

Candidate Information

Position:	Research Fellow
School/Department:	The Wellcome-Wolfson Institute for Experimental Medicine
Reference:	19/107787
Closing Date:	Wednesday 2 October 2019
Salary:	£33,797 to £36,914 per annum.
Duration:	24 months or until 31 October 2021

JOB PURPOSE:

To be a highly productive, ambitious and collaborative member of a research team led by Dr. Selinda Orr in the Wellcome-Wolfson Institute for Experimental Medicine. This 2-year position will involve working as part of a research programme that is investigating host immune responses to fungal pathogens such as *Candida albicans*, in order to identify potential immunotherapy targets. The project will utilise in vitro, ex vivo and in vivo models of fungal infection and is based in a highly collaborative team, carrying out basic and clinical research with partners locally, nationally and internationally.

MAJOR DUTIES:

1. Develop, plan and deliver fungal immunology research under supervision within a research programme aimed at understanding host-pathogen interactions in order to identify potential immunotherapeutic targets. Techniques will include cell culture, in vitro assays and in vivo models of fungal infection.
2. Develop and implement, with support, a highly ambitious personal career development plan in the course of 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 in order to obtain reliable and reproducible data in models of fungal infection.
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, always 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 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 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.

Planning and Organising:

1. Plan for specific aspects of research programmes. Timescales range from 1-12 months in advance and contribute to research group planning.

2. Plan for access to, and use of research resources, laboratories and workshops where appropriate.
3. Plan own day-to day activity within framework of the agreed research programme as well as communal activities (e.g. meetings) were appropriate.
4. Plan up to 1 year in advance to meet deadlines for grant applications, journal publications and to prepare presentations and papers for conferences and meetings.
5. Coordinate and liaise with other members of the research group and collaborative research groups regarding work progress and stock management.
6. Assist in training other group members on effective planning and organisation.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner including liaising with vendors and collaborators.
2. Provide guidance as required to support staff and any post-graduate/under-graduate students and visiting researchers who may be assisting with work of the group.

Internal and External Relationships:

1. Liaise on a regular basis with supervisor, colleagues, students and collaborators.
2. Communicate appropriately and effectively with lab colleagues about topics of interest such as latest research findings/results within the group and field.
3. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
4. Travel to, and present at scientific meetings and work in collaborative laboratories when necessary.
5. Join external networks to share information and ideas and help develop and maintain external collaborations, as appropriate.
6. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

1. Have or be about to obtain a PhD in Immunology or related area.
2. Home Office personal licence (modules 1-3) or equivalent qualification.
3. At least 3 years recent relevant research experience in fungal immunology.
4. Recent extensive hands-on experience in at least four of the following:
 1. Tissue culture
 2. Culture of fungal pathogens
 3. Cell infections with fungal pathogens
 4. ELISAs
 5. Fungal killing assays
 6. In vivo models of fungal infection
 7. RNA processing and RNAseq analysis
5. Recent high-quality original research publications in reputable peer-reviewed journals commensurate with career stage.
6. Experience teaching postgraduate/undergraduate students and visiting researchers in the laboratory
7. Methodical approach to project management and meticulous in regards to experimental procedures and record keeping.
8. Highly ambitious, motivated, efficient, organised and show a commitment to, and interest in, research topic.
9. Competent in maintaining knowledge of cutting-edge of field of expertise.
10. Competent in giving effective and informative oral and poster presentations.
11. Competent in communicating stipulated research skills essential to the post in CV/job application.
12. Strong ability to work from own initiative.
13. Excellent team working skills in multiple internal and external team settings.
14. Leadership qualities.
15. Excellent problem-solving skills.
16. Irregular hours including evening, weekend and other out-of-hours working will be a component of the research at times.
17. Must be willing to travel to national and international meetings and collaborative laboratories.
18. Animal (mice) work.

DESIRABLE CRITERIA:

1. Experience in macrophage tissue culture, Candida infections and cytokine pathways, particularly IL-27.
2. Publication record commensurate with career stage.
3. Grant, manuscript and abstract writing experience.

4. Experience teaching undergraduate lectures/tutorials/practicals.
5. Research project management.
6. Up-to-date knowledge of fields of fungal immunology and cytokine biology.
7. Experience working in outreach settings.