



POSITION DESCRIPTION

POSITION TITLE:	Bioinformatician, Group Leader
POSITION LOCATION:	Olivia Newton-John Cancer Research Institute
EMPLOYMENT TYPE:	Full time and Fixed Term

POSITION CONTEXT:

The Olivia Newton-John Cancer Research Institute (ONJCRI) is an independent medical research institute located in Heidelberg. Our mission is to discover and develop breakthrough therapies to help people live better with cancer and defeat it. Our research laboratories sit alongside patient treatment facilities to optimise collaboration between researchers and clinicians. The integration of laboratory and clinic ensures the rapid translation of scientific discoveries into clinical trials for the development of new cancer treatments. We investigate and develop treatments for cancers of the breast, bowel, lung, melanoma, prostate, liver, gastrointestinal and brain. The ONJCRI is a global leader in the development of immunotherapies, targeted therapeutics and personalised cancer medicine and sponsors early phase clinical trials.

The ONJCRI is the successor to the global Ludwig Cancer Research organisation with a proud track record of a quarter century of collaborative clinical research programs with Austin Health. Much of ONJCRI's strong foundation is built on the Ludwig Cancer Research legacy. Moreover, through the ONJCRI's exciting partnership with La Trobe University as its School of Cancer Medicine, we play a pivotal role in training Australia's future generations of medical researchers.

Recently the Institute has grown into 5 different cancer research programs, developed a patient biobank, a genomic and single cell sequencing platform. The Institute has a growing need to have access to in-house bioinformatics capabilities for the efficient and meaningful analysis of large data sets created in house and or available from public databases. As part of the development of a bioinformatics program at ONJCRI, these preclinical and clinical data generated in the precinct represent a unique resource for further exploration. Accordingly, this position is outside of the confines of a particular laboratory, although *de novo* research activities undertaken in this position may occur via an equitable and collaborative arrangement between the laboratories.

PRIMARY RESPONSIBILITIES:

This position comprises both ***independent research*** as well as ***support-provision*** for Research Laboratories at ONJCRI on a collaborative basis.

The ***independent research*** component of the position will require the development of innovative tools for computational analysis and interpretation of complex datasets generated from a diverse range of sources. The position requires skills in leadership and management of staff, putting in place workflows, demonstrating national and international leadership in the field of bioinformatics and computational biology.

The **support-provision** component of this position will be devoted to collaborative “services” to other ONJCRI laboratories as such needs occur.

REPORTING LINES:

This position reports to the Scientific Director, and for the independent research interests also to the respective Head/s of the laboratory in which these activities are undertaken.

KEY RELATIONSHIPS:

The following key relationships that are an essential component of the position include:

Internal: Scientific Director
All Laboratory Heads
Postdoctoral Researchers and Clinician Scientists directing projects with a Bioinformatics support need

External: La Trobe Bioinformatics unit
Bioinformatics Departments of the Victorian Comprehensive Cancer Centre

MAIN ACTIVITIES:

- Establish and lead a bioinformatics program/platform with a strong focus on cancer
- Provide leadership, people management and development of the bioinformatics platform
- Promote a culture of excellence in research and bioinformatics analysis
- Develop novel tools to explore complex datasets (incl. RNA, DNA, ChIP-experiments both at bulk and single cell levels) and to visualise the results
- Lead and collaborate on applications for research grants
- Proactively communicate with other research laboratories and seek for collaborative opportunities
- Supervise and mentor students, postdocs and staff scientists
- Comply with workplace safety requirements and laboratory regulatory environment
- Maintain/upgrade solution for local analysis hardware (in conjunction with IT Dept)

TYPICAL EXPERIENCE:

- PhD in Bioinformatics, Computer Science, Physics, Statistics or other relevant discipline
- More than 5 years proven experience in bioinformatics or informatics and in development, leadership and support.

CHALLENGES:

The successful candidate requires experienced skills in various aspects of Bioinformatics and a broad set of relevant skills for the analysis of various data sets. The position requires a track record of excellent communication skills with basic researchers and clinicians with a diverse range of research interests but limited background with bioinformatics. Likewise, the position requires a great degree of independence and working effectively either alone or with individual students and/or postdocs. It is critical that this position contributes to the research output of the entire Institute and where possible and justified serves as an anchor to forge collaborations with external research groups working in translational cancer research. With the position also comes a requirement to present proposals for hardware (upgrades) that are in line with the Institute's strategic funding outlook.

QUALIFICATIONS:

A PhD degree, or comparable practical experience in a relevant scientific area is desired. Demonstrated success in a research role including the publication of significant primary research papers is mandatory.

EXPERIENCE & CAPABILITIES:

- Established track record in cancer genomics
- Strong programming (R, Perl, Python, Java), analytical and statistical skills and ability to manage and interpret data
- Experience with a range of computational analysis techniques and whole genome technologies and platforms
- Demonstrated experience in teaching and leadership (including grant applications)
- Demonstrated capacity to work in and contribute to a team project as a valued and regarded collaborator
- Demonstrated ability to manage projects and deliver in realistic time frames
- Exceptional communication skills to convey complex concepts in Bioinformatics to basic Researchers and Clinicians with limited relevant background
- Well connected within the Bioinformatics "community" in Melbourne