Bournemouth University

BSc (Hons) Biomedical Science
BSc (Hons) Medical Sciences

#belongatbu @BUBioMed

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Teaching Team

Biomedical Science

Medical Science

Course options and careers

Bournemouth University

Bournemouth University

EcoCampus Platinum

Environmental Management System. The EcoCampus award for the phased implementation of an

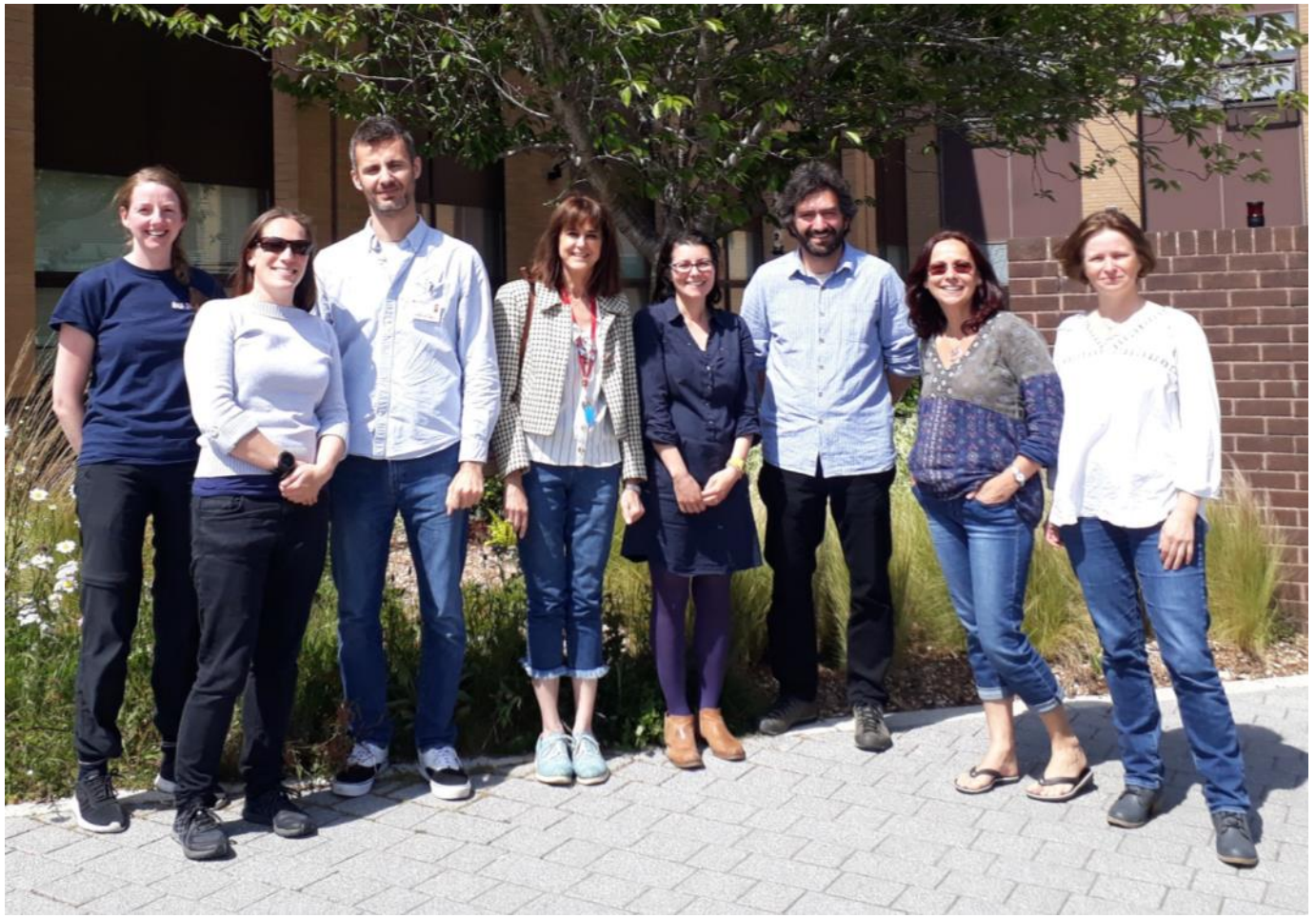
Athena SWAN Bronze Award

We are tackling gender inequality in higher education.

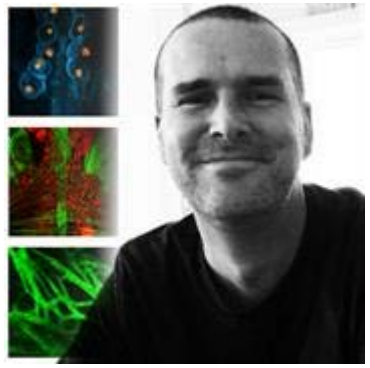
TEF Silver

Department Athena SWAN Bronze award

- Athena SWAN recognises good practices in the advancement of gender equality
- Our self-assessment team and action plan continue to improve our practices



Research and Teaching



Dr Paul Hartley – Principal Academic functional Genetics

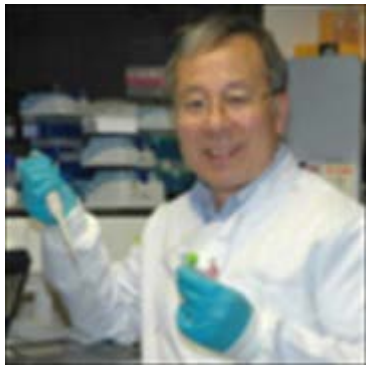
Prof. Ahmed Khattab – Professor of Biomedical and Clinical Research

Doctor Elpida Fragouli Lecturer in Biomedical Sciences

Dr Yuataka Matsubayashi Lecturer Advanced Systems Biology

Dr Sarah Buchan Lecturer in Immunology

Dr Iain Green - Forensic investigations. Pollution ecology. Trace metal homeostasis and detoxification in cells. Soil science.



Dr Wei-Jun Liang - Biological sciences. Cell and molecular biology.

Professor Rick Stafford, Biostatistical modelling

Dr Sarah Upson – Lecturer in Pharmacology

Dr Jon Cobb Principal Academic Electronics and Medical Physics

Programme Leaders

Biomedical Science
Dr Anna Mantzouratou - Human genetics; Infertility, pregnancy and reproduction genetics. Investigations on human genetic uniqueness.

Medical Science
Dr Samuel Rennie
Biological and Forensic Anthropologist with interests in both Disaster Victim Identification (DVI) and Palaeomigration of the Americas. Sex determination of skeletal remains using multivariate statistics

Biometrics Beach Day 2021 to welcome the new year 1 students

Investing in a campus for the future

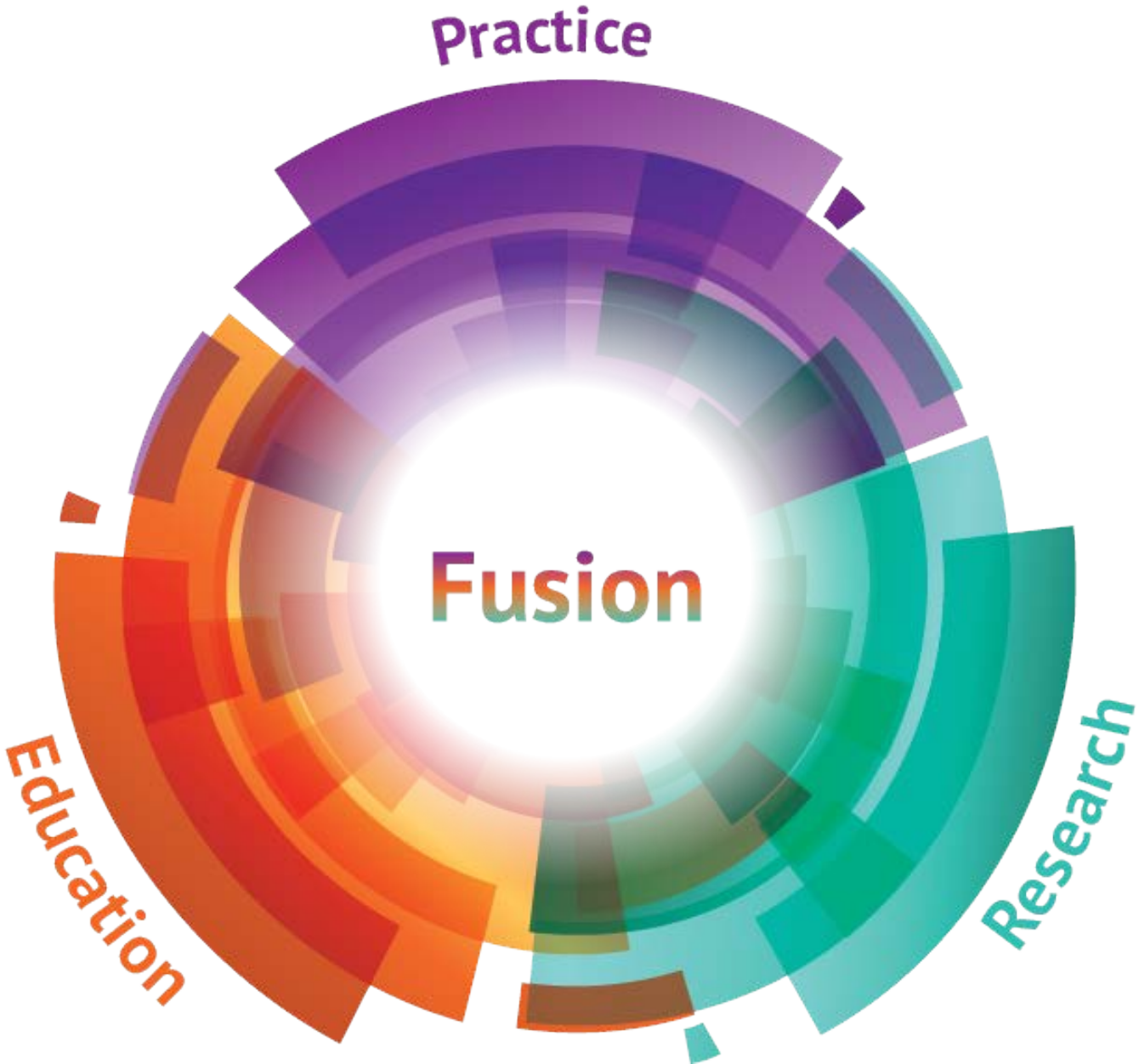
Investing in a campus for the future

See it for yourself

Visit our Virtual Tour to see everything in 360°

www.bmth.ac.uk/virtual-tour

Fusion at Bournemouth



Placements

- Optional 30 week placement (3rd year)
- Gain essential work experience
- Dedicated Placement Coordinator
- Help you plan your placement to make sure you get the right experience
- We have a network of employers that are keen to work with placement students

New laboratories …

Nikon

ZEISS

ION OPTIX CORPORATION

Supporting you

- AskBU – general support
- On-site childcare facilities
- Careers advice & myCareerHub
- Chaplaincy
- Subject librarians & Library experts
- On-site Police team and campus safety security events
- Student Wellbeing
- Student Advice (Students' Union)
- ResLife

…. To name a few.

Opportunities for academic and personal development

- Peer-assisted learning (PAL) sessions
- Academic Advisors
- Student Reps
- Student Champion
- Student Development Awards

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BSc (Hons) Biomedical Science

What is Biomedical Science?

- An important component of clinical diagnostics, research into human health and disease, drug and vaccine development.
- Informing and improving human healthcare and medicine.
- We will train you to effectively analyse and interpret results which support diagnosis, monitoring and treatment of disease.

Staff

You will be taught by a range of staff with relevant expertise:

- Senior academics
- Qualified professional practitioners
- Demonstrators
- Research students
- Guest lectures from industry

Biomedical Science Overview

Unit Name	Level	Core/Option	Semester	FT credits	PT year 1 credits	PT year 2 credits
Biomedical research skills	4	Core	1	20	20	-
Chemistry	4	Core	1	20	20	-
Introduction to molecular genetics	4	Core	1	20	-	20
Cell Biology	4	Core	2	20	20	
Human anatomy and physiology	4	Core	2	20	-	20
Introduction to immunology	4	Core	2	20	-	20
Credits L4				**120**	**60**	**60**
Advanced Skills for biomedical Science	5	Core	1	20	20	-
Biochemistry	5	Core	1	20	20	-
Advanced Immunology	5	Core	1	20	-	20
Advanced Cell biology	5	Core	2	20	-	20
Introduction to Toxicology	5	Core	2	20	-	20
Introduction to pharmacology	5	Core	2	20	20	-
Credits L5				**120**	**60**	**60**
Biomedical research project	6	Core	1&2	40	-	40
Pathophysiology	6	Core	1	20	20	-
Advanced Topics in Genetics	6	Option	1	Choose one 20	Choose one 20	-
Epidemiology and infection	6	Option	1			
Biomolecules	6	Option	2	Choose two 20x2	Choose one 20	Choose one 20
Advanced Systems Biology	6	Option	2			
Advanced Pharmacology and Toxicology	6	Option	2			
Credits L6				**120**	**60**	**60**

What will you study on BSc Biomedical Sciences?

Year 1

Biomedical research skills

Introduction to immunology

Introduction to molecular genetics

Cell biology

Human anatomy and physiology

Chemistry

What will you study on BSc Biomedical Sciences?

Year 2

Advanced immunology

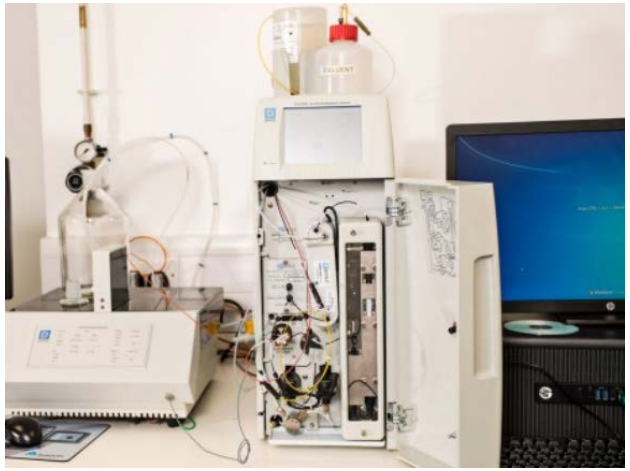
Introduction to pharmacology

Advanced skills for biomedical science

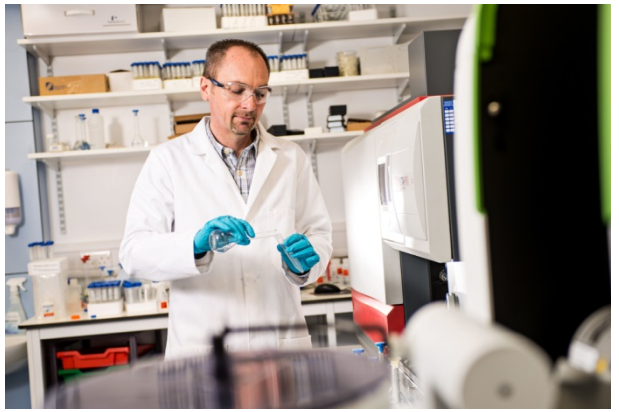
Biochemistry

Introduction to toxicology

Advanced cell biology



What will you study on BSc Biomedical Sciences?



Final year

Core units

Biomedical research project

Pathophysiology

Option units (choose 3)

Advanced topics in genetics

Advanced systems biology

Advanced pharmacology and toxicology

Biomolecules

Epidemiology and infection

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BSc (Hons) Medical Science

BSc Medical Science

- Medical Science focuses on the cutting edge science that underpins modern medicine, fostering new discoveries and technologies which improve healthcare.

- You will study a comprehensive range of topics within medical science, and gain an in-depth understanding of how our bodies work, how disease is treated and how new technology is evolving in this exciting field.

Medical Science – choose your pathway

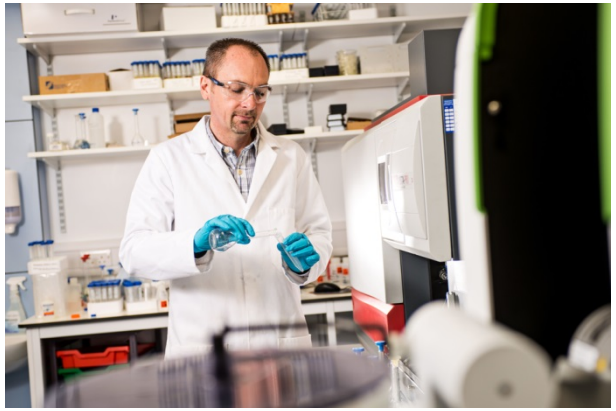
- You can choose to study Medical Sciences through selecting one of two possible pathways.

- Each pathway provides a strong foundation in medical science, but the flexibility of choosing your own distinct pathway allows you to shape the degree to best suit your future aspirations.

The pathways

- Pathway 1: General Medical Science

- Pathway 2: Psychology focused Medical Science



Medical Science Pathway 1 (General)

Year1

Medical Science Skills
Human Anatomy & Physiology
Chemistry
Cell Biology
Intro to Immunology

Biological & Cognitive Psychology

Year 2

Advanced Skills in Medical Science
Introduction to Pharmacology
Biochemistry
Introduction to Toxicology
Advanced Cell Biology
Osteomechanics

Year 3

Neuroimaging
Medical Science Project (20)

Choose 4
Pathophysiology
Advanced Systems Biology
Advanced Topics in Genetics
Epidemiology & Infection

Advanced Pharmacology & Toxicology

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Medical Science Pathway 1 (General)	Medical Science Pathway 2 (Psychology)
Year 1	
Medical Science Skills	Medical Science Skills
Human Anatomy & Physiology	Human Anatomy & Physiology
Chemistry	Chemistry
Cell Biology	Cell Biology
Intro to Immunology	Foundations in Data Analysis
Biological & Cognitive Psychology	Biological & Cognitive Psychology
Year 2	
Advanced Skills in Medical Science	Advanced Skills in Medical Science
Introduction to Pharmacology	Introduction to Pharmacology
Biochemistry	Biochemistry
Introduction to Toxicology	Introduction to Toxicology
Advanced Cell Biology	Advanced Cell Biology
Osteomechanics	Biological Psychology
Year 3	
Neuroimaging	Neuroimaging
Medical Science Project (20)	Medical Science Project (20)
	Psychology Project (40)
Choose 4	Choose 2
Pathophysiology	Pathophysiology
Advanced Systems Biology	Advanced Systems Biology
Advanced Topics in Genetics	Advanced Topics in Genetics
Epidemiology & Infection	Epidemiology & Infection
Advanced Pharmacology & Toxicology	Advanced Pharmacology & Toxicology
	Biopsychological of mental disorders
	Current trends in Clinical neuropsychology and Cognitive neuroscience

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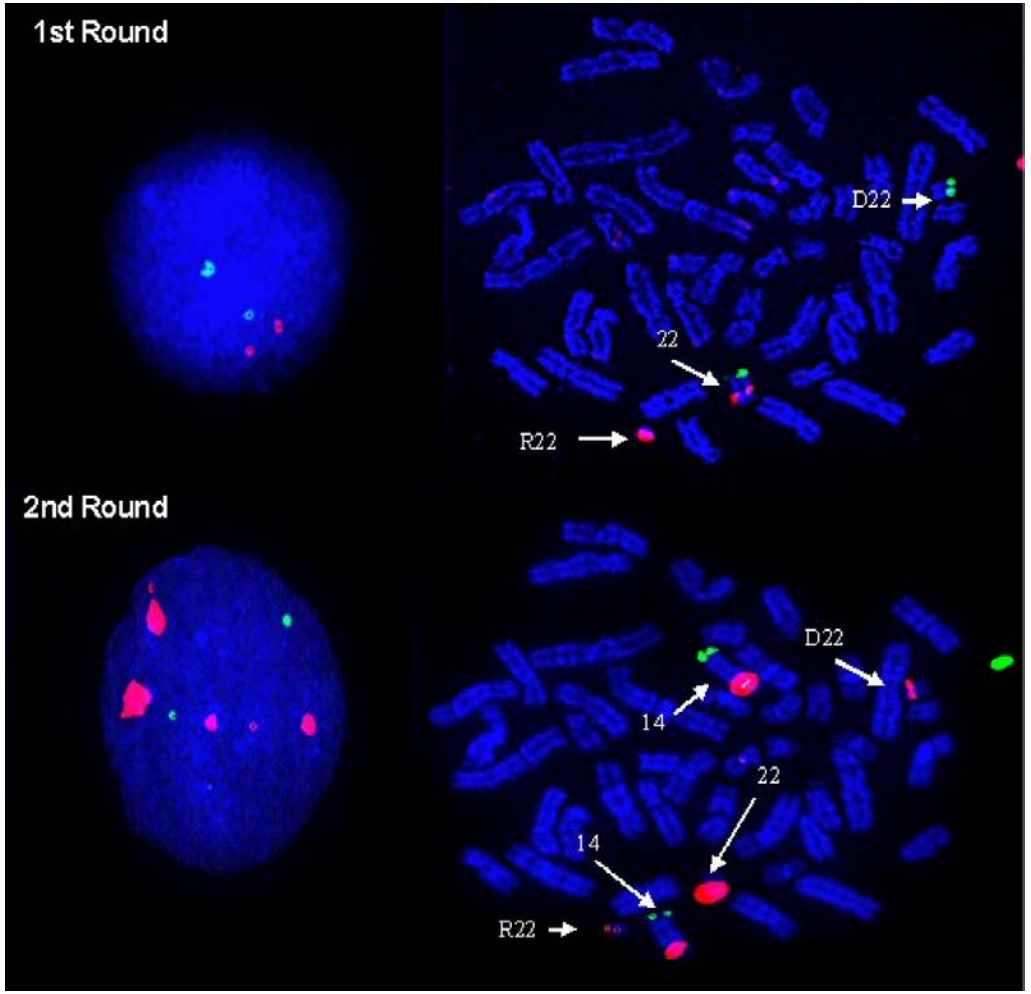
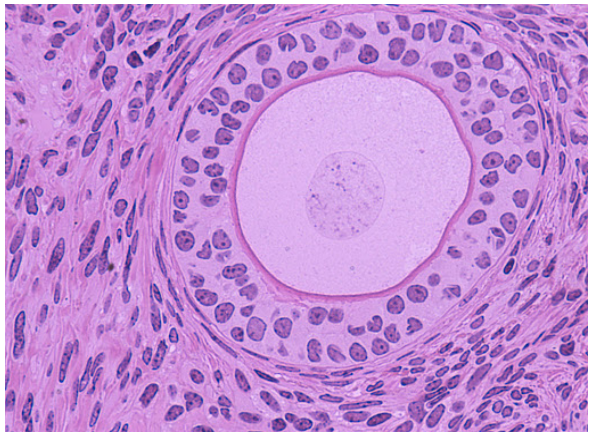
Developing your skills in Laboratory Science





Key information

Next start date:
September 2022
Location:
Bournemouth University, Talbot Campus
Duration Biomedical Science:
3 years full-time, or 4 years with a minimum 30-week placement. 6 years part-time, or 8 years with a minimum 30-week placement. Foundation Year: 4 years full-time or 5 years with 30-week placement.
Duration Medical Science:
3 years full-time, or 4 years full-time with a minimum 30-week placement. Foundation year: 4 years full-time or 5 years full-time with a minimum 30-week placement.
Required subjects:
All subjects considered but would be beneficial to have related subject areas
Entry requirements:
For 2022 entry: Please see the **'Entry requirements'** in BU website section for more information.

A-level and AS levels	**104–120 UCAS tariff points from a minimum of two A-levels.**
Advanced Welsh Baccalaureate – Skills Challenge Certificate	We accept this qualification, but it must be accompanied by an A-level sized qualification to meet the overall UCAS tariff.
Access to HE Diploma	102–118 UCAS tariff points with any combination of Distinction, Merit, Pass grades.
International Baccalaureate Certificates	104–120 UCAS tariff points from a minimum of two Higher Level certificates.

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Careers

Biomedical scientist

Biotechnologist

Healthcare scientist, clinical biochemistry

Healthcare scientist, genomics

Healthcare scientist, haematology

Healthcare scientist, immunology

Medicinal chemist

Research scientist (medical)

Clinical research associate

Medical sales

Medical engineer

Healthcare IT

Medical technologist

Microbiologist

Physician associate

Toxicologist

Typical employers

- Health Careers - NHS
- Medical Research Council (MRC)
- Food and drink, biotechnology and pharmaceutical industries - offering roles in research and development, quality assurance and sales
- forensic, charity or government-funded laboratories
- NHS Blood and Transplant (NHSBT)
- private pathology laboratories
- Public Health England
- publishing companies and the specialist press employ medical science writers and editors
- The Francis Crick Institute
- University academic departments.

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Bournemouth – a great place to study and live

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Your future?

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Thank You for your attention!

Any questions?