



RESEARCH FELLOW (LIMB SIZE IN VERTEBRATES)

DEPARTMENT/UNIT Australian Regenerative Medicine Institute

FACULTY/DIVISION Medicine Nursing and Health Sciences

CLASSIFICATION Level B

DESIGNATED CAMPUS OR LOCATION Clayton campus

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.

Established through a joint venture between Monash University and the Victorian Government, the **Australian Regenerative Medicine Institute** (ARMI) builds on the University's existing strengths in biomedical research, and supports the critical infrastructure required to deliver the next generation of discoveries in regenerative medicine.

ARMI is located at one of the world's largest regenerative medicine and stem cell research centres, at the Clayton campus. Its scientists are focused on unravelling the basic mechanisms of the regenerative process, enabling doctors to prevent, halt and reverse damage to vital organs due to disease, injury or genetic conditions.

To learn more about us and the work we do, please visit our website.

POSITION PURPOSE

A Level B research-only academic is expected to carry out independent and/or team research within the field in which they are appointed and to carry out activities to develop their research expertise relevant to the particular field of research.

The particular area of research is the study of the genetic and epigenetic determinants of limb size in vertebrates. The main goal is to generate chimeric mice in which the limbs derive from stem cells of other species. The Research Fellow will require experience in manipulation and transfer of the early mouse embryo, stem cell and tissue culture, and molecular biology.

Modified date: November 2021

Reporting Line: The position reports to Chief Investigator of the grant

Supervisory Responsibilities: This position provides direct supervision to undergraduate students and assist the

Group Leader in co-supervising Phd students and Research Assistants

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

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

- 1. 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
- **2.** Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
- **3.** Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
- 4. Administrative functions primarily connected with the area of research of the academic
- **5.** Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
- **6.** Occasional contributions to teaching in relation to their research project(s)
- 7. 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
- 8. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

- 1. The appointee will have:
 - A doctoral qualification in the relevant discipline area or equivalent qualifications or research experience.

Knowledge and Skills

- 2. Proficiency in rodent surgery, ideally including embryo transfer to pseudo pregnant females. Experience with morula aggregation and/or blastocyst injection in mouse embryos will be a plus. Otherwise, willingness to undergo training in this area prior to joining the lab is required
- **3.** Proficiency in stem cell culture and manipulation. Experience with multiple species and/or the culture of organoids will be a plus
- **4.** Experience with routine laboratory techniques including fluorescent immunohistochemistry and in situ hybridisation, light microscopy and image analysis; use/maintenance of common laboratory apparatus, storage and handling of hazardous materials
- **5.** Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
- **6.** Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines

- **7.** Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
- 8. A demonstrated awareness of the principles of confidentiality, privacy and information handling
- **9.** A demonstrated capacity to work in a collegial manner with other staff in the workplace, including supervision of students
- **10.** Demonstrated computer literacy and proficiency in the production of high level work using software such as Microsoft Office applications, ImageJ and Cell Profiler with the capability and willingness to learn new packages as appropriate
- 11. Experience in the following categories: 3D live imaging, bioinformatics

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.