

# R&D Callaghan Innovation Experience Intern: Pacific Edge Limited – Product Improvement

## Job and Person Specification

### Job Description

#### Introduction

Pacific Edge wishes to appoint a highly motivated individual who has completed either the 3<sup>rd</sup> or 4<sup>th</sup> year of a qualification in a Life Sciences field leading to a BSc, BSc honours or MSc 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 perturbing the current RNA extraction process used in a molecular cancer diagnostic test. The appointee will conduct a series of studies around improving RNA-extraction of samples to further improve clinical outcomes for bladder cancer detection, 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. Interfere/perturb specific steps in the current extraction process to determine its effect on the extraction efficiency
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

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- 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 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 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](mailto:recruitment@pelnz.com)