Candidate Information

Position:	Research Fellow in Vascular Stem Cell Biology
School/Department:	The Wellcome-Wolfson Institute for Experimental Medicine
Reference:	20/108100
Closing Date:	Wednesday 4 March 2020
Salary:	£33,797 to £34,804 per annum
Anticipated Interview Date:	Tuesday 24 March 2020
Duration:	Available for 3 years with possibility of extension

JOB PURPOSE:

To join the Vascular Stem Cell Biology Research team led by Dr Reinhold Medina within the Wellcome Wolfson Institute for Experimental Medicine to work on a research project funded by the Dunhill Trust. This investigation aims to study the role of long noncoding RNAs in vascular ageing. The post is suited to a highly ambitious individual and is available for 3 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. To analyse large datasets related to omics in relation to cellular ageing.
3. To design pipelines for data analysis and statistical assessment.
4. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
5. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
6. Prepare, in consultation with supervisor, material for publication in peer-reviewed journals and presentations for international conferences
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. To assist grant holders in the preparation of progress reports, scientific manuscripts, funding proposals and applications to external bodies.

Planning and Organising:

1. Plan for practical and specific aspects of the research project.
2. Plan to deliver specific research projects milestones on time.
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. To contribute to informatics related hardware and software maintenance and troubleshooting.
3. To provide guidance to other members of the team or students who may be assisting with research

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 Computer Science, Bioinformatics, Molecular Biology, Cell Biology, or a closely related area of Biomedicine.
2. At least 3 years recent, hands-on, experience that will demonstrate relevant laboratory skills that are relevant for this project.
3. Previous experience analysing big data sets such as transcriptomic arrays or NGS.
4. Proficiency with Programming in at least one language such as R, Python, C++, or Perl.
5. Evidence of a key role in publications in internationally recognised peer reviewed journals. This list should be commensurate with stage of career and experience.
6. Methodical approach to project management in regards to experimental procedures and record keeping.
7. Knowledge of and experience using computational tools to analyse biological data such as gene set enrichment analysis, pathway analysis, interactome analysis, or similar others.
8. Ability to communicate complex information clearly.
9. Team worker, highly motivated, supportive of colleagues within the group.
10. Ability to work independently and on own initiative.
11. Excellent team working skills
12. Demonstrate a clear interest in working at the crossroads of biology, medicine, statistics, and computer science
13. Must be prepared to work outside normal office hours
14. Willing to attend and present at national and international meetings.

DESIRABLE CRITERIA:

1. Experience writing scripts for data analysis in R/Python.
2. Experience implementing or developing novel analytical tools, algorithms, or machine learning pipelines.
3. Experience of basic cell biology techniques such as cell culture, PCR, or flow cytometry.
4. Experience with technologies for gene modification
5. Research interest in lncRNAs.
6. Experience teaching/supervising undergraduate students and visiting researchers in the laboratory
7. Research Project Management Experience
8. Competency in statistics/mathematics.
9. Experience submitting datasets to databases such as GEO/Arrayexpress
10. Evidence of having presented at conferences (poster and/or oral presentations).
11. Clear long term goals in research
12. Human blood handling