

Candidate Information

Position: Research Fellow

School/Department: Wellcome-Wolfson Inst for Experimental Medicine

Reference: 22/110259

Closing Date: Monday 31 October 2022
Salary: £35,333 per annum
Anticipated Interview Date: Friday 11 November 2022

Duration: Friday 11 November 2022 **Duration:** Fixed term for 24 months

JOB PURPOSE:

The School of Medicine, Dentistry & Biomedical Sciences (MDBS) at Queen's University Belfast is currently seeking to appoint an exceptional candidate to the post of Research Fellow to join the Airway Innate Immunity Research Group (AiiR) led by Prof Cliff Taggart and Dr Sinéad Weldon within the Wellcome-Wolfson Institute for Experimental Medicine.

This MRC-funded position will involve development and evaluation of novel therapeutic agents in models of chronic lung inflammation. This research programme involves a significant collaboration with Dr. Rich Williams (Patrick G. Johnston Centre for Cancer Research, QUB), Dr. Pat Geraghty (SUNY Downstate Health Sciences University, Brooklyn, New York, USA), and Dr. Joe Kidney (Mater Hospital, Belfast).

The successful applicant will have responsibilities in independent research, supervision, planning, day-to-day lab management, collaborations and outreach. The post is suited to a highly ambitious individual and is available for 2 years.

Applications are invited from highly motivated, efficient and organised individuals with a strong commitment to research. The successful candidate will have a strong background in cell biology and biochemistry/immunology and will be seeking an ambitious research project in a well-supported environment.

Candidates must be able to demonstrate strong initiative and independence in thought and work but also to work within a highly collaborative team to support/train other team members as appropriate.

MAJOR DUTIES:

- 1. Develop, plan and deliver research under supervision aimed at targeting inflammation in chronic lung disease, with particular relevance to Chronic Obstructive Pulmonary Disease (COPD).
- 2. Techniques will include the use of in vivo primary cell models and viral infection.
- 3. Maintain up-to-date knowledge of the field of interest at the cutting edge and communicate same to the group.
- 4. Design, develop and refine experimental protocols, models or experiments in order to obtain reliable and reproducible data of the drug potential in in vivo models.
- 5. Carry out analyses, critical evaluations and interpretations of experimental data and the literature using methodologies and other techniques appropriate to area of research.
- 6. Present regular progress reports on research to members of the research group, other groups within the Centre/University, to external audiences nationally and internationally to disseminate and publicise research findings.
- 7. Prepare, often in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
- 8. Assist grant holder in the preparation of funding proposals and applications as well as project progress reports to external bodies.

- 9. Carry out routine administrative tasks associated with the research projects/group to ensure that projects are completed on time and within budget and that the group functions efficiently. These might include organisation of project/group meetings and documentation, financial control, stock management/procurement, risk assessment of research activities and development of SOPs. Carry out routine administrative tasks associated with the day-to-day running of the research group in a communal lab setting.
- 10. Carry out school/undergraduate/post-graduate student and visiting researcher training and supervision, demonstrating, tutoring or lecturing duties within the post holder's area of expertise and under the guidance of a member of academic staff.
- 11. Participate, and in some cases lead outreach activities on behalf of the group/Centre.
- 12. Participate in local research-related activities such as journal clubs, training sessions, seminar series etc.
- 13. Assist in assessment of research communications and data, particularly within the group.
- 14. Additional research and/or laboratory related duties including outreach activities, within the general range of the post and competence of post holder.

ESSENTIAL CRITERIA:

- 1. Have a PhD in Cell Biology, Immunology or a closely related area or has recently submitted their thesis.
- 2. At least 3 years recent research experience in Cell Biology or immunology.
- 3. Recent hands-on experience in Primary Airway Epithelial Cell Culture.
- 4. Cellular analysis including immunofluorescence, confocal imaging, TEER analysis.
- Experience teaching/supervising /mentoring postgraduate/ undergraduate students and visiting researchers in the laboratory.
- 6. Methodical approach to project management and meticulous in regards to experimental procedures and record keeping.
- 7. Highly ambitious, motivated, efficient, organised and show a commitment to, and interest in, research topic.
- 8. Competent in maintaining knowledge of cutting-edge of field of expertise.
- 9. Competent in giving effective and informative oral and poster presentations.
- 10. Competent in communicating stipulated research skills essential to the post in CV/job application.
- 11. Strong ability to work from own initiative.
- 12. Excellent team working skills in multiple internal and external team settings.
- 13. Excellent problem-solving skills.
- 14. Irregular hours including evening, weekend and other out-of-hours working will be a component of the research at times.
- 15. Must be willing to travel to national and international meetings and collaborative laboratories.

DESIRABLE CRITERIA:

- 1. Experience in:
 - Viral infection
 - qPCR, ELISA, Western blotting
 - Data analysis (Omics-derived data, use of R)
 - CRISPR-Cas9 technology
- 2. High quality manuscript, report and abstract writing experience.
- 3. Publication record commensurate with career stage.
- 4. Experience teaching lab members.
- 5. Research project management.
- 6. Up-to-date knowledge of fields of airway cell culture.
- 7. Experience working in outreach settings.