



PROSPECT SCIENCE BRIEFING: TRANSFERRING PUBLIC SECTOR SCIENCE RESEARCH TO UNIVERSITIES

Governments in England, Scotland and Wales are passing responsibility for their research institutes – and work in the public interest – to universities. Eight public sector research institutes were moved into the university sector between 1996 and 2009, with more in the pipeline (see below).

Why should you – or anyone else – care about this deeply unglamorous development? After all, don't universities already do a lot of research? Well, experience from the early transfers shows that every time capability, jobs and sites that carry out important research are lost in the process.

In February 2009, the former Horticulture Research International site in Kirton, Lincolnshire closed. At the Institute of Grassland and Environmental Research, which was moved to the University of Aberystwyth in April 2008, one of its three Welsh sites has closed and one looks likely to close in October 2009.

From nutrition and food safety to horticulture and land use, research is being fragmented and lost just when policy makers and the public are becoming acutely aware of the importance of food security for the UK. True, themed research will never be achieved without long-term strategic funding, since the research will always follow the pots of money.

Research council institutes transferred to universities 1996–2009		
INSTITUTE	UNIVERSITY TRANSFERRED TO	WHEN
Rowett Research Institute	Aberdeen	2008
Roslin Institute	Edinburgh	2008
Institute for Animal Health, Neuropathogenesis Unit	Edinburgh	2008
Institute of Grassland and Environmental Research	Aberystwyth	2008
Hannah Research Institute	Glasgow Caledonian & Strathclyde	2006
Westlakes Research Institute	Central Lancashire	2005
Horticulture Research International	Warwick	2004
Natural Resources Institute	Greenwich	1996

There is also the question of whether the universities have the space and facilities to research, monitor and provide emergency response capability into subjects like animal health and welfare, sustainable farming and land use.

In January 2006, Lord Sainsbury [then science minister], said: "Basic research increasingly should be done in a multi-disciplinary environment like universities".

But when they examined the issue, MPs on the House of Commons science and technology select committee came to the opposite conclusion: "We have received no evidence to support the view expressed by Lord Sainsbury that basic research should increasingly be done in universities, rather than separate research institutes." (March 2007)

Prospect, which represents 3,000 staff in research council institutes and universities, also questions Lord Sainsbury's doctrine.

We agree with the SET committee that links between RCIs and universities at all levels should be encouraged. But each case should be judged on its merits and the form of each institute should follow the needs of the science and, above all, the public interest.

In April 2007, Prospect asked the science minister Malcolm Wicks to allow the Parliamentary Office of Science and Technology to exercise powers of scrutiny over proposed research institute closures. The government refused, saying that the research councils should retain responsibility for the management and organisation of their own institutes.

This year, Prospect has asked the Secretary of State to recognise and acknowledge the advantages of having different models to suit different purposes. The union has also called for a review of the Haldane principle to allow government to protect and promote the UK's strategic SET capability.

Data compiled by Research Fortnight in 2006 indicated that certain RCIs have much higher success rates in accessing funding through peer-reviewed grant proposals than universities, with institutes taking six of the top ten places.

The research councils have to review their institutes and consider whether it would be more cost-effective for their work to be done within universities every four/five years. MPs on the select committee said that early evidence indicates RCIs are competitive on cost grounds.

For example, since the Hannah Research Institute closed in March 2006, it has cost between £4.6-5m to fund research involving 19 former members of the Hannah for three years (£240K per capita), whereas the entire institute of around 75 staff could be funded by £7.4m over three years (£99K per capita).

When Hannah closed, nearly 70 scientific and specialist support staff were made redundant – representing a loss of around 1,000 years of scientific experience related to lactation, breast cancer, obesity, diabetes, food quality and safety. Nineteen staff succeeded in getting grants from the Scottish Executive and were employed on university terms and conditions.

By March 31, 2009, just five of those 19 staff have found posts which are for more than three years or contract indefinite; four staff are on short term contracts until around 2010. The ten remaining staff are facing unemployment.

Collaboration is already happening

NERC has 11 collaborative centres where university staff work alongside NERC staff to deliver a central mission. Although this is working well for the science, differences in pay, terms and conditions in some areas are proving to be a barrier to true collaboration (see p7).

Arguments that the RCIs should be placed inside universities to improve collaboration are beside the point: where collaboration is required it already exists. Thus many RCIs are closely connected with universities through training links and share facilities and capabilities.

Pay modernisation for higher education staff

A framework agreement to modernise pay structures for higher education staff (HERA) was nationally agreed between the universities and unions in 2001. This requires pay to be structured according to actual job activities in relation to equivalence criteria. Early attempts to assimilate institute staff onto university terms and conditions using the HERA job evaluation system have failed – consuming time and energy and damaging staff morale in the process.

Case studies

Rowett Research Institute

The Rowett Research Institute was merged with the University of Aberdeen on July 1, 2008 and renamed the University of Aberdeen Rowett Institute of Nutrition and Health. It now operates as a school within the College of Life Sciences and Medicine. There were no redundancies as a result of the merger, but most of the institute's administrative support functions transferred to the university's core departments and a few staff members were relocated to the main university sites.

The changes to the administrative systems have caused enormous frustration and inefficiencies, with typical examples being the complex electronic requisitioning systems used by the university and the current inability to provide regular budget statements. The institute remains a main research provider for the Scottish government's Rural and Environment Research and Analysis Directorate. It is the grant from RERAD that provides most of the funds for running the institute. Standard university policies, such as the routine replacement of computers at fixed time periods, have had to be fiercely resisted because of the cost implications for the RERAD-funded budget.

The institute continues to operate from its existing site, which remains under the ownership of the Rowett Research Institute – now a subsidiary company of the university. Plans are being drawn up for a new institute building at the University of Aberdeen/NHS Grampian site at Foresterhill and the existing site will be sold off when the institute moves to this new building. Proceeds from the sale will be used to fund the new building. Current indications are that the new building will be much smaller than originally envisaged.

The university's declared intent was to assimilate all Rowett staff onto university terms and conditions within five years of the merger – but its first attempt was terminated

abruptly after almost six months of trying to establish appropriate grades using the HERA job evaluation system. Staff morale has been seriously damaged by derisory and inconsistent grading offers. Only a small number of staff have accepted university terms and conditions, with the rest remaining on their pre-merger BBSRC conditions.

The problems arising from the HERA process have overshadowed all other aspects of the merger and at present staff are finding it difficult to see any positive benefits from becoming part of the university.

Institute of Grassland and Environmental Research

Food security, fuel security and the need to meet our climate change targets means that pastoral farming is as important to the UK in 2009 as it was in the Second World War. It is vitally important that government adequately funds the research needed to underpin the industry.

Grassland is the backbone of the UK agricultural industry and a vital component in rebalancing our food security needs. It accounts for over 60 per cent of agricultural land in the UK and supports dairy, beef and sheep.

The pasture field acts as a vast solar panel, capturing solar energy in the chloroplasts of leaves and using it to build sugars from atmospheric carbon dioxide. Grassland produces copious amounts of home grown food and has the capacity to remove carbon from the air into the soil, thereby slowing climate change. The Royal Society estimates that better management of the world's farmlands could capture as much carbon as is accumulated in the atmosphere each year!

The Institute of Grassland and Environmental Research (a BBSRC institute) is a world-leader in its field. But in April 2008, IGER's three Welsh sites were transferred to Aberystwyth University. Since then, Trawsgoed in Aberystwyth has closed and Bronydd Mawr in Trecastle, Powys is facing closure in October 2009. IGER's North Wyke site in Devon became part of Rothamsted Research.

IGER's key mission, grassland research, has been weakened by being absorbed into Aberystwyth University's much wider hybrid – the Institute of Biological, Environmental and Rural Sciences.

Little if any of the IGER culture remains. Management, administrative and scientific team structures within the new IBERS are still evolving, based on university templates with little sign of institute 'best practice' being incorporated.

Prospect believes it is short-sighted and wrong that IGER, an integrated institute, was broken up and its research effort diluted. It is ironic that the UK has lost intellectual and physical capacity at a time when food security has returned to the top of the political agenda.

Institute of Food Research

The Institute of Food Research in Norwich carries out work which is directly relevant to food security. But IFR's parent body is looking to put the institute up for adoption.

BBSRC and the University of East Anglia started exploring some sort of "embedding" of IFR within the University of East Anglia in 2007. There is considerable debate in the

BBSRC, UEA, IFR's governing body and the Department for Innovation, Universities and Skills as to the exact nature of that relationship. The most likely scenario is for IFR to become an 'independent' company but with a university (UEA) as one of its shareholders.

Throughout the process BBSRC has been deliberately obstructive and tried to prevent staff from contributing to the debate. Staff at IFR were denied the opportunity to brief BBSRC's board before it decided on a governance option that may have far-reaching effects on employment in the city, as well as the future sustainability of food research in the UK.

In December 2008, the chair of the local trade union side asked Prospect to pass on a letter from staff for BBSRC council members who hoped it would inform BBSRC council before it decided what the future governance of IFR should be.

Prospect's vice president forwarded the document to the Council secretariat (with a covering letter of his own) asking them to ensure that each member of council received a copy of the document and also asking for the secretariat to confirm when that had been accomplished.

Just before Christmas, Prospect's IFR representatives discovered that BBSRC's Executive had declined to forward the letter from Norwich staff to the council (and had not had the courtesy to inform them of that fact). IFR staff suspect that this was a deliberate decision on the part of the BBSRC Executive to avoid an uncomfortable debate in council.

Prospect members at IFR believe that they should have the right and opportunity to make representations, particularly where decisions affect the public purse and the UK science base.

This seems even more pertinent given the relevance of this institute's work to the UK's food security, as discussed in the new Chatham House report 'Food futures: rethinking UK strategy'.

Horticulture Research International

Horticulture Research International was a world-leader in its field. It employed 500 staff – the single largest team of horticulture research and development scientists in the world. It was publicly owned and funded by the Department for the Environment, Food and Rural Affairs.

In July 2003, the government decided to break up HRI and sell its key facilities. Prospect accused the government of giving away millions of pounds of public assets and poisoning the roots of horticulture research in the UK. HRI had five sites. By March 2009, HRI was reduced to one site and 226 staff.

Under the terms of the sale, Defra:

- sold HRI's labs and infrastructure at a bargain basement price: the University of Warwick bought the freeholds to Wellsbourne and Kirton for £2.51m and £52,500 respectively.
- sold the Rocks Farm site at East Malling for £150,000 to East Malling Trust and East Malling Research

- guaranteed contracts worth £49.8m over five to eight years. In 2004-05 an additional £2.25m was set aside to support the guarantees provided to the University of Warwick and East Malling Research
- transferred the existing intellectual property rights (arising from Defra research contracts with HRI) to Warwick-HRI
- gave up £2.05m in return for conditions attached to a conference centre at East Malling
- paid £1.6m for backlog maintenance at the East Malling and Wye sites and the transitional costs of establishing East Malling Research (EMR).

Defra did secure agreement to an unspecified "share of proceeds" if all or parts of the sites were subsequently sold or commercially developed. But the agreements have end dates: 15 years for Wellesbourne; 20 years for Kirton and 30 years for East Malling.

At the time of the sale, Prospect asked why Defra was willing to pay this money to privatise HRI, but not put that money into supporting HRI as a public sector body.

Kirton

The WHRI site at Kirton, Lincolnshire closed at the end of February 2009 making nine people redundant. The land (120 acres) is to be sold in lots as there was insufficient commercial support to keep it running as a going concern.

The Kirton Research Centre provided a diverse range of facilities dedicated to basic, strategic and applied research and technology transfer within the horticultural industry. It worked in partnership with growers, packers and other sector organisations in the UK and beyond.

Kirton was sited in an important horticultural area of the country. Field vegetables, young plants, bulbs, flowers, pot-plants, nursery stock, soft-fruit and alternative crops are all grown in the area, which is a major processing and distribution hub for fresh produce.

Efford

The Efford research facility Lymington, Hampshire was valued at £4.5m when it was closed in October 2003. It was sold in lots between January 2005 and January 2006 for £2.46m.

Wye

Wye College had a long and illustrious career. It was founded as a college for secular priests in 1447. The East Malling fruit research station was established in 1921 (closely linked with Wye/independent from 1939). The Hop Research Station was born in 1949.

Wye College merged with the Imperial College of Science, Technology and Medicine in August 2000. In December 2005, Imperial College, Ashford Borough Council and Kent County Council signed a concordat to build a research centre, science hub and associated housing at Wye. After a huge campaign (details at www.save-wye.org), Imperial dropped the plans in September 2006. The Hop Research Station (part of East Malling Research) closed in 2007 with the loss of 12 posts.

Natural Resources Institute

NRI's roots date back to 1894. A major - though not exclusive - component of NRI's work is concerned with sustainable development in developing countries and those with economies in transition. In the past, NRI has worked on: identifying and promoting new uses of tropical products, anti-locust research and overseas pest research.

The quality and strength of UK research was instrumental in building the reputation of the UK in international development. A report from the House of Commons science and technology committee in 2004 said: "UK scientists and engineers working in international development have, by and large, an excellent reputation. Dr Grant Singleton from Australia's national science agency, CSIRO, told us that they "continually find that UK scientists in the agricultural and natural resource management sectors are held in very high regard by government officials, scientists, NGOs and small-holder farmers in developing countries in South Asia and South East Asia."

NRI was one of the organisations that contributed to this excellent reputation. In 1990, it employed around 500 staff. When NRI was moved into the University of Greenwich in 1996, 325 staff transferred.

By February 2009, NRI had just 72 people on the payroll. Of those, about 25 full-time equivalents are involved in subjects classed as science, engineering and technology.

The commons select committee said: "If it is not averted, the current erosion of the UK development sciences research base will severely undermine the ability of the UK to play its full part in international development in years to come. The Government should not sit back and watch this happen, never mind contribute to the process of erosion."

As NRI pointed out, "in many other countries (US, France, Holland, Germany) governments and their development agencies have recognised mechanisms of funding to ensure specialist research dedicated to international development is available and retained as part of the national S&T asset portfolio. This is seen as both adding to the effectiveness of aid policy and conferring significant benefits on the competitiveness of national S&T industry".

National Oceanography Centre, Southampton

The National Oceanography Centre, Southampton, is a collaborative centre between NERC and the University of Southampton. NERC staff there work in close proximity with University of Southampton staff. In many groups, staff with different employers work together and/or are engaged in similar work. University-employed staff often work on NERC projects funded by NERC core strategic money.

The mixed staffing causes a range of problems, including:

- NERC staff being paid less than the more junior university staff they manage
- problems with how performance-related pay is distributed
- differences in the promotion systems in NERC and the university lead to people with little or no managerial experience, no required training in the NERC system and poor managerial skills being appointed to managerial positions

- acting as a barrier for those applying to new posts because in some instances this would mean taking a cut in pay and conditions.

NERC is now planning to take back parts of the centre which are focused on providing national capability – such as the National Marine Facilities Division, which manages ships and national facilities – into full NERC ownership, based on a single employer model. Prospect believes this move is recognition that some areas can't be managed properly by the universities.

Differences between institutes and universities

- One of the stated benefits of moving to a university is the increase in "critical mass". But experience has shown that academics work on whatever projects they can get funded. There are lots of individual projects, with little to link them or benefit the scientists. Thus there is no overall research strategy – apart from bringing in as much money as possible.
- it is more difficult for universities to take on the long-term work of RCIs since they depend on publication in high profile journals and time-limited responsive mode grants
- attitudes to research in the university are more gung-ho, with less attention to detail and good lab practice
- most of the labs and communal facilities are used by postgraduates/postdoctoral workers. Their care of equipment and its maintenance is below professional standards
- universities are very hierarchical, with relatively small academic elites. The public sector tends to be more collaborative
- university researchers will apply for grants to work on what will attract funding, not necessarily what they are interested in.
- funding for the majority of research workers on short-term contracts after they reach 40-45 is virtually non-existent, since they have to compete with younger workers, or university-funded colleagues who need only put a fraction of their time down on a grant
- support services are generally less efficient, more convoluted and time-consuming to access
- finance and purchasing systems are more clumsy and access is restricted
- university management is less open and communicative
- some appointments have been made to senior positions without following the controlled and transparent procedures used in the research councils, and seemingly without advertisement or free and fair competition.

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www.prospect.org.uk MARCH 2009