

Candidate Information

Position:	Research Fellow
School/Department:	School of Biological Sciences
Reference:	22/109797
Closing Date:	Monday 30 May 2022
Salary:	£34,304 per annum
Anticipated Interview Date:	Wednesday 15 June 2022
Duration:	12 months

JOB PURPOSE:

The Research Fellow will be based in the McVeigh and Atkinson laboratories in the School of Biological Sciences, funded by an Academy of Medical Sciences Springboard grant. The Project will focus on the discovery and profiling of extracellular RNAs in parasitic nematode infections. Candidate will lead a programme of research aimed at developing new understanding of extracellular RNAs secreted by Strongyloides parasites in animal hosts, with a view to discovery of new diagnostic biomarkers and/or parasite control options.

MAJOR DUTIES:

- 1. Maintain a daily and dated record of research activities in a digital laboratory notebook.
- 2. Develop and plan an area of personal research and expertise, and/or undertake research under supervision within a specific research project or as a member of a research team.
- 3. Design, develop and refine experimental apparatus, field research or experiments to obtain reliable data.
- 4. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
- 5. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- 6. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
- 7. Assist grant holder in the preparation of funding proposals and applications to external bodies.
- 8. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
- 9. Carry out occasional undergraduate supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
- 10. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.
- 11. Carry out designated light routine laboratory/School administrative duties.

ESSENTIAL CRITERIA:

- 1. Degree in Biological Sciences or a related subject area.
- 2. Have or be about to obtain/submit a PhD in Molecular Parasitology or related subject area.
- 3. At least 3 years relevant research experience in helminth parasitology research.
- 4. Demonstrable evidence of research experience in:
 - Molecular parasitology
 - RNA-Seq data analysis
 - Bioinformatics of parasite genomes/transcriptomes
- 5. Hold a current Home Office Personal License, and have demonstrable experience in maintaining Strongyloides parasite infections in rodents.

- Sufficient breadth and depth of specialist knowledge in molecular parasitology and of relevant research methods and techniques (e.g. PCR, qPCR, CRISPR/Cas9 genome editing, bioinformatics, parasite recovery/maintenance/culture).
- 7. Ability to contribute to broader HE management and administrative processes.
- 8. Experience in the preparation of scientific publications and/or reports commensurate with career stage.
- 9. Contribute to the School's outreach programme by links with industry, community groups etc.
- 10. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 11. Ability to communicate complex information clearly.
- 12. Ability to build contacts and participate in internal and external networks.
- 13. Effective interpersonal skills.
- 14. Demonstrable intellectual ability.
- 15. Ability to work without close supervision, individually and as part of a team.
- 16. Ability to assess and organise resources.
- 17. Willing to work irregular hours when necessary for the progress of the research project.

DESIRABLE CRITERIA:

- 1. Experience with handling data in a bash command line environment or similar.
- 2. Experience in laboratory supervision of undergraduate and postgraduate project students.
- 3. Experience of maintaining relationships with internal and external collaborators.
- 4. Evidence of conference presentation poster and/or oral.