

Dairy Council for Northern Ireland Lecture 2019 30th Anniversary Symposium

**The development of research in an increasingly competitive environment -
the Ulster example**

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Background

As the Dairy Council for Northern Ireland celebrates its 30th Annual Nutrition Lecture, it is worth reflecting upon the context within which human nutrition research and other areas which attained international excellence at Ulster were able to develop and flourish.

The University of Ulster (UU) began its existence in 1984 with a limited background level of research activity. Inevitably the earliest years of the new institution were focused on achieving managerial and administrative harmony and developing a range of new and successful academic programmes.

However, universities were then also being seen increasingly by policy makers as powerhouses for economic, social and cultural development through their research and associated knowledge transfer. Strong research universities were recognised as magnets in attracting high technology inward investment.

Beginning in the mid-1980s, the UK government decided to allocate basic research funding to universities on the quality and volume of research rather than institutional size. Thus began the introduction of the periodic Research Assessment Exercises (RAEs), now known as the Research Excellence Framework (REF). The fledgling UU was ill-prepared; in the RAE of 1992, three subjects (Biomedical Sciences, Built Environment and Social Policy and Administration) attained scores of 4 on an ascending points scale from 1-5. All other subjects scored at 3 or less.

Selectivity

At this time the then Northern Ireland Higher Education Council implemented a policy of distributing additional developmental research funds (NIDeR) to the two universities. UU established in 1993 a Research Policy and Practice Committee which developed for the first time an institutional research strategy. This involved rigorous research selectivity, allocating NIDeR funds to areas of promise alongside regular and robust, often painful, monitoring systems. It also involved, through necessity, the passing of responsibility to a new generation of young and previously successful researchers with the self-confidence and ability to chart the university into new waters.

The beneficial effects of UU's research strategy were quite dramatic. In the next (1996) RAE, UU obtained the highest rating possible (now raised to 5*) in Biomedical Sciences (including human nutrition), corresponding to outstanding international excellence. (QUB also obtained one 5* rating, in Mechanical, Aeronautical and Manufacturing Engineering). UU had shown how, through selectivity and focussed research management, it was

possible to achieve international excellence from an almost zero base. The 2001 RAE maintained the pattern. UU received two 5* ratings (in Biomedical Sciences and Celtic Studies) to QUB's one (again in Mechanical, Aeronautical and Manufacturing Engineering).

At this time the two Vice Chancellors shared a relatively common vision and willingness to cooperate in the overall interests of the Province. This led to joint successful lobbying for what became The Northern Ireland Science Park. It also resulted in government funding for research being substantially increased. Further joint approaches led to Atlantic Philanthropies agreeing to provide funding to support research infrastructure in selected areas provided this was matched by additional government funding. The resulting Support Programme for University Research (SPUR) was launched in 2002 and was followed by a similar SPUR II programme (also supported by Atlantic Philanthropies) the following year. SPUR funding was competitive and was allocated on the basis of each university's strategic research plans for attaining international excellence in selected research areas. UU, which received £40million in SPUR funding, further reinforced its policy of selectivity in 2002-3 by establishing research institutes covering its areas of selectivity. Meanwhile both universities had significantly ratcheted up the development rate of new start-up companies and other business support activities through their respective knowledge transfer companies, QUBIS and UUTECH.

It is worth reflecting on the impact of selectivity on university research quality in Northern Ireland. Whilst some policy and funding initiatives eg. NIDevR had measurable positive outcomes in the 1996 and 2001 RAES, the major increases in selective funding (SPUR I and II) and increased recurrent funding only took place in 2002 and 2003. The results of the 2008 RAE, which measured research performance over the period 2000-2007, provide a more mature evidence base. Both universities claimed strong performances. Examination of results by subject shows that QUB had 6 subjects in the top 10 as compared to UU's 4. However, 3 of UU's subjects (Biomedical Sciences, Nursing and Celtic Studies) were in the top 3 while QUB had one subject (Pharmacy) in the top 5. In terms of staff numbers, UU had 98 staff in subjects ranked in the top 5 as compared to 23 for QUB (by 2004 Biomedical Sciences at UU was the largest and highest ranked research grouping across all subjects in Northern Ireland).

Conclusion

The 2008 RAE results reflected a tight regime of selectivity operating within UU during most of the review period. Certainly, UU derived considerable leverage from the SPUR initiative with two major beneficiaries (Biomedical Sciences and Celtic Studies) performing outstandingly. It seems unlikely that the two Northern Ireland universities would have obtained a combined total of 10 top 10 subject areas without the transfusion of the various selective funding initiatives. By any objective standard, the quality of research undertaken in the Northern Ireland universities was by then of a different and higher order than that of 15 years previous and provided a strong foundation for future development.

Research excellence represents a race without a finishing line. Every place gained has to be maintained and, if possible, improved upon. Each university strives for international excellence against ever-increasing competition. Based on these and subsequent RAE/REF results, Northern Ireland has a number of areas of undoubted international excellence. This has been achieved by selective funding policies applied to varying degrees.