

**Job Description**

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| **Job Title: Senior Scientist** |  |
| **Department / School:** | Centre for Cardiovascular Science |
| **Reports To: Professor Andrew Baker** |  |

**Job Purpose**

To plan and help lead a programme of high quality internationally competitive vascular-based research, including management of staff and resources, with the aim of developing research portfolio and achieving publication of research outcomes in high impact journals

**Main responsibilities**

1. Plan and help lead a programme of high quality research in vascular biology and application to cardiovascular disease by managing a research team with Baker and conducting a programme of individual research in the Baker lab, through pursuit of new lines of research enquiry. Responsibility for all or a major element of the research team’s activities through overseeing and management of research activity and supervising progress. (Approx. 60% of time)

2. Design and development of effective research proposals with Professor Baker to attract resources to support the research programme (individually and jointly with others) and demonstrate ability to win support for these proposals. Effective management and utilisation of associated resources (financial and/or equipment). (Approx. 10% of time)

3. Disseminate and publish research findings in appropriate research publications and at national and international conferences. Where appropriate undertake knowledge transfer activities related to the research specialism. (Approx. 10%of time)

4. Contribution to the development of an established research portfolio for the subject area, including effective engagement with the wider academic and professional research community. (Approx. 5% of time)

5. Contribution to the development of a range of new methods and techniques appropriate to the type and level of research being pursued. Add to the intellectual capital and understanding of the field through new discoveries and insights.

(Approx. 5% of time)

6. Contribution to the management of the Centre/ School. (Approx. 5% of time)

7. Provision of expert advice, training and guidance to colleagues and students, including supervision and teaching of PhD projects/MSc students and associated training representation the work of the University in the field both locally and internationally in relevant networks and activities. (Approx. 5% of time)

**Planning & Organising**

The post holder will take responsibility for the supervision of a range of research activities, ensuring that the research is completed within relevant deadlines. Management of all relevant resources and co-ordination of the research effort to ensure development and evolution of the research programme. Involves both short term planning of experimental timetable, and longer term planning for effective publication and dissemination of research findings.

**Problem Solving**

The role involves significant application of prior knowledge and accumulated expertise to solve unique research problems. An enhanced level of initiative and problem solving approach is needed to develop new techniques and novel approaches in response to emerging research issues. Role involves creation of new knowledge in the subject specialism. Role would also deal with any unexpected or unforeseen issues arising from the research results and would devise alternative approaches as required. Research problems approached by sharing knowledge and development with leading experts in the field specialism, involving collaboration at the forefront of the research area.

**Decision Making**

Responsible for all decisions relating to the research programme including devising an appropriate experimental strategy, prioritising experiments and deciding when and where to publish research results in liaison with Professor Baker.

**Knowledge Skills and Experience**

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| **Attribute** | **Essential** | **Desirable** |
| **Education, Qualifications & Training** | * Extensive research experience in cardiovascular research, particular vascular biology , vascular pathophysiology, supported by relevant qualifications (PhD or equivalent) and significant post-doctoral experience.
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| **Knowledge & Experience** | * Experience and demonstrated success in delivering research project results
* Experience and achievement in the specialist area, reflected in a growing personal research portfolio
* Extensive experience of developing and applying models, techniques and analytical methods as appropriate to answer important questions in cardiovascular research.
* Demonstrate the ability to conduct innovative research.
* Ability to think critically about scientific research and strategy.
* Experience in supervision of researchers (staff and/or students).
 | * Experience of in vivo models of cardiovascular disease
* Knowledge of non-coding RNA biology
* Experience in supervising research projects and project teams
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**Key Job hazard information specific to the role**

This role may result in potential exposure to certain hazards as listed below. These will be risk assessed by the school or department, which may require you to participate in, for example, health surveillance or follow other health and safety requirements.

* Working with animals, including farm animals, insects and birds.
* Working with pathogens or pathogen infected materials.
* Working with pathogens or genetically modified organisms in containment level 3.
* Working with Human tissues and blood.
* Work with ionising radiation that requires formal Classification of the individual.
* Work or contact with non-ionising radiation sources such as Lasers and hazardous EMF sources.
* Exposure to respiratory/skin sensitisers e.g. solder flux, latex, isocyanates, wood dust, glues and resins.
* Toxic metals e.g. lead, mercury, thallium.
* Respiratory protection.

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