

What can I do with a degree in **Biomedical Science?**

Graduates are equipped with knowledge and skills in modern biosciences and clinical sciences, particularly in their application to medicine, biomedical research and healthcare services. Through your biomedical science studies at UQ you will gain extensive experience in practical laboratories where the latest breakthroughs in medical sciences are taking place. Furthermore, the degree will expose you to important ethical and health and safety considerations for the creation, investigation and application of biomedical sciences.

Importantly, a degree in biomedical science equips you with a range of highly transferrable skills desired by a variety of employers. These include:

- Assimilating, evaluating and critically interpreting evidence
- Analytical and problem-solving skills
- Effectively working in collaboration and independently
- Articulating ideas through oral and written communication
- Planning and conducting experiments



Career Pathways

A biomedical science degree provides the basis for a diverse range of careers. While most of our graduates pursue careers in biomedical research and medicine, there are numerous alternative careers available.

Biomedical Research

There are many opportunities during your biomedical science degree to explore what a career in research might be like. These include Summer and Winter Research Programs, and third year courses in which you undertake a small research project within an active research laboratory.

Following your three year undergraduate degree, a typical pathway for entering research includes a research intensive Honours year, during which you complete a larger project in biomedical science research. Your undergraduate studies may have sparked your interest in fundamental biomedical processes such as cell biology, functional anatomy, neurobiology, and reproductive biology, or global health issues such as chronic disease, and drug design and development. Alternatively, you may be interested in enhancing future students' acquisition of knowledge and skills, or the strategic delivery of curricula in biomedical sciences, and choose to engage in biomedical education research. During the Honours year, you will hone your skills in the design of, approach to, and communication of scientific discovery, as well as your ability to critically assimilate and evaluate evidence.

After obtaining an Honours degree, students typically embark on a Masters (MPhil, 1.5 – 2 years) or Doctor of Philosophy (PhD, 3 – 4 years). Postgraduate studies allow you to develop and establish your research identity within a disciplinary field of interest. Throughout this time, you will have the opportunity to contribute to the advancement of your research field by publishing in scientific journals, presenting at national and international conferences, and engaging in research collaborations.

As a post-doctorate, your career in biomedical science may involve establishing your own research group and becoming an academic, teaching the next generation of biomedical science students. Other pathways may involve transitioning into national/international government or industry roles, for example as a researcher, project manager or consultant driving strategic decisions around governance and public health issues.

Clinical Careers

Doctor of Medicine

Equipping students with the most relevant foundational knowledge and skills, a biomedical science degree is a common stepping stone for postgraduate studies in medicine. The four year Doctor of Medicine program at UQ develops your understanding of basic clinical sciences, research, ethics, public health and clinical skills. To prepare you for work as a junior doctor, your professional skills will be honed through clinical placements locally and even internationally. Being a master's level program, there are opportunities to undertake significant clinical research at MPhil or PhD

level, and develop your interest in both medicine and academia.

If you do not already hold provisional entry, you will need to complete the Graduate Australian Medical School Admissions Test (GAMSAT) to gain entry into a Medical degree at an Australian university. Prior to commencing medicine, you might also consider doing an Honours year to gain exposure to the cutting edge biomedical research informing clinical knowledge and practice.

Other Clinical Professions

You can also pursue other clinical careers by undertaking postgraduate study in occupational therapy, speech pathology, audiology, physiotherapy, nursing, dietetics and psychology.

Alternative Careers

Biomedical science graduates are typically employed in a range of industries both within and outside of science. Some roles include laboratory/research officers, medical/life sciences sales representatives, science communicators/editors, and data analysts or consultants in technology, marketing, economics and infrastructure.

Biomedical science graduates have also been successful in securing positions in graduate programs in federal and state government, and business consultancy firms. Graduate programs are structured professional development programs specifically designed for new graduates. Final year students apply for these positions usually from January to March for the following year.

Example employment sectors where your knowledge and skills as a biomedical science graduate are highly sought after include:

- Australian government departments and agencies
- health and medical research institutions, foundations and centres
- higher education institutions
- biotechnology and pharmaceutical companies
- medical and biological scientific supply companies
- blood collection centres/pathology laboratories
- public health organisations
- food/cosmetic/wine manufacturers
- water industries and agencies
- biotechnology research centres
- forensic laboratories
- occupational health and safety consultants
- government forensic service providers
- patent offices
- community health centres and agencies hospitals.

Enhancing your employability

To enhance your future employment prospects it is important to focus both on performing well academically, as well as expanding your professional qualities and skills through curricular and extra-curricular activities. Engaging in such activities throughout

your undergraduate studies will help you recognise and articulate how your disciplinary and transferrable skills apply in a professional setting, expand your understanding of the operations of a workplace, and build your networks within and beyond biomedical science.

Activities that may help strengthen your employability profile and networks, include:

- networking with industry at careers fairs or on-campus employer presentations, and attending relevant workshops, conferences, or public open-days hosted by research, medical and university institutes;
- entering student competitions, case management challenges and other opportunities to demonstrate your problem solving and teamwork skills (e.g. Kelly Scientific award)
- engaging in volunteer and extra-curricular opportunities through university (e.g. peer tutor, mentor, or a student leader programs)
- becoming an active member of a relevant student society (e.g. UQ Association of Biomedical Students, UQ Pre-med Society)
- becoming an affiliate member of a relevant professional association, many of which offer regular professional development and networking events specifically designed for students
- participating in undergraduate conferences
- gaining laboratory experience through relevant recruitment agencies (e.g. Kelly Scientific, Evolve) or universities (Summer and Winter research programs)
- volunteering in areas involving science (e.g. museums, scientific school education outreach programs).

Job search strategies

Throughout your studies, start identifying your core skills, strengths and interests to pave your own journey through networking, co-curricular activities and further study.

If you are interested in a particular sector or industry, take the time to research and better understand the requirements for graduate roles. Researching companies in the industry of your choice will help you understand organisational structures and business models. Check out general job search engines (such as [CareerOne](#), [Seek](#) and [MyCareers](#)), industry associations, and company websites. Get yourself out there, meet with industry professionals and network as much as you can.

Search the web using both broad and narrow search terms e.g. biomedical science jobs Australia, genetics, molecular biology jobs, laboratory jobs, research and development jobs. This search will generate not only relevant vacancies from employers and recruitment agencies, but also generate job search engines specialised to your discipline. You may find roles and organisations that you did not know existed.

Register for email alerts through these websites to have relevant vacancies sent directly to you. Visit company websites to find out about other opportunities, including entry level, graduate or related positions. If a listing on the job search engine provides the name of a company that is recruiting, visit their website and check for other employment opportunities. Where possible, apply directly through the company website.

Not all work opportunities are advertised. It is common practice for jobseekers to proactively search for these opportunities. Approaching potential employers, conducting research to identify links between your selling points (your skills, experience, and qualifications) and employers' needs, increases your chances of success. Developing and using your personal and professional networks is a valuable tool for finding 'hidden' opportunities.

Employment prospects and starting salaries

MyFuture (myfuture.edu.au) provides information on employment rates and median starting salaries by field of study for Australian university graduates surveyed four months after graduation. Information on occupations Australia-wide, such as the size of the workforce, employment prospects and average weekly earnings is available from JobOutlook.



Useful web links

Professional associations

AusBiotech	ausbiotech.org
Australian Science Media Centre	smc.org.au
Australasian Association of Clinical Biochemists	aacb.asn.au
Australasian Society for Immunology	immunology.org.au
Australasian Society for Human Biology	australasianhumanbiology.com
Australian and New Zealand Forensic Science Society	anzfss.org
Australia and New Zealand Society for Cell and Developmental Biology	anzscdb.org
Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists	ascept.org ; asceptasm.com
Australian and New Zealand Society of Respiratory Science	anzsrs.org.au
Australian Institute of Medical Scientists	aims.org.au
Australian Physiological Society	aups.org.au
Australian Society for Biochemistry and Molecular Biology	asbmb.org.au
Australian Society for Medical Research	asmr.org.au
Australian Society for Microbiology	theasm.org.au
Epigenetics Society	epigeneticsocietyint.com
Genetics Society of Australia	genetics.org.au
Haematology Society of Australia and New Zealand	hsanz.org.au
Human Genetics Society of Australasia	hgasa.org.au
International Society of Forensic Toxicologists	tiaft.org
Public Health Association of Australia	phaa.net.au
Royal Australian College of Medical Administrators	racma.edu.au
Australian Nuclear Science and Technology Centre	ansto.gov.au
Australian Research Council	arc.gov.au/arc-medical-research-policy

Jobs

Careers at CSIRO	jobs.csiro.au
Department of Defence	dst.defence.gov.au
Australian Defence Force Recruiting	defencejobs.gov.au/jobs/army/pathologist-and-research-scientist
ALFA Scientific Designs	alfascientific.com/job-openings
Hahn Recruitment	hahnhealthcare.com.au
Kelly Scientific Resources	set.kellyservices.us/find-a-job/job-search/science-clinical-jobs/
Evolve Scientific Recruitment	evolvescientific.com.au
Government Jobs	apsjobs.gov.au
Research Careers	researchcareer.com.au/jobs
Uniroles (vacancies of all types in Australian universities)	uniroles.com.au
UQ GlobalGrad	globalgrad.uq.edu.au
Academic Careers	academiccareers-australia.com
Graduate Opportunities	graduateopportunities.com
International	
Academic Staff	academicstaff.com
GradIreland	gradireland.com
Idealist	idealist.org
Offshore employment links for Australian Professionals	
Prospects Web UK (UK grad recruitment)	prospects.ac.uk
Quintessential Careers (US grad recruitment)	quintcareers.com
United Nations Job opportunities	careers.un.org
United States career information	learnhowtobecome.org/science-technology-careers
Eurograduate live (European grad recruitment)	eurograduate.com

For further details, please contact:

Careers Service

Student Employability Centre



careers@uq.edu.au



employability.uq.edu.au/find-a-job



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