently held

Desirable

- Experience performing paired patch clamp recordings, or targeted patch clamp recordings from genetically defined neuronal populations in acute slice preparations
- Experience with rodent stereotaxic surgery and use of viral vectors
- Experience working with transgenic mice
- Experience with rodent behaviour
- Experience performing *in vivo* imaging or electrophysiological recording of neural activity and associated analysis
- Experience using scientific programming languages (e.g. IGOR, R, Python, Matlab)
- Previous research on brain development or neurodevelopmental disorders

2.2 Relevant Qualifications

Essential

- A PhD or near completion, or equivalent research experience in an academic, industrial or clinical setting equivalent to a PhD
- PhD to be in Neuroscience, or a related field (e.g. Biological Sciences) **For SRA position** they must already hold a PhD in Neuroscience, or a related field (e.g. Biological Sciences) and have previous postdoctoral experience.

Desirable

- Home Office personal licence

2.3 Communication and Interpersonal Skills

Essential

- Excellent communication skills, both written and verbal
- Able to produce scientific publications (**for SRA this should be evidenced by multiple previous published research papers**)
- Able to share their research at scientific conferences and regular lab meetings
- Able to work collaboratively as part of a team
- Able to take ownership and lead a research project

2.4 Additional Criteria

Essential

- Dependable
- Able to meet deadlines
- Creative and able to generate ideas and think deeply about their research
- Self-motivated and able to work independently
- Willing to contribute to a collegial and supportive lab environment. **For SRA this will involve direct co-supervision and mentoring of junior lab members.**

3 CAREER PATHWAY AND OTHER RELEVANT INFORMATION

3.1 Career Pathways

All members of academic staff have a clear career pathway involving a series of levels with distinct role profiles, each with its unique requirements. Each profile sets out what is expected of an academic at the particular level. The role profiles also set out a collection of competencies expected for each level. Progression or promotion to the next level will occur after these competencies have been attained and where a role at the higher level is available.

The academic pathways are as follows:

Career Pathway One - academic roles that combine teaching, research and administrative duties.

Career Pathway Two - academic roles focusing on research and associated administrative duties.

Career Pathway Three – academic roles focusing on teaching and associated administrative pathways

This post is located on Pathway Two. Role Summaries setting out what is expected of an academic at each particular profile level on pathway two can be found below. Please note that an appointment may be made at any level of the pathway.

A schematic diagram of the career pathways can be found at <http://www.bristol.ac.uk/hr/grading/academic/>.

For Pathway Two roles progression to the next level will only occur where a role has been identified as being eligible for progression, having reached the relevant point on the salary scale and after the relevant competencies have been attained. A progressable role is a role at Level b or Level c that has been determined as being eligible for progression by the Head of Department, based on departmental needs, priorities and funds. Individuals in progressable roles at Level b or Level c are expected to develop their skills, knowledge and experience in order to ultimately progress to Level c or Level d, as applicable. A non-progressable role is one either at Level a (which are not subject to formal progression arrangements, although there may be opportunities to develop into a Level b role, based on departmental needs, priorities and funds), or at Level b or c for which the Head of Department has identified an ongoing need at that particular level. Movement to Level e will be by promotion only.

3.1.1 Role Summaries

Research Associate (Level a)

Role holders at this level are concerned with *assisting* an individual research leader or team to conduct a particular study (or group of studies). They will generally be involved in data generation and/or collection using standard and well-defined methods developed by others. They will be working under close supervision by, and direction from, a more senior researcher, who will be ultimately responsible for the project. This may be the entry level for some staff who are expected to train and/or develop to take on more senior researcher roles. Role holders will be provided with academic and pastoral support within the department (including counselling on realistic career opportunities) and training will be available designed to develop their competences and to prepare them to take on more responsibilities associated with a higher grade.

Senior Research Associate (Level b)

Role holders at this level will be experienced and professional researchers (or have considerable professional experience) and will be specialists in a particular area or methodology, drawing upon knowledge gained from postgraduate research and/or working within a Level a role. They will be

associated with a particular project (or projects) and will contribute ideas, and/or enhancement of techniques or methodologies. They will be expected to do some writing for dissemination outside the Department. They will still be working under supervision, but will be expected to take significant initiatives in their work and consult with the Principal Investigator over the details of the project. They may, where practical, contribute to the department's teaching, through supervision of projects, overseeing practical classes, or taking small group classes. They will be provided with academic and pastoral support within the department and training will be available designed to develop their competences (including counselling on realistic career opportunities) and prepare them to take on more responsibilities associated with a higher grade.

Research Fellow (Level c)

Role holders at this level will have substantial experience of research (normally not less than six years). They will initiate and take responsibility for some research projects and may be Principal Investigators or, where a Research Council does not permit this, act as though they were Principal Investigators. They will be involved in administration relevant to their projects (e.g. helping to prepare bids for research funding), managing other researchers and monitoring research budgets. They will be expected to be undertaking research individually and/or collectively and to be advancing the state of knowledge and understanding within their particular area of expertise. They will be publishing regularly in high quality outlets. They are likely to provide some teaching support for the department (consonant with the terms of their funding). They will be expected to be establishing a growing reputation within their particular research field and academic discipline and to be developing and demonstrating intellectual independence.

Senior Research Fellow (Level d)

Role holders at this level will have extensive experience in research and research management. They will normally be Principal Investigators, leading collaborative research bids and research teams, or driving forward innovative research themselves. They will be involved in scholastic projects (e.g. editing journals and academic books), and be making a significant leadership and/or management contribution within their department or the wider university, to be participating in national/international academic networks and conferences. They may be transferring their knowledge through some teaching and/or supervision to undergraduate or graduate students (consonant with the terms of their funding). Role holders at this level will be independent researchers and will have an established national and growing international reputation within their academic discipline generally and research field in particular.

Professorial Research Fellow (Level e)

Role holders at this level will have very extensive experience of research leadership and related management/administration. They will enjoy a wide recognition for their expertise within the academic community internationally (as evidenced by conference invitations, journal editorships, office holding in specialist groupings, associations with appropriate Research Councils etc.). They will have made recognised and significant contributions to the developing knowledge and understanding of their research area. They will already have responsibilities for the creation, initiation, development and overall management of significant research programmes. They will 'profess' their discipline within the Department, as appropriate and consonant with the terms of their funding. They may also carry significant leadership roles within the Faculty or University.