



# School of Biomolecular and Biomedical Science

- Biochemistry and Molecular Biology
- Genetics
- Microbiology
- Neuroscience
- Pharmacology



Prof Cormac Murphy  
Head of School



Prof Geraldine Butler  
Head of Teaching and Learning

If choose Pharmacology and Neuroscience, must choose a third that is NOT Physiology



# Consider alternatives



## Interested in Pharmacology?

Consider **Biochemistry**: drug structure, design and application

Consider **Genetics**: genomics and pharmacogenomics, cancer genetics



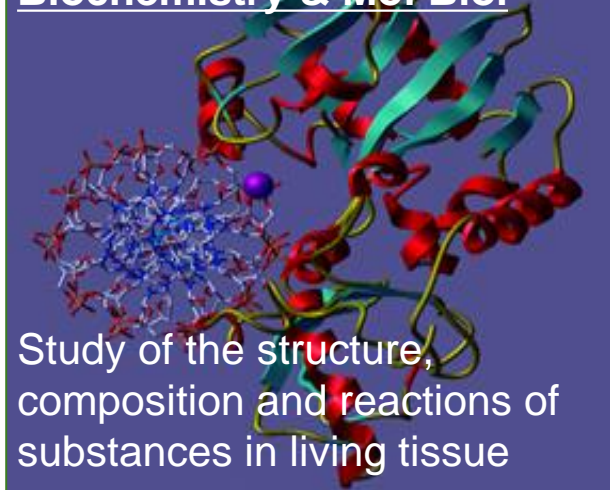
## Interested in Neuroscience?

Consider **Genetics**: genetic basis of behaviour and disease

Consider **Biochemistry**: drug design (e.g. for Alzheimer's, Parkinsons etc).

# What will you study?

## Biochemistry & Mol Biol



Study of the structure, composition and reactions of substances in living tissue

## Genetics



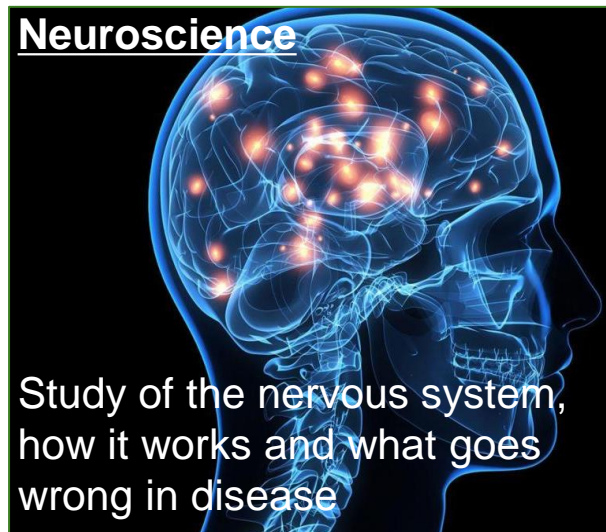
Study of genes, genetic variation and inheritance in living organisms

## Microbiology



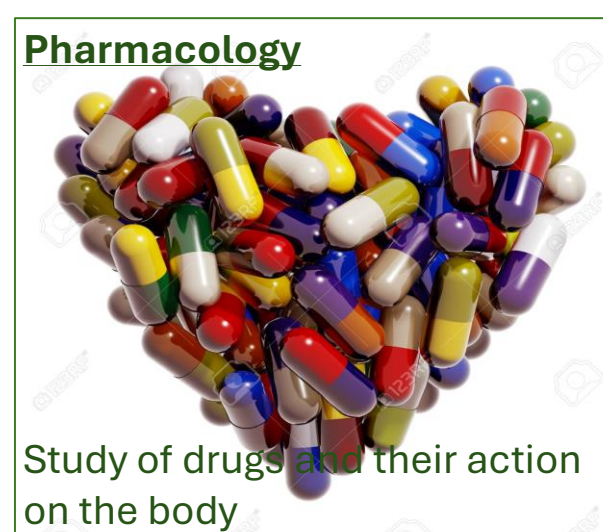
Study of microorganisms in the environment, in health and disease

## Neuroscience



Study of the nervous system, how it works and what goes wrong in disease

## Pharmacology



Study of drugs and their action on the body



# Learning opportunities: two undergraduate research modules

**Undergraduate Genetics and Microbiology students isolate and name new yeast species from soil**



## The New York Times

### Before Beer Became Lager, a Microbe Made a Mysterious Journey

Scientists found a relative of a parent of lager yeast in soil on an Irish university's campus, which could help to track how it ended up in Bavaria.

## First European discovery of a lager yeast parent by UCD scientists

Science & technology | Beer

A find by a student in Ireland plugs a gap in the history of lager

But the trail still leads back to Patagonia



The Economist

Open to: Genetics, Microbiology and Biochemistry

THE IRISH Sun



News > Irish News

**BLACK AND GOLD** Ireland's secret lager link revealed as Dublin boffins make 'amazing discovery' and plot next move



DAAD

RIS  
Deutsche  
German

MCC

UCD  
DUBLIN

Summer research opportunities  
and Erasmus/Exchange  
programmes (Stage 3)

Scholars Program



An Undergraduate  
Summer Research  
Program in Science  
and Biotechnology

The Teva logo, featuring the word "teva" in a lowercase, sans-serif font with a green leaf-like graphic above the 'v'.The Bristol Myers Squibb logo, featuring a purple icon of three vertical bars of increasing height, followed by the text "Bristol Myers Squibb" in a purple, sans-serif font.The logo for Georg-August-Universität Göttingen, featuring a stylized "GA" monogram in white on a dark blue background, followed by the text "GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN" in white, uppercase, sans-serif font.

UNIVERSITY OF  
COPENHAGEN

Stage 4 research/internship opportunities

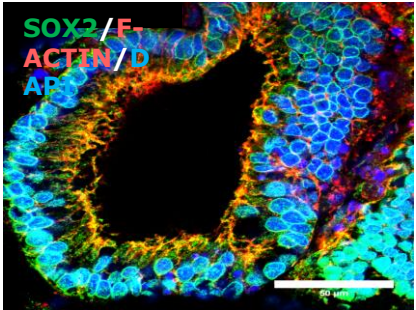
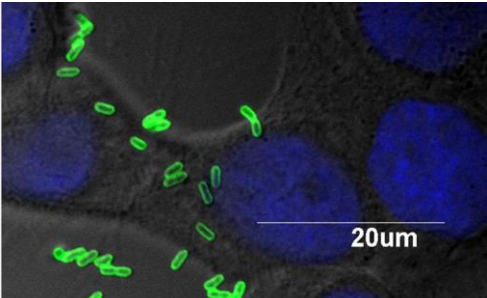


**A revolution in preeclampsia care**



# Research in SBBS

Disease modelling (cystic fibrosis, blindness, cancer biology)  
 Water quality and human/animal health  
 Climate change: zero carbon  
 Diagnosis: Oncomark and AI Premie  
 Genomics, epidemiology, infectious disease and evolution





# Opportunities once you have a Biomedical Science degree

## Industry

*Examples:*

- *Biotechnology companies*
- *Pharmaceutical companies*
- *Genomics companies*

## Science Communication

*Examples:*

- *Scientific publications*
- *Mainstream journalism*
- *Science-medical interface*

## Clinical Research

*Examples:*

- *Hospital laboratories*
- *Forensic science labs*
- *Drug development research*

## Scientific Advisory

*Examples:*

- *Environmental Protection Agency*
- *Not-for-profits*
- *Drug regulatory bodies*

## Research regulation

*Examples:*

- *Biological Patents*
- *Clinical trial consultancy*
- *Toxicology assessment*

## Graduate studies

*Examples:*

- *M.Sc.*
- *Ph.D.*
- *Additional professional qualifications*

## Useful skillset for non-research careers

- *Advanced learning*
- *Problem solving*
- *Presentation of research findings*
- *Experience with both team work and independent research*