

Candidate Information

Position: Research Fellow

School/Department: Pharmacy 23/110913

Closing Date: Monday 12 June 2023
Salary: £36,333 per annum
Anticipated Interview Date: Thursday 22 June 2023

Duration: Fixed term for 13 months or until 31 August 2024, whichever is soonest

JOB PURPOSE:

To be an active member of the Halo Research Group working on a Higher Education Authority North-South Research Programme funded study, PROMARIC.

To characterise respiratory tract microbiome composition in COPD patients with varying degrees of protease activity due to Alpha-1 anti-trypsin (AAT) deficiency and determine if there is a relationship between microbiome composition, protease levels and disease severity. To assist in the planning and delivery of this research so that the overall research objectives of the project are met.

MAJOR DUTIES:

- 1. Determine microbiome composition in clinical samples using a range of methods including real-time qPCR assays and molecular metagenomic methods.
- 2. To present regular progress reports on research to members of the research group, external audiences and to disseminate research findings.
- 3. Prepare, in consultation with supervisor, material for publication in national and international journals. If appropriate present at national/international conferences.
- 4. Carry out routine administrative tasks associated with the research project/s to ensure that projects are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
- 5. 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.
- 6. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

ESSENTIAL CRITERIA:

- 1. Primary Degree.
- 2. Hold or shortly expect to obtain to obtain a PhD in Microbiology, Microbial Ecology, Molecular Microbiology, Bioinformatics, Biochemistry or related discipline.
- 3. At least 3 years' relevant research experience (including PhD training) to include experience of the following:
 - Nucleic acid extraction
 - Molecular biology including next generation sequencing and qPCR
 - · Statistical analysis of data
 - Involvement in publication preparation and presentation of scientific data at regional and international meetings
 - Publications commensurate with stage of career.
- 4. Ability to carry out routine administrative tasks associated with the research project.
- 5. Ability to communicate effectively, both verbally and in writing.
- 6. Practical problem-solving skills, and independence of thought are required.
- 7. Ability to present scientific arguments and data in a clear, concise and confident manner.
- 8. Ability to present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- 9. A calm and conscientious scientist, able to work in a disciplined manner within a team environment.

- 10. Willing to handle samples, which may contain potentially harmful pathogens and the culture of pathogenic bacteria.
- 11. Willing to work outside office hours as the need dictates.

DESIRABLE CRITERIA:

1. Experience of microbiome related studies, functional metagenomics and bioinformatics.