

# Careers in a Research Environment – Information for Animal & Plant Scientists

## What roles are available? ...What APS graduates do

Job destinations of APS graduates reflect the diversity and breadth of the disciplines that it covers (biology, plant sciences, ecology, environmental sciences, zoology). For many graduates, the starting point for a career in research is a PhD, which will enable them to develop the necessary in-depth knowledge and experience (ask your tutor about MSc, MRes and PhDs or see [www.careers.dept.shef.ac.uk/flipbooks/pgstudyresearch/files/assets/basic-html/index.html#1](http://www.careers.dept.shef.ac.uk/flipbooks/pgstudyresearch/files/assets/basic-html/index.html#1)). Some APS graduates go straight into lab-based work, usually at a lower entry level point as research assistants, research technicians, trainee scientists and analysts. Examples of potential employers include:

- Universities and related research institutes working with plants and animals ([www.jobs.ac.uk](http://www.jobs.ac.uk); [www.jic.ac.uk](http://www.jic.ac.uk); [www.rothamsted.ac.uk](http://www.rothamsted.ac.uk); [www.ifr.ac.uk](http://www.ifr.ac.uk); [www.gatsby.org.uk/en/Plant-Science.aspx](http://www.gatsby.org.uk/en/Plant-Science.aspx); [www.hdc.org.uk](http://www.hdc.org.uk); [www.stri.co.uk](http://www.stri.co.uk); [www.cranfield.ac.uk/about/people-and-resources/schools-institutes-research-centres/seea-centres/national-soil-resources-institute.html](http://www.cranfield.ac.uk/about/people-and-resources/schools-institutes-research-centres/seea-centres/national-soil-resources-institute.html); [www.zsl.org/science](http://www.zsl.org/science); [asab.nottingham.ac.uk/index.php](http://asab.nottingham.ac.uk/index.php))
- Plant breeders / growers and food producers / manufacturers ([www.britishgrowers.org](http://www.britishgrowers.org); [www.ippseurope.org](http://www.ippseurope.org); [www.bspb.co.uk](http://www.bspb.co.uk); [www.organicfarmers.org.uk](http://www.organicfarmers.org.uk); [www.soilassociation.org](http://www.soilassociation.org); [www.fdf.org.uk/members\\_full.aspx](http://www.fdf.org.uk/members_full.aspx))
- Agricultural consultancies and policy advisers ([www.biac.co.uk](http://www.biac.co.uk); [www.agindustries.org.uk](http://www.agindustries.org.uk))
- Charities and trusts ([www.charitychoice.co.uk](http://www.charitychoice.co.uk); [www.sheffieldhelpyourself.org.uk](http://www.sheffieldhelpyourself.org.uk))
- Government and other public bodies ([www.civilservicejobs.service.gov.uk/csr/index.cgi](http://www.civilservicejobs.service.gov.uk/csr/index.cgi)) also see individual departments eg, [www.forestry.gov.uk](http://www.forestry.gov.uk); [www.defra.gov.uk](http://www.defra.gov.uk); [www.dh.gov.uk](http://www.dh.gov.uk); [www.ipo.gov.uk](http://www.ipo.gov.uk); [www.gov.uk/government/organisations/public-health-england](http://www.gov.uk/government/organisations/public-health-england); [www.hse.gov.uk](http://www.hse.gov.uk) - see [www.gov.uk/government/organisations](http://www.gov.uk/government/organisations) for full list of government bodies or [www.gov.uk/find-your-local-council-for-local-authorities](http://www.gov.uk/find-your-local-council-for-local-authorities)). Police services provide opportunities in forensics, as do many private sector providers ([www.forensic-science-society.org.uk/Careers](http://www.forensic-science-society.org.uk/Careers))
- Utility companies ([www.water.org.uk](http://www.water.org.uk))
- Chemical and process industries ([www.cia.org.uk](http://www.cia.org.uk); [www.cropprotection.org.uk](http://www.cropprotection.org.uk); [www.chsa.co.uk](http://www.chsa.co.uk))
- Biotechnology companies, especially SMEs ([www.careers.dept.shef.ac.uk/pdf/sme.pdf](http://www.careers.dept.shef.ac.uk/pdf/sme.pdf); [www.bioindustry.org/membership/member-directory](http://www.bioindustry.org/membership/member-directory))
- Pharmaceutical companies ([careers.abpi.org.uk](http://careers.abpi.org.uk); [www.pharmafile.com](http://www.pharmafile.com); [www.pharmaceutical-journal.com](http://www.pharmaceutical-journal.com))
- Contract research organisations for clinical trials ([www.icr-global.org](http://www.icr-global.org); [www.ccra.org.uk](http://www.ccra.org.uk)) and clinical data management ([www.acdm.org.uk](http://www.acdm.org.uk))
- NHS ([www.nhs.uk](http://www.nhs.uk))
- Animal health and nutrition, inc. diagnostics, medicines and foods ([www.noah.co.uk](http://www.noah.co.uk); [www.pirbright.ac.uk](http://www.pirbright.ac.uk); [www.aht.org.uk](http://www.aht.org.uk); [www.vetrecordjobs.com](http://www.vetrecordjobs.com); [www.gov.uk/government/organisations/veterinary-medicines-directorate](http://www.gov.uk/government/organisations/veterinary-medicines-directorate); [www.pfma.org.uk](http://www.pfma.org.uk); [www.waltham.com/about-waltham/careers-at-waltham](http://www.waltham.com/about-waltham/careers-at-waltham))

For those looking to pursue an environment-related or conservation-related career, research roles are available – eg, pollution measurement and control, biodiversity research and environmental impact measurement or environmental testing. See the Careers Service information sheet '**Environmental & Conservation Careers**' for more information and useful links: [www.careers.dept.shef.ac.uk/pdf/envtconcareers.pdf](http://www.careers.dept.shef.ac.uk/pdf/envtconcareers.pdf)

## Exploring jobs and careers

In addition to the web links outlined above, to find out more about what's involved in a range of occupations, investigate [www.prospects.ac.uk/types\\_of\\_jobs.htm](http://www.prospects.ac.uk/types_of_jobs.htm). Also see [targetjobs.co.uk/career-sectors](http://targetjobs.co.uk/career-sectors). Useful blogs dedicated to careers after biological science: [biosciencecareers.wordpress.com](http://biosciencecareers.wordpress.com) and <https://blogs.jobs.ac.uk>.

The Royal Society of Biology ([www.rsb.org.uk/careers-and-cpd/careers](http://www.rsb.org.uk/careers-and-cpd/careers)) has a useful careers section for students which includes 'Make a Difference' career ideas. For added inspiration, see New Scientist Careers Special: [jobs.newscientist.com/en-gb/landingpage/1401410893/careers-guide-uk](http://jobs.newscientist.com/en-gb/landingpage/1401410893/careers-guide-uk). Also useful are Guardian Careers: [www.theguardian.com/careers](http://www.theguardian.com/careers) and Professional Network: [www.theguardian.com/guardian-professional](http://www.theguardian.com/guardian-professional)

Societies, professional associations and research institutions can be a good source of careers information as well funding for scientific work experience or PhDs. Most occupational areas have at least one society and/or a professional body associated with it. Some are listed in the above section, others are set out overleaf. This list is by no means exhaustive – search for professional bodies via the Trade Association Forum: [www.taforum.org](http://www.taforum.org) (look in the 'Directories' section), which also has the latest labour market news. Also ask your tutor or lecturers.



- Royal Society of Biology: [www.rsb.org.uk](http://www.rsb.org.uk)
- Society for Experimental Biology: [www.sebiology.org](http://www.sebiology.org)
- British Society for Plant Pathology: [www.bspp.org.uk](http://www.bspp.org.uk)
- Botanical Society of British & Ireland: [www.bsbi.org.uk](http://www.bsbi.org.uk)
- British Society of Animal Science: [www.bsas.org.uk](http://www.bsas.org.uk)
- British and Irish Association of Zoos & Aquariums: [www.biaza.org.uk](http://www.biaza.org.uk)
- Chartered Institute of Ecology & Environmental Management: [www.cieem.net](http://www.cieem.net)
- British Ecological Society: [www.britishecologicalsociety.org](http://www.britishecologicalsociety.org)
- Marine Biological Association of the UK: [www.mba.ac.uk](http://www.mba.ac.uk)
- Royal Entomological Society: [www.royensoc.co.uk](http://www.royensoc.co.uk)
- BBSRC: [www.bbsrc.ac.uk](http://www.bbsrc.ac.uk)
- NERC: [www.nerc.ac.uk](http://www.nerc.ac.uk)
- Scientists for Global Responsibility: [www.sgr.org.uk](http://www.sgr.org.uk) (search the publications section for the keyword 'career')

## Useful science-based jobs websites & recruitment agencies

- Make use of online databases for a variety of jobs suitable for students of all degree disciplines, including biosciences, eg, Career Connect: [www.shef.ac.uk/careers/students/jobs](http://www.shef.ac.uk/careers/students/jobs), [targetjobs.co.uk](http://targetjobs.co.uk); [www.prospects.ac.uk](http://www.prospects.ac.uk))
- Scientific journals eg, [www.newscientist.com](http://www.newscientist.com); [www.the-scientist.com](http://www.the-scientist.com); [www.nature.com](http://www.nature.com)
- Online vacancy databases such as [sciencecareers.sciencemag.org](http://sciencecareers.sciencemag.org); [www.jobsinscience.com](http://www.jobsinscience.com); and [www.totaljobs.com](http://www.totaljobs.com)
- Recruitment agencies such as [www.kellyscientific.com](http://www.kellyscientific.com); [www.sci-search.com](http://www.sci-search.com); [www.srg.co.uk](http://www.srg.co.uk); [www.ckscience.co.uk](http://www.ckscience.co.uk); [www.seltekconsultants.co.uk](http://www.seltekconsultants.co.uk); [www.matchtech.com](http://www.matchtech.com); [www.paramountrecruitment.co.uk](http://www.paramountrecruitment.co.uk) and [www.strgroup.co.uk](http://www.strgroup.co.uk). For links to other agencies, see the University of Kent's very useful list: [www.kent.ac.uk/careers/sitephar.htm](http://www.kent.ac.uk/careers/sitephar.htm) and search the REC website for agencies by specialism: [www.rec.uk.com](http://www.rec.uk.com). Job sites for ecology, environmental and conservation jobs are listed separately in the Careers Service information sheet '**Environmental & Conservation Careers**' [www.careers.dept.shef.ac.uk/pdf/envtconcareers.pdf](http://www.careers.dept.shef.ac.uk/pdf/envtconcareers.pdf)

## Some general job-hunting tips

- Don't limit your chances by only looking at online jobs databases or vacancy listings. Use professional associations, learned societies, web search engines and even Yellow Pages ([www.yell.com](http://www.yell.com)) to find out which organisations operate in your area of interest and check out their websites. If you can't find a jobs page, contact them directly. Write a professional, tailored speculative application: [www.shef.ac.uk/careers/students/jobs/creative](http://www.shef.ac.uk/careers/students/jobs/creative)
- Don't just aim for the larger, well known organisations. Small and Medium Sized Enterprises (SMEs), make up a good proportion of graduate employers and can offer lots of early responsibility. Find details about SMEs in a locality by contacting intermediaries such as Chambers of Commerce ([www.britishchambers.org.uk](http://www.britishchambers.org.uk)), science parks ([www.ukspa.org.uk](http://www.ukspa.org.uk)) or bioscience networks. Some universities, including Sheffield, create 'spin-out' companies that employ a small number of staff, look out for bioincubators: [www.bsc-biopharma.org.uk/placements/opportunities-in-smaller-bioscience-companies](http://www.bsc-biopharma.org.uk/placements/opportunities-in-smaller-bioscience-companies). Watch our DVDs for more information on working for an SME: [www.shef.ac.uk/careers/students/worktypes](http://www.shef.ac.uk/careers/students/worktypes).
- Talk to potential employers directly. Whilst many of us dread the idea of 'networking', try doing simple things like attending talks and fairs run as part of the Careers Service's What's on programme ([www.shef.ac.uk/careers/students/events](http://www.shef.ac.uk/careers/students/events)) or those running within your department. Be prepared – find out which employers will be at the event, research them on the web first and maybe even take a copy of your CV along with you, so that you can try to chat with employers after the formal part of the event. They will be happy to share your enthusiasm. Go along to information-sharing events like Café Scientifique ([cafescientifique.org](http://cafescientifique.org)). Talk to your tutor as they may have some useful contacts for you to follow up - to search for UoS research supervisors: [www.shef.ac.uk/researchsupervisors/view](http://www.shef.ac.uk/researchsupervisors/view). Also check out the annual Life Sciences Careers Conferences: [events.societyofbiology.org/LSCC](http://events.societyofbiology.org/LSCC). Check social media: [www.shef.ac.uk/careers/students/gettingajob/media](http://www.shef.ac.uk/careers/students/gettingajob/media)
- For jobs further afield, check out 'MyInternational Career': [www.shef.ac.uk/careers/students/inter](http://www.shef.ac.uk/careers/students/inter).
- Competition for jobs is often strong so get help with applications from the Careers Service: [www.shef.ac.uk/careers/students/gettingajob](http://www.shef.ac.uk/careers/students/gettingajob). Previous research-related work experience is often vital. If you think you need to add some experience to your CV, the Careers Service can help you make a start. Be flexible in terms of the length and type of experience you seek. For example, you may find it necessary to seek several short placements with different organisations in order to gain a good level of experience. A day or two work shadowing is a useful way into an organisation and may lead to further experience or contacts for graduate job hunting.
- Have realistic expectations. You may well have to serve your time doing what you might think are repetitive tasks in the lab or field for a year or two after graduation, in order to gain experience and a true insight into the scientific field before you can progress. This can be particularly true of smaller companies.
- Explore your options. Although you may start off your career in industry, you could transfer your experience into a job in academia, or vice versa. Both can offer quite different, and rewarding, ways of working.
- Explore alternatives where you can use your science in a lab or research environment but in different ways: [www.careers.dept.shef.ac.uk/careersdegree/aps\\_careerideas.pdf](http://www.careers.dept.shef.ac.uk/careersdegree/aps_careerideas.pdf)

## Need more help? Visit the Careers Service:

[www.shef.ac.uk/careers/students](http://www.shef.ac.uk/careers/students) | Level 1, 388 Glossop Road, Sheffield | Tel: 0114 222 0910 to book an appointment