

**UNIVERSITY OF OTAGO  
ŌTĀKOU WHAKAIHU WAKA**

**JOB DESCRIPTION**

<b>ROLE TITLE:</b>	Teaching Laboratory Technician
<b>DEPARTMENT:</b>	Department of Physiology, Te Tari Mātai Whaiaroaro
<b>SCHOOL / DIVISION:</b>	School of Biomedical Sciences, Health Sciences Te Kura Mātai Rongoā-Koiora
<b>REPORTS TO:</b>	Sue Deans, Technical Manager
<b>DIRECT REPORTS (FTE):</b>	N/A. However, our Laboratory Technicians do instruct our Technical Laboratory Assistants on a daily basis.
<b>INDIRECT REPORTS (FTE):</b>	N/A

**1. PRIMARY PURPOSE OF THE ROLE:**

Responsible for the preparation, setting up, servicing and technical support/assistance for all of the Department of Physiology's undergraduate teaching laboratories – includes 100, 200 and 300-level practical classes. Undergraduate papers taught include PHSL101, NEUR201, PHSL232, PHSL233, PHSL251, PHTY251, MELS251, DENT262, MICN201, MICN301, PHSL341, BMSC321, PHSL344, PHSL345 and NEUR303, typically up to 1900 students.

**2. ACCOUNTABILITIES:**

- To provide effective and efficient support to the 13 Physiology undergraduate teaching laboratory rooms (as directed by the Technical Manager) while achieving the highest possible standard of laboratory presentation and learning outcomes for our students.
- To provide technical support to staff and students of the Department while complying with University Health and Safety regulations.
- When time allows, provide assistance in research laboratories, to offer and gain more skills beneficial to the Department.

Specific tasks include:

- Setting up technical apparatus and computers (e.g. PowerLab stations, stimulators, transducers, organ baths, exercise bikes and spirometers), using them accurately, carefully and safely.
- Accurate preparation of various chemical and biological solutions.
- Performing duties such as using centrifuges for blood analysis, obtaining sample results for students using gas analyzers and obtaining volumes of respiratory collection bags.
- Collection of animals and blood samples to be used in laboratory classes.
- Handling, anaesthetising and euthanising of experimental animals. (Animal training modules must first be achieved to carry out this work).
- Dissection of tissue from animals (including rats and mice) and mounting of the tissue on various types of organ baths.
- Correct disposal of carcasses from laboratories.
- Cleaning up after laboratories and dismantling equipment; ensuring computer stations are clean and operational.

- Liaise (in advance) with the academic staff responsible for practical sessions, to help ensure both they and the other technical staff are adequately prepared.
- Responsible for administrative aspects of some undergraduate classes, including demonstrator's meetings and accurate recording of student attendance for the awarding of terms for these courses.
- Provide practical skills training for summer and post graduate students before they start working in research laboratories to ensure correct use and basic knowledge of standard laboratory equipment and techniques e.g. pH meters, balances and pipetting.
- Dealing with student enquiries for all courses.
- Assisting with examination procedures such as invigilating, collating, sorting and dividing of exam scripts for marking and checking marks in strict confidence.
- Become competent in using computer programs used in teaching, i.e. Chart and in administration i.e. MS Excel and MS Word.
- Routine maintenance of the laboratories including general housekeeping, stocktaking and equipment maintenance.
- Liaise with purchasing staff with regard to orders required for teaching laboratories.
- Ensure familiarity with the equipment used within the department.
- Ensure that the teaching equipment is functional at the start of the laboratory session, and be available to trouble shoot potential issues during the practical sessions.
- Ensure the correct storage of laboratory equipment.
- Ensure that safe work practises are adhered to by all users of the teaching laboratories and complete PC2 training within the Department.
- Ensure the correct disposal of all biohazardous and chemical waste from the teaching laboratories.
- Maintain an awareness of possible improvements to the teaching laboratories.
- Have input into decisions regarding equipment purchases for the teaching laboratories.
- Maintain a list/database of materials, equipment and methods used during the teaching laboratories and ensure the classes are adequately stocked by ordering equipment and consumables when needed.
- Ensure that technical knowledge is up to date and relevant to the classes being taught by closely working with the academic teaching staff and seeking training for new techniques as required.
- Assist the Technical Manager where required/when requested.
- Responsible for booking all Physiology laboratory rooms and meeting spaces for teaching and departmental use.
- Knowledge of people, locations, and general processes within the department to assist with student/staff/public enquires during work hours.
- Ability to understand and request custom made equipment for teaching practicals by our internal EMTECH workshop when required.
- Liaise with teaching fellows to provide practical sessions for outreach opportunities outside of semester times e.g. Hands on Science, OUASSA and High School groups.
- Conduct electrical testing of teaching and research 240 Volt lab devices in line with AS/NZS 3760. To be responsible for liaison with lab users prior to testing, keeping of testing records, and regular maintenance of testing unit. Electrical testing training will need to be completed before this work may be carried out.
- Monitor and maintain water pre-filtration and polishing systems for the department, including ordering and replacement of consumables, and arranging repairs.

### **3. KEY RELATIONSHIPS:**

#### Directly responsible to:

The Technical Manager in charge of the teaching laboratories.

#### Internal:

- All other Departmental technical staff, both teaching (4) and research, also technical assistants (1).
- Purchasing supply chain staff (5), Client Service administrators (3), academic staff (40), teaching fellows (5) and professional practice fellows (2) and postgraduate and undergraduate Physiology students.
- Physiology Department demonstrators.
- Staff of EMTECH – Mechanical Engineer.
- Staff from other University Departments.

#### External:

- Scientific company representatives.
- Companies/specialists that carry out maintenance on teaching equipment.

### **4. QUALIFICATIONS & EXPERIENCE:**

#### Essential:

- Holder of a BSc(Hons)(Physiology), or a NZ Certificate in Science, or an equivalent qualification.
- Basic first aid training.

#### Preferred:

- Experience within a teaching institution and teaching laboratories.

### **5. TECHNICAL SKILLS & KNOWLEDGE:**

#### Essential:

- Excellent laboratory skills, preferably with experience in similar Physiology fields and with the ability to operate in a safe manner.
- Excellent computer skills both Macintosh and PC computers.
- Personal skills include:
  - Ability to manage own time and to forward plan.
  - Organisational skills and the ability to prioritise tasks to meet the teaching timetable.
  - Flexibility to alter priorities as the need arises.
  - Ability to work under pressure and at the same time maintain amicable relationships with other staff.
  - Ability to interact with staff and students of differing backgrounds.
  - Excellent communication and people skills.
  - Problem solving abilities.
  - Ability to work either within a team or as an individual without close supervision.
- Be able to lift/carry laboratory equipment in a safe manner either by yourself or with others.
- Be attentive to detail.

## **6. SPECIAL REQUIREMENTS:**

Able to work during semester time with limited leave opportunities.

## **7. DIRECT BUDGET ACCOUNTABILITY:**

Consumables for the teaching laboratories up to the value of \$500 with consultation with Technical manager to ensure funds are available.

## **8. MĀORI STRATEGIC FRAMEWORK:**

Act in a manner consistent with the principles and implications, as well as the University's commitment to the Treaty as articulated in the Māori Strategic Framework.

## **9. PACIFIC STRATEGIC FRAMEWORK:**

Act in a manner consistent with the strategies and goals contained in the University's Pacific Strategic Framework, role-modelling and promoting Pacific values, equity and diversity principles and cultural safety practices.

## **10. HEALTH & SAFETY:**

Act and work in a manner compliant with current health and safety at work legislation and University procedures, frameworks and guidelines. Role model safe behaviour and practices, share the responsibility to prevent harm and contribute to a safe campus and work environment, including raising workplace health and safety concerns for self, students, visitors and other staff.

## **11. SUSTAINABILITY:**

Act in a manner consistent with the University's sustainability commitments; role-modelling sustainable practices, with a particular emphasis on minimising the environmental impact of day-to-day activities.