



Job Title: Research Associate
Grade: 7
Salary: £34,804 due to funding restrictions (per annum)
Department: Cardiovascular Sciences
Hours/Contract: Full-time fixed term maternity cover. This contract is for 12 months or until the return of the incumbent, whichever is sooner.
Reference: 1962

Role Purpose

To independently develop and carry out research under the guidance of the Principal Investigator (Professor of Cardiac Electrophysiology) in accordance with the aims of the research group, which include performing functional experiments using the innervated rabbit preparation and additional molecular experiments to determine mechanisms of action.

Main Duties and Responsibilities

Take a leading role in the experimental design and determination of the direction of the program of work including the development and optimisation of protocols and validation of experimental data and ensuring quality control and reproducibility. Specifically the research associate will be expected to:

- To develop and undertake autonomic nerve stimulation work using the isolated innervated heart preparation, giving guidance and supervising other team members.
- To plan and carry out experiments using the innervated heart preparation for own research contribution in line with the aims of the research project.
- To direct the use of coronary artery ligation surgery in order to investigate cardiac electrophysiology in a heart failure model.
- To contribute to the direction of the research team in order to plan and produce independent original research.
- Provide general laboratory support and ensure the efficient functioning of the lab. To lead in the supervision and training of students and new group members.
- To take lead in the application for and writing of further grants and funding.
- Producing high quality data for and writing of scientific publications.

Internal and External Relationships

Communication with the PI, other colleagues and students on a regular basis to review and plan research activities.

Communicate and liaise with colleagues and collaborators involved in the abovementioned research programme and other projects that the team is undertaking, on a regular basis to discuss research and exchange of new ideas and approaches to develop such research.

Communicate with Technical Managers and core technical support staff on a regular basis to discuss ongoing lab issues, health & safety matters, and future plans for the laboratory areas.





Liaise with students within specific area.

Occasionally communicate and liaise with research collaborators, both nationally and internationally, under the instruction of the supervisor.

Planning and Organising

With guidance from the PI, plan own work and prioritise research and laboratory activities on a regular basis, including co-ordinating resources and maintenance of samples and equipment.

Plan research activity and co-ordinate the work of other group members and students.

The post-holder will be required to effectively manage their time to deliver on the priorities of the research programme.

Attend training courses as reasonably required by the PI and be proactive in terms of continued professional development.

Maintenance of shared research laboratories and handling biological samples on a daily basis.

Qualifications, Knowledge and Experience

Essential

- A PhD in Cardiovascular Sciences or a related, relevant subject *
- Significant practical experience using the rabbit dual innervated heart preparation *
- Knowledge of good laboratory practice and laboratory safety issues *
- Experience with mammalian experimental models including surgical techniques *
- Experience of using programmed stimulation protocols for the induction of ventricular fibrillation as well as proficient use of cardiac electrophysiology analysis software *
- Maintenance of comprehensive and confidential records, and a methodical approach to working
- Evidence of research productivity (e.g. research publications in peer review journals, presentations etc) *
- Current Home Office PIL

Desirable

- Experience in whole heart cardiac electrophysiology recordings
- Experience with histological and immunohistochemical techniques
- Experience in autonomic nerve stimulation protocols
- Experience in supervising staff and students

Skills, Abilities and Competencies

Essential

- High level of proficiency in English with effective oral and written skills in order to communicate effectively with staff and students *





- Computer literacy (Word, Excel, Powerpoint)
- Good written and communication skills
- Ability to plan and organise own work-load delivering results to specified time schedules
- The ability to demonstrate leadership and management skills including effective problem solving
- To be able to deliver high quality research and demonstrate enthusiasm and knowledge of the subject area
- Ability to produce accurate laboratory data suitable for publication and presentation at national/international meetings
- Good interpersonal skills and also the ability to work as part of a team and independently

****Criteria to be used in shortlisting candidates for interview***

VITAL

The University encourages all staff to live our [VITAL values](#) which are:
Valuing People, Innovators, Together, Accountable, Leaders.

Equality and Diversity

We believe that equality, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.

