

JOB TITLE:	Research Assistant
DEPARTMENT:	Personalised Medicine
DIVISION:	Research
REPORTS TO (TITLE):	Research Officer, Personalised Medicine
LAST DATE REVIEWED:	August 2021

JOB SUMMARY

The ZERO Childhood Cancer National Personalised Medicine Program (ZERO) is Australia's first and most comprehensive personalised medicine program for children and adolescents with very high-risk cancer (anticipated likelihood of survival <30%). A unique, multidisciplinary program bringing together cutting-edge science, the latest technology, and the brightest minds in research and clinical care, it is on a path to change the model of care for children with cancer today. Having already demonstrated significant impact in improving the lives of children faced with the most challenging prognosis, the program is now in preparation to expand and grow to include all children with cancer by 2023.

This role is a key support position for senior post-doctoral scientists undertaking work within ZERO Preclinical Drug Testing Core. The Research Assistant will be responsible for the development, expansion and validation of in vitro cultures and patient-derived xenografts (PDXs), critical for supporting the *in vitro* drug screening and *in vivo* drug efficacy pipelines- both central components within ZERO. The Program strives to deliver rapid results using primary patient samples. This position requires excellent teamwork and communication skills, adaptability, meticulous attention to detail, and close adherence to deadlines so that test results can be provided in a timely manner.

PRIMARY TASKS / RESPONSIBILITIES

- To develop and maintain primary cultures from personalised medicine patient samples
- Assist in the validation of cell cultures and preparation of cells for in vitro drug screening
- Assist Research Officers in the research and development of novel primary cell culture techniques
- To establish and maintain patient derived xenograft models
- To design and conduct experiments as part of a team to test the efficacy of novel drugs against patient derived xenograft models of liquid (haematological cancers) and solid tumours including neuroblastomas, sarcomas, and CNS tumours.
 - Ability to work with clinical patient samples to track and meticulously record all aspects of laboratory
 operations whilst ensuring patient confidentiality. This includes labelling of patient samples, accurate record
 keeping of patient sample usage, inventories, and research records in laboratory books and the laboratory
 information management system (LIMS)
- Collating, organising and presenting experimental results and assistance with preparing scientific reports



- Carrying out other laboratory assays as required, and participation in the day-to-day running of the laboratory in cooperation with other researchers.
- Compliance with OH&S requirements for handling of human samples and according to Institute policies
- Compliance with privacy legislation, ethics guidelines and the legal requirements for research involving human material
- Compliance with relevant legislation and Australian standards
- Any other tasks required by the Preclinical Drug Testing Core Manager, or Senior ZERO team member



MINIMUM REQUIREMENTS

Qualifications

• Minimum BSC in a relevant scientific or medical field

Experience and requirements

- 2+ years relevant laboratory experience highly desirable
- Experience with cancer cell biology highly desirable
- Experience with general procedures involving establishment of xenograft models and *in vivo* experiments (handling, monitoring and treatments) highly desirable
- Experience with primary in vitro cell cultures highly desirable
- Experience with PC2 and WHS standards and behaviour highly desirable
- Demonstrated ability to design and conduct experiments independently as well as in a team environment
- Exhibits a high degree of professionalism and respect for others
- Advanced computer skills
- Commitment to conducting experiments involving humans, animals & GMOs under strict ethical and regulatory guidelines

KEY SKILLS

- Demonstrated initiative
- High level technical skills
- Highly developed interpersonal skills
- Excellent listening, verbal, and written communication skills
- Analytical skills
- Ability to quickly respond to situations as they arise
- Excellent attention to detail
- Flexible attitude to work and ability to work to deadlines
- Ability to maintain confidential information
- Organisational skills
- Ability to work independently and as part of a team as necessary
- Integrity is key to ensure honest and transparent interactions within the team

EXPECTED OUTPUTS

- Generate reproducible, high quality research results
- Maintenance of primary patient stocks and records
- High quality accurately labelled processed patient samples, ready in time for accurate storage of samples and the associated data
- Develop and maintain xenograft models of haematological and solid tumours for drug efficacy testing



• Develop and maintain novel primary cell culture techniques for haematological and solid tumours to provide good quality viable cell cultures to the Drug Discovery Centre Personalised medicine team for in vitro drug screening.

Children's Cancer Institute policies applicable

- Code of Conduct/Ethics
- Whistle-blowing
- Use of Electronic Resources
- 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: Personalised Medicine Program, Research Officer Departmental Structure: See Organisation Chart

Note: Reporting structure may change subject to management decisions and business requirements.

APPROVED BY

All parties below need to approve by signature and date.

Vanessa Tyrrell Personalised Medicine Program Leader Date: __/__/____ Name Research Assistant Date: _ _/_ _/_ _ _ _
