



The Save British Science Society

SUPPORTING SCIENCE & THE APPLICATIONS OF SCIENCE

29-30 Tavistock Square, London, WC1H 9EZ

Tel: (020) 7679 4995 • Fax: (020) 7916 8528 • E-mail: sbs@dial.pipex.com

SBS 02/12

Exploiting Scottish knowledge for the people of Scotland

Response to the Scottish Executive's consultation on Research and Knowledge Transfer in Scotland

1. SBS is pleased to submit this response to the consultation on research and knowledge transfer in Scotland. SBS is a voluntary organisation campaigning for the health of science and technology throughout UK society, and is supported by 1,500 individual members, and some 70 institutional members, including universities, learned societies, venture capitalists, financiers, industrial companies and publishers.

2. SBS has long held that wealth creation from the university science base is an important part of a modern economy, and produced a report entitled *From the Laboratory Bench to the Boardroom: Creating Wealth from the Academic Science Base* in 1999, following a symposium sponsored by the Corporation of London and the NatWest Bank, and involving researchers, industrialists, city financiers, politicians and others. Many of the proposals in the new consultation document are in broad agreement with the consensus reached by this wide range of opinion-formers. A copy of the report is enclosed.

A strong research base

3. SBS believes that knowledge transfer is only worth doing if the knowledge base is strong. Long-term benefits to the Scottish economy will come from a strong, healthy research base, carrying out basic, strategic and applied research.

4. SBS therefore strongly supports the view, expressed in paragraph 3.13 of the consultation document, that it would be a mistake to support new activities by diverting money from existing teaching and research budgets into a "third leg" budget. The research base needs strengthening not weakening.

Executive Committee

R W Joyner FRSC (Chr)
D Braben
J Cannon
F E Close OBE
R Dowler
M Freeman
L Georgiou
H Griffiths FREng

J F Lamb FRSE
J McGlade
J C McLachlan
U Martin CEng
D Noble CBE FRS
S J Robinson OBE FRS FREng
P T Saunders
V Stone
M Trevan

Advisory Council

Sir George Alberti PRCP
Sir Geoffrey Allen FRS FREng
Prof S Arnott CBE FRS
Sir Eric Ash CBE FRS FREng
Dr Jeremy Bray
Professor V Bruce OBE FRSE
Dr Simon Campbell FRS FRSC
Sir David Cox FRS
Prof A Cullen OBE FRS FREng
Sir Richard Doll CH FRS
Sir Brian Follett FRS
Dr Ian Gibson MP

Prof A Hewish FRS
Sir R Hoffenberg KBE FRCP
Prof Colin Humphreys FREng
Dr Tom Inch FRSC
Sir Hans Kornberg FRS
Sir Harold Kroto FRS
Lord Lewis of Newnham FRS
Sir Paul Nurse FRS
Sir C Llewellyn Smith FRS
Sir Ian Lloyd
Sir John Maddox
Prof A R Michell MRCVS

Dame Bridget Ogilvie
Prof H Pennington FRCPath FRSE
Sir Martin Rees FRS
Sir Derek Roberts FRS FREng
Baroness Sharp of Guildford
Sir David Smith FRS
Sir Richard Southwood FRS
Sir Richard Sykes FRS
Ian Taylor MBE MP
Sir John Vane FRS
Prof Maurice Wilkins CBE FRS
Dr Ivan Yates CBE FREng

5. We also strongly adhere to the first principle expressed in the document. A commitment to supporting and enhancing the research base is essential. SBS therefore applauded former Enterprise Minister Wendy Alexander's announcement of new money to fund the improvements in research quality demonstrated by the 2001 Research Assessment Exercise.ⁱ

The proposed new fund

6. SBS supports the idea of a new stream of funding for universities to develop their knowledge transfer activities, having campaigned for a similar suggestion at UK level for several years. We called in 1999 for a scheme "to give universities the opportunity to allow knowledge transfer initiatives to be considered as equal competitors for time and resources with other [activities]".ⁱⁱ

7. SBS is also in favour of the idea that a significant part of the new investment should be allocated formulaically. Extensive, and expensive, bidding processes have been among the worst features of many schemes designed to stimulate various activities in UK universities in recent years.

8. We have also long been in favour of incentives for individuals who wish to engage in knowledge transfer activities. Career structures and promotion schemes should reward all the various types of activity for that form part of a university's business.

Research budgets of the private sector

9. Knowledge transfer activities rely on a commitment to research-driven innovation in the private sector. There are two unusual features of research funded by private companies in the UK as a whole.

10. First, investment in R&D is low by comparison with companies in other countries, except in the pharmaceutical and aerospace sectors. Moreover, firms in competitor nations are increasing their research investment faster than British businesses.ⁱⁱⁱ

11. Second, a relatively high proportion of research in UK universities is funded by the private sector. A recent comparison showed that business funding of R&D in the higher education sector, as a percentage of government funding was 10.1% in the UK, compared to 8.8% in Germany, 7.7% in the USA, 5.0% in Italy and 3.5% in France.^{iv} Moreover, an up-to-date survey by the UK government has shown that the UK figure has risen to 12.3%.^v

12. There is no particular reason to suppose that Scotland is unusual in regard to the nature and extent of research by private sector companies, relative to the rest of the UK.

13. In other words, UK (and Scottish) industry need to do more R&D overall, while UK (and Scottish) universities are already demonstrating that they have the capacity to work with industry at levels exceeding those of their international counterparts.

14. It is, therefore, at least as important, if not more so, to stimulate more indigenous research and development within companies as it is to expect more entrepreneurship from the higher education sector. Without this indigenous research, Scottish business will not be in a position fully to understand, appreciate and utilise the wider knowledge base. Industry pull will not match university push.

May 2002

ⁱ See SBS Press Release *English science lags behind as Scotland and Wales move ahead*. [SBS PR02/06].

ⁱⁱ *From the Laboratory Bench to the Boardroom: Creating wealth from the academic science base*. SBS, 1999 [SBS 99/17].

ⁱⁱⁱ *UK R&D Scoreboard 2001*, DTI, and previous editions of the same publication.

^{iv} *Science Policies for the Next Parliament: Agenda for the Next Five Years*, SBS, 2001 [SBS 01/03], using data from the Organisation for Economic Co-operation & Development.

^v DTI Press Release P/2001/695, dated 7 December 2001.