

# Career Opportunities

with a Degree in ...

## Biotechnology

### Your skills and the employment market

During your multi-disciplinary degree you will have developed a wide variety of course-specific knowledge as well as a range of transferable skills.

Examples: Investigative & research skills; information handling, analysing and evaluating; ability to work methodically, efficiently and accurately; good decision-making and problem-solving skills; Teamwork; IT skills; Communication skills including report writing and presentations; laboratory experience covering good lab practice and health and safety.

A degree in Biotechnology provides a solid grounding for a wide range of careers in industry, health and research and examples of industries that employ graduates are\*:

**Pharmaceutical companies** (e.g. Medtronic, Smith & Nephew, Johnson & Johnson, Wyeth Medica, Elan)

**Research** - academic institutions or in industry sectors. Check out Incubation Centres in third level institutions as many host start-up biotechnology companies

**Commercial organisations** - Brewing and distilling companies (e.g. Guinness) employ biotechnologists as do dairy and food processing and chemical manufacturers (e.g. Kerry Foods)

(\*Source: [www.science.ie](http://www.science.ie))

### Sample Job Advertisements

Some jobs advertised on Careers Connect that may suit students/graduates (for illustration purposes only).

Science Internship / Placement with Abbott Ireland. BSc in biochemistry, analytical chemistry, microbiology, biotechnology or pharmaceuticals.

Quality Assurance Graduate Programme / Research & Development Graduate Programme, Kerry Group. 2:1 degree in Biotechnology, Food and Human Nutrition or similar. Exceptional problem solving skills, leadership and communication skills, ability to work well in a team.

Validation Internship, PSC Biotech. Bachelor's degree in pharmaceutical, biotechnology, engineering, IT, computer science, or related technical field. Experience of QA in a FDA regulated environment is preferred.

Graduate Biotech Production Specialist, Regeneron. BSc or MSc in Life Sciences, Biotechnology, Engineering or a related field. Experience in or knowledge of an SOP, ISO, or similar regulated environment is also strongly desired.

### Possible Career Opportunities

Researcher	Process Control	Clinical Trials
Product Development	Regulatory Affairs	Scientific Editor or Writer
Lab Technician	Analysts / Technologists	Quality Control
Manufacturing Technologist	Patent Agent	Teacher /Lecturer

*This list is a sample representation of positions available*

The life sciences sector in Ireland continues to thrive, both with indigenous and overseas companies. Most of the world's leading life science companies have significant operations in Ireland along with a thriving and growing domestic sector.

“Biotechnology is a broad sector covering traditional pharmaceutical companies and smaller niche companies as well as healthcare companies and even breweries! Armed with a degree in biotechnology, you could become a researcher in a lab where your role would be to carry out research on living cells and cell components. From this research you could manufacture substances useful to man such as food, fuel and medicines. If you go on for a PhD you would be responsible for designing a research programme into a specific area of interest.

Opportunities for graduates are good and career prospects are excellent. Biotechnology is a specialty that is in demand worldwide, so you could use your qualifications to see more of the world”.

(Source: [www.science.ie](http://www.science.ie))

### Deciding on your Career

Choosing a career after university can extremely difficult and any long-term decisions should not be made lightly. While some people have already planned a career even before arriving at university, others will have only a vague idea of what they intend to do, or perhaps even no idea at all. Pick up our *Exploring your Options*, and *Researching Careers Information Online* FAQs and ask for details on completing an interest test.

There are also links to psychometric tests at: <http://www.nuigalway.ie/career-development-centre/servicesforstudents/explore/careerinteresttests/>

### Further study opportunities

For certain career choices, employers may look for candidates with further qualifications and training.

Some of the courses chosen by graduates in the past at NUI Galway ([www.nuigalway.ie/courses](http://www.nuigalway.ie/courses)) were:

- Structured PhD
- Higher Diploma in Business Studies
- HDip Software Design & Development
- MSc Neuropharmacology
- MSc Cancer Research
- Professional Masters in Education
- MSc Enterprise Systems

Other courses taken by graduates were:

- GradDip Chemical Engineering, UL
- PhD Immunology, TCD
- PhD Pharmaceutical Biotechnology, Chicago
- PhD, Bergerman Centre for Biomaterials, Germany
- Master Immunology, Imperial College London
- PhD Biomedical Science, RCSI Dublin
- Pharmacy, Robert Gordon University Edinburgh
- MSc Molecular Biosciences, Heidelberg, Germany

[www.nuigalway.ie/conversion](http://www.nuigalway.ie/conversion) covers conversion courses at NUI Galway. The website [www.postgradireland.com](http://www.postgradireland.com) contains useful information on postgraduate courses in Ireland, [www.prospects.ac.uk](http://www.prospects.ac.uk) is an excellent site for researching opportunities in the UK and <http://europa.eu.int/ploteus> covers the EU. Read our FAQ on *Postgraduate Courses* for more.

### What past graduates have done

Here is a sample of job titles and employers occupied by graduates of Biotechnology six months after graduation (*italics = MSc graduates*). This has been taken from our annual graduate survey.

- Laboratory work, Medtronic
- Lab Technician, Boston Scientific
- Quality, Ithpharma London
- Assistant Scientist, PPD Development
- Internship-Laboratory Assistant, Galway Fertility
- Technician, MRC London
- Technology, Harp
- Documentation Assistant, Wyeth
- *Biotechnician, BioMarin*
- *Manufacturing Specialist, Amgen*
- *Microbiology Technician, Complete Lab Solutions*
- *Lab Technician, Advanced Laboratories Testing*
- *Laboratory Quality Control Analyst, GE Healthcare*
- *Biotechnician (batch process), Pfizer*
- *Manufacturing, Medtronic*
- *Technologist, Beckman Coulter*

### Resources in the Careers Information Room

Our Job Sector files contain a range of information about working in a specific sector – from job descriptions to professional associations. At the back of each (where possible) are advertised jobs so that you can look through requirements of previously advertised jobs.

We also have a range of reference books covering science including:

- Careers with a Science Degree
- Alternative Careers in Science
- Who wants to be a Scientist? Choosing Science as a career

There are also resources to help with your job search including reference books on taking psychometric tests, going for interview, writing a CV or personal statement... and much more.

Drop into our information room and we will be happy to assist you – there's no need to book an appointment to browse through our resources.

Be sure and pick up our free booklets 'Your CV' and 'Interview Skills'.



### Useful websites

We have found that the following websites contain relevant and interesting information on opportunities with a degree in Biotechnology.

- [www.nuigalway.ie/careers](http://www.nuigalway.ie/careers)
- [www.science.ie](http://www.science.ie)
- [www.biotechnologyireland.com](http://www.biotechnologyireland.com)
- [www.ibec.ie/IBIA](http://www.ibec.ie/IBIA) (*Irish Bioindustry Assoc*)
- [www.ibec.ie/IMDA](http://www.ibec.ie/IMDA) (*Irish Medical Devices Assoc*)
- [www.sfi.ie](http://www.sfi.ie)
- <http://gradireland.com/publications> download a copy of gradireland's *Science* booklet.

Abroad

- [www.newscientistjobs.com/graduate/](http://www.newscientistjobs.com/graduate/)
- [www.jobs.ac.uk](http://www.jobs.ac.uk) (*Ireland & UK*)
- [www.europa-bio.be](http://www.europa-bio.be)
- [www.academicjobseu.com/](http://www.academicjobseu.com/)
- [www.bioindustry.org](http://www.bioindustry.org)
- [www.bbsrc.ac.uk](http://www.bbsrc.ac.uk)

There are many social media sites and groups helping people who are looking for work. Search LinkedIn, Twitter, Facebook to find people, companies and discussion groups to follow. Or use query sites such as [www.twitjobsearch.com](http://www.twitjobsearch.com), [www.google.ie/alerts](http://www.google.ie/alerts) to search for latest news items. Read our *Using Social Media* FAQ for more tips.