



bio **focus**

Mark Downs reports on the latest developments from the Society of Biology



The Society of Biology is a single unified voice for biology:

- advising Government and influencing policy
- advancing education and professional development
- supporting our members
- engaging and encouraging public interest in the life sciences

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Accreditation of biology degrees

The Society of Biology acts as a single voice for over 80,000 biologists in the UK on key generic issues of policy. Science policy and science funding are of course critical but as both a professional body and a charity, education will always be high on our agenda. The recently published* Browne review recommends sweeping changes to the way in which higher education is funded and obviously presents significant challenges to all concerned.

Understandably the media focus has been almost exclusively on the student loan element of the proposals and the increased variable cap on tuition fees for higher education institutions. However, Lord Browne's report also seeks to address the gaps between the skills required by employers and those which university graduates are able to demonstrate. University education must, surely, above all be about development of intellectual rigour and the analytical skills so valuable for life whatever the chosen career of the individual. Nonetheless, if students are to pay the significantly enhanced



fees, their interest in employability skills will inevitably grow.

The Browne review highlights something which professional institutions have known for a long time - and have been acting on: that graduates need specific skills for individual professions in addition to their basic educational grounding and, once in employment, need to continually develop their professional skills. The Society of Biology, in common with many other professional organizations, offers a chartered route to recognizing professional skills, alongside a continuous professional development programme to ensure standards are maintained. But there is also an important role to be played in helping students to identify courses which have the strongest likelihood of providing them with the skills and education they require for a particular career path. It is for that reason that the Society of Biology has been working for the last year to develop an accreditation programme for undergraduate biology degrees.

As has frequently been made clear in the run up to the comprehensive spending review announcements, science in its totality contributes enormously to our economic and social prosperity. The life sciences are a particularly successful story for the United Kingdom. In many areas we are second in the World only to the United States and often first. Over the last 10 years, university life science research groups have spun out over 200 companies, worth in excess of \$720 million. Our success at postgraduate and post doctoral level is clear to see but there remains a gap for graduates who often lack the skills suitable for research careers. Working with the Office for Life Sciences, and with support from the Biotechnology and Biological Sciences Research Council (BBSRC), and a dedicated team of skilled volunteers, the Society of Biology has, after wide consultation, developed a new framework for the accreditation of biology degrees for students who hope to embark upon a research career.

These degrees would typically be at least four years in length, including a major project with hands on experience in either industry or within a university research group. Intellectual rigour and experimental design will be high on the agenda, along with a capability to demonstrate strength in mathematics. Biology is far from a soft option amongst the sciences and a future career in the life sciences inevitably involves the application of numeric skills. It is an issue which has been ignored for far too long.

Of course, biology is a huge field and the Society cannot hope to accredit the entire breadth of degrees in one step. With this in mind, we are starting with a pilot programme in *in vivo* sciences and biochemistry. Host institutions have already expressed interest and we hope that the first students will be recruited in 2011. The challenge is to ensure that the system is not over bureaucratic, does not place undue cost burdens on universities, and meets the needs and expectations of employers. Above all though, an accredited degree needs to meet the expectation and aspiration of students.

To try and meet these challenges and requirements, the Society has opted for an outcomes based approach. We will not be dictating to universities the way in which they should teach a subject, or the particular topics they should cover. Rather, we will set out clearly the outcomes we (and employers) expect from the degree programme, based on consultation. We believe this programme, alongside our Chartered Biologist and Continuing Professional Development approaches can contribute, along with many other professional bodies, to help meet some of the aspirations outlined in Lord Browne's report.

However, university degrees are financed, and whatever the debt students incur, one thing is certain: with a more market based approach the customer (or can we still say student?) will become increasingly demanding in return for the investment they make. The Society of Biology is keen to make sure we can enable students to make more informed choices and to be more certain of the outcomes they can expect from their university education.

*correct at time of going to press December 2010

further information

For more information please visit: http://www.societyofbiology.org/education/hei/accreditation



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