University of Manchester Research Strategy

Our ambition is to be a world-leading university, where researchers produce work of the highest significance and impact. We will be distinguished by our interdisciplinary research, for training outstanding researchers and giving parity of esteem to discovery, application, knowledge transfer and impact. Our research will reflect the ambition, focus and distinctiveness as embodied in the Strategic Vision 2020, whereby we will be celebrated for:

- the strength and scale of our work across science, engineering, humanities, life and medical sciences;
- the excellence and breadth of our research, particularly its interdisciplinarity, for training outstanding researchers and giving parity of esteem to discovery, application, knowledge transfer and impact;
- the diversity and quality of our students and the ability of our graduates to contribute to society;
- making a difference to the social and environmental well-being of our communities and wider society, including through the quality and accessibility of our cultural institutions;
- being a truly international institution which is a major contributor to the economic, social and cultural transformation of the Manchester, the North and the country more widely.

This document develops and builds on the Research Strategy published in 2011 and is intended to guide an integrated strategy across the institution, driving and coordinating actions at Faculty, School and Institute level.

The success of the strategy will depend on changes in the ambitions and behaviour of research groups and individuals. These behaviours are encapsulated in the University’s Statement of Research Expectations for staff which is available here¹.

The strategy is presented under seven headings. The three central pillars are to achieve research of the highest quality, to support and develop excellent people, and to have an impact beyond academia which yields economic, social and cultural benefits.

Supporting these are four enabling areas of action, providing focus and capitalising on our critical mass and interdisciplinary capabilities, providing the right financial, physical and knowledge resources, meeting the highest standards of research integrity, and ensuring alignment of strategy at all levels of the University.

¹ http://documents.manchester.ac.uk/display.aspx?DocID=26130
Pillars

1 Quality
The University will perform research of the highest quality and continue to raise the level and ambition of our activities to world leading standards of excellence. In so doing we will take active steps to ensure that the quality of our research is reflected by leading performance in any measures of quality that may be applied including international rankings and the Research Excellence Framework, and by publishing in leading outlets and attracting high levels of citations for the great majority of our outputs.

2 People
To achieve our goals we must attract, develop and nurture the careers of excellent researchers and become the location of choice for staff at all career stages. An integrated approach will begin at postgraduate level where the Manchester Doctoral College will provide outstanding research and training. Doctoral researchers will be an integral part of our research effort and we must ensure that this first career step is properly resourced and that their research reaches an internationally excellent level, notably through the President’s Doctoral Scholar Award Scheme. Support for early career researchers in post-doctoral or early academic positions will include the mentoring and support needed to develop independent reputations and we will recruit and invest in the best independent fellows through a new prestigious University scheme. We will identify potential research leaders and help them to secure major awards and come to the forefront of their fields. Finally we will provide an environment that attracts and retains those at the peak of their research careers.

3 Impact
Our work must have an impact beyond academia and yield economic, social and cultural benefits whenever the opportunity arises. We will be the partner of choice for business and other external organisations worldwide through the quality and focus of our research, and the efficiency of our outward interfaces. We will identify and strengthen our key external relationships and manage them strategically for the long-term benefit of the research agenda.

Manchester’s heritage, image and population will give our research a distinctive identity, attract knowledge-based investment to the city and ensure there is a high value legacy from the Euroscience Open Forum, European City of Science, and other major events.

We will ensure that we identify and communicate widely the substantial body of our work that addresses societal challenges such as sustainability, energy, security and the ageing society. In this and other ways research will also contribute to the University’s goal on social responsibility. Our cultural institutions will also be used to support and distinguish our research. We will seek to bring to market the intellectual property arising from our work and support student and alumni enterprises. We will ensure that individuals receive parity of esteem for translational research and knowledge exchange.
Enabling actions

A  Focus and Interdisciplinarity
The critical mass and interdisciplinary scope of the University will be used to secure a position among world leaders in targeted fields. Building upon existing successes and our five beacons: Addressing Global Inequalities; Advanced Materials; Cancer; Energy; and Industrial Biotechnology, we will identify those themes where through key recruitments and investments we can construct a broad front of excellence. We will work in partnership with international research leaders. At the same time we will exploit our wide range of capabilities to form new and ground-breaking interdisciplinary combinations across the full range of subjects. The University of Manchester Research Institute and its constituent institutes and networks will play an important role in taking forward this agenda but no internal structure, process or system should be a barrier to interdisciplinary working.

We will not let success in these themes distract us from the critical importance of investigator-led research and the freedom and creativity needed to achieve excellence and impact. We will nurture and support scholarship and fundamental research.

B  Resources
To achieve our research ambitions we will draw upon a broad range of financial, physical and knowledge resources. While seeking to increase our share of research council and UK charitable sources, we will also diversify to achieve a substantial increase in funding from business, European and other international sources. This in turn will help us to engage our research more effectively in the agendas these funders are pursuing. We will strive to provide and make effective use of state-of-the-art facilities and equipment. Our administrative support will be integrated, using fit-for-purpose information systems, and ensuring that the needs of our researchers and sponsors are met comprehensively. Recognising that the time of researchers is a scarce and valuable resource we will seek to organise commitments to maximise quality time for research and teaching.

C  Integrity
The highest standards of research integrity are an essential element of quality. Building on recent progress, we will further improve our communication and procedures to ensure that research ethics and all other dimensions of integrity are central to the values of our staff and govern our behaviour.

D  Alignment of strategy at all levels
Our research strategy will be based upon mutual commitment and alignment at institution, faculty and school levels.

The Research Strategy must be coordinated with strategies for the University’s other main goals: outstanding learning and student experience and social responsibility. A university which is excellent in research and research impact is far better equipped to meet and exceed the expectations of its students and wider stakeholders. The success of our research strategy depends on close
coordination with our strategies for business engagement, commercialisation, internationalisation, estates, human resources and finance.

We will only be able to capitalise on our strengths, including the wide scope of our capabilities both in terms of expertise and in spanning the spectrum from research to innovation, if we have joined up strategy with wide buy-in. We also need a joined up approach to implementation. This can in part be achieved by a more open approach in which up-to-date data on our research, its environment and its impact are made available to all staff. Increasingly external opportunities require a rapid and highly coordinated response. While not losing sight of our long term objectives, the changing environment and the opportunities research creates means that we need regularly to update the content of this strategy.

Key Performance Indicators

- We will aim for 90% of our staff with research in their contracts to be judged as producing world-leading or internationally excellent research and for our share of the top 10% of cited papers in their field to be in line with that for the UK’s top 5 institutions.

- We will increase our PGR-to-staff ratio to be within the top 5 UK institutions and ensure that at least 90% of doctoral students complete on time.

- We will generate a cumulative £1 billion of economic impact by 2025 from the intellectual property we generate.

- We will seek to double our total research grant and contract income by 2020 from a 2010 baseline, ensuring an increase in both international and business income as a percentage of total income and an increase in Manchester’s share of UK research grant and contract income.

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