

Job Title: Post-Doctoral Research Associate

Grade: 7

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

Department: Molecular and Cell Biology & Chemistry

Hours/Contract: Full-time, or job share considered, fixed term contract for 12 months

Job Family: Teaching and Research

Reference: 12926

Role Purpose

To pursue Leicester's responsibilities for the research goals of the BBSRC-funded project entitled, 'Molecular grammar of a cell-type specific alternative splicing regulator', which is a joint grant led by the University of Cambridge.

The appointee will lead and be responsible for a strand of research within the context of this collaborative project, which will involve designing and building a TIRF microscope with annular excitation pathways, creating a user interface for the microscope, single molecule TIRF microscopy and analysis of RNA-protein interactions by techniques including FRET. In addition, the postholder will contribute to the development of the laboratory and co-supervision of postgraduate students.

Main Duties and Responsibilities

The Research Associate will be expected to take a leading role in experimental design and determining the direction of the program in line with reaching the research goals of the research project, developing their independent research and providing guidance to other members of the team. Specifically, the Research Associate will be expected to:

- Participate in an independent original research programme involving single molecule microscopy, cloning and expression in mammalian cells, analysis of expression, cross-linking, proximity labelling and other methods; in line with the aims and objectives of the research project.
- Design and build a TIRF microscope to facilitate this research, using annular excitation;
- Design and implement user interfaces with the microscope;
- Become knowledgeable in the background research literature and to maintain familiarity with current research in the field;
- Plan and carry out the work programme for his/her own research contribution, using methodology and techniques appropriate to this type of research;
- Participate in general laboratory activities to ensure the efficient functioning of the lab, assist with training members and adhere to health and safety procedures at all times, supporting the lab safety officer in promoting good safety practices.
- Analyse research data, extrapolate new themes or strands within the field, and write up findings for dissemination within the research team and the broader international community.





- Take a lead in presenting results at collaboration meetings and scientific meetings in the UK and overseas. Act as STEM ambassadors and present their research at annual university-organised events

Professional Development

- Duties and opportunities to engage in work that support your own professional development.

Impact and Knowledge Exchange

- Network and contribute to the maintaining and furthering of the wider research programme and research area
- To contribute to industry collaborations
- To consult effectively on own specialism directly with people external to the University
- To engage positively and pro-actively in research impact
- Providing mentoring and coaching to Early Career Researchers and research students.

Leadership and Citizenship

- Guidance to other team members both research staff and students
- Pro-actively build networks and collaborations.
- Providing mentoring and coaching to Early Career Researchers and research students.

Internal and External Relationships

Regular meetings with members of the programme research group

Meeting members of the department for critical discussion of the research and exchange of new ideas and approaches that might benefit the research

Liaison with external collaborators

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:

- Prioritise tasks within agreed work schedules;
- Plan for specific aspects of research incorporating issues such as deadlines, project milestones and overall research aims;
- Adapt daily and weekly plans to accommodate new developments and be flexible to the changing priorities of the research project



Qualifications, Knowledge and Experience

Essential

- A high-quality first degree and PhD (or near completion) in a relevant discipline. *
- A strong track record of research activity, demonstrated by sustained engagement and productivity in previous projects. *
- Proven experience in disseminating research findings through publications in leading peer-reviewed journals and presentations at international conferences. *
- Hands-on experience with single-molecule microscopy techniques. *
- Experience in writing software for the analysis of imaging experiments. *

Desirable

- Knowledge of RNA biochemistry, macromolecular structure, and biochemical assays for studying molecular interactions.

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 encourage commitment to learn and develop in others
- Collegiate member of a research team
- Evidence of skills in optics/photonics *
- Evidence of skills in programming using Python. *

****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 encouraged to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We encourage all staff



as citizens to work flexibly across the University if required. If supporting these activities is likely to affect your workload, please speak to your line manager in the first instance

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

Freedom of Speech

The University is committed to upholding freedom of speech and academic freedom within the law throughout our recruitment processes. We ensure that all candidates are considered based on merit and suitability for the role, without regard to their lawful viewpoints or the expression of challenging or controversial ideas. Our recruitment policies and practices are designed to protect applicants from discrimination or adverse treatment on the basis of their opinions, and to foster an environment where open debate and diverse perspectives are valued as essential to our academic mission.

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 equality 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 equality, diversity and inclusion.

