

Job Title: Research Associate (Aquaculture Vietnam)
Grade: 7
Salary: £39,355 per annum
Department: Genetics, Genomics and Cancer Sciences
Hours/Contract: Full-time and fixed-term until 31 October 2027
Job Family: Teaching and Research
Reference: 11843

Role Purpose

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

Infectious diseases in Asian and global aquaculture are a major continuous threat to sustainable production. Bacteriophages, or phages, are viruses that attack bacterial cells and offer the potential to develop environmental benign therapies and assessment tools to improve resilient aquaculture production practices now and in the future.

The aim of the project is to use an untargeted and targeted approach to isolate and characterise bacteriophages from shrimp and tilapia farms in the Mekong Delta. You will collect bacteriophage metagenome data and develop therapeutic cocktails, scaled for testing against project species.

You will work collaboratively, particularly with researchers in Vietnam, and independently as part of a research team to achieve defined milestones and produce high quality research as part of the wider programme.

Main Duties and Responsibilities

Research

- To undertake a research and development in a project to obtain and analyse phage metagenomes and to isolate and characterise phages to understand phage diversity in the Mekong Delta and direct the processes of environmentally friendly bacteriophage therapies and assessment tools to improve resilient aquaculture production practices in SE Asia.
- To lead in the collection, evaluation and interpretation of the research data in experimental design and performance, and work autonomously to attain project milestones.
- To contribute to the development of the choice of techniques, critiques, approaches, models and methods.
- To contribute to the overall research programme using innovative research models, novel approaches and techniques.
- In agreement with the line manager, liaise with project collaborators to progress the research
- 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, technical outputs.





- To represent the research group by disseminating results/findings at national and international conferences and broader community.
- To contribute to research outputs as a co-author to journal articles, technical papers, monograph, book chapter.
- To develop and carry out a plan to extend an area of personal research, or contribute as a team member to the development of a broader programme, this may include contributing to the writing of research bids/grants.
- With the support of colleagues, identify opportunities to apply for fellowships and/or further project grants
- To provide guidance to other staff and students (involved in the research programme).
- To actively seek opportunities to carry out multi-disciplinary research with other research groups at the University or stakeholders external to the University, with the approval of the Principal Investigator (PI).

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 collaborations with academic partners working in Vietnam on the project
- 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 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 – particularly in Vietnam along the Mekong Delta



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

- PhD or equivalent in appropriate discipline or the equivalent professional qualification and experience *
- Experience large-scale environmental sample processing and of DNA extraction for viromes*
- A firm knowledge of metagenome and virome analysis*
- Ability to use Linux and a relevant programming language such as Python/Perl/Bash*
- Knowledge of aquaculture and fish pathogens*
- Experience of environmental microbiology*
- Experience of phage isolation and characterisation
- Evidence of a contribution to peer-reviewed journal papers or equivalent e.g technical report/writing a piece of software *
- Evidence of proven analytical problem-solving capability *
- Expertise in relevant approaches/models and analytical techniques and ability to develop new ones where required.

Desirable

- Evidence of research productivity and grant writing (e.g. research publications, grant applications, outreach, presentations at national/international meetings etc
- Experience with computing to analyse next generation sequencing data and experience of metagenomics

Skills, Abilities and Competencies

Essential

- Willingness and ability to work with internal and external stakeholders*
- Willingness to travel and work in Vietnam*





- 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 multi-disciplinary 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

Desirable

- Experience in statistical analysis of data and bioinformatic analysis
- Experience in presenting at international conferences
- Grant writing experience and evidence of securing previous funding
- Evidence of establishing new collaborations
- Proven ability of training and supervision of new members of the lab, including undergraduate MSc and PhD students
- Evidence of involvement in innovative research

**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 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.

