

**Job Title:** Research Associate in *Drosophila* behavioural genetics, molecular biology and electrophysiology

**Grade:** 7

**Salary:** £39,906 to £46,049 per annum, pro-rata if part-time

**Department:** Genetics and Genomics

**Hours/Contract:** Full-time, or job share considered, fixed term contract until 30 September 2028 with possibility of extension dependent on funding

**Job Family:** Teaching and Research

**Reference:** 12125

## Role Purpose

We are seeking an enthusiastic *Drosophila* behavioural geneticist, molecular biologist and electrophysiologist to join the research groups of Profs Rosato and Kyriacou. The focus of the project is elucidating sensory perception and signal transduction in cryptochrome-dependent animal magnetoreception. The successful candidate will have significant experience of laboratory-based biological research working with *Drosophila*. The post holder will perform specialized laboratory experiments and analyses encompassing behavioural, cellular and molecular techniques. Knowledge of and experience with *Drosophila* genetics, behaviour (rhythms and sleep), electrophysiology (two electrodes voltage clamp) and cellular and molecular biology (tissue and organ dissections, immunohistochemistry, confocal microscopy, nucleic acid extraction, PCR, molecular cloning, Western blotting) are essential. It is essential to be self-motivated and have good interpersonal and organisational skills, as the successful candidate will work both independently and as part of a multidisciplinary research team located across multiple sites (Leicester, Manchester, Oxford, National Physical Laboratory, Exeter).

## Main Duties and Responsibilities

### Research:

- To perform specialised laboratory experiments encompassing behavioural, cellular and molecular techniques employing *Drosophila*. This includes carrying out crosses, measuring locomotor activity rhythm and sleep, and cellular and molecular biology experiments (using techniques such as, tissue and organ dissections, electrophysiology measurements, immunohistochemistry, confocal microscopy, nucleic acid extraction, PCR, molecular cloning, Western blotting).
- To interpret and analyse the data produced, and to present results at local, national and international meetings as required.
- To lead in the collection, evaluation and interpretation of data and work autonomously to attain project milestones.
- To contribute to the development of appropriate methods as required.
- To work closely with members of the experimental teams (*in vitro*, *ex vivo*, *in vivo*) to inform, help, design, and support the various studies and be involved in the interpretation of results. There will be the opportunity to gain familiarity in the methods used by the other members of the network.
- To contribute to the overall research programme using novel approaches and techniques.





- To liaise with project collaborators, in agreement with the line manager, to progress the research.
- To lead in writing up research findings for dissemination amongst the research team and the broader scientific community, and to develop ideas and contributions for future grant applications and technical outputs.
- To represent the research group by disseminating results/findings at national and international conferences and to the broader community.
- To contribute to research outputs as a co-author to journal articles, technical papers, monographs, book chapters.
- To develop and carry out a plan to extend an area of personal research, or contribute as a team member to the development of a broader programme that may include contributing to the writing of research grant proposals.
- To identify opportunities, with the support of senior colleagues, to apply for fellowships and/or further project grants.
- To provide guidance and support to other staff and students involved in the research programme.
- To seek opportunities, with the approval of the line manager, to carry out multi-disciplinary research with other interested research groups at the University or stakeholders external to the University.

### **Professional Development:**

- To undertake duties and opportunities to engage in work that supports your own professional development.

### **Impact and Knowledge Exchange:**

- To contribute to the maintaining and furthering of the wider research programme and research area.
- To contribute to industry collaborations should opportunities arise.
- To consult effectively on own specialism directly with stakeholders internal and external to the University.
- To engage positively and pro-actively in research impact and outreach.

### **Leadership and Citizenship:**

- To be proactive in building networks and collaborations.
- To provide research guidance to other team members, both research staff and students
- To provide mentoring and coaching to other team members, both research staff and students

### **Internal and External Relationships**

- To attend regular meetings with members of the research group
  - To attend regular meetings with collaborators and external advisors
- To meet members of the department for critical discussion of the research and to exchange ideas and approaches that might benefit the research





## Planning and Organising

You will be required to effectively manage your time, to plan your research activity and to deliver on the priorities of the project. For example, but not exclusively:

- To prioritize tasks within agreed work schedules.
- To plan for specific aspects of research incorporating issues such as deadlines, project milestones and overall research aims.
- To adapt daily and weekly plans to accommodate new developments and to be flexible to the changing priorities of the research project.

## Qualifications, Knowledge and Experience

### Essential

- PhD or close to obtaining a PhD in a relevant life science discipline.\*
- Evidence of significant experience in working with *Drosophila*.\*
- Evidence of proven analytical problem-solving capability.\*
- Proven expertise in the study of behaviour, molecular biology applications and electrophysiology.\*

### Desirable

- Evidence of contribution to conferences (posters, oral presentations)
- Contribution to peer-reviewed publications.
- Proven ability to troubleshoot and develop new methods.

## Skills, Abilities and Competencies

### Essential

- Willingness and ability to work with internal and external stakeholders.\*
- Evidence of continued development of subject expertise.\*
- Excellent communication skills – written and verbal evidenced by the ability to communicate complex information.\*
- Evidence of working effectively as part of a team and the ability to work independently.\*
- Working towards independence and ability to be involved in collaborative research.
- Evidence and commitment to Continuous Professional Development (CPD) for yourself, and encouraging commitment to learn and develop in others
- Collegiate member of a research team.

### Desirable

- Proven ability to work effectively in a large, multidisciplinary, multicentre team.

**\*Criteria to be used in shortlisting candidates for interview**

## Reason for Fixed Term Contract





The reason for the fixed term contract is stated in section 1.9 in the summary of contractual terms in your contract of employment.

### Criminal Declaration

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

### Supporting University Activities

As a University of Leicester citizen, you are expected to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We expect all staff as citizens to work flexibly across the University if required.

### University Values

**Inclusive** - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

**Inspiring** - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

**Impactful** - As Citizens of Change we will generate new ideas which deliver impact and empower our community

### Equity and Diversity

We believe that equity, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equity support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equity, diversity and inclusion.

