

NEXT STEPS



OPTIONS AFTER A
BIOSCIENCE DEGREE



This booklet was produced by the Royal Society of Biology www.rsb.org.uk in collaboration with the following learned societies and associations:



Association of the British
Pharmaceutical Industry
www.abpi.org.uk



Biochemical Society
www.biochemistry.org



British Pharmacological Society
www.bps.ac.uk



British Society for Immunology
www.immunology.org



Society for Endocrinology
www.endocrinology.org



Society for Experimental Biology
www.sebiology.org



Microbiology Society
www.microbiologysociety.org



The Physiological Society
www.physoc.org

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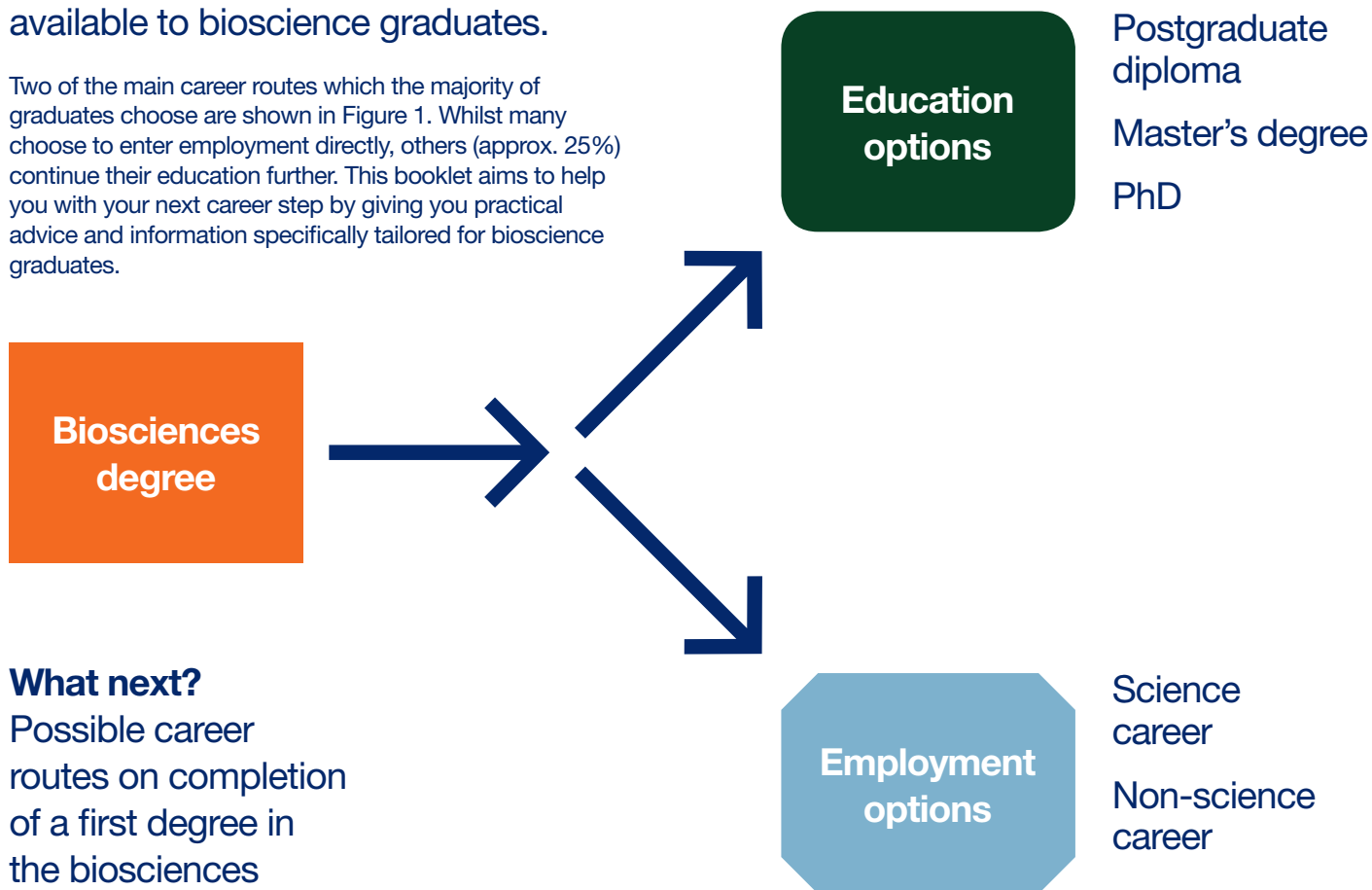
Learned societies are organisations that promote and support people working in a particular academic field, whose members can include academics, researchers and students. Bioscience learned societies offer a range of services and support to their members. They organise scientific conferences and publish specialist journals and books.

Many of the larger learned societies also offer travel grants, studentships, bursaries, competitions and awards to their student and early-career members. They are committed to the communication of science to schools and the wider public as well as within the bioscience community, and they also offer other specialist support such as careers information and guidance.

INTRODUCTION

There are many career opportunities available to bioscience graduates.

Two of the main career routes which the majority of graduates choose are shown in Figure 1. Whilst many choose to enter employment directly, others (approx. 25%) continue their education further. This booklet aims to help you with your next career step by giving you practical advice and information specifically tailored for bioscience graduates.



What next?
Possible career routes on completion of a first degree in the biosciences

As a bioscience student or graduate, you will have already made some important decisions in your life concerning your career. Think back to how you chose your degree course and university, for instance. Many courses were available to you, so how did you decide? Perhaps your choice was based on the course content, the geographical location of the university and its reputation? Or maybe your choice was linked to a particular career you are keen to pursue?

Whatever influenced your decision, you are now faced with a new set of choices which will be based on a further set of factors. Your degree course and university experiences are likely to be factors which have a major influence over your next career step, but others will figure to a greater or lesser extent. These may include work experience you have gained during the course of your degree, your interests, skills and personality. In addition, other factors such as your personal situation, network of contacts, job market knowledge and understanding of good career planning will play a part.

This booklet will help you to plan your next career move and enhance your chances of success. Your strategy will depend on your career plans, e.g. for a career as an academic researcher you will need to apply for a PhD or Master's degree. For other careers, a postgraduate course may also be advisable (or even essential). To enter some careers, you may have to consider a period of short-term or voluntary work. More general graduate recruitment programmes require early application during your final year, whereas for some science-related work, you can only apply as jobs are advertised. This booklet includes advice and information on the main aspects which contribute towards your career planning:

- **Job seeking strategies**
- **The importance of skills**
- **Postgraduate study opportunities**
- **Making applications**
- **Interviews**
- **Resources**

Whatever your career plans (and you may not know what you want to do at this stage), this booklet aims to help you move forward to your next career stage. Being flexible and proactive are key factors to succeed in what has become a very dynamic and changing job market. Your degree has given you unique knowledge, experience and skills which you can now use to move into your first graduate job. With help, support and a proactive approach you should find this new challenge is an exciting and rewarding experience.





JOB SEEKING STRATEGIES



JOB SEEKING STRATEGIES

Looking for a job can be a daunting and time-consuming experience so it's important you remain focussed and as organised as possible in your search.

This section provides you with some ideas on places to start and tips to ensure you make the most of the opportunities available.

The way you conduct your job search will depend on the types of career you are considering, as different job sectors use different methods to recruit people. You may not have a clear idea about your career plans right now so researching various options and assessing whether they might suit you will be your priority. Box 1 gives a snapshot of the types of careers on offer sub-sectioned into bioscience-related and non-bioscience related.

Box 1: A sample of some of the job sectors available to you

Bioscience-related jobs include:

- Research & development (industry/academia)
- Clinical biochemistry/immunology/microbiology
- Technical e.g. quality control, research technician
- Specialist e.g. ecologist, pollution control, bioinformatician
- Medical doctor/nurse/physiotherapist
- Patent attorney
- Regulatory affairs/technology transfer
- Teaching (school/college/university)
- Science communication/journalism/publishing
- Research management and administration
- Scientific sales and marketing

Non-bioscience jobs include:

- Accountancy/finance
- Management e.g. retail, operations
- Administration e.g. university, Civil Service
- Sales and marketing (non-medical/scientific)
- Librarian/information management
- Security/armed forces
- Legal services
- Personnel
- Non-science communication/publishing/journalism/PR
- Market research/analyst
- Self-employment



WHEN SHOULD YOU START YOUR SEARCH?

The short answer is the sooner the better! If you're not sure what you want to do, it may be more a case of 'research' than 'search' at this stage. You can carry out your research in various ways:

- **Talk to people within your immediate network (e.g. friends, family, lecturers)**
- **Look at jobs advertised on the internet – see the Resources section for websites on pages 37–38**
- **Visit your university careers service**
- **Attend careers events**

Once you have researched your chosen career area(s), start thinking about your job search. Planning ahead is key to ensure you are not left without a job when you finish your degree. If you wait until after you have graduated, you will have missed out on many opportunities advertised during your final year.

Many larger companies that run graduate recruitment schemes, and some postgraduate courses such as teacher training, have application deadlines early in the academic year from October to December. If you are interested in applying for this type of position, make sure you have researched the application deadline in plenty of time. However, other organisations will have opportunities available throughout the year, so keep your eyes open.

VISIT YOUR CAREERS SERVICE

A good place to start your search is your university careers service where you can speak with a careers adviser. Although they can't make decisions for you, they will give you guidance on the best course of action to pursue.

Your careers service will also run workshops and information sessions to help with your career decision-making and practical aspects such as CV writing, interview techniques and applying for postgraduate study. They should also have additional resources available both in the centre and on their website to help your search, including a current vacancies board, information on applying for jobs or funding further study and details of careers events.

CHECK OUT YOUR ALUMNI OFFICE

Your university alumni office holds a database of graduates, some of whom are willing to be contacted to give you advice and information about the work they are doing. This could help you to extend your network of contacts further and improve your employability.

CAREERS FAIRS

Visiting a careers fair is an excellent opportunity to discover more about companies currently recruiting and the skills and attributes employers look for in graduates. Organisations exhibiting at careers fairs tend to be large employers such as finance, management and retail companies or public sector and government organisations. Science careers fairs tend to be dominated by engineering firms and you may be disappointed at the lack of opportunities for bioscientists. Small and medium sized companies (SMEs) are large recruiters of bioscientists, but with fewer vacancies available, they do not usually attend careers fairs but rather advertise on job websites or via recruitment agencies. Therefore, although you may not find your perfect employer at a careers fair, it is still worth attending to research different job areas and build your knowledge base.

Some careers fairs also put on presentations on careers in different sectors, which can be useful in your job research. Careers fairs can be organised by your university, specialised learned societies or individual employers. Look out for posters and emails and ask your careers service for more information.

Did you know

The Royal Society of Biology and its Member Organisations run specialised life sciences careers fairs?

These events provide presentations covering a wide range of biology-related careers, a CV workshop and a chance to talk to careers experts in the exhibition.

Find out more about upcoming events at:
www.rsb.org.uk/careersfairs



JOB ADVERTS

The majority of jobs are advertised on the internet, for example on university careers websites, specialised graduate websites, specialist journals and magazines, newspapers or individual company websites. A list of websites to start your search is included in the Resources section on pages 37–38. Depending on the type of job you are looking for, you could start your search either on a general graduate recruitment website or aim for a more science-specific site. If you want to work in a particular location, also check out the job section in the local press. If there is a particular sector you want to work in, find out if there are any specialist publications for that sector that advertise vacancies. Prospects (www.prospects.ac.uk) is a good site to start your search as it gives descriptions of career areas, case studies of people working in the sector and links to associated job sites.

In these days of highly varied jobs, don't rely on the job title but examine job adverts in detail to see exactly what each role involves. The job description will give details of the skills and attributes the employers want. This will help you to decide on the type of work that may suit you as well as identifying any gaps in your skills and experience which need filling.

SPECULATIVE ENQUIRIES

If there is a particular organisation you would like to work for, but you haven't seen any vacancies advertised, it may be worth contacting them on a speculative basis. Ideally, contact the company in advance to ask if you can visit

to talk to them informally and to find out the name of an appropriate person in the company to send your CV to. Make sure you have researched the company thoroughly and highlight in your covering letter why you think you are suited to work in their organisation.

RECRUITMENT AGENCIES

Many employers register vacancies with specialised recruitment agencies. If you are thinking of registering with an agency, carry out some research first to make sure they specialise in the area you are interested in.

You should sign up to two or three different agencies to ensure you have access to a broad range of jobs. You should not have to hand over any money when signing up. Remember that using a recruitment agency shouldn't be your only option – keep searching for positions independently too.

When registering, it is important to make a good impression, as you would in a job interview. When the agency puts you forward for vacancies, they will be better able to highlight your skills and abilities to the employer. Keep in regular contact with your recruitment agency to make sure they continue to actively look for positions for you.



WORK EXPERIENCE

You may have already secured some relevant bioscience-related work experience through a placement on your degree course, or relevant work experience during your vacations. If you have had no such opportunity, you have a number of options.

- **Look out for internships and placements advertised through careers services, specialist organisations and within your university department. These can be for science or non-science related roles. There are usually a large number of applicants, so treat the application as seriously as you would a job application.**
- **Make the most of any non-science work experience (e.g. bar/shop work), or involvement in voluntary organisations or university societies, by selling the transferable skills you have acquired. See 'Importance of skills' section on page 12.**
- **Take time out following your degree to do some voluntary/short-term work to enhance your CV. In particular, sectors such as conservation, science communication and administration can offer internships and voluntary placements to help you gain experience. These can be used as evidence of your suitability for the job for which you are applying.**

SUMMER STUDENTSHIPS

Many learned societies offer studentships to undergraduate students (mainly second year students), which fund them to work in a university laboratory during the summer vacation. Societies that may run this type of scheme include: Biochemical Society, British Pharmacological Society, Genetics Society, Society for Applied Microbiology, Society for Endocrinology, Microbiology Society and The Physiological Society. Visit the learned societies' websites on page 1 for more details.



MANAGING YOUR ONLINE PRESENCE TO BOOST YOUR CAREER

Managing your online presence is becoming increasingly important when job seeking. The professional image you present to potential employers is no longer measured solely by what your CV, covering letter and referees say about you – it is also based on how you present yourself online. As online information about people becomes easier to access, it is often the first port of call for employers when seeking out potential employees. It can also be a powerful tool to build up a network of contacts and engage with groups with shared interests.

When job seeking, there are some activities you can do to ensure your online presence is communicating the profile you want. Below are some top tips to help:

Where to start?

1. Reflect on your current online presence and see if the way you are portrayed is what you want.
2. Consider what you want to gain from your online presence. Do you want to find a job, network in your current role, publicise your work to the general public or others in your field, or to create a well-known online presence for yourself to engage with key groups?
3. Ask yourself if your online presence is findable and effective.
4. Look at the online profiles of your colleagues and peers to see what others are up to. Find examples of what you like and use these to set the tone for what you do.
5. When planning, remember it is better to do a few things well than lots of things badly.

Perform a web search for your name

There is often more information than you think, and not all of it is from yourself. Remember, most people (including a busy potential employer) will likely only look through the top-ten search results to make decisions about you. Try different search terms; for example, your name but also your subject or institution, or a term that people may use to find you.

What if you don't find 'you' in an internet search?

If there are lots of people with the same name as you, there is little you can do to get 'you' appearing in the top results. You need to look for ways to distinguish yourself from others with similar names or roles. Using your full first name and/or middle initial (e.g. Jonathon P Smith) in your online profiles and CV would lead a potential employer to use this as their search term and more likely bring up the results you want.

Don't like what you see?

You are the only person who can ensure good items show up when searching yourself. Never put anything online you would not want a supervisor /future employer to see. Actively manage your privacy settings on all social media channels you use. Some less-positive items can be removed, or you can ensure there's more good than bad so these things are found more.

CREATING A PROFESSIONAL PROFILE

On the right are a few examples of the numerous social media platforms that can be used to help raise your professional profile:

Managing your online presence and building your professional profile is a continual process. Now you've got your online presence communicating what you want it to, keep it up and build on it. Share interesting and engaging content, which could include details of your work/research. But be sure to check with your employer that this is okay to do so first.



LinkedIn

This is often the preferred platform for professionals working in the science sector, and is the most widely used as a career tool. You can share your CV, professional skills and publications, and demonstrate networks and links in a very visible way. For example, if you speak to someone at a conference and obtain their business card, you can then make this link visible by adding them to your professional network.



Twitter

This microblogging site is an exceptional tool for finding information quickly. You can engage in two-way conversation whereby you communicate your thoughts and interests but also listen and learn from the expertise and ideas of others.



Writing a blog

This is a good way of establishing yourself as a “communicator” in your sector. It gives you the chance to demonstrate your specialist knowledge and show your engagement with your subject outside the lab. It also builds on your communication skills and you can upload pictures, have guest bloggers, and write your own topical posts.



Facebook

In general, this platform is best kept for personal use, and it is rarely used to help raise your professional profile. Although organisations will have groups and pages you can link to, it can be difficult to prevent the line between personal and professional becoming blurred.



THE IMPORTANCE OF SKILLS

THE IMPORTANCE OF SKILLS

All job advertisements, and their associated job descriptions, ask for particular qualifications and knowledge.

In addition they will list a whole range of skills. These can be technical and specialised research skills as well as interpersonal and transferable skills.

The more closely related to bioscience a job (or postgraduate course) is, the more specialised knowledge and qualifications are required, as opposed to transferable skills. Conversely the less specialised a job is (for example, a non-science related graduate job), the less scientific knowledge and qualifications are needed and the more necessary are the transferable and interpersonal skills. As an example, look at the three advertisements in figures 2, 3 & 4 on page 14.



Box 2: Top 10 skills employers seek

(in no particular order)

- Analytical and research skills
- Communications skills (listening, verbal, written)
- Computer and technical literacy
- Flexibility and ability to multitask
- Initiative and self-motivation
- Interpersonal abilities
- Leadership and management skills
- Planning and organisational skills
- Problem-solving and creativity
- Teamwork



THREE EXAMPLES OF JOB ADVERTISEMENTS

Fig 2: Postgraduate study

Three year PhD studentship: Molecular biology of the eye

Role and regulation of proteolysis in the retinal pigment epithelium and its significance for age-related macular degeneration.

University of Liverpool – Department of Eye and Vision Science

Applications are invited for a fully-funded PhD studentship in Ocular Molecular Biology investigating molecular and cellular processes involved in gene expression and regulation of proteolysis in retinal pigment epithelial cells linked to development of age-related macular degeneration (AMD). AMD is the leading cause of visual impairment in the elderly. The project will explore the molecular mechanism involved in the re-direction and function of variant B cystatin C and other proteolysis-related molecules associated with AMD.

The student will benefit from interaction with other postgraduate researchers in the group addressing key questions regarding fundamental cellular processes, such as the intracellular trafficking of secretory proteins, misfolding of soluble proteins and (re)modelling of extracellular matrix by RPE cells, which are likely to be important for progression of degenerative processes.

Candidates should hold a First or Upper Second class Honours degree in a relevant biochemical or molecular biology subject. Applications from candidates with an additional relevant Master's award are also welcome. You should be able to work independently and as part of a team and possess excellent academic credentials, enthusiasm, good organisational skills and initiative. The opportunity to develop skills in molecular/cellular biology, cell culture/cellular assays and imaging techniques will provide excellent career prospects for the successful applicant.

Fig 3: Bioscience job

SCIENTIFIC OFFICER

A life science graduate, ideally with a practical background in virology, immunology, molecular biology or related discipline.

However, for the right candidate, enthusiasm and a willingness to learn may be a substitute for experience. You will be a self-driven individual who is pro-active, creative and goal-orientated with excellent oral and written communication skills. In return we offer a challenging role in our newly established laboratories.

Fig 4: Non-bioscience job

Outreach Officer

The successful applicant will develop and manage projects to support the University's widening participation strategy.

The postholder will plan, organise and deliver activities to raise the aspirations and achievement of young people, providing information and advice about opportunities that exist in higher education.

Applicants should have excellent interpersonal and organisational skills, be enthusiastic and have the ability to motivate young people from diverse backgrounds. Applicants should have a degree or significant vocational experience and a good understanding of widening participation in higher education, along with the ability to manage projects and budgets.

ANALYSIS OF THE ADVERTISEMENTS

If you look at each advertisement featured on the previous page, you will see that they have different emphases according to the qualifications, knowledge, skills and attributes they require from prospective candidates. However, they also have commonalities too. Can you spot what they are?

Postgraduate study (Figure 2)

The PhD studentship gives a detailed account of the research project and the biological processes associated with it. The description aims to draw in those graduates interested in this area of the biosciences as the studentship will involve intensive focus for three years. Specific academic qualifications and knowledge are required as well as more general personal skills associated with working in a research group. If you look at websites which advertise PhD studentships, you will see that they tend to follow this general format.

Bioscience job (Figure 3)

The scientific officer post is not so focussed on specific knowledge, but the employer wants someone with a bioscience degree who can demonstrate good interpersonal skills and is a good team player. Their stipulation for

someone who is self-driven with a willingness to learn indicates they want to employ a graduate who can adapt to new projects, learn new techniques and who will be focussed on results.

Non-bioscience job (Figure 4)

Finally, the outreach officer post requires a graduate of any discipline as long as they have an even wider range of interpersonal skills. They expect that a graduate, with three or more years' experience of higher education, will have acquired the skills and attributes to enable them to take on this role.

WHAT IS A GRADUATE JOB?

A graduate job requires applicants to have a degree and assumes you are of a calibre that makes you suited to a professional career in which you will be able to progress and develop. It assumes a graduate will have the ability and willingness to learn new information and skills and possess capabilities not immediately apparent for a non-graduate.

However, this does not mean a degree automatically leads to your securing a graduate job. You will also need to show evidence you have the associated specialist and interpersonal skills which demonstrate your potential to fulfil the professional requirements of a graduate job. Having said that, many jobs now ask for a graduate even though the job is quite basic. Even so, if you think a job has the potential to propel you towards your desired career, it is still worth considering even if it is low-level and temporary (you can add this experience to your CV and use your employer as a reference for your next career move).

HOW DO YOU GAIN SKILLS?

You will have already acquired a range of skills but there is always scope to gain more, and develop the ones you already have, to improve your employability. If you look at the top 10 skills in Box 2 on page 13 could you say with confidence that you could give examples to show you can demonstrate all or most of them?

Bioscience-related skills

Your degree has provided you with bioscience-related skills so that, as a bioscience graduate, you can apply for specialist bioscience-related jobs and postgraduate study. You will have acquired these skills from practicals, project and field work, placements and other activities associated with your degree course. As well as technical and knowledge-based skills, you will have also developed general science-related skills such as critical analysis, planning, numeracy, data management and methodological approaches. You can build further on your technical and research skills by securing work experience with a company or research institution during your vacation, via a placement or by writing speculatively. See 'Job seeking strategies' section on pages 4–11.

Interpersonal and transferable skills

Non-science and bioscience-related job advertisements are likely to specify more general skills such as

teamworking and communication. There are a variety of ways you can develop these skills whilst at university. Simply being away from home and managing your own time and money are the most basic skills you will acquire, but this is the same for everyone. If you have a job whilst studying, such as bar, shop or factory work, this will also be topping up your skill-set in areas such as teamwork, diplomacy, communicating with a wide range of people, organisational skills, time management and self-motivation. Another way to enhance your skills is to get involved in organised and structured events and activities – universities offer a wealth of opportunities for you to do this. Volunteering is a great way to get skills from working in the local community on social or conservation projects. You can volunteer at the local radio station to gain journalism skills, or work with a local youth group if you're considering teaching in the future. For ideas on how to evidence your skills, see Table 1 on page 17.

What are interpersonal skills?

Interpersonal or personal skills refer to your ability to communicate and interact with other people. They are sometimes referred to as people and/or soft skills and include attributes such as negotiating, listening, persuading, leadership and team working. Evidence of these skills can usually be demonstrated through jobs you have held or activities you have been involved in.

What are transferable skills?

Transferable skills are skills you have acquired in one environment which can be transferred to another setting. For example, if you have been an active team player in an undergraduate sports club, you can use this as evidence when applying for a job which requires good teamworking abilities.



Table 1. Examples of how to evidence your skills

Activity	Skills acquired
<p>Final year practical project</p> <ul style="list-style-type: none"> • Designed and conducted experiments • Wrote up and presented work to the department 	<ul style="list-style-type: none"> • Biochemical techniques, PCR, culturing cells • Self-driven and motivated, communication skills (writing and presenting) • Interpretation and analytical skills, accuracy and precision
<p>Work experience</p> <ul style="list-style-type: none"> • Six month placement in a laboratory during degree course 	<ul style="list-style-type: none"> • Cell culture, bioassay and ELISA techniques, using biochemical equipment • Teamwork within a lab of eight people
<p>Voluntary work experience</p> <ul style="list-style-type: none"> • Worked on a conservation project 	<ul style="list-style-type: none"> • Teamworking and co-operation • Fieldwork skills and fitness levels • Understanding of ecology
<p>Member of university hockey team</p> <ul style="list-style-type: none"> • Played against other teams and came 2nd overall 	<ul style="list-style-type: none"> • Time management to ensure availability every week • Team working and motivation
<p>Secretary of hockey team (2nd year)</p> <ul style="list-style-type: none"> • Organised fixtures and controlled budget 	<ul style="list-style-type: none"> • Financial and organisational skills
<p>Bar work during first year</p>	<ul style="list-style-type: none"> • Excellent communication skills • Negotiating and dealing with difficult customers





POST-GRADUATE STUDY OPTIONS



POSTGRADUATE STUDY OPTIONS

As a biosciences graduate, there will be many postgraduate study options available to you in scientific, science-related and non-scientific fields. These can be academic or vocational, research-, taught- or work-based, and full or part time. The type of postgraduate study you choose may depend on your interests or be a requirement for your chosen career.

For this reason, and reasons of funding, you may choose to take a couple of years out before embarking on a postgraduate course. However, if you are more certain of your career goals, a postgraduate course directly after graduation is sometimes preferable, e.g. towards a PhD, for teaching, medical careers or science specialisation. Some jobs require graduates to complete specialised postgraduate courses before becoming fully fledged employees, and some employers may offer to fund their employees' postgraduate studies for relevant courses and qualifications while they work.

Box 3: Postgraduate courses – what do they mean?

- Master of Science (MSc) describes any scientific Master's course. This generally takes one year to complete and is mainly a taught course with some research elements.
- Master of Arts (MA) describes an arts or humanities Master's course.
- Master of Research (MRes) is usually used to describe courses that include at least one large research project.
- Master of Philosophy (MPhil) is awarded to candidates who have completed a substantial research project (for longer than 2 years).
- Doctor of Philosophy (PhD or DPhil) is a three to four year course where the student must carry out a substantial piece of original research, written up as a thesis and examined orally.
- Postgraduate Certificate in Education (PGCE) is a one-year higher education course for degree holders in England, Wales and Northern Ireland, that trains them to become teachers.

1. Master's Courses

Master's courses usually take one year full-time and allow you to specialise in a particular scientific area. There are a vast range of Master's courses to choose from to extend your science specialisation including molecular biology, bioinformatics, statistics, biophysics etc. Your choice will depend on your area of interest but make sure it is sufficiently different from your more general bioscience degree. Clinical Master's courses are undertaken whilst working in a hospital and are advertised by the NHS.

Unlike your undergraduate degree, there is no central admissions system for postgraduate courses, although UCAS's sister organisation, UKPASS (www.ukpass.ac.uk), does allow you to apply to courses at some universities. Therefore, you apply to individual universities (usually using their own application form) and can apply for as many courses as you like. It is usual to apply any time after the start of your final year, but you can apply later. If you can obtain a good degree, you have a good chance of being accepted onto many courses.

2. PhD Studentships

A PhD is essential if you wish to follow a career in academic research and very helpful if you want a research job in industry. You will undertake a large piece of original research, written up as a thesis. In the UK, PhD programmes now also include elements of training to develop your transferable skills and they normally last 3–4 years. They are usually completed within a university; however there may be opportunities to study within other laboratories and research institutions via schemes such as CASE PhDs. An interactive diagram showing research career progression is available here:

www.mrc.ac.uk/skills-careers/interactive-career-framework/

Choosing the right PhD is crucial, not only in terms of the subject choice, but also in terms of the academic supervisor and his/her research group. Make sure you research these carefully before applying. You will be spending three to four years with these people in a relatively close environment, so it is important that you have a rapport (you can find this out when you attend interview by asking to meet the other research group members).

You can search for advertised PhDs online at www.findaphd.com. If you have identified a research group you would particularly like to work with, you can write speculatively by sending them your CV and a letter of introduction to make you stand out in the crowd. Make sure your application is highly targeted and refer to their publications and recent research stating how you will be able to contribute. PhDs and Master's courses are advertised on websites, departmental noticeboards and social media feeds, and magazines such as *New Scientist* and also via word-of-mouth. See the Resources section on pages 37–38 for more information.

2.1 Doctoral Training Partnerships

Doctoral Training Partnerships (DTPs) are specialised PhD programmes that are funded by the main research councils. They provide skills-based training alongside traditional PhD studies. DTPs are often interdisciplinary and are usually hosted by either one research organisation or collaborations between research organisations.

3. Funding

Postgraduate study can be expensive but there are a number of funding options available. It is important that you plan carefully before starting your course to ensure you have enough money to fund yourself through to the end.

3.1 Master's Courses

There are a very limited number of funded studentships available on some Master's courses but, in the majority of cases, students need to fund their tuition fees and also their living costs whilst undertaking the course. The tuition fees for courses vary but are usually more expensive for international students and for research Master's courses. Some students pay from their own savings and part-time work, or with support from parents, however there are other options available. Many banks also offer loans to recent graduates which have relatively low interest rates. Loans are available from the UK government for studying Master's courses, and vary in size depending on which region you live in. Find out more at <https://www.gov.uk/funding-for-postgraduate-study>. Additionally, some universities offer bursaries to outstanding students or students on a low income. It may also be worth investigating whether there are any suitable scholarships or knowledge transfer partnerships available.

3.2 PhD Studentships

Most bioscience PhDs are fully funded; your funder pays your tuition fees, money for your research and a stipend to support your living costs. As these are tax-free, you could end up earning a similar amount to many first-time jobs. You cannot apply directly for the money yourself; instead the funding comes with the PhD (rather like a salary). PhDs are mostly publicly funded via the various Research Councils who are responsible for co-ordinating and funding particular research areas. Research Council funding is open to UK and EU students.

CASE studentships (Collaborative Awards in Science and Engineering) are jointly supervised by academic and industrial partners and include additional funding from an industrial partner on top of Research Council funding. These often include the opportunity to work at the industrial partner and experience work in industry.

Health charities such as Cancer Research UK, British Heart Foundation, Diabetes UK and the Wellcome Trust also fund PhDs that fit their areas of interest.



Useful funding resources for PhDs

- UK Research and Innovation
www.ukri.org
- PostgraduateStudentships.co.uk
www.postgraduatestudentships.co.uk
- Scholarship Search
www.scholarship-search.org.uk
- EURAXESS UK
www.britishcouncil.org/euraxess
- Research Council studentships
<https://bbsrc.ukri.org/skills/>
<https://mrc.ukri.org/skills-careers/studentships/>

4. Professional Postgraduate Qualifications

You may decide that you want to use the skills you gained in your biosciences degree in a science-related field. Some of the most popular examples are outlined in this section.

4.1 Teacher Training Programmes

Teaching can be a highly challenging and rewarding career and there is always a demand for skilled, eloquent and engaging science teachers in primary and secondary schools. To become a school teacher in the UK, you need to gain Qualified Teacher Status (QTS). As a graduate, there are several different paths you can take to achieve this.

Please note: The process for applying for Teacher Training can alter from year to year. For further updates, refer to the 'Get into Teaching' website.

Postgraduate Certificate in Education (PGCE)

The majority of graduates qualify as teachers through a PGCE course. The course focuses on teaching skills rather than subject knowledge and takes one year to complete. PGCE courses are taught at universities, colleges, and as part of some employment-based teacher training programmes. The course consists of work placements and a study period at the higher education institution providing the PGCE.

To apply for a secondary school teacher training programme, you need a degree related to the subject you want to teach and an equivalent of grade C GCSE Maths and English. Applications for courses are made via UCAS Teacher Training.

School-led training

School-centred initial teacher training (SCITT) is an employment-based training route where you work for a school as an unqualified teacher. Schools Direct similarly offers on the job training in a network of schools but leading to a job within one of the schools at the end. Graduates who have been working for three or more years may be eligible to receive a salary during their Schools Direct training. Both courses generally last one year, give QTS and may also award a PGCE. Applications for courses are made via UCAS.

Teach First teaching and management programme

Teach First targets top graduates and puts them to work in challenging schools whilst developing both their teaching and management skills. The two-year Leadership Development Programme is available to graduates with a 2:1 degree or above, 300 UCAS points (or equivalent) and GCSE grade C equivalents in Maths and English. The course provides a PGCE with QTS, plus management skills and networking events. In year one of the Teach First programme you'll receive at least the basic salary for an unqualified teacher, rising in year two to the basic for a newly qualified teacher.

4.2 Medicine, Dentistry and Veterinary Medicine

Bioscience graduates have access to the standard medical courses (which usually take five years) and to graduate-only "fast-track" courses (which generally take four years). The latter is more intensive, with a high workload and shorter holidays.

To apply for a "fast-track" course, you will need at least a 2:1 degree, along with good evidence of relevant work experience and extra-curricular activities. Competition for these courses is tough, so make sure you stand out from the crowd. You can apply for these courses through the UCAS website. Most medicine courses require you to attend an

interview and sit an entrance exam (which varies depending on the institution).

Most UK graduates studying medicine are eligible for NHS funding, which covers some of the tuition fees. You can also apply for a maintenance loan as part of Government's standard student finance package.

Graduate entry courses are also available in veterinary medicine and in dentistry. Most require at least a 2:1 degree and entry may be dependent on the subjects studied during your degree. Some courses require you to sit an entrance exam or show evidence of relevant work experience.

4.3 Other Healthcare Professions

Healthcare Scientists

There are two branches of healthcare scientists working in hospitals, Biomedical Scientists and Clinical Scientists. Registrations with the Health and Care Professions Council (HCPC) is necessary for both careers.

To be a Biomedical Scientist, you need to complete an undergraduate degree in Biomedical Science accredited with the Institute of Biomedical Science (IBMS), and complete a Registration Training Portfolio in an IBMS approved laboratory, either as part of your degree or employed by the NHS as a trainee. If your undergraduate degree is not IBMS accredited, the IBMS will assess your qualifications to determine whether you need to undertake supplementary top-up modules. Check <https://careers.ibms.org/> for more details.

To become a Clinical Scientist in England and Wales, you need to complete the Scientific Training Programme (STP), a three-year training offered by the NHS including work-based and academic learning, and leading to the completion of a Master's degree in your chosen specialism. You will be eligible for HCPC registration at the end. The STP is highly competitive; you can check <https://www.healthcareers.nhs.uk/> for more details. Separate work-based training



routes are offered to graduates in Scotland and Northern Ireland leading to HCPC registration.

Nursing

You must be registered with the Nursing and Midwifery Council (NMC) to work as a nurse which requires a recognised degree. Some universities offer accelerated nursing courses of two years duration for those with a relevant degree background. On completion, students are awarded both an academic and a professional qualification, through integrated study of theory and supervised nursing practice.

Allied healthcare professions

Allied healthcare professions include physiotherapist, radiographer, speech therapist and dietician. You can apply to the degree programmes through UCAS. There are some professions accelerated courses to which bioscience graduates can apply. For more information about individual courses, their requirements and funding go to: <https://www.healthcareers.nhs.uk/career-planning/course-finder>

4.4 Science Communication

Science communicators play an important role in engaging the public and schools with science and bringing the work of scientists out of the lab and into the spotlight. They fulfil a wide range of jobs including press officers, journalists, presenters and policy campaigners. Excellent communication skills are essential, as is the ability to convey scientific concepts to a non-scientific audience. A formal postgraduate qualification in science communication is not compulsory, but it can help. In many cases experience matters and getting involved in a wide variety of science communication activities whilst studying can help you enter a career in this area.

Key skills for journalists are taught in standard journalism courses (look for courses accredited by the National Council for the Training of Journalists). Many courses require evidence of previous experience, such as working for a student newspaper, radio station or interning at a media company.

4.5 Patent Law

A career in law allows you to apply the analytical, research and logic skills honed during your degree by representing clients and arguing cases. Patent attorneys deal with the patenting of inventions by companies and individuals and protecting inventors' exclusive rights over their invention. Since they communicate the scientific and technical features of a patent, as well as the legal aspects, most patent attorneys have a science background. In addition they need excellent oral and written communication skills and an enthusiasm and interest in law. This industry is relatively small, so there is strong competition for places as trainees. To apply, identify companies advertising trainee positions and send out high quality applications following all the employer's guidelines.

As a trainee attorney you work under the supervision of professionals. They will fund your in-house training and postgraduate education towards taking the exams required to become a registered patent attorney.

4.6 Other Postgraduate Study Options

As mentioned previously, the type of course and its specialist subject you choose to pursue depends on a number of factors. We have identified some of the more common choices made by bioscience graduates; however there is a vast array of courses on offer including for example: IT, management and finance, law, career guidance and counselling.



MAKING APPLICATIONS

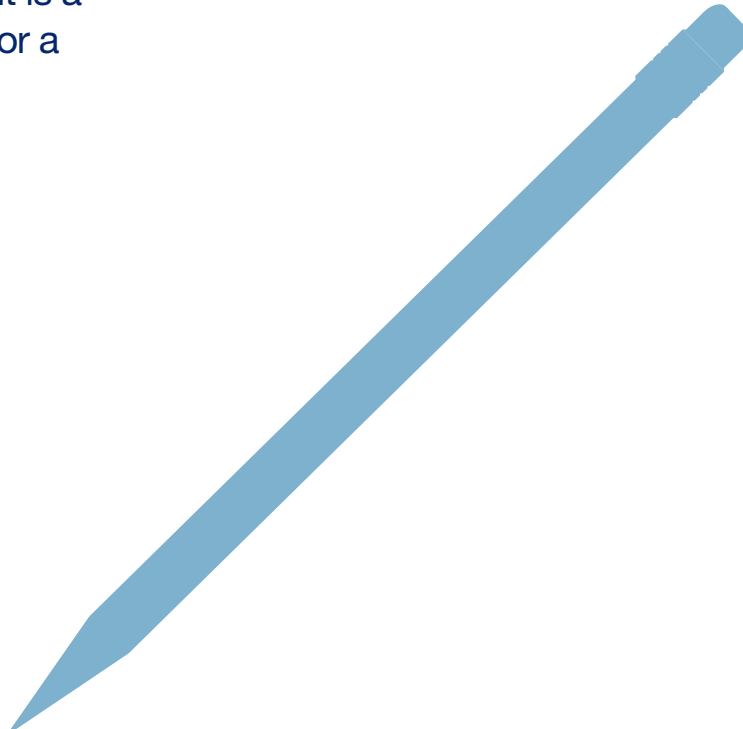


MAKING APPLICATIONS

Application forms and CVs (accompanied by a covering letter) are the two main documents used when applying for jobs, placements, courses or funding. If given time and attention, a job application gives you the opportunity to demonstrate that you are worthy of an interview and brings you one step closer to your next career stage, whether it is a job, course, voluntary post or a speculative enquiry.

Job adverts vary in length, detail and clarity but the information they contain is key to making a successful application. When writing your application, refer back to the advert on a regular basis. Highlight the knowledge, skills and abilities they are seeking and ensure you match these to your application. Additional research will also help to inform your application; for example the organisation's website will provide you with an insight into their objectives, current interests and communication style. Similarly, for a PhD studentship you can find out more about the research group and department by viewing their website to see their research interests and published papers.

Don't underestimate the amount of time it takes to write an effective CV or application form. If possible, ask a careers adviser, colleague or friend to provide feedback before sending it off.



CURRICULUM VITAE – CV

General rules

Less is more: Although Curriculum Vitae literally means ‘history of life’, this does not mean you should put every detail of your life in it – keep to two A4 sides.

One size does not fit all: Each employer looks for different skills and competencies and there is no merit in churning out the same CV for every job. Some basic information (name, contact details etc.) will stay the same but the order, emphasis and presentation of the content will need some adjustment. Make sure you address each part of the job description and, where possible, repeat the language used in the advert e.g. flexible, good communicator.

Easy to read: Structure your CV so that it leads the eye down the page and is easy to scan (employers sometimes only have a few seconds to read a CV); spell check; use a font that is easy to read; use bullet points (but don’t use too many fonts/ methods of highlighting); present black writing on white; convert to pdf to prevent formatting changes (essential if emailing). Two example CVs are included on pages 30 and 31. One is designed for a bioscience PhD studentship application and the other for a non-scientific graduate job.

CV sections

The following sections should form part of your CV. The order in which they appear depends on the type of job you are applying for.

Personal details

Your name should form the document header and clearly stand out. For contact details, include one sensible email address, one telephone number and one mailing address.

Information you DON’T need to include in your CV

- A title e.g. Curriculum Vitae
- A personal photograph
- Your date of birth/age
- Your relationship status (single/married)

Education

This should be presented in reverse chronological order (i.e. most recent first). For each piece of education, give the dates when you were studying, where you studied and the qualifications achieved. It is likely you will want to include the following key headings:

Undergraduate degree: Highlight the main modules/ pieces of work (e.g. research or library project) that are relevant to the position and the skills gained from these.

A-levels: List each subject and grade.

GCSEs: Provide a summary of grades, highlighting any of particular note (e.g. 4A* inc. Maths and English, 4A and 2B).

Work experience

This should also be presented in reverse chronological order. If there is a particular role you wish to highlight due to its relevance, bring it to the forefront by introducing sub-titles so you can place older work experience before more recent but less relevant work. Give the dates when you were employed and where you worked; you should also clarify if the work was voluntary and give a brief description of your responsibilities and the skills gained.

Skills

The skills you have can either be included as a separate section on your CV or incorporated into the sections on education and work experience. You may have learnt some technical skills of relevance to the job that you should mention. You can also include transferable/personal skills you have acquired during your education and other work. You could also list any software packages you are familiar with (e.g. Microsoft Office, Adobe Photoshop) as well as language proficiency. Some examples of skills with evidence of where you gained them from are listed below:

Technical: Proficient using PCR, biochemical and analytical skills, aseptic techniques.

Communication: Presented final year research project to over 50 students.

Leadership: Captain for university 1st XI football team, organised course social event.

Time management: Maintained a part-time job during undergraduate degree programme.

Other information

There are several sections you may want to include here, depending on any outstanding but relevant information. Examples include:

Hobbies/interests: This gives a flavour of you as a person and can include sporting interests, membership of social and university clubs, travelling.

Prizes: Receiving an undergraduate prize demonstrates achievement (but don't forget to explain what it was awarded for).

Professional membership: It is worth noting if you are a member of a learned society as this shows commitment and general subject awareness.

Other qualifications: Having a clean driving licence may be an important selection criterion, depending on the job.

References

It is normal practice to give the names of two referees – one for academic purposes (e.g. personal tutor, project supervisor) and, if possible, one in a work capacity (e.g. a lecturer or previous employer). For each application, check your referees are happy to act in this capacity; this is not only polite, but will also prevent them from receiving an unexpected telephone call. If you are aware your prospective employer will be contacting your referees, contact them first to give them a little background on the job and a copy of your current CV.

COVERING LETTER

As a general rule, all CVs must be accompanied by a covering letter. This is crucial as it introduces you to the employer and highlights your key qualities that match the job specification. Use it to set out your motivations for applying for the post and give reasons why you are highly suitable as a candidate for interview. A covering letter need only be one A4 page in length and should be set out as a proper letter (i.e. include your address, date, addressee and an appropriate sign-off).

When writing a covering letter, it is helpful to think of three 'invisible' sections:

- an introductory paragraph stating where you saw the job advertised and why you are applying;
- a second paragraph, providing information about your experience and why you are suited to the role;
- and a third paragraph, outlining what you wish to achieve in the role.

The covering letter provides an opportunity to show that you have researched the company/research group and genuinely want to work there. If emailing your CV and covering letter (as separate pdf attachments), you still should include a summarised version of the letter in the body of the email. Remember, at every point of communication, your suitability to the role is being assessed so ensure you still write in the same formal style and check that your grammar and spelling are faultless.

APPLICATION FORMS

Applications forms are used more regularly by larger organisations where the question and answer format forces each candidate to provide a similar range of information. In addition, they are also used by universities for postgraduate course applications. Sometimes the format does not always match your experience; in this case, try to fit your information in as best you can.

The most daunting part of application forms is the large white space inviting applicants to set out their suitability for the post. Write out this information in a Word document first, section it into sensible paragraphs with sub-headings that match those specified in the job description (e.g. communication, organisation) and provide bullet-pointed examples of experiences and activities which demonstrate these skills.

Application forms may be accessible as a downloadable form which you save and edit before sending on, or as an interactive online form. The downloadable form is likely to be in a Word document where the format is easily changed. It is a good idea to convert the document to a PDF before submitting to prevent further formatting changes. If working with an online form, it is often best to look through the complete application form and note the questions offline; you can then take time to prepare answers without experiencing any potential problems with your internet or with the fields being difficult to review.

Don't forget...

Applications are your way of selling yourself to an employer – you must promote yourself to the best of your ability to make the employer believe in you. Always tailor your CV to each individual job advert – generic CVs are usually easily spotted, so the extra effort you put in will pay off.



Fig 5: Academic CV

JOHN PHILLIPS

15 Lavender Avenue, Norwich. NR7 9HC
01603 76546 jphillips603@gmail.co.uk

EDUCATION

2011 - 2014

BSc (Hons) Zoology, (2:1)

University of East Anglia

Main subjects studied: animal physiology, molecular biology, microorganisms.

Essays and projects: Coursework and mini-projects were assessed during the 2nd and final years, with marks consistently at 2i and 1st level (ranging from 60% - 85%). In particular, my molecular and biochemical marks have been highest and this is the area of research which interests me most.

Final year project (graded 1st class): "Investigating an alternative in vitro method for ecotoxicological testing around the river Ouse." Samples, collected at different distances along the estuary, were analysed and then biochemical techniques such as gas chromatography and NMR were used to detect specific toxicological compounds.

2009 - 2011

All Saints 6th Form College, York

A-levels: Biology (B), Chemistry (C), English (B), General Studies (B)

AS level: Further Maths (C)

2004 - 2009

Highgrave School, York

GCSEs: 3 A*s (including Biology and Chemistry), 2 As, 3 Bs and 2 Cs.

SKILLS

My final year project received praise for the thorough literature search and well-structured thesis. In addition, I received excellent feedback for my oral presentation.

Research and Technical

During my degree, I have developed experience of the following techniques:

- Molecular/Cellular Biology: PCR, microarrays, bioinformatics
- Biochemistry: protein chemistry, isolation and purification techniques
- Ecology: environmental surveying and sampling
- IT: computer modelling
- Numeracy: key mathematical skills essential for experimental work such as dilutions and molarities

Analytical

- Ability to interpret and analyse large datasets
- Ability to assimilate and summarise complex biological information

Communication

- Excellent written skills: developed through writing essays and preparation of final year project thesis
- Good oral presentation skills: presented final year project to small and large audiences, using poster and PowerPoint presentations, respectively
- Ability to communicate diplomatically: developed during the course of my summer vacation retail work

Organisational

- Prioritisation: excellent time management skills developed during the course of my degree - always submitted work within set deadlines
- Organisation: as a retail assistant, it was essential to present merchandise in an orderly manner
- Attention to detail and a structured approach: skills developed as a postal operator when delivering and sorting mail have been essential throughout my degree

WORK EXPERIENCE

Retail Assistant, Clippers Inc, Norwich. Local Stationers

(during 6th form and Summer vacations 2011/2012/2013)

Main duties included serving customers and dealing with customer enquiries

Postal operator, Royal Mail, Norwich.

(Christmas vacations 2012/2013)

Main duties included delivering letters and parcels and assisting with sorting incoming mail.

INTERESTS AND ACTIVITIES

I enjoy watching and playing tennis, rugby and football. I have developed good leadership skills through my positions as 2nd team captain for the University rugby team and 1st team member of my local football team. I also have a clean, current driving licence.

REFEREES

Professor P. Ridley
Final year project supervisor
Department of Biology
University of East Anglia
Norwich NR1 5TH
Tel: 01603 34671
Email: pridley12@uea.ac.uk

Dr Hugh Norris
Course Tutor
Department of Biology
University of East Anglia
Norwich NR1 5TH
Tel: 01603 34567
Email: hnorris34@uea.ac.uk

Fig 6: Skills CV

JOHN PHILLIPS

15 Lavender Avenue, Norwich. NR7 9HC
01603 76546 jphillips603@gmail.co.uk

EDUCATION

2011 - 2014

BSc (Hons) Zoology, University of East Anglia
Upper Second

Main subjects studied: animal physiology, molecular biology, microorganisms.

Final year project (graded 1st class): Investigating an alternative in vitro method for ecotoxicological testing around the river Ouse.

2009 - 2011

All Saints 6th Form College, York

A-levels: Biology (B), Chemistry (C), English (B), General Studies (B)
AS level: Further Maths (C)

2004 - 2009

Highgrave School, York

10 GCSEs: Grades A* - C including Maths and English

PERSONAL SKILLS

Teamworking

- I am an active sportsman and was recently promoted to captain the football team, which I have playing for since arriving at university. I also play rugby for my college team in the annual intra-university tournament.
- My retail assistant position requires me to work in a small team of four. This involves organising rotas and working together closely to ensure that all areas of the shop are covered.
- During my degree, I worked in a group of five students to produce and present posters on our work. This involved allocating tasks and ensuring everyone's work fitted together so that a coherent result was achieved.

Communication

- Excellent written skills: developed through writing essays and preparation of final year project thesis
- Good oral presentation skills: presented final year project to small and large audiences, using poster and PowerPoint presentations, respectively
- Ability to communicate diplomatically: developed during the course of my summer vacation retail work

Organisational

- Prioritisation: developed excellent time management skills during the course of my degree
- Organisation: as a retail assistant, it was essential to present merchandise in an orderly manner; organisational skills were also key to planning and executing experiments throughout my degree
- Attention to detail and a structured approach: skills developed as a postal operator when delivering and sorting mail have been essential throughout my degree

Technical and other

- Computer literate: confident internet and Microsoft Office user. I have also become familiar with new specialised packages during the course of my bioscience laboratory experience.
- Full clean driving licence
- Working knowledge of French.

WORK EXPERIENCE

Retail Assistant, Clippers Inc, Norwich. Local Stationers

(During 6th form and Summer vacations 2011/2012/2013)

Main duties included:

- Serving customers and dealing with customer enquiries
- Knowledge of shop products
- Ordering and re-stocking merchandise
- Annual audit of merchandise

Postal operator, Royal Mail, Norwich.

(Christmas vacations 2012/2013)

Main duties included:

- Delivering letters and parcels
- Assisting with sorting incoming mail

INTERESTS AND ACTIVITIES

I enjoy watching and playing tennis, rugby and football. I have developed good leadership skills through my positions as 2nd team captain for the University rugby team and a 1st team member of my local football team. I also represent my hall of residence in pool and table-tennis competitions.

REFEREES

Professor P. Ridley
Final year project supervisor
Department of Biology
University of East Anglia
Norwich NR1 5TH
Tel: 01603 34671
Email: pridley12@uea.ac.uk

Mr Roger Smith
Store supervisor
Clippers Inc.
103 High Street
Norwich NR1 2NG
Tel: 01603 89123
No email available

ANALYSIS OF THE EXAMPLE CVS IN FIGURES 5 & 6

The two CVs in Figures 5 and 6 look similar at first glance but on slightly closer inspection you can see that John Phillips is highlighting and prioritising different areas of his experience tailored towards the position for which he is applying and the likely reader of each of the CVs.

In the Academic CV (Figure 5), the information is centred on John's academic experiences including his qualifications and achievements during his degree course. The purpose of this CV is to secure a PhD position so the reader of the CV will be a lecturer or professor who is seeking someone with a passion for science and the wherewithal to conduct an in-depth research study for three years. In addition to promoting his academic ability, John has included a 'Skills' section which further highlights his research and technical skills and demonstrates he has analytical, communication and organisational skills – all very important to achieve success as a researcher.

John has played down his work experience as it is not directly relevant to the PhD; however if he had gained some science-related work experience he would have given this a prominent position on his CV and positioned it at the top of the 'Work Experience' section. If he had done a placement during his degree course, he could place this information in the same section as his degree information or he could put it in the 'Work Experience' section. Remember that there are very few hard and fast rules about where you place your information in your CV. It is your 'sales' document so put the most important information where you think it will

receive the most attention. John has used two academics from his department as his referees. His course tutor will be able to give an account of his general academic ability and personal attributes, while his project supervisor can provide assurance of his practical capability.

In the Skills CV (Figure 6), the information is centred on John's personal transferable skills. He is applying for a non-science job here so the employer who is reading the information will not be so concerned about his bioscience experience, only that he has achieved a good degree and can demonstrate a level of intelligence and a willingness to learn. Employers looking for general graduates are very interested in the interpersonal skills graduates have developed during their time at university. They want to know that the person has well developed communication and teamworking skills so that they will be able to contribute to their company at the higher management levels. Thus, in order for John to highlight these skills within the limit of two A4 pages, he has downsized his academic information and enhanced his 'Skills' section. He has used examples to evidence his skills from a wider range of his experiences including his sports, work and degree course. Furthermore, he has provided more information about his work experience which may be of more interest to an employer than to an academic. His referees include one of his employers who will be able to vouch for his commercial experience (even though it is likely to have been limited at this stage of his career) and it is conventional to use an academic referee to give an account of your academic ability and to confirm your degree result.

Your CV will be personal to you and your own experiences so do not use these CVs as an exact template for your own. Rather, brainstorm and write down all your own information and then, using the guidelines set out in pages 26–31 and these example CVs, work out the best way to structure and present it in a CV according to each position or course you apply for.



GOING FOR INTERVIEW



GOING FOR INTERVIEW

The key to a successful interview is preparation. Here are some tips on what to expect, how to prepare and how to be professional and confident during your interview.

If you are well prepared, you will answer questions better and feel more confident. The interviewers are likely to ask about your degree, skills, experiences, future aspirations and motivation for applying for the job, so prepare answers on these topics in advance. Examine the job description and try to predict some other questions they may ask you. In addition, they will want you to show some knowledge of their organisation, so be sure to research and revise this information beforehand.

Interview preparation

- Familiarise yourself with what you wrote in your application.
- Look at the skills they highlight as important and think of examples that show you possess these.
- Research the company – look at their website and for news articles on them.
- Practice answering typical interview questions with friends or book a mock interview with your university careers service.
- List the questions you want to ask the employer. Examples include training opportunities, career progression or expansion of the role (don't ask about salary or holidays at this stage!).
- Make sure you know where the interview is being held and at what time.
- Aim to arrive 30 minutes early. This ensures you avoid minor travel delays and you can clear your head whilst waiting for the interview.

During the interview

- First impressions count! Dress appropriately in keeping with the employer (e.g. a suit if you are applying for a company position but smart/casual for a PhD studentship interview). Be friendly to all staff members you meet and smile.
- Give the interviewers a good firm handshake and make eye contact – this will convey confidence.
- Sit straight on your chair and do not cross your arms or fidget – this will make you look nervous.
- Take copies of relevant information with you, such as your application form, job description, your CV, a copy of your final year project, the interview invitation and any exercises you were asked to complete prior to interview. Also write down any questions you want to ask the interviewer.
- If asked about a failure or disappointment, make sure you talk about it positively, including what you learnt from the experience, not just what went wrong!

- When answering questions, always give relevant examples from your studies, work experience and hobbies to back up your answer.
- Be careful not to speak too much. Once you feel you have answered the question, stop talking and wait for the next question.
- Not all employers are proficient at interviewing. You may need to steer the conversation a little so you can include all your experiences and skills relevant to the post.
- If you are interviewed by a panel, it is likely each panel member has been tasked to ask you particular questions. When answering each person, direct your answer to them specifically but glance occasionally at other panel members so they don't feel excluded.

Telephone interviews

Telephone interviews are sometimes used at the beginning of the interview process to screen applicants. Prepare for this in the same way you would prepare for a face to face interview. Have all your relevant documents to hand, speak clearly and make sure that your enthusiasm comes across in your voice.

Top tip

Interviews are a chance for you to find out more about the job and organisation as well as a chance for the employer to find out more about you!

Top tips for assessment centres

Stay enthusiastic all day – the exercises are designed to be difficult and tiring so don't let that put you off. They will be interested in your attitude too. Anything may count towards the test – even chatting to other candidates in the lift or café. Stay professional throughout the day.

Examples of general interview questions

Here is a list of possible questions you may be asked during your interview. You will need to think about more specific questions which may be asked in relation to your particular interview:

Why are you applying for this job?

Focus on one or two key aspects of the job which attracted you to apply.

Tell me about your research project

Give a summary account of your research. Pitch it according to how much understanding the interviewer has – don't blind them with science but don't be too simplistic if you are applying for a PhD. Consider what will be of most interest to the interviewer: the actual research project itself, the technical and methodologies you used or the transferable skills gained?

What did you enjoy most during your degree course?

Think carefully about what you will say and link it to how it will help you to be effective in this job. Talk about the degree course but also the wider experiences you have gained.

What particularly attracts you to this job/PhD?

Choose two to three aspects of the job, PhD or course which inspired you to apply and link it to your career plans and interests. Use this as an opportunity to show that you have researched the organisation and are keen to work for them in particular.

Where do you see yourself in five years' time?

The employer wants to know that you aim to follow a professional career and that you have your own agenda too. Tell them about your aspirations to develop your skills and to succeed in this industry. For example, in a PhD studentship interview, you might want to talk about your aspirations towards a senior research post. For a graduate management post it might be to have gained professional recognition in this sector and to have progressed to a junior or middle management position.

In conclusion, an interview is a conversation with a purpose. Be engaging and interesting whilst always remembering to stick to the task in hand in order to secure the position!



SECOND ROUND INTERVIEWS

After the first interview, you might be asked back for a second interview. This scenario is more likely for highly competitive non-science jobs and some graduate schemes. This allows companies to assess how you perform different tasks to build up a full picture of your work style and skills. You may be asked to attend an assessment centre where you will have to perform a combination of different exercises. Practice different types of test in advance. Your university careers service should have some example exercises and may run practice sessions and workshops.

You may be asked to perform exercises such as:

- In-tray exercises where you are given a full 'in-tray' of emails and messages and have to quickly respond to urgent items, deciding what action to take based on the available information. Assessors will look for your ability to understand information quickly and prioritise your actions.
- Group exercises where you have to complete a task in a team, e.g. debate or role play exercises. Assessors will look for your ability to work with or lead others, your listening and analytical skills and how you negotiate and contribute to the task generally.
- Presentations where you are given new information and asked to write a short presentation on it. Assessors will look for your ability to structure the presentation well in a short space of time, your communication skills and the way you respond to unexpected and difficult questions.
- Case studies where you are given large amounts of information to quickly analyse and make recommendations on. Assessors will look for your ability to analyse information, make sensible judgements and present it in a logical way.
- Aptitude tests where you are given a timed exam testing your numeracy, logic and/or verbal skills. Sometimes the questions are designed to get harder as you answer more

correctly, so don't worry if the questions get really difficult towards the end!

- Personality tests where you are asked what you would do in certain situations. This allows assessors to find out about your values, motivation and interests. There are no right or wrong answers for these tests so just be yourself, but the recruiters may be looking for specific qualities that match their company culture.

UNSUCCESSFUL APPLICATIONS

If you are unsuccessful, don't despair and do ask for feedback. This is very useful in finding out your interview strengths and weaknesses. Stay positive and use the experience to improve your interview technique for next time.

IF YOU ARE OFFERED THE POSITION

If you receive a job, course or PhD offer – well done! This may happen any time after your interview, immediately after or, more normally, in the following week. If you like the company/university and the job/study offer your decision is an easy one. If you receive offers from several different organisations, then reflect carefully on each one and what it has to offer you. Talking this over with a careers adviser, friend or relative can sometimes help to clarify your thoughts.

Once you have accepted a position, you can ask about start date, salary/studentship, working conditions, holidays etc. If there are aspects of your contract you want to negotiate, this is the time to do it but don't push your luck!

Remember you are starting out on your career, so consider the potential of this position not just in terms of salary but in terms of your personal development. Think of the experiences, training and skills you will learn which will contribute to your future career.

WHERE TO FIND FURTHER INFORMATION

Often the best sources of information can be your tutor and lecturers. Your university's careers services can also point you in the direction of local employers and vacancies you may not have heard of, and can help you tailor CVs and cover letters to roles you are applying for.

It is important to spend time during your degree researching your future. Try to attend as many careers fairs as you can and prepare questions for exhibitors. Be sure to make contact with family and friends working in areas you are interested in – they may be able to help you find work experience.

Internet research can also be valuable – try these useful online resources:

Key

Websites which provide a searchable list of vacancies (v)

Websites which provide information about careers (i)

Websites which provide information and an application portal to further training (ap)

Getting a job

General science

Jobs in Science (v)	www.jobsinscience.com
Nature (v)	www.naturejobs.com
New Scientist (v)	jobs.newscientist.com
Royal Society of Biology (v)	jobs.rsb.org.uk
Science (v)	sciencecareers.sciencemag.org
STEM careers (i)	www.wherestemcantakeyou.co.uk

Jobs are also listed on learned society websites (see page 1)

Biomedical science

Academy of Medical Sciences (i)	http://www.acmedsci.ac.uk/
Association of Clinical Biochemistry (i)	www.acb.org.uk/whatwedo/Careers/biomedical_science_careers.aspx
Careerscene (v)	www.careerscene.com
Institute of Biomedical Science (i)	https://careers.ibms.org/home/
NHS careers (i)	https://www.healthcareers.nhs.uk/
NHS careers (v)	www.jobs.nhs.uk or www.jobs.scot.nhs.uk

Environmental and plant science

Chartered Institute of Ecology and Environmental Management (v)	www.cieem.net/jobs
Environmentjob (v)	www.environmentjob.co.uk/jobs
Green Jobs Online (v)	www.greenjobsonline.co.uk

Food science

Institute of Food Science and Technology (i)	www.ifst.org/knowledge-centre-other-knowledge/competencies-food-graduate-careers
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Bioscience and pharmaceutical industry

Association of the British Pharmaceutical Industry (i)	careers.abpi.org.uk
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Teaching

Get into Teaching (i, v)	https://getintoteaching.education.gov.uk/
Teach First (i, v)	www.teachfirst.org.uk
TES (v)	www.tes.co.uk/jobs/
UCAS Teacher Training (ap)	www.ucas.com/ucas-teacher-training

RESOURCES

Medicine, healthcare, dentistry and veterinary

British Dental Association (i)

<https://bda.org/students/careers-and-education>

Health and Care Professions Council (i) www.hpc-uk.org/education

Medschools Online (i) www.medschoolsonline.co.uk

NHS courses (i)

<https://www.healthcareers.nhs.uk/career-planning/course-finder>

NHS healthcare (i) <https://www.healthcareers.nhs.uk/>

Royal College of Nursing (i) <https://careers.rcn.org.uk/>

Royal College of Nursing (v) www.rcnbulletinjobs.co.uk

Veterinary jobs (v) mrcvs.co.uk/en/jobs-main-page.php

Science communication

PSCI-COM discussion list

www.jiscmail.ac.uk/cgi-bin/webadmin?A0=PSCI-COM

Scicommjobs (v) scicommjobs.wordpress.com

Charitable organisations

Charity Job www.charityjob.co.uk

Third Sector jobs.thirdsector.co.uk/

Law

Chartered Institute of Patent Attorneys (i)

www.cipa.org.uk/pages/about-careers

Inside Careers (i, v) www.insidecareers.co.uk/professions/patent-attorneys/

Lawcabs (ap) www.lawcabs.ac.uk

The Law Society (i) www.lawsociety.org.uk/careers/becoming-a-solicitor/

General job sites

graduate-jobs.com (v) www.graduate-jobs.com

Guardian jobs (v) jobs.theguardian.com

milkround (v) www.milkround.com

Prospects (v) www.prospects.ac.uk

TARGETjobs (v) www.targetjobs.co.uk

totaljobs (v) www.totaljobs.com

Placements and internships

Biochemical Society (v)

www.biochemistry.org/Grants/SummerVacationStudentships

Cogent Life Science Placements Service (v)

www.cogentskills.com

MRC London Institute of Medical Sciences

<https://lms.mrc.ac.uk/study-here/summer-studentships/>

Wellcome Trust Sanger Institute (v)

www.sanger.ac.uk/workstudy/placements/

Recruitment companies

CK Science www.ckscience.co.uk

Pharmiweb www.pharmiweb.com

Science Recruitment Group (SRG) www.srg.co.uk

Further study

European PhD Funding Guide www.european-funding-guide.eu

General information including study abroad

www.prospects.ac.uk/postgraduate_study.htm

Masters and diploma courses

FindAMasters www.findamasters.com

Fulbright Commission (study in the USA) www.fulbright.org.uk

hotcourses www.hotcourses.com

TARGETcourses <https://targetpostgrad.com/>

PhD studentships

FindaPhD www.findaphd.com

Jobs.ac.uk www.jobs.ac.uk

PhDs in Europe ec.europa.eu/euraxess

Times Higher Education Supplement

jobs.timeshighereducation.co.uk

Useful publications and books

Spotlight on the Life Sciences: A Guide to Biology Careers

https://www.rsb.org.uk/images/Spotlight_on_the_Life_Sciences_-_A_Guide_to_Biology_Careers.pdf

Careers with a Science Degree: Over 100 Job Ideas to Inspire You (2010) by J. Barron and H. Evans, Lifetime Publishing

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