



University of
Nottingham
UK | CHINA | MALAYSIA

Research Strategic Delivery Plan 2022-27

Ratified by:

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1. Executive summary

The University of Nottingham's vision is *"To be a university without borders, where we embrace the opportunities presented by a changing world, and where ambitious people and a creative culture will enable us to change the world for the better."*

Our university is a research-intensive global university whose core mission is to promote discovery, enterprise, and the advancement of the human condition. We are committed to a broad and diverse research environment that fosters both mature and emergent disciplinary and inter-disciplinary research. We enhance our research ambitions with a deep commitment to research-led educational provision, open research and knowledge exchange, which underpins the vitality of our university. Research connects the [seven strategic goals](#) set out in the university strategy and is essential to the delivery of each.

This Research Strategic Delivery Plan (SDP) is based on extensive university-wide consultation, and dialogue with our key external partners. The consultation has identified priorities for action. Taken together with an appraisal of the external research environment, the consultation outcomes identified four priorities for our Research SDP (described in more detail in Section 5, *Key priorities*):

- **People, culture and ambition** (*to develop a research environment and culture that is inclusive, supportive, and enables high quality and high performing research*)
- **Infrastructure and platforms for excellence** (*to support and drive research of the highest quality and ambition*)
- **Reputation and influence** (*to develop our external relationships and build our reputation for nationally and internationally significant research*)
- **Accelerating our research and impact** (*creating and supporting the pipeline of research ideas required to ensure delivery of high-quality discoveries that will positively transform lives and societies*)

Our ambitions for this research strategy require us to accelerate our efforts to deliver the four priorities as outlined to ensure we address major opportunities and deliver the step-change needed. We are committed to providing the necessary strategic focus and energy to accomplish this.

The aim of our research strategy is to empower everyone in our research community (academics, technicians, professional services and postgraduate researchers) to deliver work they are proud of, whether that is fundamental discovery or transformative innovations that change lives. To accomplish this requires excellent people supported by an outstanding environment of ideas, internationally competitive facilities, infrastructure and support systems, in a culture of ambition and reward. Supporting this work requires us to win significant external funding, which in turn requires us to maximise our reputation to deliver internationally recognised research to drive the partnerships which underpin large awards and initiatives.

The Research SDP is operationalised via an action plan covering the academic years 2022/23-2026/27.

2. University values

Our Research SDP aligns with the values of the university: inclusivity, ambition, openness, fairness and respect. This SDP aims to amplify these values across our research community to realise our collective ambition and excitement for research, as together we improve our ways of working. Through the four priorities described, we will enable staff and students to deliver research, drawing on the best available facilities, supporting them to share findings with as wide an audience as possible, and to enhance profile, recognition and reputation. Our researchers will be unimpeded by internal organisational barriers and supported to maximise the potential of their research.

This SDP aligns initiatives in the context of the external funding environment, our capabilities to deliver, and recognises that opportunities evolve over time. Decisions to prioritise activity or initiatives to secure external funding will be treated openly and fairly, consistent with our university values.

3. Campus coverage

The Research SDP sets out priorities for the whole university (i.e., Category 1 of the tri-campus operating model: Global activities that are led and managed by the university, across the university). However, by their nature, research activities must be designed to suit the conditions in which they will be undertaken. Activities will, therefore, be dependent on the campus where those activities are deployed. Activities must also be responsive to the opportunities that arise, with an appropriate level of management and coordination.

UNUK, UNM and UNNC will develop approaches to research in keeping with the national priorities and funding opportunities in each country. The Research Strategic Delivery Plan Steering Groups will work together across campuses to support the development of local approaches, aligned to the overall research strategy. The Research SDP will ensure that we capitalise on our unique global footprint wherever appropriate.

4. Links to other strategic delivery plans

We are a research-intensive global university. Our campuses in the UK, China and Malaysia share a common mission to deliver solutions that transform lives. Research embeds collaboration and a global mind-set and is essential to achieving sustainable development goals and solving complex challenges. Research is linked to every aspect of our university's work and is dependent on the operation and effectiveness of our wider structures. Research-focussed initiatives will be complemented by, and link to, work taking place under all the other university SDPs with especially strong co-dependencies on the successful delivery of the Education and Student Experience (ESE), Knowledge Exchange (KE), People, Equality Diversity and Inclusion (EDI), Civic, and Digital SDPs.

5. Key priorities

5.1 Renewing our research strategy

Our renewed research strategy 2022-2027 will strengthen our commitment to delivering research of the highest quality, prepare us for the unexpected in a shifting geopolitical landscape and bolster our position within a context of rapidly changing national and international policy and funding priorities. It will strengthen our research ecosystem and infrastructure, and ensure a pipeline of exceptional researchers and research, whilst increasing the external research funding essential to support our research ambitions. It will align to the Knowledge Exchange SDP, build on existing areas of exceptional research strength and depth, as well as key strengths such as working with industry and developing spin-out companies. It will also address our need to further build our discovery research and the volume of research recognised to be of exceptional quality and impact.

5.2 Together we pledge

As a community, we are committed to building an inclusive, supportive, and truly transdisciplinary research culture, by developing high-performing and diverse teams of academics, technicians, professional services, and postgraduate researchers, at all career levels and at all our campuses. This is at the heart of this strategy.

Together, we will empower researchers at all career stages and disciplines to experiment and innovate without fear of failure, to undertake high quality research and to reach their full potential, enabling challenge-led, adventurous and fundamental discovery as well as exceptional, transformative innovations that change lives. We will reward team research fairly and will recognise the contribution of all in delivering high-quality outcomes.

By working together, we will fulfil our pledge.

5.3 Matching our ambition with action

We will direct some of our strategic efforts to key areas where our capacity aligns with external opportunity. This work will need to exploit and develop very strong links with key stakeholders (e.g., industry, public bodies) as such opportunities will require us to develop and deliver highly collaborative and multi-disciplinary research programmes.

Internal barriers can impede this collaborative and inter-disciplinary effort, and we are committed to removing such barriers through high level interventions that can act quickly and identify appropriate action in support of effective local research leadership.

5.4 Theme priorities

Theme 1: People, culture and ambition

(To develop a research environment and culture that is inclusive, supportive, and enables high quality and high performing research)

Our research is delivered by people (academic, technical, postgraduate and professional administrative) self-organised into teams, and therefore this strategy has people at its centre. We will manage our pipeline of talent at all career stages by recruiting, retaining and developing people with the highest potential.

We will create an inclusive and diverse research environment, and set clear expectations for research culture, individual performance, and support systems. We recognise the need to reduce internal barriers to research so these expectations can be met.

We will develop and support synergies between the Research SDP and the ESE SDP and will reimagine the role of research in our educational curricula to better equip our students and to help them appreciate the research that informs the knowledge/discipline they are studying.

We must aim for a research environment that supports excellence for all and will embrace the change necessary to deliver this.

Activities in this area will include (but are not limited to):

- We will actively **develop our research culture** - understanding, valuing and celebrating individuals and teams, and clarifying expectations of performance, supporting and building a collegiate, inclusive and ambitious environment, and enhancing research leadership to focus effort on areas of potential accelerated success
- We will **support and cultivate our talent**, for example by creating strong talent search capability to support recruitment, and monitoring researcher retention to inform areas of improvement. We will build a strong Fellows cohort with both internal and external funding and a Fellows Academy for their support. There will be specific support for BAME researchers and colleagues with protected characteristics
- We will **embrace and recognise our postgraduate researchers** (PGRs) as key contributors to our research success, for example by ensuring fair allocation of funding support, providing an excellent and equitable experience, and support to enable all to achieve their career ambitions
- We will **develop the role of research in the curriculum**, adding value in ESE and prototyping early knowledge exchange of research results and methods

Theme 2: Infrastructure and platforms for excellence

(To support and drive research of the highest quality and ambition)

Infrastructure and facilities are vital for our research. We will actively promote the development of shared physical and digital research platforms to provide sustainable and simplified access to our unique capabilities across the university, working with our partners where appropriate.

Aligning with the Digital SDP, we will deliver a transformative research computing environment, and ensure we follow the principles of open research so that the outputs and process of our research are as freely accessible as possible, to increase collaboration. We will develop our capability to lead research in trusted data environments and related data analytics and, through horizon scanning identify key future developments to future proof our capability.

Activities in this area will include (but are not limited to):

- We will **build shared facility and infrastructure platforms** for research, enabling us to sustainably share world-class capabilities that leverage new research and partnerships
- We will **encourage co-location of equipment, data and research** to build team research and 'spin in' of partners (academic, commercial, third sector), including using virtual co-location where this adds value
- We will **embed next-generation, sector-defining trusted research environment capability** across the university by developing the required governance and policies, implementing technical enablers and most importantly integrating into staff training programmes

Theme 3: Reputation and influence

(To develop our external relationships and build our reputation for nationally and internationally significant research)

For our researchers to gain recognition and raise the profile of their work, we will increase our capacity to actively promote our research reputation in a coordinated and structured manner. This will include supporting researchers to identify reputational opportunities for their research and strategically promoting specific areas through targeted campaigns to identified audiences. We will identify, and engage with, our strategic influencers so that we can more effectively set our forward agenda, reinforcing our capability for funder relationships and thereby ensuring we are able to align our work with external priorities and opportunities in a timely and effective way.

Activities in this area will include (but are not limited to):

- We will support researchers to **build peer reputation** through Continuing Professional Development (CPD) to become better advocates for their own research and to build their reputation among peers.
- We will **establish a research advocacy function** to develop and deliver key research priorities for example large funding bids, developing those areas in our research portfolio with potential for significant growth, alongside a longer-term campaign to build our research reputation with influential audiences
- We will **establish a proactive model for our strategic relationships** with funders and stakeholders. This will include influencing opportunities, supporting our researchers to participate in funder work (e.g., strategy groups, panels) and building networks of influence.

Theme 4: Accelerating our research and impact

(To create and support research ideas required to ensure delivery of high-quality discoveries that will positively transform lives and societies)

In order to lead more research of global significance, we will foster cross university, inter-disciplinary teams to tackle the greatest societal challenges. A major focus will be the pressing problem of climate change drawing on our strengths and capabilities to deliver solutions as well as conduct our research sustainably.

We will better understand the impact of what we do, by mapping our work onto an internationally recognised and widely used 'codex' for research, for example use of the UN Sustainable Development Goals (SDGs), in turn linking these to the sustainability agenda in the curriculum.

We will better understand our performance, identifying where we do well and where we need to improve.

Activities in this area will include (but are not limited to):

- We will **define and deliver a needs-based targeted support model** for our pipeline to maximise opportunities for our researchers to succeed. This will aim to propel emerging work and teams so they can establish and accelerate their work. We will develop our model to support new Strategic Research and Innovation Clusters. Clusters will begin by targeting the Zero Carbon challenge but be proactive in the future and link with current and future strategic UoN investments e.g., Digital Nottingham. The Cluster model will enable us to build and access major external opportunities. Opportunities include the UK Government's proposed programme of innovation to enable decarbonisation a transdisciplinary net zero innovation fund led by the Department for Business, Energy, & Industrial Strategy.
- We will **map our research to external challenges** (including the UN SDGs) in order to build critical mass in areas where we will address sustainability challenges and couple activities to the sustainability objectives of ESE, as well as work to ensure our research is undertaken in ways to minimise any damaging environmental impact and achieve the University's goal to reduce carbon emissions.
- We will **improve research management data**, by assessing existing assets and identifying gaps, to make it available cross-campus, and within campus at all Levels.

6. Outcomes and key performance indicators

Everything that we do must lead to an improvement in research quality, increase the financial sustainability of our research, and enhance the reputation of our university to ensure we are nationally and internationally recognised for the quality and impact of our research.

Our top-level key performance indicators (KPIs) are: research grant income/ research active FTE (R&T and R contracts); proportion of outputs in the top 10% cited (field-weighted, %). These are supplemented by additional metrics designed to support decision making and guide the delivery of specific initiatives.

As our action plan develops and evolves, delivery of our defined outcomes will be driven by key milestones. KPIs associated with each initiative will be put in place and monitored to drive the successful delivery of our overarching target outcome.

7. Risk management

The University Risk Register includes enterprise level risks in relation to research, along with mitigating actions and controls.

Each initiative that contributes to this SDP will have its own project risk register, managed locally by the group delivering that initiative. The 'local' project risk register will adopt the university 'standard', with agreed scores, mitigations, and controls.

'High risk' items that require escalation from the individual project's control, will be escalated from 'local' level to 'campus' level and be owned and monitored by Research Committee.

8. Governance

Governance for the strategy will be delivered over three tiers.

Tier 1 – Project: Each individual project and/or activity within the programme will have its own governance reporting to the steering group on each campus.

Tier 2 – Programme (campus specific): The campus-specific Research SDP Programme Board will ensure that projects within the programme are aligned with the delivery of programme outcomes and the achievement of benefits, and reports to Research Committee.

Tier 3 – Global (whole university): Research Committee acts as the overall programme owner to bring together decision makers and key stakeholders to ensure the core programme runs effectively, is delivered on time, and within agreed quality specifications and delivers the expected benefits.

University Executive Board (UEB) has ultimate sign-off of the Research SDP.

9. Implementation

The Research SDP will be implemented through its action plan. There will be nuances to the action plan for each of our campuses, and as such our China and Malaysia campuses will each be empowered to own and deliver their respective part of the action plan. The plan will include timescales for each project or activity aligned to one of the four priority areas, as well as information about dependencies with work underway under one of the Research SDP's enabling plans (e.g., People, KE, Digital, etc.).

A senior research lead, or leads, will have oversight of each priority area, and each project or activity will have a named professional services lead.

For our UK campus, monitoring of progress towards school and departmental versions of the action plan will be through Faculty Research Boards/Committees with reviews commissioned periodically by University Research Committee. In this context we note that working across school/faculty boundaries is a feature of this SDP and there is a commitment to address any barrier this introduces. Identification of additional resource and expertise required by schools and departments to achieve local objectives will be through Faculty Research Committees.

Research Performance Board will have oversight of activity related to the development of research management information used to support local decision making.