

Work Based Learning (WBL) Placement Description

Host Details

Host Organisation	VivaZome Therapeutics Pty Ltd
Placement Title	Research Assistant
Placement Location	Onsite
Address (if onsite)	Either LIMS1, Level 4, Laboratory or BioInnovation Hub, Laboratories 304 & 305, level 3, Jenny Graves Building
Primary Supervisor Name	Ella Johnston
Position Title	Research Scientist
Host Organisation Website	www.vivazome.com

Host Organisation Background:

VivaZome Therapeutics is a biotechnology company focused on the development and commercialisation of exosome-based therapeutics. Exosomes are small vesicles secreted by cells that play a crucial role in intercellular communication. VivaZome's proprietary technology enables the isolation, purification and customisation of exosomes for therapeutic applications with a focus on diseases associated with neuro-inflammation including age-related macular degeneration and traumatic brain injury.

Placement Details

Placement Semester/Term	Semester 2 2024
Start Date	29 July 2024
End Date	25 October 2024
Days/hours per week	
Hours (total)	100 hours
Placement Type	Unpaid

The host and successful student will have an opportunity to negotiate placement start and end dates, as well as days of the week that align to the Term or Semester dates that the student is enrolled in prior to commencing the placement.

Desired Course Discipline/Background

Preferred degree/areas of study: Bachelor of Biomedicine students and students in the Microbiology major (B Science, B Biological Science, etc)

Key Duties and Responsibilities

Project Description:

This project will focus on the development of analytical test methods for the characterisation of purified extracellular vesicles (PEVs) from VivaZome Therapeutics (VZT) proprietary cell lines, produced and isolated using the VZT manufacturing process. This project will include the development of assays such as fluorescent nanoparticle tracking analysis (F-NTA) using ZetaView (Particle Metrix) to quantitate PEVs and their surface-associated markers, quantitative real-time PCR (qRT-PCR) to quantify the miRNA cargo packaged within PEVs, and Western Immunoblot to characterise luminal and surface markers within PEVs. These analytical assays will provide valuable information regarding the characteristics of VZT PEVs from proprietary cell lines and will contribute to their development as therapeutics for age-related macular degeneration and traumatic brain injury.

The student will:

- Assist research scientists in planning and executing experiments, including sample preparation in alignment with procedures and protocol.
- Collect and record data.

- Review academic literature.
- Create presentations based off key results.

Selection Criteria

Essential:

- VivaZome is a small team and requires someone who can work as a team and independently
- Experience in analytical techniques
- Good verbal and communication skills
- Good writing and documentation requirements:
 - Ability to maintain excellent records including use of electronic technology e/g. LabArchives.
 - Prepare detailed experimental procedures and reports.
 - Prepare data presentations as required.
- Good organisational and time management skills
- Attention to detail

Desired:

- Strong interest in the cell and gene therapy sector and product manufacture and analysis

Pre-Placement Compliance Checks & Requirements

- Police Check
- Working With Children Check (WWCC)
- Other (Please Specify)
- None

Work Based Learning (WBL) – Subject Information and Requirements

Subject Code	LTU3IND
Subject Information	
Subject Prerequisites	<ul style="list-style-type: none"> • Completed 120 credit points of your degree • Have 1 elective space in your course plan

How to Apply

Application Deadline: 22 May 2024

Application Instructions:

Please provide:

- CV/Resume
- Cover letter. Please address why you are interested in this placement opportunity.
- Apply through the following link: [Industry Placement Application Form, Careers and Opportunities, La Trobe University](#)

For help with your cover letter and resume - [Resumes and job applications, Careers and Opportunities, LTU](#)

Thank you for considering a Work Based Learning Placement!