Cellular and Molecular Medicine
Undergraduate study
Courses

Why study cellular and molecular medicine at Bristol?

Cellular and molecular medicine is an exciting subject which examines the fundamental mechanisms of diseases, potentially discovering new ways to treat them.

At Bristol, our aim is to inspire you in this goal to turn science into medicine. You will learn what it is like to be involved in biomedical research and how to think like a scientist, developing critical and analytical skills highly valued by employers in the field of biomedical sciences and beyond.

We offer:
- a range of stimulating courses taught by internationally recognised experts in infection and immunology, cancer biology, stem cell biology and regenerative medicine;
- the flexibility to transfer between courses as your interests develop;
- a year in industry at a pharmaceutical company or top research institute;
- an excellent foundation for careers in biomedical science, academia, industry or health services, or for medicine;
- innovative educational resources and facilities such as the Dynamic Laboratory Manual eBiolabs [bristol.ac.uk/ebiolabs], designed to prepare you for practical classes by demonstrating concepts and experiments through animations, videos and pre-lab quizzes;
- a real taste of applying research skills in your final-year project, in the laboratory, on the computer working on a bioinformatics project, or researching the scientific literature.

Our students really enjoy their time in Bristol and find the lecturers inspiring. Cellular and molecular medicine graduates feel very well prepared to present their work, to tackle unfamiliar problems and to move on to the next stage in their careers.

‘The best things about studying at Bristol are being taught about the cutting-edge research in your field... and the large amount of lab work you get to do as a part of the course, especially the work you do for the final-year project where you can work with an academic within the school or one of the surrounding hospitals.’

Emma (BSc Cellular and Molecular Medicine 2017)

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Single Honours
BSc Cancer Biology and Immunology
three years B131

BSc Cancer Biology and Immunology with Study in Industry
four years*

BSc Cellular and Molecular Medicine
three years B130

BSc Cellular and Molecular Medicine with Study in Industry
four years*

BSc Medical Microbiology
three years C521

BSc Medical Microbiology with Study in Industry
four years*

BSc Virology and Immunology
three years C540

BSc Virology and Immunology with Study in Industry
four years*

*Entry by transfer in the second year after securing a placement.
Our courses are broadly based in biomedical sciences, with an emphasis on the areas of cancer biology, immunology, stem cell biology, microbiology and virology. All courses are also available with Study in Industry as four-year degrees; you can transfer onto these courses after securing a placement during year two.

BSc Cellular and Molecular Medicine has the broadest final year, and is currently the course that the majority of our students apply for, while the other courses allow for greater specialisation in the final year. There is a great deal of flexibility and it is possible to transfer between our courses. This allows you to follow your own interests as they develop.

Year one
Your first-year units will introduce the following topics:
- Microbiology and infectious disease
- Cell biology of normal and tumour cells
- Pathology and immunology
- Biochemistry.

What will you study?

Year two
Building on the broad foundation of year one, in the second year you choose an optional unit to study alongside four core units. In the current academic year, second-year core units were:
- Infection and Immunity
- Cellular and Molecular Pathology
- Recombinant DNA Technology
- Gene Expression and Rearrangement.

You will also take our Biomedical Research, Employability and Enterprise Skills unit, which aims to prepare you for the research project in your final year. It also gives you the opportunity to practise making an application for a Study in Industry placement, internship or future employment, and helps you consider a variety of careers. The research and enterprise strand involves group work and you will prepare a research proposal and learn about commercial aspects of biomedicine. This unit fits well within the research environment, where we aim to take laboratory discoveries through to the clinic where they will benefit patients. Our motto is ‘Turning science into medicine.’

In years one and two you will learn in lectures, tutorials, workshops and practical laboratory sessions and will also have time for independent study. Assessment will be via coursework and written examinations.

Year three
In the final year you will study four lecture units. We currently offer:
- Developmental Genetics and Embryonal Cancers
- Cancer Mechanisms and Therapeutics
- Haemopoietic Stem Cell Transplantation
- Regenerative Medicine
- Advanced Immunology
- Immunopathology and Applied Immunology
- Medical Microbiology
- Frontiers in Infectious Diseases
- Medical Virology.

You will also work on a research project in the Biomedical Sciences building or in a laboratory at one of the surrounding hospitals.

‘I would definitely recommend this course. The diversity of this course has allowed me to gain a comprehensive understanding of both the theoretical and practical aspects of molecular medicine. You will be given the opportunity to explore different fields of science in the first two years and be provided with unconditional support by the staff and personal tutors.’

Rachel (BSc Cancer Biology and Immunology 2017)
A significant number of our graduates go on to PhD study as the first step in a research career, or postgraduate degrees in a wide range of subjects, including immunology, cancer biology, virology, transfusion and transplantation sciences, bioscience enterprise, cardiology, epidemiology, genetic counselling, infection biology, regenerative medicine, science communication, and media production, as well as areas such as economics, finance and management. Others have gone on to medicine, dentistry, veterinary science and teaching.

Other graduates go straight into employment, using their practical research skills in industrial or academic biomedical research posts. Our courses provide a broad subject knowledge appropriate for careers in biotechnology and the pharmaceutical industry. Alternatively, our graduates go into education, finance, law, health and social work, management, manufacturing and journalism.

You can see some of our students’ stories and learn more about their career destinations online: bristol.ac.uk/cellmolmed/study/undergraduate/stories.

Typical offer for BSc Cellular and Molecular Medicine*

Visit bristol.ac.uk/ug18-cmm for other qualifications.

A-levels AAB (contextual ABC†) including AB in Chemistry and another science/mathematics subject (in any order). A pass in the practical element of all English examination board science A-levels is expected.

IB Diploma 34 overall (contextual 31†) with 17 points at Higher Level (contextual 15†) including 6 at Higher Level in Chemistry and 5 at Higher Level in another mathematics/science subject.

English Language profile E††

GCSEs Grade C in English, Mathematics and two sciences.

For information on contextual offers, visit bristol.ac.uk/ug-apply/#typical-contextual-offers.

Further information
Find out more about the School of Cellular and Molecular Medicine: bristol.ac.uk/cellmolmed.

Learn more about eBiolabs: bristol.ac.uk/ebiolabs.

In August 2018 the Faculty of Biomedical Sciences will become part of the new Faculty of Life Sciences.

We are interested to know about you, why you are interested in the subject area and your aspirations for your future career. We welcome applications from those interested in the mechanisms of human disease, including those who are also applying to medicine.

Applicants who receive an offer will be invited to a visit day. This will involve lunch, a talk from the admissions tutor, a one-to-one informal chat with a member of the teaching staff and perhaps a look around their research lab. You also have the chance to visit displays in our teaching lab and meet current students and staff. It will provide an opportunity for you to get a feel for the school, its activities and the courses we offer.

Deferred entry Welcomed.

The typical offer is indicative only and the University accepts a wide range of qualifications. The information is correct at the time of printing (June 2017); however, we recommend you check the University’s website for the most up-to-date information: bristol.ac.uk/ug-study.

The University of Bristol has one of the best employment records in the UK. We are rated sixth in the UK in the QS Graduate Employability Rankings 2016/17 and are the third most targeted university by top UK employers (High Fliers Research, 2017).
Contact us

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If you have any questions about courses, applications or any aspect of being a UK or international student at Bristol please contact the Enquiries Team.

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University guide to the city of Bristol
bristol.ac.uk/citybristol

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