Training

A medical laboratory scientist has to complete a four year Bachelor of Medical Laboratory Science. The course can be taken at either

- Auckland University of Technology,
- University of Otago

In addition to a degree, a medical laboratory scientist must also:

- work for 6 months under supervision
- be registered with the Medical Sciences
 Council of New Zealand
- have an Annual Practising Certificate.

Subjects that will help most are English, biology, chemistry and maths with statistics. Entry requirements:

- AUT requires University Entrance with biology, chemistry and statistics.
- Otago University students apply for entry into 2nd year from the Health Science First Year.

Part of the training involves placements in medical laboratories in NZ or Australia. Check the institution websites for up-to-date information.

Personal Qualities

Medical laboratory scientists deal with many samples each day. They need to be:

- careful and methodical
- accurate
- able to work quickly
- cautious about safety
- enquiring and adaptable
- problem solvers
- able to work under pressure
- able to cope with samples, which may be unpleasant

Medical laboratory scientists need good eyesight (with or without glasses) and must have normal colour vision.

Information collated by NZIRH Where to go for more information: <u>www.nzimls.org.nz</u> <u>www.careers.govt.nz</u> <u>www.kiaorahauora.co.nz</u>

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Medical Laboratory Scientist





Medical Laboratory Scientist

Medical laboratory scientists work with pathologists and carry out laboratory analyses on blood, tissues and other samples taken from patients. They specialise in the following disciplines:

- **Clinical Biochemistry**
 - analysis of body samples (blood, urine, faeces,
- tissue) for diseases e.g. diabetes or kidney failure.
- Clinical Immunology
 - test for diseases involving the body's immune system, such as HIV infection or for allergies.
- Cytogenetics
 - investigate genetic diseases.

Haematology

analysis of blood samples for conditions such as anaemia or diseases such as cancer.

Histology

preparation of tissue samples for a pathologist to determine diseases or abnormalities.

Medical Cytology

test cell samples for cancer and other diseases. Medical Microbiology

- detect, cultivate and test for bacteria and fungi. Transfusion Science
 - prepare blood and blood products for transfusion.

What do they do?

Medical laboratory scientists may:

- analyse blood, tissue and urine samples from patients
- get samples ready for a pathologist
- evaluate results from analyses
- · send test results to hospitals and doctors
- use specialized laboratory equipment
- maintain quality assurance and safety standards
- supervise staff, like technicians
- care for medical equipment
- research and develop new tests and equipment



Where do they work?

Most medical laboratory scientists work in public hospital laboratories. Others work in:

- private diagnostic labs or hospitals
- university research labs
- chemical and pharmaceutical companies, in research and development.

Working in a hospital

In a hospital laboratory setting, many of the laboratory staff move around the different areas e.g. haematology, biochemistry, histology. New graduates mainly carry out analyses to support clinical diagnosis and health screening. With experience, promotion to positions with more responsibility within these laboratories is likely.

Medical laboratory scientists working in hospitals do shift work and may be required to work at night or during the weekend in an emergency.