



# CAREERS IN SCIENTIFIC ANALYSIS & R&D

## Starting Your Research

Scientific R&D takes place in a wide range of settings:

- University departments
- Government agencies
- Research institutes
- Charities
- Hospitals

As a scientist you might be undertaking fundamental research, developing the technologies of the future, making scientific ideas a commercially viable reality, developing and refining manufacturing processes, or innovating medical solutions. A significant number of R&D roles require a PhD, or a research based masters. Please see our resources on postgraduate study ([www.bath.ac.uk/students/careers/find-further-study/index.html](http://www.bath.ac.uk/students/careers/find-further-study/index.html)).

Professional bodies provide a broad sector overview and are a good starting point if you want to explore the breadth of opportunities within R&D:

- Directory of Professions - [www.directoryoftheprofessions.co.uk/](http://www.directoryoftheprofessions.co.uk/) - useful links to most UK professional bodies organised by sector.
- Royal Society of Chemistry - <http://www.rsc.org/>
- Institute of Physics - [www.iop.org/?qclid=CNq5vY6Nt8YCFEQSwwodH-QNSq](http://www.iop.org/?qclid=CNq5vY6Nt8YCFEQSwwodH-QNSq)
- Biochemical Society - [www.biochemistry.org/](http://www.biochemistry.org/)
- Society of Biology - [www.rsb.org.uk/](http://www.rsb.org.uk/)
- Association of Independent Technology and Research Organisations (AIRTO) - [www.airto.co.uk/](http://www.airto.co.uk/)
- L'intelligence - [www.intelligence.fr/](http://www.intelligence.fr/) - promotes the value of training through research into non-academic world
- Academy of Medical Sciences - <https://acmedsci.ac.uk/>
- Association for Clinical Biochemistry - [www.acb.org.uk/](http://www.acb.org.uk/)
- Association of British Science Writers - [www.absw.org.uk/](http://www.absw.org.uk/)
- British Academy of Forensic Sciences - [www.bafs.org.uk/](http://www.bafs.org.uk/)
- British Pharmacological Society - [www.bps.ac.uk/view/index.html](http://www.bps.ac.uk/view/index.html)
- British Science Association - [www.britishtscienceassociation.org/](http://www.britishtscienceassociation.org/)
- European Medical Writers Association - [www.emwa.org/](http://www.emwa.org/)
- Institute of Biomedical Science - [www.ibms.org/](http://www.ibms.org/)
- Royal College of Nursing - [www.rcn.org.uk/](http://www.rcn.org.uk/)
- Royal Pharmaceutical Society - [www.rpharms.com/home/home.asp](http://www.rpharms.com/home/home.asp)
- Royal College of Veterinary Surgeons - [www.rcvs.org.uk/home/](http://www.rcvs.org.uk/home/)

- Society for Endocrinology - [www.endocrinology.org/](http://www.endocrinology.org/)
- Society for Experimental Biology - [www.sebiology.org/](http://www.sebiology.org/)
- Society for General Microbiology - [www.sgm.ac.uk/](http://www.sgm.ac.uk/)
- The British Ecological Society - [www.britishecologicalsociety.org/](http://www.britishecologicalsociety.org/)
- The Forensic Science Society - [www.forensic-science-society.org.uk/home](http://www.forensic-science-society.org.uk/home)
- The Physiological Society - [www.physoc.org/](http://www.physoc.org/)

## R&D by sector

R&D roles exist both in the public and private sectors and there is scope to pursue a truly international career. Employers vary from small hi-tech and bio-tech firms to large government departments. There is also the potential opportunity to work for a large multinational, university departments and the NHS.

## Higher Education

A research career within a university could offer the opportunity to pursue your own research, to work collaboratively and to teach. Progression is unlikely without a PhD, and the academic job market is characterised by short-term contracts for those early in their career. Useful websites to explore include:

- Vitae - [www.vitae.ac.uk/](http://www.vitae.ac.uk/) - Information about issues concerning postgraduate research students and research staff, as well as listings of free events running nationwide (e.g. skills courses, conferences, careers days). The careers section is specifically tailored to researchers and covers everything from planning your career to job searching and the recruitment process, for both academic and non-academic careers.
- Jobs.ac.uk - [www.jobs.ac.uk/](http://www.jobs.ac.uk/) - jobs within UK and international universities and a useful careers advice section.
- Times Higher Education - [www.timeshighereducation.co.uk/](http://www.timeshighereducation.co.uk/) - weekly news about the latest developments within Higher Education and a jobs section.
- Guardian Higher Education - [www.theguardian.com/education/higher-education](http://www.theguardian.com/education/higher-education) - General news and information about Higher Education, working in HE and insightful articles and blogs on a variety of topics, including careers.
- Academia.edu - [www.academia.edu/](http://www.academia.edu/) - networking for academics.
- Ambitious Futures - [www.ambitiousfutures.co.uk/](http://www.ambitiousfutures.co.uk/) - leadership graduate scheme within Higher Education.

The University of Oxford careers service have put together comprehensive advice ([www.careers.ox.ac.uk/options-and-occupations/sectors-and-occupations/academia/](http://www.careers.ox.ac.uk/options-and-occupations/sectors-and-occupations/academia/)) on working in Higher Education with links to external organisations.

## Industrial Research

Scope to work is not limited to just Pharmaceuticals, Engineering, Defence, Food Technology and Manufacturing. In fact, there are opportunities in SME's and most sectors looking to improve current technologies and to develop innovations that strengthen the organisation's position in the marketplace. For a list of high-tech SME's you may want to explore the NESTA ([www.nesta.org.uk/](http://www.nesta.org.uk/)) website.

Some leading graduate recruiters offer internships and graduate schemes; useful websites to search for opportunities include MyFuture (<https://myfuture.bath.ac.uk/>), Milkround ([www.milkround.com/](http://www.milkround.com/)) and Student Ladder ([www.studentladder.co.uk/](http://www.studentladder.co.uk/)). You may also want to consider looking at our guides on Finding Work Experience

([www.bath.ac.uk/students/careers/docs.bho/finding-work-experience.pdf](http://www.bath.ac.uk/students/careers/docs.bho/finding-work-experience.pdf)) and Finding a Graduate Job ([www.bath.ac.uk/students/careers/docs.bho/graduatejob.pdf](http://www.bath.ac.uk/students/careers/docs.bho/graduatejob.pdf)) which provide a general overview on how to get started and the types of opportunities that are available to you.

## Government Agencies & Research Institutes

A career in a research institute or government agency might give you the opportunity to pursue your research interests without the teaching and administrative load associated with academic posts. The availability of opportunities varies according to subject, and may be found in government departments (e.g. DEFRA, MOD), government agencies (e.g. Environment Agency) or in institutions associated with charities, often medical, (e.g. Cancer Research UK, Wellcome Trust) or funded by research councils (e.g. Culham Centre for Fusion Energy).

Below are some useful websites that you may want to explore further:

- Research Councils UK - [www.rcuk.ac.uk/](http://www.rcuk.ac.uk/) - links to all UK research councils and has a section on research careers.
- Defence Engineering and Science Group - [webarchive.nationalarchives.gov.uk/+http://mod.uk/defenceinternet/aboutdefence/whatawedo/scienceandtechnology/desg/](http://webarchive.nationalarchives.gov.uk/+http://mod.uk/defenceinternet/aboutdefence/whatawedo/scienceandtechnology/desg/)
- Environment Agency - [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)
- Cancer Research UK - [www.cancerresearchuk.org/](http://www.cancerresearchuk.org/)
- Public Health England - [www.gov.uk/government/organisations/public-health-england](http://www.gov.uk/government/organisations/public-health-england)
- Civil Service Fast Stream - [www.faststream.gov.uk/](http://www.faststream.gov.uk/)
- Food Standards Agency - [www.food.gov.uk/](http://www.food.gov.uk/)
- Wellcome Trust - [www.wellcome.ac.uk/](http://www.wellcome.ac.uk/)

## Charities & Hospitals

For those interested in medical science, a hospital setting can also offer a rewarding career in scientific areas such as microbiology, clinical biochemistry, neuroscience, clinical engineering or medical physics. The NHS Scientist Training Programme ([nshcs.org.uk/stp-recruitment](http://nshcs.org.uk/stp-recruitment)) provides three years of workplace-based training with an NHS Trust in England alongside a Masters degree in your chosen specialism. The Association of Medical Research Charities ([www.amrc.org.uk/](http://www.amrc.org.uk/)) provides information on the latest research and developments in the UK. It is worth looking at their list of partners which will help you identify charities and hospitals undertaking R&D projects. Cancer Research UK ([www.cancerresearchuk.org/](http://www.cancerresearchuk.org/)) run a graduate training scheme in Science and they also run a summer internship.

## Other Useful Websites

- CareerEdu - [www.careeredu.eu/](http://www.careeredu.eu/) - international research posts in academia and government research institutes
- KTP Online - [ktp.innovateuk.org/](http://ktp.innovateuk.org/) - knowledge transfer partnership
- Nature - [www.nature.com/](http://www.nature.com/) - international weekly journal of science
- Science Careers Magazine - [sciencecareers.sciencemag.org/](http://sciencecareers.sciencemag.org/) - job and careers advice for anyone considering science, engineering and technology careers.

- New Scientist - [www.newscientist.com/](http://www.newscientist.com/) - weekly science and technology careers magazine.

Careers Service

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