



Candidate Information

Position:	Research Assistant
School/Department:	Wellcome-Wolfson Inst for Experimental Medicine
Reference:	24/111786
Closing Date:	Monday 6 May 2024
Salary:	£32,024 per annum
Anticipated Interview Date:	Monday 20 May 2024
Duration:	Fixed Term Contract available for 18 months or until 31/10/2025, whichever is sooner

JOB PURPOSE:

To join the infection biology team led by Prof Jose Bengoechea in the Wellcome-Wolfson Institute for Experimental Medicine. We focus on understanding how antibiotic resistant infections counteract our defences to inform the development of novel treatments. This position is a collaborative project with the company VaxDyn to develop new therapeutics against the human pathogen *Klebsiella pneumoniae* and it involves assessing the efficacy of functional antibodies in vitro and in vivo. This position is suited to a highly ambitious, productive, and collaborative individual.

MAJOR DUTIES:

1. To be actively involved in the existing research programme as directed by the supervisor and to ensure adequate planning and progression of the investigation so that the overall research objectives for the project are met.
2. To test in vitro the presence of functional antibodies increasing complement susceptibility and opsonophagocytosis.
3. To assess in vivo the efficacy of the new therapeutics developed by VaxDyn probing the mouse pneumonia model.
4. Carry out analysis, critical evaluation, and interpretation using methods and techniques appropriate to area of research.
5. Support the team in collaborative work, to complete milestones of publications, and to generate preliminary data for grant applications.
6. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
7. Prepare, in consultation with supervisor, material for publication in national and international journals and presentations at national and international conferences.
8. Carry out school/undergraduate/post-graduate student and visiting researcher training and supervision under the guidance of a member of academic staff.
9. Carry out routine administrative tasks associated with the research project to ensure that project milestones are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.

ESSENTIAL CRITERIA:

1. Degree in immunology, biochemistry, cell biology, molecular biology, or a relevant biomedical science.
2. Extensive hands-on experience in at least two of the following:
 1. Tissue culture.
 2. Genetic modification of enteric pathogens.
 3. Infection of cells with bacterial pathogens.
 4. Western blotting, ELISAs and cell death assays.
 5. Infection of the mouse model.
3. Methodical approach to project management and meticulous in regard to experimental procedures and record keeping.
4. Highly ambitious, motivated, efficient, organised and show a commitment to, and interest in, research topic.
5. Competent in maintaining knowledge of cutting-edge of field of expertise.
6. Strong interpersonal skills.

7. Ability to communicate complex information clearly.
8. Competent in giving effective and informative oral and poster presentations.
9. Demonstrable intellectual ability.
10. Strong ability to work from own initiative.
11. Excellent problem-solving skills.
12. Excellent teamwork skills.
13. Must be prepared to work irregular hours including evening, weekend and other out-of-hours work on an ad-hoc basis as required.
14. May be required to travel for training, meetings and conferences on an ad-hoc basis as required.

DESIRABLE CRITERIA:

1. Postgraduate qualification in a relevant area.
2. Personal animal licence.
3. Experience in flow cytometry, molecular biology techniques such as cloning, immunofluorescence assays.
4. Experience working with neutrophils and/or macrophages.
5. Knowledge of and training in the Human Tissue Act.
6. Original research publications in peer-reviewed journals commensurate with career stage.
7. Experience teaching/supervising undergraduate students and visiting researchers in the laboratory.
8. Research project management experience.
9. Up-to-date knowledge in the field of vaccine development.
10. Ability to assess and organise resources.