

R&D Callaghan Innovation Experience Intern: Pacific Edge Limited – Single Cell

Job and Person Specification

Job Description

Introduction

Pacific Edge wishes to appoint a highly motivated individual who has completed either the 3rd or 4th year of a qualification in a Life Sciences field leading to the BSc degree.

The successful applicant will join an experienced team over summer (November 2018 – February 2019) for a 10-week contract and play a key role in optimising a key technical step of de-clumping cells for downstream detection of biomarkers in the cells that will lead into a molecular cancer diagnostics test. The appointee will conduct a series of studies around improving cell de-clumping of the samples to further improve clinical outcomes for the bladder cancer detection assay, *Cxbladder*. The successful applicant will be based in a purpose-designed laboratory at The Centre for Innovation at the University of Otago. The successful applicant will contribute towards the development and validation of improved methods utilised in diagnosing cancer.

The commence date is negotiable and the remuneration is \$18/hr.

Prime Functions

1. Optimise methodology to de-clump cells in biological fluids that will enable downstream compartmentalisation of cells and quantification of RNA from cells in the biological samples.
2. Work, as part of a small, dedicated team, aiding in the development of commercial outcomes based on the RNA detection of novel biomarkers.
3. Participate in the development and validation of new methods for diagnostic and prognostic products being established in the laboratory.

Main Objectives

1. Extend and improve the current gene expression detection pipeline.
2. Critically evaluate the performance of novel techniques and systems.
3. Contribute to the development of robust biomarker based cancer detection assays.

Skills Required

- Experience in molecular biology, biochemistry, microbiology or a related field.
- Experience working in a laboratory, ideally a Molecular Biology laboratory.
- Experience in either working with single cells or RNA/DNA extraction and qPCR will be an advantage.

Key Task

Conduct a series of experiments designed to critically examine and optimise RNA detection from cells in biological samples.

Key Relationships

1. Research and Development science staff. The successful applicant will work with R&D staff developing improvements to methods and techniques for detection of gene expression.
2. Technical Supervisor of the Diagnostic laboratory.
3. The successful applicant will report to the Research Scientist.

Expected Outcomes

1. Novel and innovative data that will result in significantly improved products for cancer detection.
2. An opportunity for a student to spend a period of time in a commercial science environment learning and contributing to important projects.

Person Specification

1. Completion of or working towards a graduate qualification in a relevant science field from a New Zealand University.
2. Experience working in a Molecular Biology laboratory.
3. NZ citizenship or current NZ residency or work permit.
4. An organized and systematic approach to tasks.
5. A positive team focused attitude and the desire to work with and support others and the Company's objectives.
6. Ability to meet Company standards by working with a disciplined, confidential and professional value base and conforming to agreed codes of professional practice.
7. A hands-on knowledge in expression-based technology systems such as qPCR is preferred but not essential.
8. Applicants should ideally have a background in cell biology, Genetics, Molecular Biology, Microbiology, Biochemistry, Chemistry or a similarly related field.

Closing date 30 September - unless filled previously

To apply

Send your CV & Cover Letter to:

Emily Richards
Recruitment Manager
Pacific Edge Limited
email: recruitment@pelnz.com