



Research Assistant POSITION DESCRIPTION

Research Group:	Centre for Circulating Tumour Cell Diagnostics & Research (CCDR)
Status:	Full-time for one (1) year
Hours:	38 hours per week
Salary:	\$82,000 - \$85,000 per annum commensurate with experience, plus 9.5% super. Salary packaging is available
Reports to:	The Leader of the CCDR and for non-operational matters to the Institute's Human Resources Manager

Background

The **Ingham Institute for Applied Medical Research** (the Institute) is a not-for-profit organisation located in Sydney's South West that conducts world-class medical research that is rooted in and driven by the needs of the local community and wider Australia.

The Institute is the pre-eminent research institute for South Western Sydney. It is home to 360 staff, over 40 research groups, and five (5) research streams that are committed to its vision of Inspiring Health and Transforming Care.

The Institute is integral to a unique collaboration with the South Western Sydney Local Health District, Western Sydney University and the UNSW Sydney. Through these collaborations the Ingham Institute is working to radically transform health outcomes both locally and globally.

The Institute established the Centre for Circulating Tumour Cell Diagnostics & Research in 2013. The CCDR undertakes ground breaking research in the use of liquid blood biopsies to guide cancer treatment by defining biomolecular cancer characteristics.

The CCDR is seeking an experienced Research Assistant/postdoctoral researcher to join the CTC Research Team. This individual needs to be enthusiastic, flexible, be able to multitask, keen to learn and develop all aspects of the role and play an integral part of the research team.

Purpose of Position

The research assistant will be responsible for research into the utility of liquid biopsy for brain cancer patient management.

Selection Criteria

ESSENTIAL:

- Science Degree minimum PhD (or equivalent)
- Independent, dedicated and outcome-driven work ethos
- Proven competence in basic laboratory methods and procedures
- Proven experience to work in medical laboratory based cancer research
- Proven ability in molecular biology (cloning, transfections, functional in vitro assays, γ -irradiation in vitro assays, liquid biopsy analysis (CTCs, ctNA and exosome isolation and analysis), qPCR, ddPCR, FACS analysis for apoptosis and cell cycle, fluorescent microscopy, confocal microscopy, immunocytostaining)
- Proven ability to work with patient samples and biobank and meticulously document such samples processed in the laboratory
- Ability to liaise with clinicians and basic scientists in translational cancer research
- Knowledge of the fundamentals of laboratory safety
- Academic basics (publication record, demonstrated experience in writing research papers, and in grant writing and grant writing assistance)
- Strong communication skills
- Strong organisation and time managing skills
- Ability to work in a team and support a team environment and supervise and train students
- Eligible to work in Australia.

DESIRABLE:

- Certified, valid PC2 training
- Venesection skills
- Experience in database management.

Key Accountabilities	Key Performance Indicators
Processing of blood samples for CTCs, ctDNA, ctRNA and exosome isolation	Organises processing of samples effectively and in a timely manner, achieving high sample quality and reproducibility
Immunocytostaining of CTCs	<ul style="list-style-type: none"> ▪ Follows procedural protocols ▪ Achieves reproducible immunocytostaining data ▪ Processes brain cancer patient blood samples for CTCs effectively.
Using ALS CellCelector to isolate single CTCs	<ul style="list-style-type: none"> ▪ Demonstrates ability to comprehend and use ALS CellCelector software and degree the robotic hardware ▪ Is able to develop skills required to independently use this machine with minimal assistance by the CellCelctor custodian within 1-2 month of first training.
Fluorescent microscopy	<ul style="list-style-type: none"> ▪ Follows procedural protocols ▪ Achieves reproducible data.
Confocal microscopy	<ul style="list-style-type: none"> ▪ Follows procedural protocols ▪ Achieves reproducible data.
Tissue culture	<ul style="list-style-type: none"> ▪ Follows procedural protocols ▪ Demonstrates appropriate sterile working techniques ▪ Takes the lead in establishing transfection, proliferation, apoptosis, promoter reporter assays in the team and teaches PhD students effectively.
Optimisation of research methods by ddPCR and other techniques	<ul style="list-style-type: none"> ▪ Demonstrates ability to comprehend and use software of QX200 ddPCR and other high end equipment

	<ul style="list-style-type: none"> ▪ Develops the skill to independently use these machines with minimal help by the custodians within 2-4 weeks of first training.
cDNA synthesis from CTCs and other cells	<ul style="list-style-type: none"> ▪ Follows procedural protocols ▪ Achieves reproducible data.
Keeping up with the literature in the field relevant to the SPHERE brain cancer research grant	Demonstrates knowledge in the relevant research field at meetings and in the laboratory
Organising CCDR databases	Displays good organisation skills
Biobanking and documentation of research samples	Demonstrates sound biobanking skills without need of constant supervision
Writing Research manuscripts	<ul style="list-style-type: none"> ▪ Writes first drafts of research manuscripts ▪ Inputs into other draft research manuscripts.
Applying for Research Funding	<ul style="list-style-type: none"> ▪ Writes and submits research grant applications with input of experienced mentors (eg CCDR leader) ▪ Assists with putting together other CCDR grant applications.
Compliance with confidentiality and ethical requirements	<ul style="list-style-type: none"> ▪ Familiarises themselves with the project's human ethics approval ▪ Keeps all sensitive data protected, in agreement with the project's human ethics approval.
Comply with relevant State and Federal Privacy Legislation for the access, use, handling and storage of health data.	<ul style="list-style-type: none"> ▪ Adheres to legislative requirements ▪ Complies with legislative requirements regarding access and reporting.
Understand and uphold WHS requirements and responsibilities.	<ul style="list-style-type: none"> ▪ Complies with the Institute's WHS Statement and WHS Policy and Procedures ▪ Is always mindful of workplace safety as it pertains to self

	<ul style="list-style-type: none"> ▪ Reports accidents within 24 hours ▪ Proper use is made of all relevant safety equipment ▪ Attends training programs as directed.
Work as an Institute team member.	<ul style="list-style-type: none"> ▪ Is an effective team member ▪ Attends Institute staff meetings and, where applicable, shares information available at these meetings with unit staff ▪ Complies with Ingham Institute Code of Conduct ▪ Contributes to the research culture at Ingham Institute ▪ Participates in Ingham Institute supporting activities.