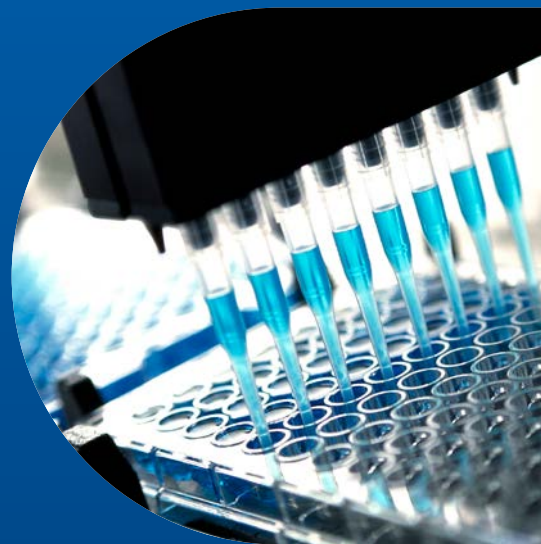


Mātai Taka Rongoā Undergraduate Pharmacology



Pharmacology is about the study of drugs, examining how they work and how they are processed by the body.

What you will learn

Pharmacology is the science at the heart of the discovery and testing of potential therapies through the drug development process. It underpins the safe and effective use of medicines and is critical for making clinical decisions.

The core concepts of pharmacology broadly fit into two groups, pharmacodynamics (what a drug does to the body) and pharmacokinetics (what the body does to a drug).

You will learn about:

- › Targets within the body such as receptors, enzymes and ion channels.
- › How chemical structure influences the selective interaction with these targets.
- › The development of new medicines for disease-relevant drug targets and the selection of an appropriate medicine to treat a disease based on pathology.
- › Absorption and distribution: how much of a drug reaches its target, and how long it remains there before it is removed through metabolism and excretion.
- › Predicting and preventing adverse effects early in the drug development process.
- › The discovery, testing and regulatory processes required to bring a new medicine to the market.

Interested in pursuing entry to a clinical programme?

Pharmacology is one of six Bachelor of Science (BSc) health majors that provide clear pathways into the following year two clinical health programmes:

- › Bachelor of Medical Imaging (Honours)
- › Bachelor of Medicine and Bachelor of Surgery
- › Bachelor of Optometry
- › Bachelor of Pharmacy

Students intending to apply for these programmes must take specific courses to be eligible for clinical selection. GPA requirements also apply. Please consult the relevant year two clinical programmes on the University of Auckland website for detailed information.



To find out more, visit

auckland.ac.nz/sciencehealthmajors



Waipapa
Taumata Rau
**University
of Auckland**



Career opportunities

Our graduates work in:

- › **Clinical research:** coordinating, implementing and analysing data from clinical trials that test new medicines in patients.
- › **Academia:** Basic research and research-led teaching in universities.
- › **Laboratories:** Quality and safety testing of pharmaceutical products, testing patient samples in clinical trials.
- › **The pharmaceutical industry:** Developing, producing, testing and marketing pharmaceuticals.
- › **Regulatory affairs:** Ensuring medicines meet safety, quality and performance standards, approving new medicines.

Programme highlights

- › Gain technical laboratory skills, learn to develop and follow protocols and generate data that is accurate, reliable and reproducible.
- › Interact with a variety of other disciplines such as biological sciences, physiology, pathology, medicinal chemistry and statistics.
- › Understand how models for exploring the activity of drugs translate to what happens in real people.
- › Learn through clinically relevant and case-study based real-world examples, e.g. designing a clinical trial.
- › Participate in discussion-based workshops to generate, interpret and present data, with opportunities to develop oral presentation and teamwork skills.



Find out more about how your degree will be structured and what courses you need to take at

auckland.ac.nz/pharmacology

Applications close on 8 December.



"One of the aspects I really appreciated about studying pharmacology was the flexibility of the programme. While pharmacology was my major, I was able to take a range of complementary science papers alongside my core courses, such as neuroscience and microbiology. This allowed me to broaden my knowledge and gain exposure to other disciplines that strengthened my overall understanding of pharmacology, which is now relevant in my day-to-day work."

Sophie Stanimiroff
BSc Pharmacology
Clinical Trial Coordinator, ICON Strategic Solutions, Providing Services to MSD

Kuhua ki tō mātou hāpori, ā, Kimihia tōu Pūtaiao.
Join our community and find your Science.



Disclaimer: The information in this document is a general guide only for students and subject to alteration. All students enrolling at the University of Auckland must consult its official Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies. [2026]

Have any questions?
Contact the Student Hub

auckland.ac.nz/student-hubs