



Research Officer

Position title: Research Officer	Classification: Academic Level A
Division/Department: Bioinformatics Division	Work location: Parkville
Position reference:	Employment type: Contract
Remuneration range: \$81,725 - \$94,673 p/a	Further information:
Position reports to: Laboratory Head	Closing date:
Positions reporting to this one:	

Position overview

The Postdoctoral Research Fellow in the Davis Laboratory will be lead research projects in cancer therapeutics, including the analysis multi-omics and clinical data associated with drug treatments and combination therapies. The appointee will also be expected to establish and contribute to collaborative research projects investigating epithelial-mesenchymal plasticity in breast cancer and cancer metastasis more broadly and will have the opportunity to undertake some supervision of students and junior staff.

Organisational environment

The Walter and Eliza Hall Institute of Medical Research

The institute, established in 1915, houses 3 research Themes (Cancer, Healthy Ageing & Development, and Infection, Inflammation & Immunity Theme) and 2 research Centres (New Medicine & New Diagnostics and Computational Biology & Bioinformatics), containing 13 Divisions with over 80 laboratories and around 1,000 staff and students, and an annual budget of approximately \$100 million (AUD). The institute has a strong national and international reputation for performing highly influential research and for translation that leads to long term improvements in disease diagnosis and treatment. More than 100 national and international clinical trials are underway based on research undertaken at the Institute.

The institute's main laboratories are located within the Parkville precinct, a vibrant hub for life science research, education and healthcare provision. In addition, the Walter and Eliza Hall Institute Biotechnology Centre is located 30 minutes from Parkville at La Trobe University's R&D Park in Bundoora. The Biotechnology Centre features facilities for high-throughput chemical screening, medicinal chemistry, antibody production and malaria containment. The centre also functions as an incubator for the institute's biotechnology companies.

Organisational objectives

Discovery and translation

To make discoveries that shape contemporary scientific thinking, increase understanding and improve prevention, diagnosis and treatment of cancer, immune disorders and infectious diseases.

Education and training

To educate and train world class scientists and to attract, develop and retain the best and brightest workforce.

Organisational culture

To provide a vibrant and inspiring organisational culture that encourages, promotes and rewards excellence, collaboration, innovation, creativity and respect.

Engagement

To engage with our stakeholders to improve outcomes, building support and secure resources for medical research.

Sustainability

To build infrastructure, professional services and funding that sustains our research and maximises the time our scientists can spend making discoveries.

Organisational values

- Pursuit of excellence
- Integrity and mutual respect
- Collaboration and teamwork
- Creativity
- Contribution to society
- Accountability

Key responsibilities

- Analysis and integration of multi-omics data associated with responses to drugs and drug combinations in cell lines models of disease
- Undertake collaborative research projects which examine the roles of epithelial mesenchymal plasticity and cellular differentiation programs in breast cancer progression and metastasis
- Prepare reports and communicate effectively with collaborators project stakeholders
- Work effectively with other lab members on joint projects.
- Prepare manuscripts for publication in refereed journals.
- Present research findings in seminars and at national and international conferences.
- Produce and maintain high quality software through software repositories like GitHub and ensure that methods meet emerging standards for reproducibility and re-computability
- Help prepare applications for research funding.
- Manage and supervise RHD students

Key selection criteria

Knowledge and skills

A PhD in a relevant discipline such as mathematics, statistics, computer science, computational biology or genetics.

Strong programming and data analysis skills using open-source, redistributable languages such as python or R
A track record in the computational analysis and systems biology, demonstrated through publications, in areas including:

- analysis and integration of multiple heterogeneous datasets in the context of cancer biology, including drug response data.
- analysis of signalling networks using a variety data, such as imaging data, transcriptomics and/or phosphoprotein data.
- development of computational methods for analysis of large and complex datasets
- generation of computational models that capture the regulatory behaviour of biological systems, built from heterogeneous data, such as genomic and epigenomic data, transcriptomic data, protein, metabolite and molecular interaction data.

A track record in the computational analysis and systems biology of cancer, demonstrated through publications.

Excellent time management and stakeholder management skills, and highly developed written and verbal communication skills.

Desirable criteria

- Experience with a variety of analytical software, such as Matlab, R, or Mathematica, and well developed data visualisation skills
- An advanced understanding of epithelial-mesenchymal plasticity in cancer progression, and a detailed knowledge of the role of signalling, signalling pathways regulatory networks and molecular interactions in cancer.
- Experience in the supervision of research higher degree students
- Evidence of an emerging national profile
- Existing collaborations with cancer research laboratories across Australia

Occupational Health and Safety

- Comply with institute Health and Safety Policies and Procedures.
- Take reasonable care of own safety and the safety of others around.
- Use Personal Protective Equipment (PPE) and safety devices appropriately.
- Report all hazards, incidents and injuries.
- Attend training programs as documented in individual training needs matrices.

How and where to apply

Applicants are encouraged to submit a cover letter, current resume and three referees to jobapplications@wehi.edu.au quoting the position number.

Please address each of the key selection criteria separately in a written document.

Diversity

The Walter and Eliza Hall Institute is an Equal Opportunity Employer.

The institute encourages and welcomes interest from Aboriginal and Torres Strait Islanders for roles within the institute.

Privacy notification

The collection and handling of declarations and personal information relevant to your employment will be consistent with the requirements of the *Privacy Act 1988*.