

Candidate Information

Position:	Research Fellow
School/Department:	Wellcome-Wolfson Inst for Experimental Medicine
Reference:	24/111919
Closing Date:	Monday 24 June 2024
Salary:	£37,841 per annum
Anticipated Interview Date:	Thursday 18 July 2024
Duration:	12 months or until 30 June 2025

JOB PURPOSE:

To join the Airway Innate Immunity Research group led by Prof Cliff Taggart at the Wellcome-Wolfson institute for Experimental Medicine. The position will involve evaluation of peptides with novel immunomodulatory activity in various models currently running in the Taggart laboratory.

The post is a suitable for a scientist with suitable research experience and 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 and collaborative individual and is available for 1 year in the first instance.

MAJOR DUTIES:

1. Develop, plan, and deliver an area of personal research and expertise, and/or undertake research under supervision within a research programme aimed at understanding the interaction between peptides and bacteria in in vivo (lung) and in vitro infection models. Techniques include cell culture of primary human cells (myeloid), various bacterial strains, Western blotting, ELISA and peptide design.
2. Develop and implement, with support, a highly ambitious personal career development plan during the post.
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 models to obtain reliable and reproducible data in models of immunomodulation.
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 Institute/University, to external audiences nationally and internationally to disseminate and publicise research findings.
7. Prepare material for publication in national and international journals, and presentations at national and international conferences.
8. Assist grant holder in the preparation of funding proposals by generating preliminary data 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 laboratory setting.
10. 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 laboratory setting.
11. Participate in local research-related activities such as journal clubs, training sessions, Institute seminar series etc.
12. Assist in assessment of research communications and data, particularly within the group.

13. 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, or about to obtain*, in Immunology, Biochemistry, Cell Biology, or a closely related area. (*must be obtained within 3 months of commencement of employment)
2. Have completed Home Office modules (PIL AB).
3. Relevant recent research experience in immunology, biochemistry, or cell biology.
4. Recent extensive hands-on experience in all of the following:
 1. Isolation and culture of primary human or murine cell types such as macrophages and culture of cell lines.
 2. Assays for innate immune responses including ELISAs and Western blotting.
 3. Knowledge of bacterial culture and infection in vitro or in vivo lung infection models.
 4. Peptide design and antibacterial evaluation.
5. Methodical approach to project management and meticulous in regard to experimental procedures and record keeping.
6. Highly ambitious, motivated, efficient, organised and show a commitment to, and interest in, research topic.
7. Competent in maintaining knowledge of cutting-edge in field of expertise.
8. Competent in giving effective and informative oral and poster presentations.
9. Competent in communicating stipulated research skills essential to the post in CV/job application.
10. Strong ability to work from own initiative.
11. Excellent team working skills in multiple internal and external team settings.
12. Excellent problem-solving skills.
13. Irregular hours including evening, weekend and other out-of-hours working will be a component of the research at times.
14. Must be willing to travel to national and international meetings and collaborative laboratories.
15. Human blood and samples handling is required.

DESIRABLE CRITERIA:

1. Demonstrated experience in conducting laboratory experiments and procedures, preferably in the field of biomedical research or respiratory.
2. Familiarity with administering i.p, i.t, s.c injections to mice and monitoring their health throughout the study duration. Genotyping of mice.
3. Collection of bronchoalveolar lavage fluid and blood samples from mice.
4. Experience supervising /mentoring postgraduate/undergraduate/school students and visiting researchers in the laboratory.
5. Research project management.
6. Computing skills especially for software commonly used in biomedical research such as GraphPad Prism.
7. Experience working in outreach settings.