Why study cellular and molecular medicine at Bristol?

Cellular and molecular medicine is an exciting subject that 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;
- the option to apply for a year in industry at a pharmaceutical or biotech company or top research institute;
- an excellent foundation for careers in biomedical sciences, academia, industry or health services, or medicine;
- innovative educational resources 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 perhaps researching the scientific literature.

Our students really enjoy their time in Bristol and find the lecturers inspiring. Cellular and molecular medicine graduates feel 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, especially the final-year project where you may work with an academic within the school or in one of the surrounding hospitals.’

Emma (BSc Cellular and Molecular Medicine)
What will you study?

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.

Year two
Building on the broad foundation of year one, in the second year you choose an optional unit to study alongside five core units. In the current academic year, second-year core units include:
- 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, an 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 within the school or in a laboratory at one of the surrounding hospitals.

‘My course is as challenging as it is interesting. We have great support from the teaching and administrative staff. A great university in a beautiful city – I think it speaks for itself!’
Alissa (BSc Cancer Biology and Immunology)
Careers and graduate destinations

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 study medicine, dentistry, veterinary science or 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, some graduates go into careers in clinical trials management, education, finance, law, health and social work, management, manufacturing and science communication.

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

’Bristol has really opened my eyes to the amount of opportunities available to me when I graduate. The Careers Service has helped me to add to my CV, particularly with the Bristol PLUS Award.’

Katie (BSc Medical Microbiology)

Making your application

Visit bristol.ac.uk/ug20-cmm for more information about our courses.

Typical offer for BSc Cellular and Molecular Medicine

A-levels AAB including Chemistry and another core science/mathematics subject (contextual BBB including Chemistry and another core science/mathematics subject or ABC including AB (in any order) in Chemistry and another core science/mathematics subject).

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

Our contextual offer is a grade reduction of up to two grades below the standard entry requirements, made to applicants from under-represented groups. Find out more at bristol.ac.uk/contextual-offers.

GCSEs No specific subjects required.

Selection process UCAS.

For other accepted qualifications, and for our English language requirements, visit bristol.ac.uk/ug20-cmm.

Application advice for cellular and molecular medicine courses

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 may involve a talk from the admissions tutor, an informal chat with a member of the teaching staff and perhaps a look around their research lab. You will 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.

Further information

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

This information is correct at the time of printing (May 2019), but we recommend you check the University website for the latest information: bristol.ac.uk/ug20-cmm.

Read more about how we support you when you are here: bristol.ac.uk/students