

Job Title: Postdoctoral Research Associate (or equivalent research roles at grade 7)

Grade: 7

Salary: £40,704 to £46,970 per annum

Department: School of Biological and Biomedical Sciences/ Division of Microbiology and Infection

Hours/Contract: Full time, Fixed term until 31st March 2030

Job Family: Teaching and Research

Reference: 14111

Role Purpose

The post-holder will undertake fundamental research to investigate the multifunctionality of staphylococcal lipoproteins within a UK Research and Innovation (UKRI)-funded research programme. The successful candidate will establish and optimise mini-bioreactor experimental systems, lead the proteomics component of the project, and develop experimental approaches to investigate the production and function of linear peptides. Working both independently and collaboratively, the post-holder will make a significant intellectual and practical contribution to the research programme, deliver project milestones, generate high-quality research outputs, and contribute to future research and funding activities.

Main Duties and Responsibilities

Research

- To establish, optimise and maintain a mini-bioreactor system, ensuring robust and reproducible experimental workflows.
- To lead the proteomics component of the project, including protein purification, sample preparation, mass spectrometry analysis and interpretation of proteomic datasets.
- To design, conduct and analyse experiments investigating peptide production and function using microbiological, biochemical and proteomic approaches.
- To lead the collection, evaluation, interpretation and presentation of research findings, working autonomously to achieve project objectives and milestones.
- To contribute to the development of experimental design, laboratory methods, protocols and analytical approaches relevant to the project.
- To maintain accurate research records and ensure compliance with relevant health and safety, biosafety and data management requirements.
- To lead in writing up research findings for dissemination amongst the research team and broader international community and develop ideas and contributions for future grants and technical outputs.
- In agreement with the Principal Investigator, liaise with project collaborators and external partners to support the progression of the research programme.
- To contribute to publications and other research outputs arising from the research programme.
- To support the day-to-day operation of the laboratory, including equipment maintenance, and provide guidance and training to students and other members of the research team.
- To assist with the management of project consumables, research expenditure and associated budgets.

Professional Development

- Duties and opportunities to engage in work that support their own professional development.
- To complete all mandatory University training and development requirements.



Impact and Knowledge Exchange

- To develop and maintain research networks and contribute to the advancement of the wider research programme and research area.
- To contribute to collaborations with academic and external partners relevant to the project.
- To engage positively and proactively in activities that enhance research impact and visibility.
- To represent the research group through presentations at national and international conferences, workshops and scientific meetings.

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 interaction with members of the programme research group.
Regular coordination and collaboration with the Research Assistant employed on the project to support the delivery of project objectives and milestones.
Regular liaison with technical staff and laboratory personnel regarding equipment, laboratory operations, health and safety, and research support requirements.
Liaison and collaboration with project partners and external research collaborators, as required, to support project delivery, dissemination activities and the progression of the research programme.

Planning and Organising

The post-holder will be required to effectively manage their time to plan, coordinate and deliver research activities and project objectives:

- Prioritise tasks within agreed work schedules and project milestones.
- Plan and coordinate specific aspects of the research programme, incorporating project deadlines, milestones and overall research aims.
- Coordinate research activities with the Research Assistant and other project contributors, as appropriate.
- Adapt daily and weekly plans to accommodate new developments and respond flexibly to changing research priorities.
- Contribute to the planning and delivery of project objectives within agreed timescales and resources.

Qualifications, Knowledge and Experience

Essential

- PhD in Microbiology or a closely related discipline.*
- Evidence of first-author publication(s) in peer-reviewed journals and additional contributions to relevant microbial research publications.*
- Experience working with bacterial communities and interactions, microbial biofilms and/or relevant class 2 bacterial pathogens.*
- Evidence of working with bacterial cell-cell signalling and gene regulation*
- Experience using bioreactor and/or other continuous-culture systems to investigate bacterial physiology, adaptation and interactions.*
- Evidence of protein purification and/or quantitative proteomics workflows*





- Experience in independently designing, conducting and delivering research projects, applying strong analytical and problem-solving skills to meet project objectives and deadlines.*
- Evidence of analysing and interpreting complex biological datasets using appropriate bioinformatic and statistical approaches.*

Desirable

- Experience in the application of mass spectrometry techniques and the analysis and interpretation of mass spectrometry datasets.*

Skills, Abilities and Competencies

Essential

- Excellent communication skills – written and verbal evidenced by the ability to communicate complex information *
- Evidence of developing and maintaining subject expertise in a relevant research field.*
- Evidence of working effectively as part of a team and the ability to work independently.*
- Strong organisational, analytical and problem-solving skills.*
- Working towards independence and ability to be involved in collaborative research
- Evidence and commitment to Continuous Professional Development (CPD) for themselves, and encourage commitment to learn and develop in others
- Collegiate member of a research team

Desirable

- Experience of training or supporting students and new laboratory members.
- Budget management skills

****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.

