

ECONOMIC DEVELOPMENT & TRANSPORT COMMITTEE

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Date:	2 November 2005
Time:	9.00 am to 12.30 pm
Venue:	National Assembly for Wales, Cardiff Bay
Title:	Cardiff University

Science Policy: Response from Cardiff University

In response to the letter from Christine Gwyther AM of 27 July, I set out below Cardiff University's response to the consultation on developing a science policy in Wales. This has been compiled in consultation with Heads of School, with specific input received from the Heads of Biosciences, Earth Sciences, and History and Archaeology. The Welsh e-Science Centre, based in our School of Computing Sciences, has provided a comprehensive document relating to ICT infrastructures and ICT skills which I have appended in its entirety.

I set out, below, the particular issues which Cardiff University would like to emphasise to the Economic Development and Transport Committee at this time:

- The progression from new scientific knowledge to innovation and economic development is essential for a successful Wales, and all components of this chain must be supported. For wealth-generating activities in Wales to have a competitive edge globally they must have access to world-leading innovations, which can only flow from world-leading fundamental research. This must be encouraged and supported to underpin true innovation. Excellence in the provision of basic science teaching and cutting-edge research is needed as much as the application of scientific information to a knowledge-based economy – and this should be reflected in an emerging science policy.
- The interfaces between established disciplines often offer the greatest opportunities for

innovation. The growing collaborative activities across bioscience, medicine, the physical sciences and engineering are examples of areas where research investment will generate considerable commercial and social benefits for Wales.

- It is often observed by Welsh HEIs that we fare less well, in per capita terms, than our counterparts in other parts of the UK in terms of securing Research Council funding. A Welsh Science Policy should focus on how this could be addressed – e.g. do we need to improve our physical or human resource infrastructure, and/ or to develop and promote centres of academic excellence.
- Science has been acknowledged as a key driver of a successful knowledge-based economy (e.g. the Government’s July 2000 White Paper ‘Excellence and Opportunity : A Science and Innovation Policy for the 21st Century’) Universities such as Oxford and Cambridge in the UK and MIT and Stanford in the US attract industry to their surrounding regions with their availability of high-level expertise and facilities and a high quality graduate workforce.
- Scientific research contributes to the quality of life generally. Successful economic development activities and effective public services depend not only on science and technology but also on the economic strategies used to manage them and the social and physical well-being and the cohesiveness of the societies they serve. Therefore ‘Science’ should be deemed to include not only engineering and technology but also management and social sciences. Wales should seek to assess and maximise the impact which the Welsh science base can make on all relevant areas by involvement of representatives of business, health, education and the community at large – it is understood that your initial ‘call for evidence’ was directed to a variety of constituencies in Wales and it is hoped that you will continue to involve a range of interests.
- Scientific research, practice and consultancy are crucial to the cultural prosperity of Wales. Archaeological, historical and architectural heritage depends on scientific expertise in Wales’ universities and museums, and the scientific exploration and conservation of this cultural capital needs the latest in appropriate technology. Knowledge and practice of this kind will, in turn, contribute to tourism and related industries.
- The overall aim for Wales should be to support world-class science which will enable Wales to develop a true knowledge-based economy resting on expertise which is unique to Wales. To realise and sustain such an economy will also require output of high quality graduates with the related skills and training of a new force of high grade technical staff.

These are the University’s initial submissions of evidence. We would welcome further involvement as the Assembly’s discussions progress. If you require clarification on anything raised in this letter I would be grateful if you would contact Sharon Burgess (BurgessSC@cf.ac.uk) in our Planning Division in the first instance

Yours sincerely,

Vice-Chancellor