



Job Title: Research Technician

Grade: 5

Salary: £26,038 to £30,505 per annum pro-rata

Department: Genetics, Genomics and Cancer Sciences

Hours/Contract: Part-time (0.2857 fte / 10 hours per week), fixed term contract from 01 November 2024 to 31 March 2025

Job Family: Technical and Experimental

Reference: 10798

Role Purpose

The post-holder will be based within the Centre for Phage Research at the University of Leicester.

Bacteriophages, or phages, are viruses that attack bacterial cells and offer the potential as new therapeutics as alternatives to antimicrobials. Synthetic or genetic engineered phages offer the potential for customized delivery of effectors to target bacteria. The aim of the project is to genetically engineer a bacteriophage infecting *Salmonella spp* to carry an additional gene cargo. The work will involve the genetic manipulation of a bacteriophage infecting *Salmonella spp* and subsequently isolate, purify and scale up the production of genetically modified bacteriophages.

Main Duties and Responsibilities

- To perform specialised laboratory experiments to genetically modify bacteriophages
- To perform specialised laboratory experiments to purify phages following genetic manipulation
- To accurately record, present and discuss experimental data with the Project leads.
- To assist with preparation of data that may be subsequently used for publication in scientific papers, grant submissions and presentations at local, national, and international conferences.
- To produce and standardise protocols and assist with the development and validation of new web-based techniques to support the research work, under the guidance of the Project leads.
- To ensure the lab and subsequent lab work is in adherence to Health and Safety regulations consistent with working within a category 2 biosafety area
- Assist with any other lab duties as and when required, including but not limited to, supporting colleagues learning through development and demonstration of techniques, use of specialist equipment, supporting stock replenishment, hosting visitors.

Internal and External Relationships

- Daily contact with staff at all levels about the execution of duties
- Contact with members of the team based at the University of Leicester for services and collaboration
- Regular contact with supervisor to review and plan research activity





- Communication with other academics, staff, postdocs, PhD students, and technicians within the laboratory and to liaise daily regarding availability of equipment and materials and to exchange information
- Liaise with external collaborators to explain progress and milestones

Planning and Organising

- Plan and prioritise research objectives in consultation and under the direction of the Project Lead to meet deadlines
- Plan and conduct own research on a daily and weekly basis and in collaboration with other members of the group.
- Adapt daily and weekly plans to accommodate new developments

Qualifications, Knowledge and Experience

Essential

- Technical or Scientific education to ONC or NVQ3 level*
- Previous laboratory-based experience in working with phages and pathogenic bacteria*
- Previous laboratory experience of molecular biology*
- Well-developed understanding of good laboratory practice (GLP) and Health and Safety regulations and procedures*
- Maintenance of comprehensive and confidential records, and a methodical approach to working
- Experience in working with genomic data and use of basic Bioinformatic tools
- Previous experience of genetic manipulation of bacteriophages*
- Experience of assembling and annotating phage genomes

Desirable

- Experience of scaling up phage amplification
- Specialist knowledge of microbial research field

Skills, Abilities and Competencies

Essential

- Good IT skills to include experience in the use of Microsoft software
- Good Laboratory and Microbiological skills including PCR and DNA extraction
- Ability to work flexibly and organise and prioritise own work to agreed deadlines
- Excellent written and communication 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 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.

