



Position Description

NAME:	TBA
JOB TITLE:	Senior Scientist
DEPARTMENT:	Personalised Medicine
REPORTS TO (TITLE):	Preclinical Drug Testing Core Manager Personalised Medicine Program Leader
LAST DATE REVIEWED:	December 2018

JOB SUMMARY

This individual will lead the development and implementation of an *in vitro* drug sensitivity testing platform for multiple childhood cancer types as part of the Zero Childhood Cancer Personalised Medicine Program. This will involve working with a large team of researchers to develop novel *in vitro* tumour models and assays, testing the correlation of drug sensitivity profiles between *in vitro* tumour models and *in vivo* xenografts, extending the current platform to include drug combination screening, directing the publication of research manuscripts and ensuring routine *in vitro* screening of patient cells as part of an ongoing national clinical trial. A further role for this individual will be to further develop a drug response prediction database, and lead the integration of core databases as part of an international consortium focused on implementing standardised *in vitro* drug sensitivity testing methods as a central platform in ongoing and future clinical trials. This position requires experience with *in vitro* cell-based screening assays, cell imaging, primary *in vitro* tumour model development and drug screening.

PRIMARY TASKS / RESPONSIBILITIES

- Lead the development of novel *in vitro* tumour models for multiple tumour types in collaboration with Preclinical Drug Testing Core team members within the Zero Childhood Cancer Program, including 3-dimensional formats, co-culture, imaging assays and cell assay miniaturisation to exploit the limited amount of tumour material received for *in vitro* drug testing
- Own and Lead the coordination of activities to be undertaken by members of the newly formed Global *in vitro* Harmonisation Consortium to achieve collectively agreed goals
- Test the correlation of the drug sensitivity profiles of patient cells in both the *in vitro* tumour models and associated *in vivo* patient-derived xenografts, to identify the *in vitro* cell assay format that best reflects the results observed *in vivo*
- Work in close partnership with the ACRF Drug Discovery Centre, a high throughput small molecule screening facility, based within Children's Cancer Institute, to develop and implement a drug combination system as part of the *in vitro* drug sensitivity testing platform
- Oversee and direct the generation of research manuscripts arising from the development and implementation of the above drug sensitivity testing platform, and work closely with Preclinical Drug Testing Core and 'Omics team members to collect relevant data required for additional manuscripts led by other team members
- Ensure the routine *in vitro* drug testing of patient cells, in collaboration with the ACRF Drug Discovery Centre, as part of the ongoing national clinical trial for personalised medicine
- Expand and maintain the *in vitro* drug sensitivity profiling database and lead the integration of this, and other associated databases, formed to test and apply functional precision medicine to improve therapeutic choices for children with cancer



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- Working closely with other researchers, and directing *in vitro* drug profiling data generation and collection, and contributing to relevant presentations and manuscripts
- Present data at internal and external research meetings and conferences
- Participate in core Children's Cancer Institute activities
- Comply with regulatory guidelines, including OGTR, ethics and institute policies

MINIMUM REQUIREMENTS

Qualifications

- Tertiary qualifications including a doctorate in relevant scientific or medical field

Experience and requirements

- More than 5 years' experience of demonstrated ability to plan and conduct experiments, following the receipt of doctorate
- Experience with biochemical and cell biology, and *in vitro* assay development
- Excellent technical and scientific understanding of drug testing methodologies in an *in vitro* setting
- Experience with assay development for drug screening
- Experience with primary cell cultures
- Experience of bioinformatic analysis or working with bioinformaticians desirable
- Demonstrated experience managing external collaborative relationships
- Demonstrated leadership potential
- Demonstrate thoroughness, strong analytical skills, and an ability to understand and interpret data from literature in a critical manner
- Demonstrate the ability to provide accurate and timely assessment, including evaluation of published literature and clinical data to provide accurate, thorough, and thoughtful clinical interpretation of research results.
- A strong ability to work in and contribute to a healthy team environment.
- Strong technical and professional written and verbal communication skills.
- Ability to multitask and prioritise activities according to a clinical need
- Ability to maintain strictly confidential information

KEY SKILLS

- Excellent verbal and written communication skills
- Highly developed interpersonal skills
- Analytical with strong attention to detail
- Ability to work autonomously and demonstrate initiative
- Team player with energy and enthusiasm
- Excellent negotiation skills

EXPECTED OUTPUTS

- Provision of *in vitro* drug sensitivity test data for patient samples in the Zero Childhood Cancer Program in a timely manner
- Collaborate effectively with multiple research teams and stakeholders in the Zero Childhood Cancer Program to assist in the generation and integration of *in vitro* drug sensitivity test data into personalised treatment recommendations



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- Advance development and utility of *in vitro* drug sensitivity testing platform with new assays and technologies, including development and implementation of a viable combination therapy screening platform in to the ZCC Personalised Medicine testing platform
- Generation of quality research data and manuscripts
- ZCC / CCI established leadership and coordination of the Global *in vitro* Harmonisation Consortium ZCC / CCI established leadership and coordination of the Global *in vitro* Harmonisation Consortium

Children's Cancer Institute policies applicable

- Code of Conduct/Ethics
- Whistle-blowing
- Use of Electronic Resources
- Workplace Health & Safety
- Appropriate Workplace Behaviour
- Privacy
- Any other policies not listed but are available on the Staff HR Information Portal (Intranet)

SERVICE STANDARDS AND GENERAL EXPECTATIONS

- Respond to phone calls and emails within 48 hours
- Read internal communications within 48 hours
- Maintain up to date personal information in HRIS system (ConnX)

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.

WORK HEALTH & SAFETY

- Must adhere to all WHS policies and procedures including reporting incidents within 24 hours
- 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 and in the WHS reporting system (Myosh)



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- 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: Professor Richard Lock, Zero Childhood Cancer Preclinical Drug Testing Core Manager

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.

Professor Richard Lock
Zero Childhood Cancer Preclinical Drug
Testing Core Manager

Date: 21 December 2018

Name
Position

Date: _ _ _ _ _

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.