The University of York

Research Strategy

2010-2015

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Introduction

The University of York has developed in fewer than 50 years since its foundation into one of the leading research Universities in the UK and internationally. One obvious mark of that achievement is its standing in the 2008 Research Assessment Exercise where over 91% of our staff were submitted for assessment and over 50% of our research was judged to be 'world-leading' or 'internationally excellent'.

Vision

The research undertaken at the University of York will be of the highest quality and value to society, and the University will be seen as one of the best places for researchers worldwide to achieve their personal research goals, tackling problems that are both important and challenging. Our research will not be constrained by traditional disciplinary boundaries, and will be informed by, and itself inform, our teaching programmes.

The **University Plan** identifies four themes: Excellence, Internationalisation, Inclusivity and Sustainability. These themes will guide all aspects of the University's work, and research will contribute to them in a variety of ways. They are not specific to research, however, and our research strategy is informed by **key principles**, by which the University will judge the merits of planning and investment decisions for research. These principles include:

A belief that research is a public good. Research is the driver of the knowledge economy, and we will work to ensure that new knowledge created at York is made available to society, whether for cultural, social or economic benefit, or for its inherent interest. We strongly assert that research is inherently valuable, by its ability to throw new light on previous assumptions and to add to the sum of human knowledge. Our research will play a role in shaping and responding to national and international agendas.

Researchers should be able to achieve personal goals. Good research depends upon the excitement and enthusiasm of individual researchers who will have their own intellectual ambitions. Those ambitions will be shaped and informed by the University research environment and strategic goals, but they will have their own roots and drivers as well, and together they determine the University's overall research capacity.

Recognition of the importance of inter-disciplinary research. Despite the primacy of the researcher in our vision of research, we recognise that interactions among researchers are almost invariably a fruitful way of advancing research into new areas. We will foster those interactions not least because advances in knowledge often occur serendipitously at the intersections and edges of disciplines. In doing this the University will identify strategically important research themes.

A strong link between teaching and research. We believe that the research environment is greatly enhanced by the challenge that comes from researchers teaching enquiring students, and that developing critical thinking skills in students is best done in an atmosphere where they are exposed to research and researchers of high quality.

Annexes I-III provide details of Context, Themes and Objectives.

Annex I

Context

Research-based universities play a unique role in advanced societies, which are increasingly dependent on knowledge and skills to achieve sustainable societies and economies. Universities of the highest calibre are the places where new knowledge is generated and where that knowledge and the skills to exploit and generate it are transmitted to the next generation. There is an exceptional synergy between these activities: training students in a research environment, especially if it is the active researchers who are the teachers, stimulates innovation in both student and researcher.

Humanity is currently facing extraordinary challenges. Addressing these 21st century concerns requires new knowledge, accurately derived and effectively applied. In some cases, it may be possible to identify specifically the research goals that must be attained to address the problems. But such targeted research grows out of, and is made possible by, the continuing development of knowledge that depends on curiosity-driven research. There is a misconception that the latter is abstruse and of limited value. What matters is that the questions asked are important, interesting and answerable. As Sir George Porter, former President of the Royal Society, said: "there are two kinds of research: applied and not yet applied."

The economic outlook for the next several years makes funding vulnerable, and we will need to respond vigorously to maintain our ability to undertake research of the highest quality and value. The current record reflects success by individual researchers in departments acquiring funds to support their work, but we need to raise our ambitions significantly. In particular, we need to match our success in the more traditional responsive mode in competitions for large grants (>£1M). A challenge for the next period of research development is to retain the positive features of the departmental model while building capacity to exploit a changing funding landscape. Another challenge in a model with such a departmental focus is to ensure that inter-disciplinary work is not disadvantaged, especially where this requires researchers from different departments to collaborate. We need systems that encourage the sustainable development of inter-departmental collaboration and provide incentives to departments to promote it. In all this, there is a critical role for Departmental Research Committees in inculcating a culture of achievement and collaboration, in monitoring the behaviour of researchers, and in managing the research process at a departmental level.

Another challenge will be to ensure the maintenance and development of major equipment and facilities. Funders have signalled changes in their policies and expectations that mean universities will have to pay greater attention to the depreciation of these capital assets and to evolve procedures that will allow updating and more efficient use research equipment and facilities.

Although the final form of the next research assessment (Research Excellence Framework) is still not fully determined, it remains likely that dual funding will continue and that it will be a critically important source of income for York. What is certain is that quality of the research done at York will be the most influential factor in determining our income from REF. We need to plan carefully to ensure that we have the information needed to manage the REF process to deliver the greatest institutional value.

Annex II

Objectives

York is proud of its high reputation as a research-based University, which has been achieved in less than 50 years since it was founded. However, it recognises that it should set itself very high standards to ensure that it maintains and advances that reputation. To do this the University will set ambitious but achievable research performance expectations and benchmark our performance against leading national and international institutions. Our investment in and support of research activities will be strategically selective. Among The University of York's objectives are that:

1. **York should be recognised as one of the best places to undertake research, nationally and internationally.**
   We wish to ensure that researchers of the highest quality will view York as an ideal environment in which they can undertake their work. Because of the primacy of people in our research values, all of our other aspirations follow from this fundamental one.

2. **Our research should be viewed as being of the highest quality and of value to society.**
   Only by effectively addressing issues of large significance can we be sure that our reputation for research quality will grow. There is a clear link between the quality of the researcher, the research process they follow and the value of the work that they do. Our research should therefore be undertaken within a robust governance and ethical framework, our research practices should meet international norms, and the goals of stakeholders and sponsors of research should be addressed in our own research planning.

3. **There should be low barriers to interaction, both internally and externally.**
   Since we believe that many of the most exciting advances are made where disciplines meet, it is essential that we have structures that make it easy for researchers to discover, meet and interact with each other. Sometimes this will be across what are often perceived as large disciplinary gulfs, for example from the Arts to the Sciences, but interactions are also fruitful within disciplines, and it is important that all barriers to collaboration, both within and beyond the institution, are minimised. We will actively seek new forms of collaboration.

4. **The quality of the physical environment for research should be commensurate with the quality of the work.**
   In some disciplines progress is dependent on the availability of key facilities, and we will need to ensure that we have the ability to provide these where needed, but it is a sign of the importance that society and the institution places on research that it is willing to provide an appropriate physical environment within the constraints that the funding environment will provide.

5. **There should be a thriving community of international researchers and research visitors at all times.**
   We will continue to develop partnerships and collaborations with leading international researchers and research institutions. As a relatively small University we cannot aspire to appoint to posts all of those people who can contribute to the intellectual environment at York. An essential corollary of our vision, therefore, is to ensure that we are able to attract visitors for short or long periods to contribute to debate and projects, so that they can add to the richness of the intellectual environment.

Annex III

Objectives (mechanisms, measures)

In developing this strategy, we have identified six groups of objectives that will need to be attained if our aspirations are to be realised.

1. **People**: attract, recruit and retain researchers of the highest quality and ensure that they operate effectively. (See also the Human Resources Strategy)

   The fundamental objective here is to ensure that the University is an attractive place to work and that we are therefore able to make appointments of staff capable of operating at the highest levels, and to retain them as their careers develop. Attracting staff will depend on reputation and on the more apparent aspects of the research environment, including the appearance and suitability of buildings, and the availability of resources and facilities. Retaining staff, however, depends on more subtle aspects of the research environment, such as the management of workloads within departments, opportunities for advancement and for career development, including for staff with family and similar commitments, and the provision of opportunities for research interactions. Departmental research management should act to identify aspects in which staff need support or encouragement, including the nature of the research problems they are tackling, their need for interactions, collaborations or facilities, and their personal funding and publication strategies.

2. **Support**: provide support to staff, especially when newly appointed, and offer an effective administrative support system.

   Researchers will operate most effectively if they are supported by professional and expert staff and systems, both directly and indirectly. Research support may be provided locally, within departments, or centrally, and the appropriate balance of local and central support will depend on discipline-specific factors as well as the critical mass of researchers in different parts of the University. One of the goals of an effective support system will be to ensure that researchers are aware of the full range of funding opportunities and that departments do not become over-reliant on a few funders. All of these functions require that reliable information on research activity is available and properly disseminated.

3. **Facilities**: provide high quality facilities and infrastructure. (See also the Estates Strategy)

   Research requires physical space of suitable quality: it is essential that plans for research expansion are fully reflected in other parts of the University's strategic planning, notably in its estates and capital plans. The latter also need to make appropriate provision for the needs for major equipment purchases, especially in scientific disciplines, both for the maintenance of existing capability and to allow researchers to keep abreast of new technologies. To do this we will need to explore possibilities for more extensive sharing of research equipment and facilities. Although the issue of equipment may be felt most acutely in the sciences, the availability of high quality information and computing systems is common to all.

4. **Collaboration**: promote inter-disciplinary research and support collaborations

Interactions among researchers are a key element of a vibrant research environment, and it should be easy for staff to meet and interact with colleagues across the institution. Sometimes, those arrangements may need to be recognised in a more formal structure such as Interdepartmental Centres. However, collaboration must extend beyond the institution, and we should ensure that staff operate on an international stage. The research environment depends on a broader group than our own staff. Interactions with visitors and honorary staff allow staff to be exposed to new skills and knowledge and increase the range of potential collaborations. There need therefore to be active programmes to encourage the flow of international research visitors, as well as to enable our own staff to develop international collaborations. Membership of partnership organisations such as the Worldwide University Network will contribute to this objective. Collaboration with non-HEI partners is also essential to a balanced research portfolio, including links with research centres, NGOs and industry.

5. **Training**: sustain a thriving community of research students.

Research students are a major element of the research environment of the University; their presence supports research in a wide range of fields and encourages innovation, and it is a fundamental part of the University's mission to train new researchers. We need therefore to ensure that there are wholly effective support mechanisms in place for research students and that students are offered both effective supervision and relevant and innovative training. A thriving graduate school should be attractive to students from all countries, and we need therefore to ensure effective marketing of graduate opportunities. Because of the demands of postgraduate research, it is essential that a variety of modes of study is available, to allow for the personal circumstances of a broad range of potential students.

6. **Engagement and impact**: exchange knowledge derived from research with users and sponsors of research, deliver a high profile and effective marketing of our research strengths and clearly communicate our research achievements to well-chosen audiences. (See also the Business and Community Strategy.)

The University needs to ensure that the impact of its research are realised and that accurate messages about its research and research quality reach a wide range of relevant target audiences. We have a duty to engage with the general public and to facilitate their understanding of our research, its importance and its results. We must ensure that the knowledge generated by our research is made available to potential users, whether they be members of the general public, industry (construed in its broadest sense), government, NGO's or agencies that implement policy informed by research. We should also engage with those bodies in government and elsewhere that are responsible for research policy and directions, to ensure that our voice is influential in guiding them. All of these activities assume a clear understanding internally of our research portfolio.