

Position Description

JOB TITLE:	Research Assistant
DEPARTMENT:	Personalised Medicine – Translational Tumour Biology
REPORTS TO:	Personalised Medicine Program Leader
	Group Leader, Translational Tumour Biology
LAST DATE REVIEWED:	March, 2020

JOB SUMMARY

The Zero Childhood Cancer (ZCC) Program is a national trial being led by Children's Cancer Institute, and Kids Cancer Centre, Sydney Children's Hospital, to identify individual cancer therapy for children, adolescents and young adults with high-risk cancer where the expected survival rate is less than 30%. The objective of the program is to prolong survival and reduce treatment side effects. The data generated by the ZCC trial is globally unique for paediatric cancer.

This position will support the molecular work done by the Translational Tumour Biology laboratory, which studies the molecular and functional aspects of genomic lesions such as mutations and gene fusions. This includes the cloning and expression of these lesions in cell model systems, the development of functional genomic screens, test drug responses, and identifying potential drug targeting strategies. The work will include studies to dissect the signalling pathways regulated by these oncogenes using model cell lines, and where appropriate, other models such as patient derived xenografts.

PRIMARY TASKS / RESPONSIBILITIES

- Assist with the development and maintenance of cell lines with Dr Lauren Brown.
- Undertake cloning and expression studies of new genomic lesions.
- Assist with drug screens in the cell line models.
- Assist with nucleic acid extractions, RNA sequencing experiments and other experimental procedures.
- Assist with general laboratory management including contributing to ordering supplies, maintaining laboratory inventory
- Achieve an outstanding level of competence in all aspects of experimental work
- Contribute to quality publications
- Assist with the training and guidance of students on a day to day basis
- Involved in professional activities
- Be involved in CCIA activities
- Comply with regulatory guidelines (including OGTR and ethics) and Institute policies





KEY SKILLS

- Molecular cloning techniques are a core skill requirement. This includes the capacity to design strategies to isolate (by PCR) genes from patient cDNA samples, clone these into plasmids for expression in cell lines.
- Familiarity with online genome/gene reference databases (e.g. UCSC, NCBI) and alignment tools (BLAT, BLAST)
- Performing and analyzing Sanger sequence data (Sanger)
- Perform a range of PCR experiments and independently undertake primer design, PCR set up and trouble shooting
- Basic molecular biology and cloning including restriction digests and ligation, bacterial transformation, plasmid extraction, gel electrophoresis
- Tissue culture and retroviral and lentiviral transduction
- Some experience with flow cytometry would be an advantage but not required
- Western blotting
- Valued personal skills and attributes include strong interpersonal skills and the ability to work in a team, excellent listening, verbal and written communication skills, strong attention to detail and initiative. We also value a flexible attitude to work (being able to move between projects and support other laboratory members), some management skills and a capacity to help solve problems

MINIMUM REQUIREMENTS

Qualifications

Bachelor or Masters degree in a biological science.

Experience and requirements

- Demonstrated ability to design and conduct experiments independently as well as in a team environment
- The successful candidate will have practical experience in the conduct of molecular biology techniques and cell culture techniques.
- Ambition for career development and a drive to publish results in peer-reviewed journal
- Exhibits a high degree of professionalism and respect for others
- Demonstrated commitment to conducting experiments involving humans, animals & GMO's under strict ethical and regulatory guidelines
- Demonstrated commitment to OGTR and other regulatory requirements
- An interest in developing techniques and using the latest technology in research projects

EXPECTED OUTPUTS

Telephones & Email

• Respond to emails in 48 hours

Children's Cancer Institute policies applicable

- Code of Conduct/Ethics
- Whistle-blowing
- Use of Electronic Resources



Position Description

- Occupational Health & Safety
- Appropriate Workplace Behaviour
- Privacy

SERVICE STANDARDS

• Respond to phone calls and emails within 48 hours

COMPLIANCE AND CODE OF ETHICS AND CONDUCT

Staff members are responsible for ensuring that they are familiar with and comply with their conditions of employment as stated in their individual contract, all Children's Cancer Institute Policies and Procedures and relevant ethical and regulatory guidelines. Staff must be aware that breaches by individuals will not be tolerated or condoned and may be subject to the Disciplinary Action Policy.

Your knowledge and awareness of Children's Cancer Institute Policies and Procedures (including the Code of Ethics and Conduct), will be monitored from time to time to ensure that our compliance program is effective.

Part of compliance adherence involves the use of standardised forms, checklists, and other aids (as appropriate) to ensure that important compliance issues are not overlooked. All forms must be used in accordance with instructions and the procedures as outlined in the relevant policies and procedures to ensure that compliance to the laws and regulations occurs.

O H & S

- Must adhere to all OHS policies and procedures
- Take reasonable care for their own health and safety and the health and safety of other people who may be affected by their conduct in the workplace
- Actively participating in health and safety meeting, training and induction programs
- Complying with all safe work procedures and instructions
- Use equipment in compliance with relevant procedures, without wilful interference or misuse
- Ensure that any hazardous conditions, near misses and injuries are reported immediately to the supervisor
- Must not wilfully or recklessly interfere with or misuse anything provided in the interest of environment health and safety or welfare

REPORTING STRUCTURE

Position reports direct to: Translational Tumour Biology Group Leader Departmental Structure: See Organisation Chart **Note:** Reporting structure may change subject to management decisions and business requirements.