

**RANDOX**

**NHS**

**ALMAC**

Royal Society of  
**Biology**

**THE ZOO**  
BELFAST ZOOLOGICAL GARDENS

**Biology Careers**

**ea** Education  
Authority

# Aim

This PowerPoint aims to give you an overview of some of the career paths you can follow when you study Biology. Please remember that this list is limited and many Universities offer these courses- it would be impossible to list them all!!

“Biologists are involved in researching and understanding some of the most controversial advances in human knowledge....Biologists are also involved in finding solutions to worldwide problems” (CCEA, 2021)

# Biology courses

You can choose to study a general Biology course usually referred to as Biological Science but you can also complete more specific courses that focus on a particular aspect of Biology. Some of these are listed here:

- Biochemistry
- Biotechnology
- Cell biology
- Ecology
- Endocrinology
- Environmental science
- Genetics Pathology
- Pharmacology
- Physiology
- Plant science

- Zoology
- Immunology
- Marine biology
- Microbiology
- Molecular biology
- Neurobiology
- Nutritional science

# Biomedical Scientist

## **What do they do?**

Analyse blood, tissue and other samples to help diagnose diseases. Usually laboratory-based, with areas such as microbiology, genetics, immunology and pathology.

## **Degree/Course**

Biomedical Science BSc

## **Salary?**

£31,000–£63,000+ in NHS progression

## **Where can I study this?**

Queen's Belfast, Liverpool, Manchester, Nottingham

## **Entry requirements**

ABB–AAB at QUB; Biology + Chemistry required

# Biochemist

## **What do they do?**

Investigate chemical processes within living organisms. Work can involve medicines, disease, genetics, biotechnology and laboratory research.

## **Salary?**

£28,000–£53,000

## **Degree**

Biochemistry BSc/MSci

## **Where can I study this?**

Manchester, Liverpool, Leeds, Birmingham

## **Entry Requirements**

Usually BBB–AAA, depending on university

# Doctor

## **What do they do?**

Diagnose illnesses, treat patients and work in areas such as surgery, paediatrics, cardiology or general practice.

## **Salary?**

£40,000–£100,000+ depending on experience/specialism

## **Degree**

Medicine MBBS/MB

## **Where can I study this?**

Queens University, Newcastle University, Glasgow University, Cambridge etc

## **Entry Requirements**

A\*AA in Chemistry and at least one from Biology, Maths or physics  
and

University Clinical Aptitude Test (UCAT)- the results achieved are used as part of the selection process prior to interview

# Biology Teacher

## **What do they do?**

Prepare lessons and teaching materials, Assess students' progress and mark their work, Set homework, Manage classroom behaviour, Discuss students' progress with parents and carers and Organise study trips, social activities and sports events.

## **Salary?**

£30,000-£50,000+

## **Entry Requirements**

To become a secondary school teacher you first of all have to do a degree in the subject you want to teach e.g. Biology or Biochemistry. You then need to complete an extra qualification known as a Postgraduate Certificate in Education (PGCE).

The grades needed to study a Biology degree vary considerably depending on the University (AAA-CCC) but most commonly you need BBB in Biology and one other science

# Marine Biologist

## **What do they do?**

Marine biology is the study of organisms and ecosystems in the ocean and other saltwater environments. Research projects are the main focus of marine biologists, which include collecting specimens at sea, compiling data, and undertaking laboratory-based experiments.

## **Salary?**

£24,000-£40,000

## **Degree**

Marine Biology BSc

## **Where can I do it?**

Plymouth University, University of Southampton, Bangor University

## **Entry Requirements**

AAB-BBB in Biology and one other science depending on the University

# Pharmacist

## **What do they do?**

Pharmacists dispense prescription medication along with key information, such as side effects, contraindications with other medicines, and a range of other concerns.

## **Salary?**

£40,000-£65,000

## **Where can I do it?**

Ulster University, Queens University, Nottingham University

## **Entry Requirements**

AAB in Chemistry and at least one from Biology, Maths or physics

# Ecologist

## **What do they do?**

Study how organisms interact with each other and their environment. May carry out wildlife surveys, environmental assessments and conservation work.

## **Salary?**

£24,000-£50,000

## **Where can I do it?**

Queen's, Bangor, Newcastle, Exeter

## **Entry Requirements**

Usually 2–3 A levels; Biology useful/usually required depending on course

# Work Experience

It is a good idea to gain work experience in the career you think you might like to pursue to ensure that you are suited to the job and that you will enjoy it. Where you do your work experience is up to you and will vary with each career path. Listed below are some ideas/options and some local examples:

1. A natural history or science museum- *W5*
2. Research lab in a university or industrial setting- *Ulster University or Randox*
3. a clinical lab in a hospital- *Causeway Hospital (Gap medics is another organisation that offers experience abroad)*
4. Zoo- *Belfast Zoo*
5. A veterinary practice
6. School
7. Wildlife conservation- *The National Trust*
8. Charities- *St John Ambulance*

# BioNET – The Royal Society of Biology

BioNet is part of the Royal Society of Biology - the UK's leading professional body for the life sciences. If you are deciding to follow a career in Biology it is a good idea to join the RSB. It adds something extra to your UCAS application. Additionally, you will receive magazines and newsletters with the latest biological advances and mentioning these at interviews can give you a competitive advantage.

Membership is available to students aged 14-19 at a cost of £10 a year.