

Institution: University of Sunderland**1. Context and mission**

The University of Sunderland is a teaching-intensive, research-active institution and a member of MillionPlus and Universities UK. Our Strategic Plan 2016 was developed following REF2014, and affirmed our commitment to research with real-world impact. Following the appointment of our new Vice Chancellor, the refreshed **University Strategy 2020-25** re-articulated this **society-shaping** mission: *we make a positive difference to industry and society through our research, innovation and practice.*

We are a significant regional anchor institution. Our teaching, research, innovation and impact align to the North East LEP Strategic Economic Plan, and national agendas (such as the NHS Long Term Plan). The University has a leading role in addressing regional challenges: to increase the number and quality of job opportunities; to increase levels of economic activity and productivity; and to prioritise specific growth and service sectors. We are the founding member of the Sunderland Business Group, the Sunderland Culture Company and Sunderland Software City. We balance this strategic, regional role with support for high-quality research of international excellence, by identifying research goals that, while sometimes originating in a local context, can have a far wider significance.

The University comprises a student population of c.18,500, c.13,000 studying at our Sunderland, London or Hong Kong campuses and the remainder with international or FE partners. Overseas/EU students comprise c.18% of the on-campus population and postgraduate taught students c.16%. There are currently 344 PGR students. Home recruitment is predominantly regional, with c.90% of undergraduates representing one or more of the Government's target groups for widening participation.

The 2016 Strategic Plan realigned our portfolio into faculties: **Arts and Creative Industries; Business, Law and Tourism; Education and Society; Health Sciences and Wellbeing; and Technology**. Significant expansion of the health sciences over this period included establishing a School of Medicine. Faculties are led by Academic Deans whose responsibilities explicitly include research, supported by the **Enterprise and Innovation Directorate**, the **Research Office** and the **Graduate Research Support Office**. At Executive level, the research, innovation and enterprise agendas are shared between the Deputy Vice-Chancellors Academic and Commercial, supported by the Research and Innovation Group, a committee of **Academic Board**.

2. Strategy

Research strategy objectives: Building on our well-established foundations, develop increasingly sector-leading, applied research; develop centres of innovation, excellence and collaboration; promote a dynamic research environment, reaching out to our external partners and audiences.

Our overall strategy is to support high-quality research of all kinds, while pursuing every opportunity to create real-world impact that benefits the economy and, in particular, the challenged North-East communities in which we are located. The University is ranked in the top 10% of all institutions in the **Local Growth and Regeneration** category of the Knowledge Exchange Framework pilot.

Over this period the University has, through strategic investment of support funds, maintained a success rate of c.50% in grant applications; increased the total value of awards; increased the number of research-active staff in receipt of resources and/or development; substantially increased the proportion of research outputs indexed by WoS; and increased knowledge exchange activity.

Following REF2014, a comprehensive review was undertaken, in consultation with staff and external partners, to strengthen research infrastructure and culture. Good practice was identified from the REF2014 results, as was weaker performance in some areas. Organisational challenges

were recognised, including staff work-loading, the management of research productivity and the need to extend partnerships and develop 'critical mass'. A revised institutional strategy was therefore required.

The refreshed **Research and Innovation Strategy** was approved by the Board of Governors in 2017. It set out an agenda for applied research that values all research-active staff and students, supports excellence and contributes to teaching. The strategy heralded a transition into comprehensive, institution-level planning and resource allocation, with leadership and governance significantly strengthened.

The **Research Office** was expanded with additional posts; its integration into the **Enterprise and Innovation Directorate** consolidated research with commercial and outreach functions and created a single focus for external engagement.

To support the Deputy Vice Chancellors, and to increase engagement in research activity, the **Research and Innovation Group** was established as a committee of **Academic Board**, with representation from students, senior leadership, academic and service staff. It was tasked with overseeing implementation of the strategy. Faculties and senior leaders identified research objectives in response to the strategy, monitored through annual planning, with faculty committees and **research centres** serving as focal points. Individual staff research objectives responded to faculty priorities through a new planning process. Wider dialogue was facilitated by a new Professoriate forum and annual research conference.

This inclusive process has delivered a settled agenda, clarifying priorities and the means to achieve them. It has ensured that our research environment has a culture of integrity and good governance with equality and diversity embedded. The strategy is supported by a comprehensive suite of policies.

Our commitment to develop research that contributes to regional socioeconomic and cultural development is achieved through external collaborations which create opportunity and maximise return on our investment. Collaborations, both national and international, have been reinvigorated and prioritised across all faculties. The University is ranked in the top 30% of all institutions in the **Research Partnerships** category of the Knowledge Exchange Framework pilot.

One example of this approach is the University's leading role in the mooted **Centre of Excellence in Sustainable Advanced Manufacturing (CESAM)**, intended to be a facility for translational research in process technology. We are working in collaboration with Sunderland City Council, Newcastle and Durham universities, the North East Automotive Alliance and NE LEP. Initial CESAM infrastructure is already in place and this will develop as further funding becomes available. While this is currently at an early stage it will be a key focus of our next research strategy and we will pursue projects aligned to CESAM's goals. For example, the **Sustainable Advanced Manufacturing Project**, funded by the EU and industry, has increased our research capacity and has engaged with 200+ manufacturing companies. It is now extended to 2023 with additional European funding (UoA 12).

Our collaborative approach is also evident in other areas. Our curriculum-led NHS partnerships have attracted the support of healthcare philanthropist Helen McArdle, donating £2.5m towards our **Nursing and Care Research Institute** (UoA 3) with the aim to be a national hub for patient care research. The Faculty of Education and Society (UoA23) has established a partnership with the Education and Training Foundation to create a nationally commended capacity-building programme in adult and vocational education at MPhil, and has advised government on policy. The Faculty of Arts and Creative Industries has led the University's Doctoral Training Partnerships in collaboration with other universities.

Our drive to increase **impact** has been supported by additional Research Office staffing, dedicated financial support and an *Impact Strategy*. Priorities include: sharing guidance on impact throughout a project lifecycle; connecting academics with business and the public/voluntary

sectors; supporting individuals' applications and projects; improving evidence compilation; and increasing support for academics to realise impact through public engagement. Our participation in the *Northern Accelerator Connecting Capability Fund* project, a collaboration with the other four North-East universities, offers impact training for academics. Training has also been provided from UK Parliament and external consultants.

Examples of our engagement with social communities include: the *Positive Allies Charter Mark* (UoA 20); partnership with the *Riding for the Disabled Association* to co-produce sensor technology (UoA 11); work on the Prevent agenda, supporting c.100 practitioners with Prevent responsibilities (UoA 20); and our lead on the campaign for the release of Shahidul Alam (UoA 32).

Interdisciplinary research is led by **Interdisciplinary Research Networks**. These cross-faculty/external teams are approved and monitored by the Research and Innovation Group. Activities include symposia, other output dissemination and partnership-based grant writing. The current networks encompass the Creative Arts, Social Sciences, Nursing and Tourism: the *Sunderland Gender Network*; *Participatory Approaches to Research & Practice Network*; *Adverse Childhood Experiences Partnership North East*; *DISCRIM - Vulnerability and Criminal Justice Research Network*; the *Race, Class and Ethnicity Research Network*; and the *Health and Care Workforce Network*.

Our **Visiting Professor and Fellow scheme** is deployed strategically, securing external partnerships via leading professionals – academic, industry-based, public sector – paired with nominated researchers. There are currently 51 Visiting Professors and 13 Visiting Fellows. For example, Graham (UoA 3) has led the appointment of 17 clinical researchers who are now supporting the Helen McArdle Nursing and Care Research Institute.

The reach of collaborative research has extended through the **Global Challenge Research Fund**, building on three TNE partnerships – SEGi University, Botswana Accountancy College and the University of the Commonwealth Caribbean – to address socioeconomic challenges such as digital skills and technological infrastructure. This has involved the introduction of doctoral programmes, conference organisation, and co-founding a new Centre of Intelligent Manufacturing Systems in Malaysia.

Common across research is the connection with the **taught curriculum**. Initiatives undertaken to promote the research/teaching nexus include the enhancement of research practice in PGT and implementation of our *Curriculum Design Framework*, with research/teaching integration as a key component.

The University is committed to **research integrity**, research conduct and the truthful and fair representation of outcomes. Our *Research Integrity Concordat* sets out the expected standards. An Annual Statement on Research Integrity is reported to the Research and Innovation Group. Our *Code of Practice for Research* aligns to the Concordat. All staff and students involved in research are required to observe the Code. Good practice is predominantly self-regulated, supported by staff development and an environment that promotes integrity from the most senior levels.

New procedures for **research ethics** using *epiGenesys* were introduced in 2016. This entailed: a single approval process including student projects with embedded advice and guidance; a risk assessment tool for self-certification; and a GDPR-compliant records system. This has increased transparency, raised awareness and improved the quality of applications. The **Research Ethics Group** is responsible for the *Research Ethics Policy*, monitoring compliance and providing advice.

The University adopted an **open access** mandate in 2015. Accordingly, all authors, including research students, must deposit final peer-reviewed manuscripts subject to publishing restrictions to the **Sunderland REpository**. This applies to all publications from 2008. Staff can access funding for article processing charges when output and journal quality are demonstrated.

A **2025 strategy** for research and innovation is currently in consultation. We will prepare for the funding environment after REF2021, the implementation of KEF and new opportunities arising from post-Covid and other national and regional developments. Our key strategic themes will remain. Our focus will shift towards a further concentration of resources and investment, long-term planning for generating impact and a widening of our national and global reach as a collaborative partner.

3. People

Research strategy objective: Develop and nurture our academic staff

To build quality and capacity we have taken an **inclusive** approach which is value-driven and strategic, recognising both established and developing researchers. The proportion of staff submitted to this REF indicates our progress to this point, with a significant number of staff who are experienced professionals but are either not yet active researchers or at a very early stage of a research career. Through wide-ranging support for broadly-defined 'early career researchers', we recognise the benefit to the University: widening our research base; building critical mass for the next REF exercise; increasing future PGR supervisory capacity; developing and retaining staff; and promoting a deeper appreciation of how research can inform teaching.

Inclusivity is one of five institutional values underpinning the 2016 University Strategic Plan and *People Strategy*. Accordingly, an objective of the Research and Innovation Strategy has been to create an annual planning and appraisal process: the **Individual Research Plan (IRP)**. This ensures we manage support, provide access to research development (including research degrees), recognise research excellence in promotion, facilitate knowledge exchange and consultation activities, and embed equality and diversity in all aspects of practice. Academic staff who are not research active are given every encouragement and support to engage with research-active colleagues so that their teaching and practice can be appropriately informed.

The University's *Framework for Academic Workloading* for Category A staff allocates 10% for scholarly activity and research, typically used for professional updating. The IRP builds research capacity through allowing individuals to identify research objectives and related support, resource and time allocation needs. It identifies both staff with **a significant responsibility for research** and those with the potential for a research career. It has a transparent review framework and audit process, external review and regular Equality Impact Assessments and represents a significant commitment of University resources.

In 2019/20, there were 315 submissions to IRP resulting in 154 resource/time allocations. All staff are entitled to an annual appraisal which supports the IRP scheme. Participation rates in appraisal are monitored via survey (2018: F:76%, M:66%). The main reason for non-participation was being recruited outside of the cycle. 70% of female staff (M:62%) felt their appraisal discussion was useful.

IRP also revealed high demand to undertake a **research degree**. In response, an institution-wide offer was made for all academic staff, formalised in the *Support for Staff Undertaking Qualifications Policy* and managed by IRP and a Staff Qualifications Panel. On the REF census date there were 82 members of staff were in receipt of fees or fee remission as a research degree student. This represents 18.3% of staff and results from a cumulative investment of £756,166 over the REF period.

Research-active staff are expected to be adequately skilled and knowledgeable to undertake research of the highest standard, compliant with the Concordat for Research Integrity and the University's Code of Practice. Initiatives have focussed on raising awareness of these expectations, with mechanisms to request development and support.

IRP submissions have helped target this **researcher development**, overseen by the University Staff Development Group. A member of Vitae, the University adheres to the **Concordat to**

Support the Career Development of Researchers and retains the **HR Excellence in Research Award** (since 2013). Development opportunities for all stages of a research career include mentoring, probation, training and appraisal, aligned to IRP and promotion. Targeted *Researcher Development Weeks* cover topics such as grant writing, research ethics and impact. The University adopts a broad definition of **Early Career Researchers** (ECRs), recognising that experienced teachers may be at an early stage. In 2017/18 a *Mentoring Scheme for Researchers* was launched, focused on these colleagues, with mentors trained according to Vitae guidance. ECRs comprise 13% of this REF submission.

The University's process for approving new posts includes specific guidance for fixed-term contracts. The University's *Recruitment and Selection Procedure* requires that interview panels receive training, including equality legislation and unconscious bias, and are gender balanced. Positive action statements encourage applications from underrepresented groups. Since 2017/18 there has been an increase in the proportion of successful female academic appointments, with well over half of academic appointments being women (c.63% in 2019/20). Researchers ending a fixed-term contract are actively supported, with redeployment considered. All academic staff have a twelve-month **probation** period, with regular monitoring, during which developmental objectives are identified and provided.

The University is recognised by accrediting bodies for its commitment to **equality and diversity**. The University holds an institutional Athena SWAN Bronze award, renewed in 2019 and has an action plan for departmental applications. We ensure that all students and staff are welcome and face no discrimination regarding any aspect of their identity. Mainstreaming starts with effective policies and procedures that inform the culture of the University, ensuring that EDI is integral to the way students and staff think and behave. The University undertakes research in equality issues, represented in various parts of this submission, including in gender and sexuality, disability and neurodiversity (UoAs 20, 27, 34). The **Equality, Diversity and Social Responsibility Group** (EDSRG) ensures consistency of practice.

A number of policies establish best practice. The *Academic Sabbatical Leave Policy* includes part-time and fixed-term staff. Informal and formal changes to hours/pattern, career break and phased retirement are outlined in our *Flexible Working Policy*. *Maternity, Paternity and Adoption* policies include enhanced pay, flexibility and phased return. During the last three years all staff taking parental leave returned to the University.

The *Wellbeing Strategy* sets out objectives for mental wellbeing awareness, healthy lifestyles and a safe community environment, promoted through regular health initiatives. In the last two years 79 staff engaged with personal development sessions related to wellbeing. The *Sickness Absence Policy* and Occupational Health operate a referral system, determining any reasonable adjustments and providing access to physiotherapy and counselling.

Promotion panels are gender balanced and an EIA is applied at each stage. More than half of Professorial applicants and appointees were female in the last two rounds. The proportion of female professors is currently 58% (sector: 27%). In 2020 academic teaching and research contracts comprised 504 staff, of which 54% were women, above ECU benchmark (46.3%).

The gender balance of staff submitted to REF2014 was in proportion to overall representation. Analysis of other protected characteristics did not reveal any significant differences. An EIA of the REF2021 Code of Practice and REF2 submissions evidenced the same. The Individual Circumstances Panel considered any impact on individuals, including in relation to protected characteristics.

Recruitment to **research degree programmes** has been stable since 2014: approximately two-thirds are PhD, the remaining taking the Professional Doctorate programme. Two-thirds are part-time. The Graduate Research Support Office supports Research Student Managers, to coordinate faculty activity, with overall academic leadership from the Director of Postgraduate Research appointed from the University's professoriate. The Director chairs the Postgraduate Research

Student Sub-committee, overseeing regulations, policies and awards, reporting to the Research and Innovation Group. Faculty Postgraduate Research Degrees Sub-committees manage day-to-day operations and are responsible for admissions, student support, supervision quality and assessment.

Students undergo an initial mid-year review, and annual monitoring reviews thereafter with an independent Chair. A PGR Central Development Programme offers skills development, hosted on our VLE. *Research Fridays* provide training and opportunities to share practice. Students convene an annual conference and contribute to the University's Annual Research Conference. Students are expected to complete our *Preparing to Teach* programme (AFHEA), run by the Centre for the Enhancement of Learning and Teaching; 87 PGR students completed the programme in the last three years. The Professional Doctorate programme begins with a year of taught/assessed elements, through block teaching and blended learning.

All supervisors are expected to complete the University's supervision training programme, accessed online. All supervisory teams have at least one experienced supervisor. The quality of supervision is evidenced by high completion rates, declining withdrawal rates, increasing submission rates and PRES rankings: for example, 11th/103 Overall Satisfaction, 6th/103 for Supervision (2019); 2nd/63 Overall Satisfaction (2018).

4. Income, infrastructure and facilities

Research strategy objective: Drive entrepreneurial, commercial and income-generating activity

Our long-term investment strategy is to grow areas of strength – in the curriculum, through innovation and research – aligned to the regional socioeconomic context, funding agencies and commerce. The Enterprise and Innovation Directorate has lead responsibility for generating external income for research, innovation and knowledge exchange, aiming to maximise the return on the investment of staff time, internal funding and support services. The Directorate has added significant impetus to the University's income generating strategy, deploying our internal resources to the best effect.

Following the post-REF2014 review, the first priority was to strengthen **research support services**, now with an operating budget of £1M p.a. for staffing, the IRP, impact and project support. Additional posts widened the range of services to include: managing IRP; monitoring research policy and compliance; impact and research environment support; research funding support; advice on academic publishing and open-access; and governance and project/committee servicing. Since 2014, the University has invested £311,899 to update all research-support systems.

Faculty-based performance indicators monitor progress against research objectives. These include external research funding (number of bids, unique users, value, success rate) and the volume/quality of outputs. These show increased volume of bids per year by a widening pool of staff, with success rates maintained. The post-REF2014 review attributed a decrease in external funding to the loss of some senior researchers. Improved recruitment processes for senior academic positions and strengthened Research Office capacity have addressed this dependency on a small subgroup. Many staff have been supported to submit bids for the first time, as demonstrated by the number of unique applicants over this period.

Since 2014 the University has secured £18.1M of external research income from 217 successful applications (full FEC value). The average success rate for applications was 49%, an indicator of the University's quality control and support mechanisms. The value of successful bids doubled between 2014/15 (£1,468,369) and 2017/18 (£3,174,867), with incremental growth over that period. Collaborative grant applications have had noted successes, including: industrial and academic partnerships in the Graphene Flagship (£146k) and Creative Fuse (£198k); and an ESRC-funded research on abusive behaviour in same sex and/or trans relationships (£267k).

The Northern Accelerator collaboration is enabling **research commercialisation and** has supported training for academics and the identification of commercial prospects, securing proof of concept funding for three projects to date and supporting the establishment of a spin-out, Sundara. This work has complemented a review of IP policies and practices and a rationalisation of the University's patent portfolio.

We are commercialising pioneering research by the late Professor Roz Anderson and her team on life-threatening genetic diseases such as Cystinosis. A £1.6m MRC grant, and collaborations with the University of Birmingham and Sundara Pharmaceuticals, enable us to take this research to clinical trials. We are extending this work to establish a critical mass of research focussed on new medicine discovery to treat rare inherited metabolic diseases, where there is a significant unmet clinical need.

Investment in fees and fee remission for staff undertaking doctoral study amounts to £756,166 over this period. This is a long-term commitment to building research and supervisory capacity across the University's academic portfolio.

The University has been successful in applications for **Doctoral Training Centres and Partnerships**. The *Northumbria-Sunderland Consortium*, following the AHRC's collaborative BGP1 award (2009), involves matching studentships in partnership with the BAL TIC Centre for Contemporary Art and National Glass Centre. The *Northern Bridge Consortium*, an AHRC DTP, includes the other four North East universities, Queen's University Belfast and Ulster University. The same partners have secured accreditation from the ESRC to form the *Northern Ireland and North East (NINE)* Doctoral Training Partnership, 2017-2022. The two consortia jointly secured additional awards, funded by the AHRC in response to the National Productivity Investment Fund.

The close alignment between teaching and research means they operate within a shared environment. Research infrastructure has benefitted from investment in the estate funded through student fee income and other non-research funding (over £22.3M since 2014). The University invested £1.88M in a £9M facility for the Enterprise and Innovation Directorate with a remit for regional development in city and the North East. The facility supports new and established businesses, entrepreneurs and innovators. It includes the North East FabLab, created in 2016 with £102,359 investment, providing equipment and advice for product design, prototyping and commercialisation.

Ongoing capital investment is driving the development of the **Sciences Campus**, including a significant expansion of nursing and health sciences and creation of the School of Medicine. Work on £18.2M of the investment plan is complete, with a further £8.2M committed to current projects. This has enabled researchers in core and applied science, allied health professions, nursing, pharmacy and psychology to have access to improved laboratory facilities and has facilitated interdisciplinary research connections that are key area to future research growth. These facilities now support the Helen McArdle Nursing and Care Research Institute. We expect, and are committed to, an increase in medically-related research as the School of Medicine continues to develop.

The **National Glass Centre** is owned and operated by the University through its leading role in Sunderland Culture. It houses state-of-the-art research and exhibition facilities with £972,184 invested since 2014 and is an internationally-renowned centre of excellence in glass-making: a research facility for artists and other researchers and a visitor attraction, which is a vehicle for the public engagement with research. In addition, £375,000 was invested to house the collection of the Northern Centre for Contemporary Art. Over £1.3m of investment in the **School of Engineering** enhanced research capacity through access to industry-standard technologies. New facilities include mechanical, fluid and digital manufacturing labs. Investment of £1.7m to relocate the **Faculty of Education and Society** into new research and teaching building.