

POSITION DESCRIPTION

Research Officer

Tumour Biology and Therapeutics Research Group

Position Title	Research Officer or Senior Research Officer		
Division	Tumour Biology and Therapeutics Research Group		
Position Purpose	The Research Officer or Senior Research Officer is expected to critically evaluate data and literature, design and perform experiments to functionally validate new targets in aggressive forms of breast and ovarian cancer. As a part of this project patients derived organoid cocultures will be set up, synthetic lethal drug/CRISPR screens will be performed followed by testing in vivo in patient-derived xenograft models.		
Location	TRI Woolloongabba		
Occupational Category and Level	Research Academic		
Reporting Relationship	Reports to Group Leader		
Review Date	Oct 2024		
Next Review Due	Oct 2025		
Staff Member		Signature	Date
Direct Supervisor	Prof Kum Kum Khanna	Signature	Date 19.04.24

1. OVERVIEW

Mater Group

For more than a century in Queensland, Mater has been defined by an abiding commitment to meeting the healthcare needs of the community. Today, our Mission and Mercy Values continue to guide Mater people in making appropriate decisions for a sustainable, socially relevant healthcare service that is genuinely committed to the community it serves. As Mater's capacity to genuinely and sustainably influence health outcomes has increased, our service model has adapted to incorporate and enhance contemporary practice. Today we recognise that achieving and sustaining our goal to help build a healthy community requires a sincere and consistent approach to integration of three key elements. To that end, our corporate strategy is heavily focused on integration, excellence and continuous improvement across three areas of health service delivery, education and research.

Health: Ongoing provision and expansion of our core healthcare services to build closer connections with our community, to promote wellness and healing.

Education: Organisation-wide integration of teaching and learning, with an inter-professional focus and approach to improve health education and clinical outcomes for all.

Research: Conducting research consistent with, and supportive of, our core healthcare services and partnering to share our research outcomes for the benefit of the community.

Values: *We value care, mercy, dignity, quality and commitment.*

Mater Research (MR)

Mater Research (MR) is a world-class institute that is committed to academic medicine and aims to discover, develop, translate, and commercialise medical research that integrates with relevant areas of excellence within clinical practice. MR discovers ways to prevent and treat conditions affecting babies, children, adolescents and adults, helping them to lead healthy lives.

Our teams conduct outstanding research into:

- common diseases affecting children and adults;
- more effective diagnosis and treatment of disease;
- improving health outcomes for mothers and babies; and
- understanding development from babies through to adolescence and adulthood.

Mater Research Institute – The University of Queensland

Mater Research Institute-UQ (MRI-UQ) is a world class institute committed to academic research and its translation into clinical care for the benefit of all. MRI-UQ is an alliance between Mater Research and UQ, providing strategic and operational benefits to both parties. Mater Research brings to the alliance considerable clinical collaboration opportunities and UQ brings all its expertise as a research, education and teaching institution. MRI-UQ has more than 300 research staff, post graduate students and clinical researchers. There are currently 70 students undertaking a PhD, MPhil or Honours program. The Institute has access to world-class research infrastructure in the state-of-the-art Translational Research Institute (tri.edu.au). MRI-UQ has a strong commitment to career development and mentoring.

Translational Research Institute (TRI)

Focusing on a wide range of health and medical research areas, the Translational Research Institute (TRI) is a joint venture between Mater Research (MR) The University of Queensland Diamantina Institute (UQDI), Queensland University of Technology's Institute of Health and Biomedical Innovation (IHBI), and the Princess Alexandra Hospital's Centres for Health Research. The Translational Research Institute brings these research facilities together with the aim to improve and accelerate the translation of medical research into greater patient care.

2. HOURS

This is a full-time appointment. Working hours need to be agreed with one's supervisor. As with all scientific institutes, we acknowledge the need for flexibility in working hours in order to undertake the experimental procedures appropriate to individual projects. We are not clock watchers. We all work hard and do what has to be done. It is a give and take system with no actual recording of times. We find this contributes to the overall team effort.

3. PURPOSE OF POSITION

The Research Officer or Senior Research officer is expected to critically evaluate data and literature, design and perform experiments in the tumour Biology and Therapeutic group. Part of the projects in this group are concerned with finding new approaches to target aggressive forms of breast and ovarian cancers. Both cancer intrinsic targets and the tumour microenvironment will be investigated, and functional validation will be performed in patient-derived organoids and xenograft models. The experience in genetic barcoding and CRISPR screen is desirable.

The principal investigator is Professor Kum Kum Khanna, who has three decades of experience understanding cancer biology and exploiting the knowledge gained from fundamental studies to develop innovative therapies that hold immense promise to improve patient outcome. The group has a strong emphasis on patient material, which is obtained from clinical collaborators at Mater. Cancer studies include triple negative breast cancer and high-grade serous ovarian cancer.

4. POSITION DESCRIPTION

4.1. Research

- Participate in the design, execution and control of research studies.
- Coordinate the processing and analysis of data and laboratory tests
- Coordinate the conduct of experimental tests and procedures.
- Develop new research methodologies.
- Analyse literature relevant to research area.
- Assist in the publication of research papers for publication and presentation at conferences and workshops, and in the writing of research grant applications, ethics and compliance documents.
- Work with colleagues and postgraduates in the development of joint research projects.
- Organise data for the preparation of proposals for new funding.
- Supervision of junior staff and students and contribution to the smooth running of a laboratory.
- Attend, as appropriate, research related and organisational events.
- Presentation of data at the laboratory meetings.
- Active participation at the laboratory meetings.

4.2 Administration

- Attend relevant training programs and mandatory educational programs, workshops, conference and promotional functions.

4.3 Safety in the Workplace and Human Resources

- Maintain a safe working environment.
- Report any potential hazards to the reporting officer.
- Ensure compliance with Workplace Health and Safety (WHS) Standards.
- Treat all clients with sensitivity and without discrimination.
- Responsible to ensure the annual performance plan is met.

4.4 Expression of the Mater Values

- Promote and demonstrate the mission and objectives of MR Limited.
- Promote and demonstrate the philosophy and values of the Sisters of Mercy.
- Demonstrate personal attentiveness, sensitivity and non-judgemental manner when interacting with team members and families.
- Demonstrate values-based decision-making and leadership.

- Ensure that the mission, objectives, philosophy and values stated above are inherent in the delivery of the health care services by collaborating with and supporting other members of the health care team regarding clinical and research practices.
- Demonstrate a strong commitment to the timely delivery of a high-quality service to the staff of MR.

5. PRIMARY DELEGATIONS AND ACCOUNTABILITIES

- The Research Office and Senior Research Officer will be accountable to the Group Leader.
- Demonstrated understanding and commitment to the joint NHMRC/AVCC Statement and Guidelines on Research Practice is required.
- Demonstrated understanding and commitment to the NHMRC National Statement on Ethical Conduct in Research Involving Humans.
- The use of Institute property, equipment and technical support facilities will respect the guidelines established by the Institute.

6. INTELLECTUAL PROPERTY

Mater Research will require the assignment of all rights, in and to all discoveries, and inventions made, developed, or devised while working at or under the guidance of the Mater Research, during the term of the appointment.

7. SELECTION CRITERIA

Qualifications

Essential

- PhD submitted in related field of Science.

Knowledge and Skills

Essential

- Demonstrated high level interpersonal skills necessary for negotiating and liaising effectively with a diverse range of staff, patients and other stakeholders.
- Knowledge of data management systems.
- Demonstrate high level written and verbal communication skills.
- Possess analytical and problem-solving skills.
- Advanced computer skills.
- Ability to work independently and as part of a multidisciplinary team.
- In depth knowledge of cancer cell and molecular biology, drug target validation and testing in animal models, CRISPR screens, genetic barcoding of cells, patient-derived organoid generation and co-culturing with other cells in tumour microenvironment
- Ability to present complex data and concepts at laboratory meetings.
- Basic skills in molecular biology and statistics.

Experience

Essential

- Handling human samples and establishing organoid co-cultures, CRISPR Screen, and single cell analysis
- Experience in presenting at major national meetings.
- Experience in testing of drugs in in vivo preclinical models.

Personal Qualities

Essential

- Demonstrated high level interpersonal skills in order to negotiate and liaise effectively with a diverse range of staff and other stakeholders.
- Demonstrated high level organisational skills including the ability to prioritise work demands meet deadlines and balance competing tasks.
- Commitment to the Promotion of the Philosophy and Mission of the Mater Group and goals of the Mater Research Institute. To be thoughtful, considerate and act as a positive role model for others.

8. REVIEW

The position will be subject to mutual review on an annual basis.