

Candidate Information

Position:	Research Fellow in Vascular Stem Cell Biology
School/Department:	Centre for Experimental Medicine
Reference:	19/108003
Closing Date:	Thursday 2 January 2020
Salary:	£33,797 to £36,914 per annum
Anticipated Interview Date:	Wednesday 22 January 2020
Duration:	This post is available until 31 July 2020 with possibility of extension.

JOB PURPOSE:

To join the Vascular Stem Cell Biology Research team led by Dr Reinhold Medina within the Centre for Experimental Medicine to work on a research project investigating diabetic retinopathy. This study aims to validate a novel therapeutic target for diabetic retinopathy, employing a broad range of cell and molecular biological approaches. The post is suited to a highly ambitious individual and is available for 7 months.

MAJOR DUTIES:

1. To be actively involved in the existing research programme as directed by the line manager and to ensure adequate planning and progression of the investigation so that the overall research objectives for the project are met.
2. Design, develop and refine experimental models to investigate diabetic retinopathy in vitro and in vivo in order to obtain reliable and reproducible data.
3. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
4. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
5. Prepare, in consultation with supervisor, material for publication in national and international journals and presentations at international conferences.
6. 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.
7. Assist in other laboratory related duties including outreach activities, within the general range of the post and competence of the post holder.

Planning and Organising:

1. Plan for practical and specific aspects of the research project.
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. Plan in advance to meet deadlines for progress reports, journal publications and presentations for conferences.
5. Coordinate and liaise with other members of the research group over work progress.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner including liaising with vendors, and routine ordering of research consumables through P2P.
2. Provide guidance as required to support staff and any postgraduate/undergraduate students and visiting researchers who may be assisting with research work within the group.

Internal and External Relationships:

1. Liaise on a regular basis with supervisor and other members of the research team.

2. Join external networks to share information and ideas.

ESSENTIAL CRITERIA:

1. Have or about to obtain a PhD in Molecular Biology, Cell Biology, or a closely related area of Biomedicine.
2. At least 3 years recent, relevant research experience.
3. Experience in relevant laboratory skills that are relevant for this project, such as cell culture, PCR, western blotting, and flow cytometry.
4. Recent extensive hands-on experience in at least two of the following:
 1. genetic modification of cells
 2. animal handling
 3. In vitro cellular functional assays
5. Methodical approach to project management in regards to experimental procedures and record keeping.
6. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to enable work within established diabetic vasculopathy research programmes.
7. Ability to communicate complex information clearly.
8. Willing to attend and present at national and international meetings.
9. Demonstrable intellectual ability and awareness of the scientific literature pertaining to area of interest.
10. Ability to assess and organise resources.
11. Problem solving skills.
12. Team working skills and experience.
13. Due to the nature of the project, flexibility of working hour may be required.
14. This role will include Animal (mice) work and Human blood handling.

DESIRABLE CRITERIA:

1. Experience the cell transfection using lentiviral vectors.
2. Experience in human cell culture.
3. Personal License for Animal Handling.
4. Experience in phenotyping transgenic mice.
5. Experience handling blood-derived cells, their isolation and characterisation.
6. Experience in flow cytometry and cell sorting technologies.
7. Experience teaching/supervising undergraduate students and visiting researchers in the laboratory
8. Research Project Management Experience
9. Evidence of Clear long term goals in research
10. Experience in Computing skills for software commonly used in biomedical research such as FlowJo, R, and GraphPad Prism.
11. Evidence of having presented at conferences (poster and/or oral presentations).