

Candidate Information

Position:	Research Fellow in Heart Failure Biomarkers
School/Department:	The Wellcome-Wolfson Institute for Experimental Medicine
Reference:	19/107997
Closing Date:	Monday 16 December 2019
Salary:	£33,797 per annum.
Anticipated Interview Date:	Friday 10 January 2020
Duration:	This post is available for 12 months.

JOB PURPOSE:

An experienced and highly motivated Postdoctoral scientist is being sought to join Dr. Chris Watson's research group based in the Wellcome-Wolfson Institute for Experimental Medicine, Queen's University Belfast. The recruited Postdoctoral scientist will undertake a senior role within an Invest Northern Ireland funded Proof of Concept study focused on the validation and commercialisation of novel heart failure biomarkers. This research will include working with in silico data, pre-clinical models of heart failure, and the analysis of human cardiac tissue and plasma samples derived from patients with heart failure.

Applications are invited from enthusiastic, motivated and efficient individuals with a strong commitment to research. The successful candidate will have a demonstrated background in cardiovascular disease, or closely related fields in biomedicine with an excellent PhD degree awarded. The candidate should be committed to developing a dynamic, academic career in science and have excellent communication skills in written and spoken English.

We offer scientific development opportunities in an international and interdisciplinary environment and support our postdoctoral fellows with a Centre-based mentoring program to support career development.

MAJOR DUTIES:

1. Develop, plan, and deliver cardiovascular based research under supervision within a research programme aimed at validating novel biomarkers for heart failure. Techniques may include pre-clinical models of cardiac, RNA sequencing, cell culture, tissue histology, immunohistochemistry, clinical biobanking, transfection, Western blotting, RT-PCR, ELISA, bioinformatics.
2. Maintain up-to-date knowledge of the field of interest at the cutting edge (e.g. cardiac fibrosis, heart failure, biomarkers) and communicate the same to the group.
3. Design, develop and refine experimental apparatus, models or experiments in order to obtain reliable and reproducible data.
4. Carry out analyses, critical evaluations, and interpretations of experimental data and the literature using methodologies and other techniques appropriate to area of research.
5. 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.
6. Prepare, in consultation with supervisor, material for commercialisation activities, publication in national and international journals, and presentations at international conferences.
7. Assist grant holder in the preparation of funding proposals and applications as well as project progress reports to external bodies.
8. 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.

9. Carry out school/undergraduate/post-graduate student and visiting researcher training and supervision as required, demonstrating, tutoring or lecturing duties within the post holder's area of expertise and under the guidance of a member of academic staff.
10. Participate, and in some cases lead outreach activities on behalf of the group/Centre, which may include social media.
11. Participate in local research-related activities such as journal clubs, training sessions, seminar series, postdoctoral development activities etc.

Planning and Organising:

1. Plan for specific aspects of research programme. Timescales range from 1-12 months in advance and may contribute to overall 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 (eg. meetings) where appropriate.
4. Plan up to 6 months 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 topics 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 developing links with local community groups, industries etc.

ESSENTIAL CRITERIA:

1. Have or be about to obtain a relevant PhD (PhD thesis must be submitted by closing date) in molecular biology, cell biology, translational research, pharmacology or a related area of biomedicine.
2. At least 3 years recent relevant research experience in cardiovascular disease, biomarker research, or closely related area relevant to this project. AND;
Recent extensive hands-on experience in three of the following:
 1. Tissue sectioning and immunohistochemistry
 2. qPCR
 3. RNA sequencing analysis
 4. Immunoassays
 5. Worked with clinical samples/data from cardiovascular disease studies.
3. Experience teaching/supervising/mentoring postgraduate/ undergraduate/school students and visiting researchers in the laboratory.
4. Methodical approach to project management and meticulous in regards to experimental procedures and record keeping.
5. Highly ambitious, self-motivated, very efficient and organised.
6. Showing strong commitment to, and interest in, research topic.
7. Competent in maintaining and communicating knowledge of cutting-edge of field of expertise.
8. Good oral and written communication skills.
9. Competent in giving effective and informative oral and poster presentations.
10. Competent in communicating stipulated research skills is essential to the post in CV/job application.
11. Strong ability to work from own initiative and to work independently.

12. Excellent team working skills in multiple internal and external team settings.
13. Leadership qualities.
14. Excellent problem-solving skills.
15. Irregular hours including evening, weekend and other out-of-hours work will be a component of the research at times.
16. Must be willing to travel to national and international meetings and collaborative laboratories.

DESIRABLE CRITERIA:

1. Human Tissue Act trained.
2. Recent up to date knowledge of heart failure, cardiac biomarkers, pathophysiology of cardiac fibrosis
3. Recent hands-on experience in the following techniques:
 1. In vitro gene knock-down and over expression techniques.
 2. Bioinformatics.
 3. Ex vivo or in vivo models of cardiovascular disease.
 4. Western blotting.
4. Experience in general lab management.
5. Experience teaching lab members as well as undergraduate lectures/tutorials/practicals.
6. Classroom-based teaching such as lecturing, tutorials.
7. Research project management training.
8. Recent hands-on experience in creating SOP, Risk Assessments, COSSH.
9. Up-to-date knowledge of fields of heart failure and cardiac biomarkers.
10. Experience in giving oral and poster presentations at scientific conferences.
11. Experience working in outreach settings.