

Job Title: Senior Research Technician
Grade: 6
Salary: £31,396 to £36,024 per annum, (pro rata if part time)
Department: Genetics and Genome Biology
Hours/Contract: Full-time, or job share considered, fixed term contract until 30 April 2025
Job Family: Research and Technical
Reference: 9790

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. The initial, essential steps in such phage therapeutics is isolating novel phages and characterizing them to determine their therapeutic potential. The aim of this project is to isolate archaea viruses active against methanogen strains from bovine rumen fluid, and assist in archaea virus characterization.

Main Duties and Responsibilities

- To plan and perform specialised laboratory experiments to isolate and purify archaea virus from bovine rumen fluid and provide technical guidance to others where required.
- To plan and perform specialised laboratory experiments to assist with the characterization of novel archaea virus including host range testing a range of methanogen strains using qPCR technique.
- Monitor and maintain a safe working environment for self and others in accordance with Health and Safety regulations consistent with working within a category 2 biosafety area
- To accurately record, present and discuss experimental data with the Project leads and members of the research group
- Set and monitor technical standards for self and other members of the Centre for Phage Research taking action to improve quality of service where required
- Diagnose and rectify faults/problems with equipment, systems and procedures
- Contribute to the development of new or improved screening methods and techniques
- Take the lead with any other lab duties as and when required, including but not limited to, supporting colleagues by providing instruction, guidance and training such as demonstrating phage techniques & use of specialist equipment, supporting stock replenishment and hosting visitors.
- Communicate and liaise with the wider University body as well as users of the University's services and/or external consultants/suppliers.

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

Planning and Organising

- With guidance from the Project Lead, or equivalent, plan own work and prioritise research objectives, research project and laboratory activities on a regular basis, including co-ordinating resources and maintenance of samples and equipment.
- Plan and conduct own research on a daily and weekly basis and in collaboration with other members of the Centre for Phage Research to deliver on research and technical priorities to meet deadlines.
- Adapt daily and weekly plans to accommodate new developments
- Attend suitable training courses or equivalent and be proactive in terms of continued professional development.

Qualifications, Knowledge and Experience

Essential

- Technical or Scientific education to BSc, HNC or NVQ4 level or equivalent experience*
- Depth or breadth of knowledge in the phage biology field and recognised as a technical expert in this area
- Substantial laboratory-based experience in working with phages and experience of providing guidance and training to others in this field*
- Previous laboratory experience of molecular biology*
- Well-developed understanding of good laboratory practice (GLP) and Health and Safety regulations and procedures*
- Previous laboratory-based experience in working with category 2 bacterial pathogens*
- Maintenance of comprehensive and detailed records, and a methodical approach to working*
- Practical experience and knowledge of applying research techniques and technical skills to deliver outputs on time and to the required quality, improving the quality of service as required
- Experience of diagnosing and rectifying issues with equipment, systems and procedures

- Experience of isolating, purifying and characterizing phages *
- Specialist knowledge of microbial research field

Desirable

- Supervisory experience
- Masters or higher-level qualification in related subject area

Skills, Abilities and Competencies

Essential

- Good Laboratory and Microbiological skills including aseptic technique and DNA extraction*
- Ability to work flexibly and organise and prioritise own work to agreed deadlines*
- Excellent analytical and problem-solving skills *
- Good IT skills to include experience in the use of Microsoft software*
- Experience in working with genomic data and use of basic Bioinformatic tools
- Excellent written and verbal communication skills *
- Team player who can support the broader research group*
- Ability to prioritise tasks within agreed work schedules*

Desirable

- Evidence of continued personal development of subject expertise

****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

Equality and Diversity

We believe that equality, 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.

