

Candidate Information

Position: Research Fellow in Vascular Stem Cell Biology

School/Department: The Wellcome-Wolfson Institute for Experimental Medicine

Reference: 19/107759

Closing Date: Wednesday 18 September 2019
Salary: £33,199 to £35,210 per annum
Anticipated Interview Date: Monday 7 October 2019

Duration: 24 months

JOB PURPOSE:

To join the Vascular Stem Cell Biology Research team led by Dr Reinhold Medina within the Wellcome Wolfson Centre for Experimental Medicine to work on a project funded by the MRC. This study aims to develop a novel cell therapy for diabetic wounds, employing a broad range of cell and molecular biological approaches. The post is suited to a highly ambitious individual and is available for 2 years.

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 vascular repair and wound healing 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
- 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. Assist grant holder in the preparation of funding proposals and applications to external bodies.
- 7. 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.
- 8. Carry out undergraduate/postgraduate/visiting researcher supervision, within the post holder's area of expertise and under the direct guidance of a member of academic staff.
- 9. 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. Timescales range from 1-6 months in advance and contribute to overall 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. Plan up to a year 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. Build internal networks for the exchange of information and to form relationships for future collaboration.
- 3. Join external networks to share information and ideas.

ESSENTIAL CRITERIA:

- 1. Have or be 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, such as cell culture, PCR, western blotting, and flow cytometry.
- 4. Recent extensive hands-on experience in at least two of the following:
 - 1. tissue culture
 - 2. microscopy
 - 3. animal handling
 - 4. tissue processing and staining
- 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 regenerative medicine research programmes.
- 7. Ability to communicate complex information clearly.
- 8. Demonstrable intellectual ability and awareness of the scientific literature pertaining to area of interest.
- 9. Ability to assess and organise resources.
- 10. Due to the nature of the project, flexibility of working hour may be required.
- 11. This role will include Animal (mice) work and Human blood handling.

DESIRABLE CRITERIA:

- 1. Experience with experimental models for stem cell or vascular biology.
- 2. Experience in human cell culture.
- 3. Personal License for Animal Handling.
- 4. Experience in phenotyping transgenic mice.
- 5. Handling of blood-derived cells, their isolation and characterisation.
- 6. Experience in imaging technology both in in vivo and in vitro systems.
- 7. Experience teaching/supervising undergraduate students and visiting researchers in the laboratory.
- 8. Research Project Management Experience.
- 9. Experience in Computing software used in biomedical research such as FlowJo, R, and GraphPad Prism.
- 10. Evidence of having presented at conferences (poster and/or oral presentations).
- 11. Problem solving skills.
- 12. Team working skills and experience.