Candidate Information

Position:	Research Fellow
School/Department:	Wellcome-Wolfson Inst for Experimental Medicine
Reference:	21/109242
Closing Date:	Sunday 7 November 2021
Salary:	£34,304 - £40,927 per annum
Anticipated Interview Date:	Wednesday 24 November 2021
Duration:	36 Months Fixed Term Contract to December 2024

JOB PURPOSE:

To join the retinal immunopathology research team within the Wellcome-Wolfson Institute for Experimental Medicine, Queen's University Belfast. The successful applicant will employ a broad range of cell and molecular biological and immunological approaches to study mechanisms of retinal fibrosis.

MAJOR DUTIES:

1. To establish in vitro and in vivo models of retinal fibrosis.
2. To evaluate the role of mesenchymal stem cells in retinal angiogenesis and fibrosis using a range of in vitro and in vivo laboratory techniques.
3. To evaluate retinal function and pathology using a rage of techniques.
4. To design, develop and refine experimental apparatus or experiments in order to obtain reliable data.
5. To present regular progress reports on reserach to members of the group, funding body or to external audiences to disseminate and publish research findings.
6. To carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
7. To prepare, in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
8. To assist grant holder in the preparation of funding proposals and applications to external bodies.
9. To 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.
10. To 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.

Planning and Organising:

1. Plan for specific aspects of research programmes. Timescales range from 1-6 months in advance and contribute to research group planning.
2. Plan for the use of research resources, laboratories and workshops where appropriate.
3. Plan own day-to-day activity within framework of the agreed research programme.
4. Coordinate and liaise with other members of the research group over work progress.

Resource Management Responsibilities:

1. Routine ordering of research consumables.
2. Ensure research resources are used in an effective and efficient manner.
3. Provide guidance as required to support staff and any students who may be assisting with research.

Internal and External Relationships:

1. Liaise on a regular basis with colleagues and students.

2. Build internal contacts and participate in internal networks for the exchange of information and to form relationships for future collaboration.
3. Join external networks to share information and ideas.
4. Contribute to the School's outreach programme by establishing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

1. Have or about to obtain* a PhD in vision science, cell biology, molecular biology, or a closely related area of biomedicine. *must have submitted PhD thesis at the time of application.
2. At least 3-years recent, hands-on, postgraduate research experience that will demonstrate relevant practical and laboratory skills for this project, including experience in cell biology or stem cells using appropriate model systems.
3. Evidence of practical skills in in vivo models of human disease.
4. Evidence of research career development (experimental skills, communication, knowledge of field) which is commensurate with research training.
5. Evidence of a key role in publication in internationally recognised peer reviewed journals. This list should be commensurate with stage of career and experience.
6. Experience with supervising undergraduate or post-graduate students in a research lab.
7. Ability to contribute to broader management and administrative processes.
8. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
9. Ability to communicate complex information clearly.
10. Ability to build contacts and participate in internal and external networks.
11. Must demonstrate a clear interest in this area of research and show commitment to the specific research topic.
12. Demonstrable intellectual ability.
13. Ability to work independently within the context of a research team.
14. Must be prepared to work outside normal office hours.
15. Must be willing to travel to national and international meetings.

DESIRABLE CRITERIA:

1. PhD in retinal cell biology or retinal angiogenesis or mesenchymal stem cells.
2. Recent hands-on research experience in single cell RNA sequencing to address key research questions in the context of an ongoing project.
3. Experience in in vivo and in vitro models of retinal angiogenesis or fibrosis.
4. Experience in in vivo retinal imaging techniques.
5. Evidence of having presented at conferences (poster and/or oral presentations).
6. Computing skills especially software commonly used in biomedical research.
7. Contribute to the School's outreach programme by links with industry, community groups etc.
8. Background or research interests which are compatible with the post.
9. Long term goals in research.