Developing Excellent Research with Social, Cultural and Economic Impact University of Worcester Research Strategy 2014 – 2019

"To foster and disseminate independent and distinctive scholarship and research to achieve major, beneficial, social impact" Strategic Plan, 2013-18

Research at the University of Worcester will be recognised for being distinctive, socially and culturally relevant, and influential on national agendas. Many parts of the University are already engaged in producing impactful research and we intend to strengthen and broaden this during the period of this Strategy. In clearly defined areas, such as dementia and aerobiology, we will continue to produce world-class research and we will seek to develop new areas of research excellence with global reach. Our research will generate outcomes which demonstrate significant public benefit in the areas of distinction in our Strategic Plan (2013-18):

- Children and Young People
- Human Health and Well-Being
- Arts, Culture and Heritage
- Economic, Social and Environmental Sustainability

All members of academic staff are expected to contribute to research and scholarship through their active research plans, although we recognise that individuals will have different starting points in terms of their engagement. The Professional Services of the University will embed support for research into their own work and endeavour to promote research growth alongside our community of scholars.

The University's definition of research is based on that used in the Research Excellence Framework 2014: "a process of investigation, leading to new insights, effectively shared". We recognise that engagement with research may grow out of scholarship, professional practice and knowledge exchange and we value the contribution of staff in these pursuits and the public benefit that results. At the heart of our research is the community of researchers, both staff and students, and we will continue to seek to attract talented individuals to work at the University and support them to succeed.

Central to this Research Strategy is the generation of excellent research with high academic, societal, cultural and economic impact. To achieve this, we will need outstanding people, appropriate facilities and enabling processes. The ambition is to improve the quality of the outputs of our research in a form appropriate to the discipline and, through well planned dissemination and knowledge exchange, to ensure the contribution to society of research at the University of Worcester is maximised.

Aim 1: We will enhance our research culture

In our Strategic Plan, we recognise that research, scholarship and knowledge exchange are essential to the life and work of the university. Research informs our learning and teaching, our contribution to society and culture, and our work with businesses, public sector and voluntary organisations. It is vital then that we continue to develop a University culture in which vibrant research is recognised as intrinsic to our success. Over the past five years, this has been demonstrated by growth in research activity: witnessed by the increased percentage of staff engaged in research; by the more substantial submission to REF 2014; and by its significantly increased research income. It is further reflected in its growing programme of research seminars, lectures and other events, and its hosting of national and international conferences. To maintain this momentum - to create a supportive, ambitious environment serving the interests of existing and future researchers and research teams we will enhance the culture by more fully embedding research into everything we do, not only in the work of the Institutes and Research Centres, but also in the professional and support Departments. Both the Research Office and the Graduate Research School will continue to play a central role in developing the University's research culture but increased emphasis will also be placed on the support offered by Communications and Participation, Data Management, Finance, Information Learning Services and Personnel.

Objectives:

- Harmonise the support provided for researchers across institutes to reduce inequity and foster inter-institute co-operation.
- Ensure that staff are uploading all outputs from research and scholarship (including conference papers as appropriate) to WRaP and adhering to the Open Access Policy.
- Continue to develop institute and cross-institute research seminar programmes, conferences and other events.
- Review the efficacy of Research Focus events as a vehicle for celebrating and highlighting research.
- Develop further administrative support for research within institutes.
- Ensure that PGRs are integrated fully into their academic institutes and have a recognised role in developing the institute's culture.
- Ensure that the policies and practices of professional and support departments fully support research and the needs of research staff.
- Promote research success internally and externally and communicate research outcomes through external media and the University's website to funders of research, policy makers and strategic partners.
- Ensure that all researchers maintain an up-to-date web presence in order to publicise research interests and activity.

Aim 2: We will attract, develop, support and retain high quality researchers

To achieve our research ambition, we must be able to attract talented individuals (staff and students) to join our research community and to develop and support both new Early Career Researchers and existing researchers, including the professoriate.

In its Strategic Plan 2013-18, the University seeks to be an "Outstanding Place to be a Member of Staff". We believe that fundamental to this ambition is providing a balanced workload, which allows staff time and space to design, secure funding for, undertake and disseminate excellent research. We also believe it is vital that members of staff are given the opportunity to continue to develop as researchers throughout their careers, whether through undertaking research degrees and/or training courses, or through mentoring or peer-to-peer support.

We remain committed through the Graduate Research School and the work of the Research Degrees Board to supporting our research students in their journey to successful and timely completion of their research degree and also to developing their research and transferable skills to maximise their employability in their subsequent careers.

Objectives:

- Ensure that the University's procedures for academic staff appointment identify a candidate's research track record and potential as key criteria.
- Ensure that there is a clear career pathway articulated for all research staff.
- Ensure that the University's procedures for staff probation, appraisal and promotion recognise and reward research success.
- Ensure that the University appoints excellent researchers to research studentships, post-doctoral fellowships and research posts.
- Ensure that workload reflects the individual's contribution to research, their success in attracting funding and producing high quality outputs.
- Establish a programme of researcher development, including mentoring and peer review, to ensure that all researchers are well supported at all career stages.
- Review the mechanisms by which the University seeks to support research activity (including Research and Scholarly Leave, Research and Project Leave, University Research Studentships, Vacation Research Assistantships, Honorary and Visiting appointments) to ensure they are enhanced and remain fit for purpose.
- Ensure that infrastructure (e.g. the library, collections, facilities, and equipment) is developed appropriately to support the University's research ambition.
- Develop opportunities for exchange nationally and internationally for academic staff, professional research staff and postgraduate students through, for example, sabbaticals, secondments and mobility programmes.

Aim 3: We will increase the proportion of internationally recognised, internationally excellent and world leading research delivered by our researchers

The focus of the last Research Strategy was to encourage all academic staff to engage in research and scholarship and thus increase the capacity for research across the University. We achieved this. Year-on-year there was a growth in the proportion of staff engaged in research in all subject areas, culminating in a significant increase in the number of staff submitted to REF2014 by the University and in the number of submissions made.

Whilst we continue to want all our academic staff to engage in research and scholarship, during the lifetime of this strategy we intend to enhance the quality of work undertaken by our researchers, growing the proportion of 2* (internationally recognised), 3* (internationally excellent) and 4* (world leading) research . To achieve this: our investment in research will be driven by our pursuit of excellence. We will encourage collaboration, internal and external, intra-, inter- and cross-disciplinary, since the best research is often a product of researchers working together as part of a team in which ideas can be generated, challenged and refined. We will develop and enhance staff capacity to produce and disseminate excellent research.

Objectives:

- Review the annual Research Reports to identify current and emerging areas of research excellence and to inform institutional strategic planning.
- Prioritise identified areas of excellence for internal research funding.
- Support academic staff to produce at least one output from their research and/or scholarship each year on average (pro rata for part-time staff). This will include a range of academic, peer-reviewed outputs and discipline-appropriate outputs relevant to professional and scholarly activity.
- Establish Research Interest Groups (RIGs), both disciplinary and interdisciplinary, to help drive the pursuit of research excellence.
- Develop at least one more Research Centre by the end of the period which has the
 potential to make a significant contribution intellectually, reputationally and
 financially, and be recognised as having international impact.
- Develop opportunities for external collaboration (e.g., through: national and international exchanges for researchers; strategic partnerships).
- Provide professional support in writing and planning for publication.
- Develop opportunities and remove barriers for researchers to write up their research.

Aim 4: We will increase income from research, enterprise and consultancy including the commercialisation of our research

The University increased its research income by 400% since 2008, particularly reflecting the success of its two Research Centres, the Association for Dementia Studies (ADS) and the National Pollen and Aerobiology Research Unit (NPARU), in gaining funding, but also significant, if more individual achievements in other areas. In the period of this strategy, we will seek to grow further our income from research. This growth will be an indicator of the enhanced quality of our research but will also act as a vehicle for developing excellence.

Fundamental to this growth will be the continued expansion, as appropriate, of our existing Research Centres but also the emergence of one or more new centres aligned with the University's areas of distinction. Equally important will be the creation of an environment that encourages researchers to seek external funding – whilst recognising that this may not be the pathway that all researchers should take – and that supports them through the process of bidding and of effectively managing grants in the event of success. The continued development of a professionally-led Research Office, which will work closely with institutes and departments in identifying funding, developing bids and supporting grants post-award, is key to the success of this aim.

In addition, the University will take advantage of opportunities it has not fully engaged with in the past. This means tapping into a greater diversity of funding streams, particularly European funding, but it also involves realising the commercial potential of our research.

Objectives

- Ensure that applicants for research funding are supported throughout the process.
- Identify and remove disincentives to bidding for research income and reward researchers for success in gaining external funding.
- Develop support for staff to undertake contract research and consultancy with businesses and other organisations.
- Develop the capacity to advise researchers on the commercialisation of their IPR, to safeguard their ideas and to increase the revenue earned from research.
- Enhance our knowledge of international funders, in particular the European Commission, and assist researchers to identify appropriate funding streams.
- Support researchers to engage in the development of collaborative bids.
- Review the resources in the Research Office to ensure there is sufficient support for pre- and post-award processes.
- Identify future research leaders and themes, congruent with the University's mission and Areas of Distinction, which have the potential to grow into Research Centres.
- Ensure Research Centres remain viable, financially secure and sustainable.

Aim 5: We will ensure our research makes a difference to people's lives locally, regionally, nationally and internationally

We want our research to engage as wide an audience as possible, not only in terms of the number of people we reach but also in terms of influencing local, regional, national and global audiences. To this end, we want to ensure that our researchers are publishing their work in open access contexts and that they recognise the value of disseminating their work across multiple media: through academic publications, professional publications, national and international conferences, social media, radio, television, the internet. We want to ensure that our research has impact. We will proactively seek ways in which we can engage with research users (including in the design of our research) and potential beneficiaries, such as public organisations and businesses, to develop mechanisms of knowledge exchange. A primary way that the outcomes of our research are transferred is through our teaching and we will ensure that all our programmes are informed by up-to-date research.

Objectives:

- Develop support to ensure our research is communicated effectively to nonacademic audiences through external media.
- Establish programmes of events to engage the public with our research.
- Establish and further develop existing links with research user groups, including public services, non-for profit organisations and businesses, and engage these groups in the co-creation of research.
- Work with our partners and partner organisations in developing research capability, research opportunities and knowledge exchange to mutual benefit.
- Support our researchers in developing an external profile to enable them to play a broad strategic role by influencing key national and international decision-makers.
- Play an important intellectual leadership role locally and regionally in assessing economic and societal impact of change, how it is measured and how it can be used to the benefit of the city and region.
- Develop our pedagogic research and ensure the outcomes inform our practice and are disseminated nationally and internationally.
- Ensure that research is disseminated through our academic programmes and that students are taught by members of staff who are research-informed.

Aim 6: We will further develop our research governance arrangements to ensure that research is undertaken to the highest standards of integrity.

Substantial progress has been made over the period of the last Research Strategy to put in place more effective research governance arrangements. These arrangements assure the quality and integrity of our research: that our researchers are honest, open and critical about their research; that they exercise a duty of care to their participants and collaborators; that they store and manage their data effectively; that they publish their research accurately and in a timely fashion. It is vital, however, that these arrangements are dynamic, that they are responsive to and, where appropriate, compliant with changing legislation, codes of conduct and external governance frameworks. It is the role of the Research and Knowledge Transfer Committee, with support from the Ethics and Research Governance Committee, to keep these arrangements under constant review and to ensure compliance with these arrangements, whilst ensuring that they do not act as a barrier to researchers.

Objectives:

- Ensure our arrangements for research governance are compliant and/or aligned with legislation, governance frameworks, concordats and codes of practice.
- Continue to develop effective and proportionate processes to support researchers in research approval, and ethical and regulatory compliance.
- Review and revise, as appropriate, existing policies (e.g. Ethics Policy, IP Policy) to
 ensure they are comprehensive, accessible and understood by all researchers.
- Develop a Research Data Management Policy.
- Provide professional support for researchers in legal and contractual matters, financial probity and monitoring, and intellectual property rights.
- Ensure that the University's Research Governance mechanisms are reviewed regularly and adhere to legislation, external frameworks and best practice in the sector.

Key Performance Indicators

Aim	KPI	Measure(s) of Success
1. We will enhance our research	Number of "research active" staff	All academic staff engaged in research and/or
culture		scholarship by 2015/16
	Research student numbers	Increase numbers in targeted areas (to be identified)
	Number of outputs on WRaP	Year on year increase
	Number of external research conferences held at UW	Increase number and standing of these events
	Number and frequency of Institute research seminars	All institutes establish a regular research seminar
		series incorporating internal and external speakers
	Efficacy of professional and support departments in	Research embedded in the practice of departments,
	supporting research	reflected in annual service reports, responsibilities, etc.
	Annual survey of research-informed teaching	High % of courses/programmes informed by
		researcher's own research and scholarship
2. We will attract, develop, support	Highest qualification on appointment (academic and	Increase % of staff with PhD (or equivalent experience)
and retain high quality researchers	research staff)	at appointment
	Publication profile of new staff (academic and research)	Increase % of new appointments with "REFable"
		outputs at appointment
		Increase % of new appointments with "REFable"
		outputs 3 years after appointment
	Completion data for research students	Reduced average completion time and/or favourable
		comparison with benchmarks
	Enhanced processes for development and progression	Gaining and maintaining HR Excellence in Research
	of research staff in line with national initiatives (e.g.	Status
	Concordat to support the development of researchers)	Gaining Athena Swan status
		Number of research staff who have been awarded
		promotion
	Engagement with and efficacy of 4 year research plan	% of staff producing a 4 year research plan
		% of staff who have met objectives in their 4 year
		research plan
	Applications to University's research support schemes	Year on year increase in applications
	Staff and student engagement with researcher	% of staff and students who engage with the

	development programme	programme
	Staff and student feedback on researcher development	Enhanced 'scores' on relevant areas of PRES and CROS
	programme	surveys
	Retention data for research students	Increased retention rates
	Retention of staff	% of research active staff in post 5 years after appointment
3. We will increase the proportion of internationally recognised, internationally excellent and world leading research delivered by our researchers	Number of staff submitted to the next research assessment	Increase in number compared to REF 2014
	Number of articles published in journals of at least "internationally recognised" standard	Increase in number over the period of the strategy
	Number of staff invited to deliver keynote presentations at conferences of international standing	Year on year increase
	Number of staff occupying positions of esteem in a research context	Year on year increase
	Number of Research Centres	Increase number to 3 over the lifetime of the strategy
4. We will increase income from	Research Income Figures	Year on year increase in total research income
research, enterprise and		Year on year increase in funding from European Union
consultancy including the commercialisation of our research		Increase in income from contract research
	Consultancy Income Figures	Increase in income from consultancy
	Applications for patents, design rights, etc.	Applications made where appropriate
	Licensing of IP	IP licensed as appropriate
5. We will ensure our research makes a difference to people's lives locally, regionally, nationally and internationally	Number of publications in professionally focused journals, magazines, etc.	Year on year increase
	Number of media appearances by staff (press, TV, radio)	Year on year increase in at least nationally focused media appearances
	Development of public engagement events (e.g. public	Number of events
	lectures, research fairs)	Attendance figures
	Number of downloads on WRaP	Year on year increase
	% of journal articles, conference papers and other outputs in Open Access contexts	100% of journal articles and conference papers in Open Access contexts by 2015/16
	Researchers engaged in roles that connect them	Year on year increase in numbers

	directly with research users, beneficiaries, etc. (e.g. member of policy boards, advisory committees)	Measure of impact of the role (e.g. change effected through the work of the board, working party, etc.)
6. We will further develop our	Reported cases of research misconduct	Effective investigation of any reported cases
research governance arrangements		Zero cases of research misconduct identified
to ensure that research is	Compliance with the Concordat to Support Research	Confirmed by HEFCE on an annual basis
undertaken to the highest	Integrity	·
standards of integrity	Annual audit of ongoing and completed projects in	Reduce no. of projects not following the ethics
	receipt of ethical approval	protocol set out in approved application to zero.
	Efficacy of Research Data Management Policy	% of research projects recorded in research data
		catalogue
		% of projects uploading data to University's research
		data system
	Number of student research projects (UG Independent	Zero cases by the end of the lifetime of the strategy
	Studies, Masters dissertations, PhD thesis) that did not	
	follow the Ethics Policy.	