School of
Biomedical Sciences

B210: BSc Pharmacology

What is Pharmacology?
Pharmacology is the design & study of drugs, how they exert their effect and how the body interacts with such substances.

Have you ever wondered?...
- Why some drugs are given as an injection but others are a tablet?
- How someone worked out the drug dosage on the side of the packet?
- Why some drugs are more toxic than others?
- Why any drugs are harmful if they are supposed to help treat patients?

Pharmacology at Newcastle supports students in exploring these questions and helps to develop an understanding of how drug chemistry changes in health and disease.

Personalised Medicine
Professor Ann Daly

Some drugs occasionally cause unwanted side effects in a small number of patients. Can we predict which patients are at risk of side effects, by testing their genetic profile, and offer a personally tailored treatment?
Prof. Daly and her team are part of an international project trying to find the answer to this important question. Pharmacogenetics is the study of how genetic profile can influence the effects drugs have on an organism. In 2017 Prof. Daly became the first female recipient of the International Society for the Study of Xenobiotics (ISSX) European Scientific Achievement Award for her work in this field.

Adam Skeen
Pharmacology graduate

My time at Newcastle has afforded me so many excellent opportunities and opened many doors. I was awarded a Wellcome Trust Vacation Scholarship to carry out an 8-week independent project in the Institute of Neuroscience researching treatments of mitochondrial epilepsy. I was also able to study Mandarin through the ‘University Wide Language Programme’ which eventually led me to gain a scholarship to spend 5 months studying in China. I have no reservation in saying studying at Newcastle has provided me with highly sought after skills and prepared me for the future.

3 Year programme
Extensive lab-based teaching using in vitro and in vivo techniques

Detailed subject learning in areas such as genomics, neuropharmacology, toxicology and carcinogenesis.

Final year research projects in one of seven world-class faculty research institutes.

Course information