Options with physiology

Your skills

Over the course of your degree you develop a good mix of subject specific and technical skills as well as transferable core skills. Consider these alongside other achievements, such as paid work, volunteering, family responsibilities, sport, membership of societies, leadership roles, etc. Think about how these can be used as evidence of your skills and personal attributes. Then you can start to market and sell who you really are, identify what you may be lacking and consider how to improve your profile.

In physiology, you will have studied the biochemistry of individual cells; integrated this into an understanding of organ function; and finally into how the whole animal works. Physiology is, therefore, often considered as looking at the bigger biological picture. The ability to look at science from different angles might be considered a skill in itself.

From your degree, you will also have learnt to plan, conduct and evaluate experiments and to research and interpret scientific literature. You will also have developed a wide range of transferable skills alongside your physiology-specific skills. Transferable skills are highly regarded by employers generally. For physiologists these include:

- analytical and problem-solving skills;
- computing and statistical skills - you will probably have used spreadsheets, databases and presentation packages, which are found in most workplaces;
- data interpretation skills;
- numeracy skills;
- organisational skills - acquired through coping with your workload of lectures, practicals, study, part-time work, social activities etc;
- ability to identify, select, organise and communicate information;
- team working skills - learned through your laboratory work, or perhaps through sport, a society or volunteering.

Employment prospects

Every year, statistics are collected to show what HE students do immediately after graduation. These can be a useful guide but, in reality, with the data being collected within just six months of graduation, many graduates are travelling, waiting to start a course, paying off debts, getting work experience or still deciding what they want to do. For further information about some of the areas of employment commonly entered by graduates of any degree discipline, check out 'What Do Graduates Do?' and the AGCAS Special Interest booklet 'Your Degree... What Next?'

There are three main ways you can use your physiology degree in a graduate job:

- directly as a scientist, where your physiology knowledge and skills are essential;
- indirectly, where having some scientific knowledge and/or specific skills such as numeracy or data interpretation is useful. Examples include chartered accountant or information scientist;
- in a non-scientific job, but where graduate qualities, such as intellectual ability or communication skills, are essential.

According to the Centre for Bioscience (http://www.bioscience.heacademy.ac.uk/), approximately half of physiologists take up employment directly after graduating. Of these, 18% enter a scientific post in laboratories in industry, universities, hospitals or the civil service. Others go into a wide range of jobs including marketing, media and finance.

Job options

Bear in mind that it's not just your degree discipline that determines your options. Get hold of the AGCAS Special Interest booklet 'Your Degree... What Next?' from your careers service. This looks more generally at the options for today's graduates and offers informed advice on career planning. Or try 'What jobs would suit me?', an online career planning tool, at www.prospects.ac.uk/links/pplanner.

You can choose between jobs that are degree-related or those that appeal because they use other interests or elements of your degree.

Although the most obvious career is perhaps scientific research, jobs that are analytical and quantitative appeal to physiologists too. These include computing, accountancy, banking and insurance. There are many others you could consider.

Your chance of entering some of the following jobs may be enhanced by further study or a few years' relevant work experience.

Jobs directly related to your degree

- Biomedical scientist (MLSO) - carries out laboratory tests on human samples to help clinicians diagnose illness and to evaluate the effectiveness of the necessary treatment.
- Clinical research associate - sets up, monitors and completes clinical trials of a medicinal product.
- Radiation protection practitioner - gives advice about the possible hazards of radiation and radioactive materials and waste. A range of scientific techniques and equipment is used to measure radiation, assess risks, and ensure the safety of those in the workplace, the public and the environment.
- Audiological scientist - develops ways to measure and compensate for hearing loss, and for diagnosing neurological diseases.
- Physiological measurement technician - works in hospitals and can specialise in a number of areas including audiology: measuring hearing and balance problems; cardiac physiology: testing blood pressure and heart rhythm; or neurophysiology: measuring electrical activity in the brain.

Jobs where your degree would be useful

- Scientific journalist - researches, writes and edits scientific news articles and features. Typical work activities include attending scientific conferences, interviewing expert scientists, writing articles for print or web publications and researching scientific literature.
- Medical sales representative - liaises between pharmaceutical companies and medical and healthcare professionals in order to promote and sell medical products.
- Medical technical officer - responsible for the highly complex equipment used to diagnose disease and treat patients in hospitals.
- Inspector of health and safety - carries out inspections and investigates accidents or cases of ill-health and complaints in the workplace.
- Information scientist - organises and manages information systems. They store, analyse, and retrieve information and distribute it to interested clients.

Although for many graduates the jobs listed here might not be

their first, they are among the many realistic possibilities with your degree, provided you can demonstrate you have the attributes employers are looking for. It's worth noting that many graduate vacancies don't specify particular degree disciplines.

To find out more about the above options and other jobs, see AGCAS Occupational Profiles and other sources of occupational information available in careers services. Occupational Profiles are also available on www.prospects.ac.uk/links/occupations.

Where are the jobs?

The major scientific employers of physiology graduates are universities, pharmaceutical and biotechnology companies and The National Health Service (NHS). Non-scientific employers include management consultancies, retail companies, banks and other financial institutions.

Most employers are spread throughout the country, although corporate headquarters and the larger pharmaceutical companies tend to be in the south of England. Biotechnology companies often appear in clusters, such as in Nottingham, Edinburgh and Oxford. You may find looking at the following sectors useful:

- Education - a range of careers within higher education, including administration and research;
- Health - careers in hospitals and other health settings;
- Science - careers in industrial, academic, hospital and public laboratories.

Career management is an ongoing process, one that you'll no doubt develop all your working life. For further information on all the above employment areas, visit www.prospects.ac.uk/links/sectorbs or ask to see the AGCAS Sector Briefings at your careers service.

Further study

A large proportion of physiology and anatomy graduates (40% in 2006) undertake further study. Half of these do a second first degree - usually medicine or veterinary medicine. There are graduate fast-track medical courses at many universities in the UK.

Others pursue physiology through an MSc, MRes or PhD. In academia, a PhD is a necessity to get a lectureship. In industry, a PhD is not so essential, although most heads of section possess one.

Some move away from pure physiology through an MSc or diploma in subjects like forensic science or toxicology. Others change direction more radically by studying courses such as law, computing, accountancy or librarianship. These are sometimes referred to as conversion courses.

Another alternative is a Postgraduate Certificate in Education (PGCE) in order to teach.

These trends show only what previous graduates in your subject did immediately upon graduating. Over the course of their career - the first few years in particular - many others will opt for some form of further study, either part-time or full-time. If further study interests you, start by taking a look at the AGCAS Special Interest booklet 'Postgraduate Study and Research' or the 'Further study' section of www.prospects.ac.uk. For a comprehensive list of courses, see 'Prospects Postgraduate Directory'.

Refer too to the 'Prospects Postgraduate Funding Guide', the AGCAS Special Interest booklet 'Postgraduate Study and Research' and AGCAS Vocational Course Surveys for further details relating to finance and the application process.

Other options

Don't forget there are alternatives to entering employment or postgraduate study, such as taking time out, volunteering or travelling. Longer term, you may want to consider starting your own business. Check out the AGCAS Special Interest booklets 'Beyond Nine to Five: Flexible Working', 'Self-employment' and 'Working Abroad', all available from your careers service.

What next?

This should have started you thinking about your future. Whatever stage you are at, your careers service will be able to help you. A huge number of resources, including most of those mentioned here, plus a wide range of other services, including individual careers guidance, employer presentations and workshops on topics such as successful applications and interview techniques, are likely to be on offer.

A full list of useful resources plus case studies of graduates in this subject can also be found on www.prospects.ac.uk/links/options.

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