



RESEARCH FELLOW

DEPARTMENT/UNIT	Monash Biomedical Imaging (Alfred Research Alliance)
FACULTY/DIVISION	Deputy Vice-Chancellor (Research) and Senior Vice-President (DVCR)
CLASSIFICATION	Level A
DESIGNATED CAMPUS OR LOCATION	The Alfred Hospital

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The **Portfolio of the Vice-Chancellor and President** is responsible for: high level of coordination for, and management and advice to, the Vice-Chancellor, leadership in the management and delivery of key strategic and cross portfolio initiatives, University level governance, University-wide marketing, communications and student recruitment activities, strategic communications, external relations and coordination of special events arranged on behalf of the Chancellor and the Vice-Chancellor, leadership in and development of relationships with a range of local and international stakeholders and partners, including alumni, benefactors, government, industry and strategic alliance affiliates.

The **Deputy Vice-Chancellor (Research) and Senior Vice-President (DVCR)** is responsible for the development, implementation and continuous improvement of the University's research vision within the changing landscape of higher education, ensuring delivery of accountabilities within the context of the University's strategic plan. Reporting to the President and Vice-Chancellor and as an integral member of the University's executive team, the DVCR further advances the University's research performance, diversifies research funding, oversees research infrastructure strategy, and fosters interdisciplinary and transdisciplinary areas of excellence, collaboration and innovation within Monash and with global research partners. Further information about the University's organisational and governance structure is available at www.monash.edu/about/structure.

Monash Biomedical Imaging (MBI) is the Monash University research platform of excellence for biomedical imaging. MBI hosts state of the art MRI facilities for animal and human imaging, and molecular and X-ray imaging facilities for investigating small animal models. These capabilities are supported by expert personnel and a suite of ancillary facilities, including patient support, radiobiology and (limited) short-term animal holding. MBI conducts basic and translational research of the highest quality, increases skills in biomedical imaging amongst research staff and higher degree by research students, and provides user access to internal and external researchers. These

core drivers of the facility's activities aim to provide cutting edge and high-quality research imaging modalities to biomedical and non-biomedical researchers.

ARA-MBI is a purpose-built preclinical imaging facility located at the Alfred Research Alliance in Prahran. The facility houses a comprehensive suite of imaging instruments including PET/CT, MPI, and 9.4T MRI with MR-guided focused ultrasound (MRgFUS) capability. ARA-MBI assists preclinical researchers by providing access to the latest imaging equipment and offering operational guidance and support. The facility is managed by Alliance partners, Monash University and the Baker Heart and Diabetes Institute, and is a node of MBI.

POSITION PURPOSE

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

The Research Fellow – MPI/MRgFUS Research Scientist will be expected to work closely with the Principal MRI Research Fellow and collaborating scientists to develop and optimise MPI and MRgFUS protocols. In addition to running these instruments, responsibilities will also include administrative duties and assistance with the day-to-day running of the facility.

Reporting Line: The position reports to Director, Preclinical Imaging

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level A research-only academic may include:

1. Operation of the MPI instrument
2. Operation of the FUS Instruments RK-300 in-bore and RK-50 bench-top instruments and water degasser
3. Operation of the 9.4T Bruker small animal MRI scanner
4. Rodent handling including anaesthesia and tail vein cannulation (mice) for microbubble and MR contrast agent delivery
5. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research
6. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
7. Administrative functions primarily connected with the area of research of the academic, such as writing standard operating procedures and safe work instructions; compiling and submitting ethics proposals, managing ethics compliance; and ensuring an OH&S compliant workspace
8. Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
9. Occasional contributions to teaching in relation to their research project(s)
10. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures

11. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
12. Advice within the field of the staff member's research to postgraduate students
13. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - An honours degree (or higher) in the relevant discipline or have equivalent qualifications or research experience.

Knowledge and Skills

2. Demonstrated analytical and manuscript preparation skills
3. Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
4. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
5. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
6. A demonstrated awareness of the principles of confidentiality, privacy and information handling
7. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
8. Demonstrated computer literacy and proficiency in the production of high level work using software such as Microsoft Office applications and specified University software programs, with the capability and willingness to learn new packages as appropriate
9. Demonstrated experience working with rodents
10. Preclinical imaging experience including MRI/MPI and FUS
11. Experience with image analysis and the use of FSL, MRtrix3, MATLAB, or other image processing software
12. Experience manipulating data in Unix

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.