



Royal Pharmaceutical Society of Great Britain

Helping pharmacists achieve excellence

Mr Ian Pearson MP
Minister for Science and Innovation
Department for Innovation, Universities and Skills

CHIEF EXECUTIVE AND REGISTRAR

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Dear Mr. Pearson

The Royal Pharmaceutical Society of Great Britain (RPSGB) welcomes the opportunity to contribute our experience to help inform DIUS policy priorities.

The RPSGB is the professional and regulatory body for pharmacists in England, Scotland and Wales. It also regulates pharmacy technicians on a voluntary basis, which is expected to become statutory under anticipated legislation.

The primary objectives of the RPSGB are to lead, regulate, develop and represent the profession of pharmacy.

The RPSGB leads and supports the development of the profession within the context of the public benefit. This includes the advancement of science, practice, education and knowledge in pharmacy. In addition, it promotes the profession's policies and views to a range of external stakeholders in a number of different forums.

We will be able to provide further information on the topics raised should you require.
Yours sincerely,

A handwritten signature in black ink, appearing to read 'J Holmes', written in a cursive style.

Jeremy Holmes
Chief Executive and Registrar

DIUS Science and Innovation Strategy: An Opportunity for you to contribute. Response from Royal Pharmaceutical Society of Great Britain February 2008

Expanding the academic workforce

If the UK is to compete on the world stage it is imperative that our universities produce increased numbers of top class graduates. In order to achieve this, a large well-trained academic workforce is required. Figures from our own recent workforce survey (Future Pharmacy Work Force Requirements¹) and a follow up report entitled 'Pharmacy Academics Work Force Strategy' (published in 2007²) show that a potential crisis is looming in the (Pharmacy) academic workforce.

To meet the expanding role of Pharmacists and an increasing number of students, it is calculated that a minimum number of an extra 133 academic pharmacists will be needed by 2015. To sustain this would require an expanded PhD level training programme for pharmacy students. Assuming an 80 percent completion rate over four years, and a 50 percent conversion rate to academic posts, the Schools will need to train an extra 333 PhD students to yield an additional 133 academic pharmacists by 2015.

We believe that other disciplines are in a similar position. To address this situation there is a need to make an academic career more attractive and to be creative in providing funding opportunities for PhD students.

Encouraging experienced practitioners into Universities

For professional courses such as Pharmacy, it is essential that strategies be urgently put into place to allow more experienced practitioners to join the academic workforce, normally on a part-time basis, to allow them to impart their knowledge to trainees. A great deal of emphasis is usually placed on early achievers in academia, sometimes to the detriment of those moving from one career direction to another who could bring substantial experience.

Providing funding for innovation

We view innovation as encompassing products (e.g. drug treatments and medical devices), processes (e.g. clinical care, integrated inter-professional services, communication and information sharing) and the underpinning science that supports both of these.

For the NHS we see fostering and spreading innovation as key to achieving a significant step change in how it uses its resources and to securing markedly better health outcomes. Commissioners of health services need high quality data about population health needs and the likely impact of different innovations on them to make effective investment decisions. For instance, innovations enabling early detection, prevention, cure or symptom alleviation of the common chronic conditions which account for the majority of ill-health and healthcare spending should be prioritised because they can make the biggest impact on life expectancy, quality of life and healthcare costs³.

Innovations are of interest to commissioners once they have demonstrated scalability (to create confidence that they do not just depend on a single enthusiast, and are capable of

¹ Guest, DE, Battersby, S & Oakley, P (2004) Future Pharmacy Workforce Requirements; Workforce Modelling and Policy Recommendations; Commissioned by the Royal Pharmaceutical Society of Great Britain.

² Professor David Guest, Dr. Pat Oakley, Alexandra Budjanovcanin, Pharmacy Academics Workforce, Commissioned by the Royal Pharmaceutical Society of Great Britain.

³ Porter ME & Teisberg EO (2006). Redefining health care: creating value-based competition on results. Harvard Business School Press, pp. 140-143

being delivered reliably at a certain volume) and cost-effectiveness. We have published evidence about pharmacy services for long-term conditions that meet these criteria.⁴

It is recognised that drug treatment research is expensive. In some instances the financial reward through conventional patenting and royalties is insufficient e.g. orphan drugs, natural substances or the secondary use of existing medicines. Here other financial devices may be needed to encourage innovation.

In scientific research, obtaining funding for innovative, high-risk research is extremely difficult in the current risk adverse climate. Yet the potential outcome of such research for the wealth and health of the nation, if successful, is enormous. A possible way forward is to ring-fence funding so as to offer a large number of small grants, sufficient to obtain base line evidence, to allow innovative research projects to apply for larger research funds. A similar, small-scale initiative funded by the Pharmacy Practice Research Trust in education has proved to be very successful. This initiative funded innovative education methodology and delivery and encouraged sharing of information⁵. The same principle could be applied to scientific endeavor or healthcare practice (albeit with greater potential for ethical consideration).

Ensuring university research is adequately supported

With the recent move towards full economic costing in universities there is a greater transparency and appreciation of the cost of research. In order for universities to still be seen as competitive to external sponsors more infrastructure investment needs to be made by the government in university research in order to add yet further value to the capability and capacity of universities to drive innovation. Particularly, great benefit would be gained if universities could maintain continuity of research by means of sustained funding.

Improving the transfer of research between the universities and industry

There is little incentive for academic researchers to transfer the rights for their research to industry as frequently the academic loses the right to continue their work in the area. With new technologies emerging and the potential commercial value of research findings, sharing or knowledge brokering of information is at times seriously restricted. Innovation rarely flourishes in a vacuum but contractual tightening for IPR, patent applications and global competition may be creating just that.

In the same vein collaboration in the delivery of services is often essential for innovation to take place. Within the world of healthcare, patient care pathways are often paved with different professions; innovations in care packages, services and delivery rely on working with patients, carers and other healthcare professions. Any environment or initiative that encourages this will encourage innovation.

The new Research Excellence Framework proposed by the funding councils is expected to place most emphasis on publications and other metrics; it appears to place markedly less on the effects on translation research and value to the user. This may have a significant negative impact on researcher behaviour in universities.

⁴ <http://www.rpsgb.org/pdfs/ltcondintegcommphrept1.pdf>

⁵ Learning from Innovation in Education. Available at: <http://www.rpsgb.org/pdfs/learninnovpharmeduc.pdf>.
Commissioned by the Pharmacy Practice Research Trust.