

KNOWLEDGE EXCHANGE STRATEGY 2021-2025

INNOVATION – ENGAGEMENT – IMPACT

KNOWLEDGE EXCHANGE AT OXFORD – CONTEXT, SUMMER 2021

The University of Oxford is dedicated to the advancement of learning by teaching and research and its dissemination by every means. Through our research, education and knowledge exchange, our goal is to change the world for the better. Knowledge exchange in this context of this strategy refers to the broad array of mechanisms, embedded across the University, by which we ensure that, through our engagement with businesses, policymakers, publics, regional and community partners, charities, hospitals and others, our research and education have a positive impact on the world and its environment, society and economy.

Our commitment to knowledge exchange is embedded in the University's Strategic Plan 2018-2024¹ under the Engagement and Partnership theme:

By enhancing the public engagement, knowledge exchange and innovation culture of the University, we aim to ensure that our research and education benefit wider publics in the Oxford region, across the UK and globally. To this end we will work in partnership with public, private, voluntary and commercial organisations, and our alumni.

Under the Engagement and Partnership theme in the Strategic Plan we commit:

- 1. To work with partners to create a world-class regional innovation ecosystem
- 2. To build a stronger and more constructive relationship with our local and regional community
- 3. To engage with the public and policy makers to shape our research and education and to encourage the widest possible use of our research findings and expertise
- 4. Through our international engagement the University will aim to maximise the global social, cultural and economic benefit derived from our research and scholarship

OUR VISION FOR KNOWLEDGE EXCHANGE

The University of Oxford undertakes, through knowledge exchange, to make a positive difference to the economy, to the environment, and to the societies in which we live. We will ensure that academics, students and support staff, at all career stages, across all disciplines, and from all parts of our society have the opportunity and support to use knowledge exchange to reach beyond the academy, and be recognised and rewarded for their contributions in this sphere alongside research and teaching.

Our research and teaching culture and practice will be open, connected, and proactive, promoting mutually beneficial exchanges of knowledge and expertise with those beyond the academy, and fostering engagement, innovation and entrepreneurship for the benefit of all society.

Equality, diversity and inclusion are fundamental to knowledge exchange at the University. We will ensure knowledge exchange opportunities and their benefits are available to all of our community, and that every member of the University feels able to access the support they need to develop and sustain their knowledge exchange activities and ambitions. We will convene groups who can inform our understanding, listen, learn what the barriers are to engagement, and take steps to break them down.

¹ Strategic plan 2018-23

OUR KNOWLEDGE EXCHANGE FOCUS

The scale, quality and impact of our knowledge exchange have improved significantly over the last decade. We have developed broad-based capabilities across multiple dimensions of knowledge exchange, as evidenced in the KEF 2021 published results². We value equally all forms of excellent knowledge exchange and are committed to continuous further improvement over the next 5 years. Academic and research staff use knowledge exchange mechanisms appropriate to their research, the impact they seek, and the opportunities that present themselves. They are supported by groups of professional staff who often specialise in one area of knowledge exchange, such as intellectual property commercialisation or public engagement. These communities are organised through support units and networks, and their work may also be expressed differently according to different disciplinary needs.

OUR KNOWLEDGE EXCHANGE PRIORITIES 2021-2025

Our knowledge exchange activities can be grouped broadly into three areas: **Business & Economy**; **Regions & Place** and **Society**. Inevitably, these three areas significantly overlap, and cross-cutting themes ensure we consider all areas of knowledge exchange holistically.

We have identified twelve challenges that we will address during the period of this strategy:

- 3 cross-cutting priorities
- 3 priorities under the **Business &** Economy theme
- 3 priorities under the **Regions & Place** theme
- 3 priorities under the **Society** theme



Figure 1: Knowledge Exchange Priority Areas 2021-2025 ³

² <u>KEF dashboard</u> Oxford performed above average when benchmarked against peer institutions in six of the seven framework perspectives. In four of these Oxford was ranked in the top 10% of all UK Higher Education institutions

³ Diagram Accessibility footnote: The diagram encompasses the strategy by showing three overlapping circles representing the areas of: (1) Business and Economy (2) Society and (3) Regions and Place, centred on circles showing three cross cutting themes of (1) Equality, Diversity and Inclusion, (2) Recognition and Reward, and (3) Entrepreneurial Skills. All within a larger circle representing Innovation Culture

CROSS-CUTTING PRIORITIES

Three challenges have been identified as our highest priorities for the next five years. Equality diversity and inclusion and reward and recognition are inextricably linked, and fundamental to our vision for our knowledge exchange ecosystem. We will develop inclusive career pathways to encourage and inspire all members of our community to invest time in high-quality knowledge exchange and, as we increase participation, we will ensure that we recognise and reward success. Support for all forms of entrepreneurship is in high demand from our staff, our students, our alumni, and investors. We will invest in supporting and expanding a responsible, ethical and sustainable entrepreneurial community rooted in the University mission, committed to making a positive economic, social and environmental impact.

PRIORITY 1: We will embed equality, diversity and inclusion in all knowledge exchange

As part of our continuous improvement across all aspects of knowledge exchange, we will collect and share EDI data about participation in knowledge exchange, build communities and record and learn from experiences. We will design effective interventions, set clear targets and evaluate and report on progress. We will provide support that enables all members of our community to achieve their knowledge exchange ambitions and work to remove barriers that prevent this where they exist.

PRIORITY 2: We will recognise Knowledge Exchange as a core activity and develop reward and promotion pathways for academics who engage in it

We will work to ensure that excellent knowledge exchange is recognised and rewarded alongside research and teaching more consistently across the University. Proper reward and recognition of successful knowledge exchange is a necessary condition of promoting broad and inclusive participation. Skilled academic, technical and support staff are in high demand and in order to recruit and retain the best, a clear framework for recognition and reward will be developed. The required framework is not only financial but will include development of flexible career paths and support for mobility into and out of the institution to meet the aspirations of our community. Collaboration with the Research Staff Hub will ensure that support is available at all career stages and integrated into our Researcher Concordat commitments. As a signatory to the Technician Commitment we will include technical and support staff in our plans.

PRIORITY 3: We will increase support for entrepreneurial skills and businesses

The biggest conduit that the University has for its impact is its people. Demand for entrepreneurial skills training and support for business start-ups has increased significantly among students, staff and alumni. We will ensure that infrastructure and resources can meet demand across the collegiate University, noting that entrepreneurial and business skills equip people for roles in large and small businesses as well as start-ups. Colleges are an increasing focus for entrepreneurial activity and will be included in the enhancement of a university-wide, consistent infrastructure for support. Alumni and business partners are increasingly becoming engaged, as entrepreneurs, investors and mentors and we will facilitate their inclusion in the entrepreneurial community. Delivery of entrepreneurship support infrastructure will be coordinated and we will develop a specific strategy and university-wide vision to support this.

BUSINESS & ECONOMY

The University has mechanisms in place to support engagement and partnership building with business (e.g. through Research Services, divisional Business Partnership teams, the Careers Service, Oxford University Innovation's (OUI) Consulting Services and others), to conduct IP commercialisation (through OUI and Research Services) and boost entrepreneurship (e.g. through the Oxford Foundry, Enterprising Oxford, BioEscalator, Begbroke, the Stephen A. Schwarzman Centre for the Humanities, Creative Destruction Lab and others). We will build on successful support mechanisms, now enhanced by the newly established strategic innovation fund (SIF) which will reinvest surpluses from successful commercialisation activity in improving knowledge exchange. We will invest in and improve communications to businesses, policymakers and funders improving awareness of our successes, and promoting opportunities to work with the University.

PRIORITY 4: We will coordinate engagement with businesses across the University

Business has several different points of engagement with the University. At present we do not always have a consistent way of characterising our relationship with a single company or unifying the university offer to them. We will develop a holistic understanding of our engagement with any single organisation by connecting relationships and activities across the University into a single visible partnership. We will continue to create places for businesses to work with or move alongside the University through the growth of our innovation districts.

PRIORITY 5: We will complement existing collaborative projects with an increased emphasis on strategic relationships

Growth in research income year on year drives a desire for immediate, quantifiable results from business engagement activities. This expectation can at times exists in tension with efforts to develop long term relationships where the returns to the University may accrue more progressively. We recognise and value both approaches. Many such relationships, including those developed through the Oxford Foundry, OUI (both IP commercialisation and consulting) and the Careers Services, bring benefits other than research funding and we will continue to foster such rich, multifaceted relationships.

PRIORITY 6: We will diversify the scope and increase scale of the commercialisation of Oxford's research and collaborate with Oxford Sciences Innovation to drive ecosystem growth

The significant growth in spinouts (catalysed by the creation of Oxford Sciences Innovation) and continuing licensing success is a major contributor to the impact of our research, economic and social, as well as driving the growth of Oxford's innovation ecosystem. The diversity of new ventures supported by OUI is increasing, reflecting growing engagement with entrepreneurship across all four divisions of the University, from students to tenured researchers. Social enterprises in particular have become increasingly popular as vehicles to support the development and commercialisation of University IP⁴. While Oxford Sciences Innovation will continue to be a vital source of capital, there remains an acute need to attract more investors able to provide the right capital and expertise to Oxford's spinouts. Linked to the University, although not directly commercialising its IP, student and alumni start-ups have a similar need for diversity and scale of investment capital, and contribute in a similar manner to the enhancement of the regional ecosystem.

⁴ As discussed in more detail under the Society theme below

REGION & PLACE

We will take a leading role in knowledge exchange and innovation where region and place are a key component. As a global University, the regions and places in which we work are complex, as are the knowledge and innovation ecosystems they represent. Our KE covers all scales of activity – hyperlocal, city-wide, county-wide, regional (e.g. the Oxford-Cambridge Arc), national and international. Common to knowledge exchange activities wherever they occur is the need for linkages and innovation infrastructure which support the impact of research and enable knowledge exchange and innovation. This complex interdependency of people, infrastructure, ideas, capital, businesses, institutions and community is necessary to enable effective knowledge exchange. Much of our regional and place-based knowledge exchange is closely linked to the other themes of Business & Economy and Society (e.g. we will seek to target underserved areas and communities as part of our commitment to an inclusive economy for Oxford).

PRIORITY 7: We will update our understanding of our rapidly growing societal, cultural and economic impact at local, regional, national and international level

With an economic evaluation of our impact, we are better able to understand the effect of our activities and where to grow, develop and accelerate them. We have done this through a regional economic analysis in 2017 and are currently updating this analysis (extended to multi-regional national level) to inform our strategy and plans.

PRIORITY 8: We will continue to engage actively with regional partners who support and enable knowledge exchange and invest in the development of innovation infrastructure and projects

We will lead and contribute to collective plans with multiple partners to ensure the leading role and transformative power of the University is recognised and enabled, and facilitate our continued, growing impact in the region. We will participate in relevant boards, groups and organisations. We will develop large scale infrastructure including through expansion of our innovation districts that enable knowledge activities driving the local ecosystem.

PRIORITY 9: We will work with partners to promote the Oxford ecosystem

To make an attractive and vibrant ecosystem for knowledge exchange and innovation, for both the University and other regional and global partners, we will communicate clearly about our activities and their benefits surrounding region and place. Working across the University and with other regional and global partners we will support inward investment and the development of the ecosystem broadly to enable and realise the social and economic benefits that arise from our knowledge exchange activities.

SOCIETY

The University undertakes knowledge exchange with society through engagement with publics and communities, through social enterprise and innovation, and through engagement with policy and policymakers. These activities occur in and are supported across the University including through our public-facing activities in our Gardens, Libraries and Museums (GLAM), through OUI, through our Public Engagement with Research Strategic Plan⁵, and through the Oxford Policy Engagement Network (OPEN) Strategy 2021-24⁶. Initiatives within all divisions, such as Humanities and Social Sciences knowledge exchange fellowships and the KE Dialogues scheme in the Social Sciences Division, have done much to encourage academics to develop new approaches to social and cultural impact.

PRIORITY 10: We will increase the amount of the University's research that is socially

driven and fully engaged with public, cultural or community groups from its inception Public and community partners will be invited to help shape and co-create research resulting in direct and measurable benefits to these communities and the researchers. Engagement with patients through clinical and healthcare collaborations with the NHS and patient groups will be supported and increased. The strong role played by research staff and research students will be recognised and rewarded, and they will be encouraged and enabled to include public and community engagement in their work. We will continue to develop and deliver our Public Engagement with Research Strategic Plan⁵.

PRIORITY 11: We will increase the creation of and interaction with social enterprises

Social enterprise creation is growing, driven by demand from the academic staff, alumni and student communities who seek new mechanisms to derive social benefit from their research and entrepreneurship. We will provide support to increase the formation of social enterprises by staff, students and alumni, attracting an increasing diversity of investors motivated by social outcomes. We will also increase collaborations with other social enterprises and innovators in our ecosystem.

PRIORITY 12: We will increase support for policy engagement

We will deliver the Oxford Policy Engagement Network (OPEN) Strategy 2021-24⁶ with its four aims to (i) increase the sharing evidence with policymakers and supporting its use in decision-making, (ii) deepen our understanding of how research can inform policymaking, and developing the relevant skills to catalyse that, (iii) broadening and deepening our policy networks, and (iv) strengthening leadership for policy engagement.

⁵ <u>Public Engagement with Research Strategic Plan</u>

⁶ Oxford Policy Engagement Network (OPEN) Strategy 21-24

IMPLEMENTATION PLAN

More detailed implementation plans will be developed under each of the action points listed below.

	Priority	Action Points	Groups involved	Committee oversight
CROSS-CUTTING	PRIORITY 1: We will embed equality, diversity and inclusion in all knowledge exchange PRIORITY 2: We will recognise Knowledge Exchange as a core activity and develop reward promotion pathways for academics who engage in it	 Identify sources of and gather EDI data across all aspects of knowledge exchange Build communities to interpret data and create programmes for improvement Design clear evaluation processes to monitor success Convene a leadership group to consider reward and recognition and equality, diversity and inclusion together to ensure action is taken Explore how knowledge exchange can be incorporated in recruitment and promotion practises across the university Revise and clarify systems for rewarding engagement in commercialisation activity through equity and revenue sharing. Consider reward and recognition for technical and support staff as well as academics Consider more flexible career paths for academics, including jointly with other organisations 	Research Services, OUI, Divisions, GLAM, Oxford Foundry Research Services, Divisions, GLAM, Personnel Services, OUI	Research & Innovation Committee Research & Innovation Committee, Personnel Committee
	PRIORITY 3: We will increase support for entrepreneurial skills and businesses	 Increase coordination and connection across the University of all entrepreneurship activities, undertaking a gap analysis to identify areas where demand is not being met. Explore the applicability and scalability of existing programmes before making tailored investment in new ones Ensure that tailored support exists for entrepreneurial trajectories amongst students, research staff, tenured academics, including arising from the University's commitment in the Researcher Concordat that researchers develop "their professional competencies and gain experience to support their future careerparticipating in policy development, public engagement, or knowledge exchange activities" Consider expansion of schemes to support entrepreneurs in the early stages of business creation Define and achieve targets for involvement of under-represented groups in University entrepreneurial activity at all levels 	Research Services, Oxford Foundry, Divisions, Research Staff Hub	Research & Innovation Committee, Education Committee

	Priority	Action Points	Groups involved	Committee oversight
BUSINESS & ECONOMY	PRIORITY 4: We will coordinate engagement with businesses across the University	 Explore how to configure academic leadership for specific industry sectors or initiatives Explore models of stewardship for business partners. Develop and implement new mechanisms for streamlined contracting and pricing, reviewing three years after implementation to fully evaluate success. Develop, share, Identify and signpost engagement pathways for SMEs Develop strategies for reaching unfamiliar sectors where there is a demonstrated opportunity that resonates with Oxford capabilities 	Strategic Business Team (Divisions and Research Services)	Research & Innovation Committee
	PRIORITY 5: We will complement existing collaborative projects with an increased emphasis on strategic relationships	 Develop appropriate KPIs for long- and short-term horizon engagements, and pursue both approaches in an appropriate balance Share knowledge from CRM systems in different parts of the University and investigate consolidation and coordination Develop strategies and toolkits to increase the conversion rate of academic consultancy activity into more institutional relationships and partnerships 	Strategic Business Team (Divisions and Research Services), OUI, Careers Service	Research & Innovation Committee
	PRIORITY 6: We will diversify the scope and increase scale of the commercialisation of Oxford's research and collaborate with Oxford Sciences Innovation to drive ecosystem growth	 Attract a greater scale and diversity of experienced investors and entrepreneurs to Oxford to cater to increased diversity of new ventures Maintain growth trajectory of commercialisation activity Maintain a strong emphasis on localising support for translational research that fosters broad impact and removes barriers to progress. Balance attracting experienced spinout management teams externally with nurturing the development of "home-grown" talent from within the University and its alumni community Review the operation of OUI 7 years on from the last Innovation Review to plan for growth of commercialisation 	OUI, OSI, Translational Research Office	Research & Innovation Committee, Finance Committee, OUI Board

	Priority	Action Points	Groups involved	Committee oversight
REGION & PLACE	PRIORITY 7: We will update our understanding of our rapidly growing societal and economic impact at local, regional, national and international level PRIORITY 8: We will continue to engage actively with regional partners that support and enable knowledge exchange and invest in the development of innovation infrastructure and projects	 Perform an economic analysis every 3 years on the impact on Oxfordshire Analyse and communicate the results internally and externally Use the analysis to develop new knowledge exchange initiatives in Oxfordshire and into different regions Ensure representation of the University on appropriate LEP and ARC Boards and sub-groups, and other similar groups with associated dialogue with all internal stakeholders Actively contribute to strategies and plans that affect regions and places, e.g. Local Industrial Strategy, Arc Investment plans, National infrastructure consultations Communicate and engage with place-based organisations with an interest in the benefits of knowledge exchange Operationalise a Strategic Innovation Fund which can support place-based initiatives Support the application of other funding sources to local and regional projects Consider the local heritage community in particular as a locus for investment in stronger links and collaborations over the next few years 	Research Services, Public Affairs Directorate Research Services, Divisions, Public Affairs Directorate	Research & Innovation Committee Research & Innovation Committee
	PRIORITY 9: We will work with partners to promote the Oxford ecosystem	 Strengthen the University's innovation communications about Region and Place, to enable more awareness and mutual promotion of different place-based initiatives Contribute to inward investment collateral and initiatives to ensure the University's capabilities and strengths are clearly represented and key contact points are identified Contribute to the ARC communications materials to ensure the University's capabilities and strengths are clearly represented and key contact points are identified 	Research Services, Divisions, Public Affairs Directorate	Research & Innovation Committee

Priority	Action Points	Groups involved	Committee oversight
PRIORITY 10: We will increase the amount of the University's research that is socially driven and fully engaged with public or community groups from the beginning	 Continue to undertake audience research to identify opportunities for co-creation, and areas of both research need and community priority, focusing in particular on communities who would not otherwise engage with the University Improve access for publics and communities to our research and expertise with an explicit invitation to collaborate in design, conduct and learning from our research Support long-term relationship building and develop plans to evaluate long-term impact of engagement, with funding or joint bids where appropriate Explore 'range of modalities' or 'modes of engagement' to fit with the different stages of research, and opportunities to engage and collaborate including the use of virtual and new technologies and non-standard methods or channels of knowledge exchange Use the opportunity for thought-leadership provided by doctoral training centres (DTPs, CDTs) and the University's research centres, units and institutes as catalysts for shaping ideas and practice across this area (all are engaged with external partners) Facilitate reflection on engaged research and foster an awareness of the value of different types of expertise as part of researcher training 	Divisions, GLAM, Research Services, Research Staff Hub	Research & Innovation Committee, GLAM Board
PRIORITY 11: We will increase the creation of and interaction with social enterprises	 Develop and use a new framework to measure the impact of social enterprise and innovation Develop a more cohesive and co-ordinated social entrepreneurship environment within and external to the University 	OUI, Divisions, Research Services	OUI Board, Research & Innovation Committee
PRIORITY 12: We will increase support for policy engagement	 Enable researchers to learn through engagement, e.g., through OPEN Fellowships, the Research & Public Policy Partnership Scheme, and a mentoring scheme Enhance provision of other professional development activities and resources, especially in relation to specific policy areas; complex aspects of engagement; engagement outside the UK; and monitoring, evaluation and learning Broaden and deepen membership of OPEN, connecting members with opportunities for engagement and learning, and finding more ways for the policymaking community to connect with them, e.g. through hosting brief visits to Oxford Increase the visibility of OPEN, members' interests and expertise, and resources available to support them, including through support for a leadership scheme 	Oxford Policy Engagement Network (OPEN), Divisions	OPEN Steering Group, Research & Innovation Committee