



## 1 Advertisement

**Post Title:** Research Fellow in Neuroscience

**School/department:** School of Life Sciences

**Hours:** full time

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

**Contract:** fixed term for 24 months

**Reference:** 8568

**Salary:** starting at £34,304 to £40,927 per annum

**Placed on:** 03 May 2022

**Closing date:** 18 May 2022 Applications must be received by midnight of the closing date.

**Expected interview date:** As soon as possible

**Expected start date:** 01 June 2022

Research Fellow position is available in the laboratory of Tom Baden (<https://badenlab.org/>) to work on retinal basis of avian colour vision. The project will investigate the retinal neural circuits involved in chromatic and achromatic processing in the chicken retina and focus on examining spectral data using multielectrode array (MEA) recordings. Demonstrated previous research experience in visual neuroscience and advanced MEA neuronal data analysis will therefore be essential.

Experience in Python and other programming languages will also be a distinct advantage.

We are a very active research group located in the Neuroscience Centre, which also houses a number of other groups using imaging to study neural circuits involved in sensory processing (<http://www.sussex.ac.uk/sussexneuroscience/>).

The School of Life Sciences is at the forefront of research in the biological sciences in the UK, coming 8th in the REF 2014.

*More about the laboratory and our previous work can be found at <https://badenlab.org>  
Informal enquiries are encouraged and should be made to Tom Baden  
([t.baden@sussex.ac.uk](mailto:t.baden@sussex.ac.uk)).*

*“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 of Life Sciences

The [School of Life Sciences](#) has a mission statement *to enhance human health and environmental sustainability, through research, education and knowledge exchange*. It undertakes research, teaching and engagement across a wide range of the Life Sciences, from Chemistry through a range of biological and medically-related areas to Conservation Biology. The breadth and depth of cutting-edge research and innovative teaching practice requires a diverse community who work across boundaries to deliver excellence.

The School is the largest in the University in terms of research activity, with an annual research income of £16m, and is one of the largest in terms of student and staff population: The School has a teaching and research faculty of around 100, over 200 research fellows and technicians, and an administrative team of around 25. We aim to develop scientists that are able to connect with global issues and develop innovative solutions to the challenges that face the planet.

Academics within the School of Life Sciences apply their [research](#) to create impact in areas as diverse as addressing neurodegenerative diseases, saving endangered species, fostering sustainable agriculture and developing diagnostics for cancer and rare diseases. In the most recent Research Excellence Framework (REF2014), more than 96% of the School's research was rated as 'world leading', 'internationally excellent' or 'internationally recognised', putting us above many Russell Group institutions. As part of our research impact, we have developed relationships with business, policy and community partners. Our vibrant post-graduate research community is made up of around 180 PhD students and they are key to our success, undertaking cutting-edge research across all of our areas of interest in the Life Sciences.

Research in the School of Life Sciences is structured into [six collaborative Subject Groups](#), led by a Subject Chair who is a leader in their field. These are *Biochemistry & Biomedicine*, *Genome Damage and Stability Centre*, *Neuroscience*, *Evolution, Behaviour & Environment*, *Sussex Drug Discovery Centre* and *Chemistry*. The Head of School (Professor Sarah Guthrie, in post since 2017) leads the Head of School Executive, which includes two Deputy Heads of School (one focussed on research, the other on education), the School Administrator and the Director of Technical Services. Wider School organisation and administration is overseen by the School Management Committee, which includes the Subject Chairs and others in Directorship roles.

The School's teaching is firmly based on our research excellence and offers students an intellectually stimulating yet supportive experience, with opportunities for personal research experience and use of modern technology to enhance learning. The School has a population of around 1650 undergraduates studying a [range of subjects](#) across the School's expertise. For each degree we offer a 3-year BSc and a 4-year integrated Masters (MSci or MChem). We also offer a Life Sciences Foundation Year, which is ideally suited for students whose A-level (or equivalent) qualifications don't meet the requirements for direct entry on to our BSc/MSci degrees. We have a population of around 85 postgraduate taught students undertaking [MSc or MRes courses](#) across our subject expertise.

The School is committed to the [University's core values](#) of kindness, integrity, inclusion, collaboration and courage. The Equality, Diversity and Inclusion Committee (with representation on the School Management Committee) promotes and encourages our values across the School, [championing initiatives](#) that meet the [University's goals](#) of

being Equal, Diverse, Accessible and Flexible. We currently hold an Athena SWAN Silver Award and have a BAME Awarding Gap Committee who closely liaise with the University's Race Equality Charter committee. The School also hosts a wellbeing room and a multi-faith prayer room within its estate and the University supports the [Trans Rights are Human Rights](#) UK initiative. We believe that equality, diversity and inclusion is everyone's business and aim to provide a friendly and supportive environment for all who work, study and visit the School of Life Sciences.

### **3. Job Description**

Job Description for the post of: Research Fellow

**Department:** Neuroscience

**Section/Unit/School:** Life Sciences

**Location:** CRPC Building

**Grade:** 7

**Responsible to:** Professor Tom Baden

- **Job description**

The post holder will work on investigating retinal basis of avian colour vision and examining spectral data using multielectrode array (MEA) recordings.

The applicant will work towards understanding common information processing strategies in neuronal circuits of birds and possibly other species.

### **4. Person Specification**

The post holder will be pursuing a line of independent research within the research group.

The applicant will be educated to PhD level (or be close to submission) in neuroscience, computer vision or related discipline. A strong work ethic and commitment to high-quality research is vital. Good research publication record (either from a recently completed PhD or new original research) is expected. Post holder must also demonstrate evidence of successful engagement in teaching or supervision.

The post holder would communicate effectively and present scientific work at seminars within the lab, and at external meetings.

- **Essential and Desirable Criteria**

Essential

- - Educated to doctoral level (or be close to submission) in neuroscience/visual neuroscience.
- - Evidence of engagement in high-quality research activity.
- - Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.
- - Ability to work individually on own initiative and without close supervision, and as part of a team.
- - Ability to exercise a degree of innovation and creative problem-solving.
- - Excellent IT skills.
- - Experience in multielectrode array recordings data analysis.
- - Fluency in widely used programming languages (Python).

Desirable

- - Experience with multiphoton imaging of neuronal activity.
- - Experience of generating research or knowledge exchange income.
- - Experience in use of other than avian species for vision research.
- - Experience in electronics and micro-controller programming.