

<b>Job Title:</b>	Research Associate – Molecular and Cell Biology
<b>Grade:</b>	7
<b>Salary:</b>	£39,105 to £41,421 per annum due to funding restrictions
<b>Department:</b>	Molecular and Cell Biology
<b>Hours/Contract:</b>	Full-time fixed term contract from 01 January 2025 to 31 December 2027
<b>Job Reference:</b>	10628

### Role Purpose

Applications are invited for a Postdoctoral Research Associate position in Molecular and Cell Biology funded by the Medical Research Council. This is an exciting opportunity to be a key researcher in an interdisciplinary project entitled ‘Developing PROTACs for the target validation of individual Histone Deacetylase corepressor complexes’. This is a collaborative project between the groups of Dr James Hodgkinson (School of Chemistry and Leicester Institute of structural and Chemical Biology, LISCB), Professor John Schwabe (Department of Molecular and Cell Biology and LISCB) and Professor Shaun Cowley (Department of Molecular and Cell Biology). The project also involves collaborations with industrial partners Charnwood Discovery and TOCRIS bioscience, a Bio-Techne brand. This a 36-month position subject to completion of a probation period.

In this role you will primarily be based in the research labs of Professor Schwabe and Professor Cowley implementing the biological evaluation of novel proteolysis targeting chimera (PROTAC) libraries, and generating new approaches to evaluate PROTACs in vitro and in-cells. The role is ideally suited to a researcher experienced in techniques in molecular and cell biology including cell culture, protein biochemistry and assay development. Additionally, the candidate should be motivated to learn new techniques and approaches to evaluate PROTAC libraries. Although your primary role will be in Molecular and Cell Biology you will work as an integral member of an interdisciplinary team of researchers actively engaging in the interpretation and communication of biological results to all team members. The successful candidate will also provide high level research skills in molecular and cell biology through personal expertise and contributions to the wider research team, and will take a leading role in the presentation of results and manuscript preparation for publication/IP.

### Main Duties and Responsibilities

#### Research:

- Carry out the biological evaluation of novel PROTAC libraries in-vitro and in cells.
- Develop and apply in vitro and in-cell assays to evaluate the effectiveness of PROTAC libraries. This includes but is not limited to western blotting, enzymatic assays, cell viability assays and biophysical techniques.
- The protein expression and purification HDAC corepressor complexes and/or components as well as E3-ligase/ubiquitination-proteasome system proteins
- Keep excellent, accurate records and data collation and retention on research carried out throughout the project.
- Responsible for personal and collaborative research, resulting in significant contributions to project deliverables, scholarly articles, research papers suitable for publication, patent applications and conference presentations.
- Contributing to writing research proposals, manuscripts for publication and patent applications





- Contributing, as an experienced researcher, to determining the direction of the programme in line with reaching the research goals. This will include elements of research planning, project management.
- Co-supervision of research students and provision of advice and guidance to other members of the team, both research staff (PhDs and PDRAs) and students (undergraduates) including a mix of a desk-based and lab based research.
- Contribute to the overall research programme, testing and developing research strategies to enable work to be carried out that will result in the emergence of new understanding within the research field.
- Representing the research group at external meetings, project review meetings and workshops so as to improve the reputation of the group and that of the role holder.
- In agreement with the line manager, liaise with project collaborators to progress the research.

**Professional Development:**

- The candidate will be supported and encouraged to take up opportunities support professional development. This includes relevant training courses and conference presentations in agreement with the line manager.

**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.

**Leadership and Citizenship:**

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

**Internal and External Relationships**

Regular meetings and progress updates with members of the programme research groups.

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, including the evaluation of specific compound libraries within agreed timelines with the PI;
- Plan for specific aspects of research incorporating issues such as deadlines for compound evaluation, 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

- PhD awarded in a biological science research topic (or near completion) \*
- A good honours degree in a biological science related subject\*
- Knowledge and hands-on experience in cell culture and techniques in cell culture\*
- Knowledge and hands-on experience in techniques in molecular biology \*
- Knowledge and hands-on experience in protein expression, purification and biochemistry \*
- Knowledge and hands-on experience in assay development and implementation\*
- Track record of publications in high-quality journals and presentations at conferences, commensurate with the career stage of the applicant\*

### Desirable

- Experience in biophysical techniques.
- Experience in RNA-seq and bioinformatics.
- Experience in quantitative proteomics and bioinformatics.

## Skills, Abilities and Competencies

### Essential

- Excellent oral and written communication skills, including the ability to communicate complex information with clarity\*
- Well organised and self-motivated with the ability to manage the day-to-day running of a research project, to identify research objectives and carry out appropriate research activities within a given timescale\*
- 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
- Ability to work in a shared office/lab environment
- Friendly, helpful and productive interactions with colleagues
- Well-developed understanding of Health and Safety regulations and procedures





- Ability to interact with academic, research, and professional services colleagues

**Desirable**

- Ability to supervise undergraduate and postgraduate students in the laboratory
- Demonstrable ability to produce independent research ideas

*\*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.

