

WHERE CAN I FIND A JOB AS A PHARMACOLOGIST?

A major in Pharmacology offers much versatility concerning future career options. Many of our graduates have found work in the following settings:

- The pharmaceutical and biotechnology industries
- Hospital or university-based research laboratories
- Federal or State Government health regulatory agencies

Others use a major in Pharmacology as a springboard for specialisation in other disciplines, such as dietetics, pharmacy, nursing, medicine, teaching, law, journalism, or physiotherapy.

MORE INFORMATION?

You might find our Discipline website helpful.

<http://www.health.adelaide.edu.au/pharmacology/>

If you have specific questions about our subjects for Bachelor of Health Science or Bachelor of Science, feel free to contact :

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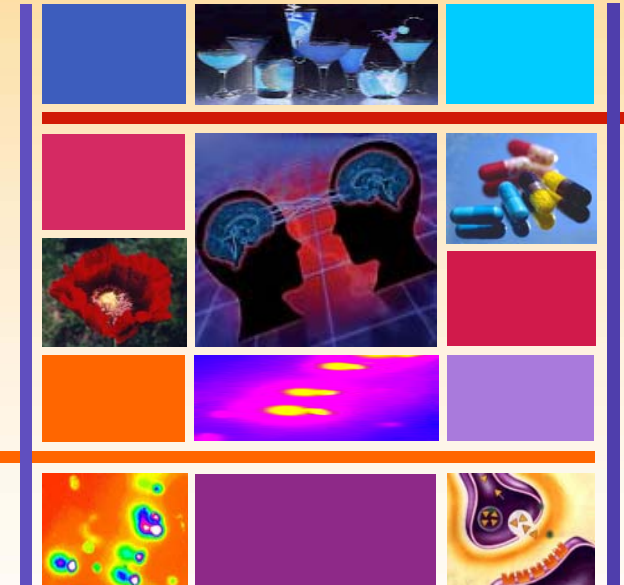
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FACULTY OF HEALTH SCIENCES
SCHOOL OF MEDICAL SCIENCES
DISCIPLINE OF PHARMACOLOGY
<http://www.health.adelaide.edu.au/pharmacology/>

PHARMACOLOGY

at
THE UNIVERSITY OF ADELAIDE



*Preparing You for an Exciting Twenty-First Century
Career in the Expanding Biotechnology and
Pharmaceutical Industries!*

MODERN PHARMACOLOGY

Pharmacology is the branch of science that studies *the effects of foreign substances on the body*. It has a long history, since drugs of one sort or another have been used for treating disease in humans for over 2000 years.

In the past, drug use was often, and at times still is, based on considerable ignorance. Drugs were used without much knowledge of the biology of the disease, or of how they acted within the body.

Modern pharmacology seeks to understand the mechanisms whereby drugs produce their effects. Such knowledge enables the best use of drugs in patients, and helps us make better drugs.

PHARMACOLOGY—HOW DO YOU STUDY IT?

Reflecting the rapid growth of the medicines and biotechnology sector, the Discipline of Pharmacology has greatly expanded the teaching of pharmacology within the Bachelor of Health Science (BHlthSc) and Science (BSc). You can start studying Pharmacology in the second year and continue to the third year gaining a major in Pharmacology. Pharmacology is also taught as part of the Nursing and Pharmaceutical Engineering programs.

WHAT WILL I LEARN?

You will learn fundamental concepts that are important in understanding how drugs produce their effects. A broad range of drugs in current use will be studied in detail, including anti-inflammatories, analgesics, chemotherapy agents, antibiotics, brain depressants and

stimulants. You will learn how these drugs can be used to treat diseases with minimal side effects. We provide you with a range of practical skills that are used in modern pharmacology research, both in *laboratory and clinical settings*.

SECOND YEAR COURSES

Drugs, Chemicals and Health (Semester 1)

This course introduces students to basic pharmacological concepts and principles needed to understand how medicines produce their effects in the body. You are also introduced to a select range of drug classes in current use.

Drugs, Chemicals and the Environment (Semester 2)

Drugs and other chemicals sometimes produce harmful effects. This course will provide an appreciation for potential negative health effects accompanying human exposure to foreign and naturally occurring chemicals. This course helps you understand why toxicity can occur.

THIRD YEAR COURSES

Pharmacology A (Semester 1)

You will learn how new medicines are discovered and tested for effectiveness using powerful modern technologies. This course will provide you with a solid theoretical knowledge needed to understand how medicines influence body functions and introduce you to a wide range of laboratory skills required to investigate effects of drugs on the body.

THIRD YEAR COURSES (CONT)

Pharmacology B (Semester 2)

You will learn how new medicines are tested for safety and effectiveness in humans and then approved for use. This course focuses on what happens to a drug after it enters the body and how this influences its effectiveness. You will also gain research skills needed to evaluate the effects of drugs at molecular, cellular and the whole body levels.

STUDYING OTHER SUBJECTS WITH PHARMACOLOGY?

The human body is very complex and drugs affect it in subtle ways. It can help to have some background in the biological sciences. Knowledge of biochemistry, physiology, chemistry, anatomy or pathology can be very useful.

Also, since drug use has a significant social impact, combining pharmacology with the study of public health or psychology is a useful option.

FURTHER STUDY?

After completing the BHlthSc or BSc course, students with an interest in pharmacology often choose an optional 4th year of study (i.e. Honours year). Master & Doctoral programs in pharmacology are also available .