



## Q1. Respondent Information

- **What bioscience sector do you work in?**
- **Please state if you are replying on behalf of an organisation and the type of organisation you represent e.g. Higher Education Institution, professional body, Sector Skills Council, industrial employer e.g. or as an individual**

The Physiological Society is a Learned Society, bringing together over 3000 scientists from over 60 countries. Since its foundation in 1876, our Members have made significant contributions to the knowledge of biological systems and the treatment of disease. Our charitable aims include the advancement of physiology, and we support researchers and teachers working within this field in both academia and industry.

## Q2. The Focus of the Accreditation Programme

- **In the past the Accreditation Programme has focused on research skills, following many reports highlighting graduate skills gaps. Do you think this should continue to be the main focus of the programme? Please explain your answer citing evidence where possible.**
- **If research skills remain the focus, which biological discipline(s) do you feel should be of immediate priority for expansion of the Accreditation Programme and why? Please submit references for any reports and evidence to support your suggestion.**
- **Beyond graduate research skills, what drivers are there in your field for Degree Accreditation? Do you consider that an Accreditation Programme of the nature we describe can address these? If not, please explain your answer**

1. The Physiological Society notes that the Society of Biology is looking to expand the accreditation scheme to further biological disciplines before the completion and evaluation of the pilot projects. We would be cautious about the expansion of the scheme prior to full evaluation of the pilots, a process vital to ensure that these are fit for purpose and likely to fully embraced by higher education institutions.
2. The main driver for initiating the Society of Biology accreditation process was the 2009 Life Science Blueprint, which highlighted concerns that graduates in the life sciences often lacked the core mathematical and practical skills and competencies required by employers.
3. The Physiological Society believes that the focus on research skills is therefore correct, on the assumption that these include key transferrable skills such as analysis and interpretation of data, competence in the mathematics and statistics, the ability to perform critical reviews of the literature and other sources, and both oral and written communication skills. Whilst specific skills (e.g. for *in vivo* studies) are important, it should be remembered that most graduates in the biosciences do not subsequently follow a career in laboratory research. The focus of Accreditation should therefore not be merely restricted to research skills, but also include a strong element relating to key transferable skills.
4. The Physiological Society supports in principle the introduction of an accredited degree programme for *in vivo* sciences. We agree that producing graduates with a higher level of subject knowledge and practical training in their chosen specialisation is desirable,

and believe accreditation has the potential to achieve this. However, The Physiological Society has had concerns with the scope of the *in vivo* sciences accreditation framework, as previously communicated to the Academic Content subgroup. It is important that such issues are addressed before expansion of the scheme, and also that a high level of transparency is maintained throughout.

5. It is not clear what the immediate priority for expansion of the Accreditation Programme should be, as apart from the acknowledged lack of specific skills (e.g. *in vivo* studies), the Blueprint highlights a lack of generic skills across the sector. To address this will require wider application. This also reflects the ongoing rise of biomedical science programmes at the expense of traditional physiology, pharmacology etc. programmes, which is driven by both student choice and institutional rationalisation and attempts to increase cost effectiveness by reducing the number of offered programmes.
6. This raises a difficult issue, as there are many types of Biomedical Science programmes, some of which, primarily focussed on the healthcare industry rather than research, are already accredited by the Institute of Biomedical Sciences. The rationale for the IBMS accreditation is quite different from that of the Society of Biology. This has been further complicated by the Modernising Scientific Careers initiative, which again has its own accreditation process. There is therefore substantial potential for causing confusion in the minds of students.
7. In terms of drivers, we have mentioned transferable skills above, and these can and should be addressed by any accreditation process. There are however also negative drivers that need to be acknowledged. One is the focus solely on four year BSc programmes. Whilst the Physiological Society understands that this is to ensure a substantial component of hands-on research experience, in the current financial climate and with the prospect of £9000 annual fees such courses may not appear attractive to either students or the providing institutions, unless the benefits can be demonstrated to outweigh the costs, compared for example to a standard 3 year BSc followed by an MSc.
8. As such, the Physiological Society would strongly urge the Society of Biology to examine how stand-alone MScs could be made eligible for accreditation if taken in conjunction with an appropriate undergraduate degree.
9. The Physiological Society believes that increased tuition fees mean that there will be increased pressure on HEIs to provide undergraduate courses of use and worth to students, and which enhance their career prospects, and we believe that a transparent accreditation system may provide a system which can help demonstrate the value of specific courses to students.

### **Q3. Discipline specific expertise**

- **If your suggested discipline(s) was shortlisted for the next stage of the Accreditation Programme, would you be willing to give a brief presentation on this topic at the Consultation Event on the 17th October?**
- **If your suggested discipline was selected for the expansion on the Accreditation Programme, would you be interested in playing an active role in the development of discipline specific criteria and/or acting as an assessor in the future?**

The Physiological Society has been involved in the development of the *in vivo* sciences accreditation programme. We would wish to continue working to ensure the successful development of an accreditation programme for the *in vivo* sciences which is of demonstrable worth to academia, students and industry.

The Physiological Society may also be prepared to play an active role in the development of physiology-specific criteria for programmes that contain a significant component of physiology, such as research focused biomedical science programmes, and potentially act as an assessor.