2030 Research Strategy

Impactful Research on a Page

Delivered across all Schools, Campuses, Centres and Support Services

GCU Values

Led by our values of Confidence Responsibility Integrity Creativity and the Sustainable Development Goals

Strategic Goals

Postgraduate Research	Research Impact	Staff development
90% satisfaction 20% intake growth	New centres addressing social needs	- 40% in future REF - 65% at doctoral level

Headline Objectives

Capacity, capability and culture, leading to excellence	Development of academic culture & sense of community	Cutting-edge, interdisciplinary research, addressing the SDGs	Early & often impact with stakeholders including civil society	Capture and promote evidence of research impact	Research-led and research-informed teaching

Primary Deliverables

• Conducting the continuous review, monitoring and consultation with our newly-established Early Career Researchers (ECR) and Professoriate • Placing research excellence at the heart of recruitment and personal development	• Creating spaces to enable connectivity amongst researchers and PhD students • Ensure our research is open, transparent and reproducible. • Annual research celebrations • Post-COVID research recovery, accounting for differential impacts on staff of the pandemic	• Continued enhancement of Research Infrastructure, targeting resources and creating research structures to support research addressing our societal challenges • Expand our collaborative networks both locally and internationally. underlining place as a key driver for our research outputs.	• Drive impactful engagement, co-production and knowledge exchange with the public in line with RCUK's Concordat for Engaging the Public with Research and the UKRI's mission to connect diverse communities and create new combinations • An overarching social innovation lab devoted to community engagement researcher connectivity	• Our societal challenges, and monitoring corresponding progress in research income, activity and outputs, not only to meet the challenges but also achieve standards required by the Research Excellence Framework. • PURE research information system and repository flexible cloud storage, capability for research.	• Principles of research-led and research-informed teaching, equality of learning opportunities and flexible learning,. • Researcher participation in teaching and curriculum design, for engagement of students in research. • Experience from KTPs, and related innovation activities, transferred into teaching examples.

Executive Summary

This document presents Glasgow Caledonian University's strategy for research for 2030.

As top Modern University for research power in Scotland in the 2014 Research Excellence Framework (REF) and now with over a third of our academic staff entered into REF2021, this Strategy builds on a solid trajectory. Strengths within Schools, existing Research Centres and international networks allow us to be global in ambition. The guiding framework for our research is the Sustainable Development Goals (SDGs), issued by United Nations in 2015, applying to *all countries*, in place until 2030 and upon which the Scottish Government's National Performance Framework is based. Thus, in line with our Common Good mission, we address the changing needs of communities, civil society, governments and industry. All require the strengths in interdisciplinary, multi-sectoral approaches to enhanced health, well-being, inclusive growth and sustainability we possess at GCU. Post-COVID, our commitment to the SDGs and socially-purposeful innovation is undiminished and, indeed, reinforced.

Our strategic research goals are to:
I. Devise and carry out cutting-edge, interdisciplinary research, not only addressing the SDGs via our three societal challenges of *Healthy Lives, Inclusive Societies* and *Sustainable Environments* but also reflecting the SDGs in the way we carry out and manage research.
II. Capture and promote evidence of research impact with our stakeholders in public and private sectors and in civil society.
III. Extend our research capacity and capability, striving for the highest standards of excellence.
IV. Contribute to the continued development of academic culture and sense of community within the University through Group, Centre and cross-campus working on research-with-purpose.
V. Strengthen our research-teaching nexus.

We address the SDGs and our societal challenges trough a research architect consisting of:
- Cross-cutting research, facilitated by our approval and renewal process for endorsement of new and existing Research Centres, themed against the SDGs.
- A set of less-formal research groups, of varying size and disciplinarity, some addressing multiple and single SDGs, some operating within, outside and across Research Centres and Schools.

University resources will be targeted at facilitating the highest quality research within and across Centres, Research Groups and campuses, and through international partnerships. In line with GCU 2030 Strategic Indicators, expected research outcomes (ROs) by 2030 are as follows:

RO1: 30% increase in annual research income (from £5.7m to £7.5m per annum).
RO2: Increase number of academics presenting a REF portfolio judged internationally-excellent or world-leading from 24% (REF2014) to 40% (REF2028).
RO3: Maintain REF impact positions for those in top third and move other GCU entries into the top half of their respective Unit of Assessment.
RO4: Create or re-approve a minimum of eight University Research Centres and initiatives on social innovation and data science for the Common Good spanning our three societal challenges.
RO5: Grow new intake of postgraduate research students by 20% (from 96 in 2019-20 to 115), sustaining sector-based completion rates.
RO6: Increase satisfaction with postgraduate research student experience to 90% (85% in 2018-19).
RO7: Increase proportion of academic staff qualified to doctoral-level to 65% (57% in 2019-20).

Pursuit of cutting-edge research will also be driven via coordination with the GCU Strategy for Teaching & Learning 2030, enacting principles of research-led teaching. In our People Plan, research excellence is at the heart of recruitment, as is enhancing the researcher development environment in line with sector Concordats and co-produced GCU values of integrity, creativity, confidence and responsibility. Through Finance, Estates and Infrastructure, we seek sustainable growth, including continued investment in bespoke accommodation for our Research Centres, postgraduate research students, an overarching facility to support engagement and knowledge exchange and plans for digitalisation.

1. Introduction

1.1 This document presents Glasgow Caledonian University's Research Strategy. As an enabler for the University's Strategy 2030, the Research Strategy provides a framework for both discipline-led and inter-disciplinary research within and across all academic units.

1.2 As the University for the Common Good, the focus of Strategy 2030 is on addressing the Sustainable Development Goals (SDGs) via impactful teaching and research. The SDGs, released by United Nations in 2015 to "end poverty, ensure prosperity for all and protect the planet", have formed the strategic framework for GCU's research since February 2017. The SDGs, in place until 2030, apply to all countries, whatever their stage of development.

1.3 Safe to say, the pace of societal change, globally, is set to continue, moderated and accelerated by COVID-19. The pandemic, and associated measures to address it, have laid bare widespread and pre-existing health, social and economic challenges. Thus, our commitment to the SDGs is undiminished and, indeed, reinforced. The SDG framework accommodates a reorientation of priorities towards actions addressing the challenges posed by COVID-19 but also to retain a focus on other enduring threats to sustainability and wellbeing, such as climate change, the environment, chronic disease, and various health, social and economic inequities.

1.4 This orientation has already contributed to GCU being placed in the top 50 of the Times Higher Impact Rankings over the last two years, based on our performance against the SDGs. Enhancing their local as well as international relevance, the Scottish Government's National Performance Framework (NPF) is also based on the SDGs. Our research addressing the SDGs will also be influenced by the UK Industrial Strategy and associated UK Research & Innovation (UKRI) funding streams as well as those of the EU and other international organisations. Collectively, these aspirations require strengths in inter-disciplinary and multi-sectoral approaches to research on and for health, wellbeing, inclusive growth and sustainability, reflected in the academic strengths and critical mass within GCU's research centres, Schools and our national and international research partnerships. Building on these strengths, we seek to enhance our collaborative working across disciplines, engaging with partners from outside academia, to develop and evidence more effective ideas for contributing to the SDGs.

1.5 The SDGs also serve us well in the Higher Education innovation landscape. Addressing the SDGs in numerous public, private and civil society partnerships and settings, the GCU research community is well placed to lead in contributing to *social* innovation and, thus, the Common Good via the capacity and quality of our research. The SDGs allow us to respond to the recommendations of the 2019 *Muscatelli Report* that all actors in the field, including universities, "should adopt the Scottish Government objective of turning Scotland into a world-leading innovative nation as a shared national mission", whilst exemplifying its commitment to inclusive growth and well-being. The SDGs encourage collaboration, reflecting the aspirations of the 2019 Healthwaite *Review of the Scottish Funding Council's Research Pooling Initiative*.

1.6 The research of the University is intrinsically and explicitly linked to place, to the challenges, characteristics and aspirations of Glasgow, and its position within Scotland, the UK and the global community. Our contributions will be seen via world-leading work in health, where our researchers continue to co-produce and assess interventions in partnership with communities and patients, enhancing possibly the greatest social innovation of all – the NHS – along with social care. Industry, too, is required for achievement of the SDGs as reflected in the UN Global Compact, to which GCU is a signatory.

1.7 Against this dynamic landscape, research will inform the University's Outcome Agreement with the Scottish Funding Council, encouraging growth in research income from all sources. GCU's Research Strategy also aligns with the GCU Strategy for Learning, our Civic University agreement and with objectives in support plans for People, Infrastructure and Finance.

2.   The place and trajectory of research at GCU

2.1   Research is at the heart of GCU's mission as University for the Common Good. It is central to our other major activities, such as teaching, and core to our place in the university landscape. More particularly, research:
- contributes to the development of intellectual and social capital, generating benefits to society via impacts on economic, environmental, cultural, health and social policy to enhance the quality of life;
- enhances our reputation as an international centre of knowledge and expertise, with positive financial consequences in terms of research excellence grant income;
- provides a basis for partnership with other universities, and for collaboration with other organisations across public, voluntary and private sectors in the UK and internationally;
- is crucial to our role as educators, attracting high-quality staff and students from all over the world, and informing their professional development;
- helps develop the integrity, creativity, confidence and responsibility of staff, students and our wider institution.
- informs and underpins the content of all curricula, enhancing the student experience, helping to produce skilled, intellectually adept and employable graduates.

2.2   GCU's research trajectory is strong. We host the largest constituency of postgraduate research students of any Modern University in Scotland. From REF2014, GCU emerged as top Modern University in Scotland for research power. REF2021 has seen an increase in academic staff submitted (34%) relative to 2014 (24%). 2016-17 was a record year for research income, topping the £6m mark in competitive grants from UKRI bodies such as the Economic & Social Research Council, and the Medical Research Council, as well as the European Commission, National Institute of Health Research and Wellcome Trust; a new level of funding which has been sustained in subsequent years. We are also number 1 university in the UK for Erasmus+ project funding.

3.   GCU's research architecture

3.1   In 2017, Glasgow Caledonian became the first University to frame its Research Strategy around the SDGs. This framework serves us well with respect to current and forthcoming global challenges which seek health, technological and economic advancement alongside social goals such as sustainability, climate justice and inclusion. As the most comprehensive statement of global needs ever issued, the SDGs provide an excellent fit with the Common Good, our School structures and GCU's associated Strategy for Learning, enhancing integration with initiatives such as Principles of Responsible Management Education (PRME) and AshokaU.

3.2   To promote greater cross-University working, our research addresses the SDGs via:
- three societal challenge areas of *Inclusive Societies*, *Healthy Lives* and *Sustainable Environments*, broadly reflecting the strengths of the three main Schools on our Glasgow campu*s*.
- a set of less-formal research groups - of varying size and disciplinarity, some addressing multiple and single SDGs, some operating within, outside and across Research Centres - is in place and constantly evolving. As well as groups being encouraged in order to create critical mass, the lack of formality is intended to support freedom and testing of new ideas and collaborations.
- an established Centres Approval & Renewal Process as a focus for inter-disciplinary excellence in thematic areas related to the SDGs.

3.3   Thus, spanning all three of our campuses (in Glasgow, London and at Glasgow Caledonian New York College), six thematic GCU Research Centres have each been approved for five years,

building upon concentrated areas of world-class research, represented in part by contribution to the 2021 Research Excellence Framework (REF) Units of Assessment (UoAs), as follows:

- BEAM (Built Environment & Asset Management Research Centre) (UoA 13): exploring the social, environmental and economic interdependencies of sustainable built environments in the context of global climate change and natural resource utilisation.
- Centre for Climate Justice: committed to quality research that addresses climate change within the overarching context of the SDGs of 'leaving no one behind'.
- REACH (Research Centre for Health) (UoA 3): bringing rigorous health and social science to bear on management of long-term conditions and public health improvement, evidencing 'what works, how and for whom?'.
- SMART Technology (UoAs 11 & 12): The Centre explores the design, development and evaluation of largely computer-based systems and serious games, applied in commercial and industrial settings to issues such as energy resource management, industrial processes and manufacturing, digital network infrastructures.
- WiSE Centre for Economic Justice (UoAs 17, 20, 28): The Centre carries out research into economic inequality, poverty, public policy, migration and human rights issues, primarily from a gender perspective, fostering creative interdisciplinary initiatives to inform policies for more just societies.
- Yunus Centre for Social Business & Health (UoAs 3, 17, 20, 28). The work of the Centre aims to transform the lives of vulnerable communities through pioneering research in the potential for microcredit, social enterprise and civil society more widely to act as generators of health and wellbeing.

3.4   In addition, we partner with Poverty Alliance in our Scottish Poverty & Inequality Research Unit, with Strathclyde University in the Centre for the Social History of Health and Healthcare, and host the largest consultancy centre for tourism in Scotland, the Moffat Centre.

3.5   The above architecture, especially the focus on Research Groups and Centres, creates a sense of community-with-purpose, particularly in how we develop as staff and students in addressing the SDGs. This is further enhanced by the health assets and sustainability focus of GCU London, for example in fashion and the circular economy, and similarly at Glasgow Caledonian New York College, with its new Centre for Social Impact & Innovation; displaying potential for creating greater research identities in London and New York whilst simultaneously growing cross-campus collaboration.

3.6   Figure 1 below illustrates the contribution of our Research Centres to the SDGs. (Note, the colour of each shaded box in Figure 1 corresponds to one of the SDGs on the cover page.) Between them, all the Centres respond to all 17 of the SDGs. Further work on how we are increasingly embedding the SDGs into the research activities of the University, and documentation of this, will be undertaken over the coming years by working with the SDG Integration Working Group, established as a result of Strategy 2030.

3.7   The Graduate School leads on building a cross-university research community and culture, as well as in communication and providing advice and guidance. A development focus is taken in academic researcher development, researcher experience and the research student journey as well as working with Registry in developing policy and practice with respect to all stages of the postgraduate research student journey. Through developmental support and workshops, not only for students but also early career researchers and mid-career staff, we seek to enhance the career development, as well as the integrity, creativity, confidence and responsibility of researchers who teach and teachers who research.

Figure 1
GCU Research Centres and the SDGs

SUSTAINABLE DEVELOPMENT GOALS	Research Centre					
	BEAM	**Climate Justice**	**ReaCH**	**SMART**	**WiSE**	**Yunus**
1 No poverty		■			■	■
2 Zero hunger		■				
3 Good health and well-being	■	■	■			■
4 Quality education	■	■	■	■	■	■
5 Gender equality		■	■		■	
6 Clean water and sanitation	■	■	■			
7 Affordable and clean energy	■	■		■		
8 Decent work and economic growth	■				■	■
9 Industry innovation and infrastructure	■			■		
10 Reduced inequalities		■	■		■	■
11 Sustainable cities and communities	■		■	■		
12 Responsible consumption and production	■			■		
13 Climate action	■	■	■			
14 Life below water	■					
15 Life on land	■					
16 Peace, justice and strong institutions		■				
17 Partnerships for the goals	■	■	■	■	■	■

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3.8   A key part of this architecture is a strong foundation of research support, comprising our:

- Research & Innovation Office (RIO), which takes a proactive approach by not only responding to researcher needs but actively engaging with academics in the development and leadership of research and innovation initiatives. The Office raises awareness of opportunities for researchers and lends policy insight across the spectrum; it oversees awards management, costing and contracts for research projects, as well as knowledge exchange activities, the intellectual property portfolio and commercialization activities, and the internationalisation of research through engagement with and management of European and global networks; it leads on overall coordination of the REF submissions.
- School-based, Research Centre and Library support for researchers and postgraduate research students, provided by a network of specialist research advisors, postgraduate student administrators, research impact officers, research centre administrators information scientists and archivists supporting bid preparation, project and Centre management, School-based postgraduate research administration, research repository management and data management for the REF and the wider Research Lifecycle.

The above entities also lead and collaborate on aspects of research; for example, the work of RIO in creating Social Innovation Networks globally (see para 4.2), recognised in 2021 through the European Union programme for Employment and Social Innovation (EaSI) to establish a National Social Innovation Competence Centre for the UK, and of our Archives in collaborating with the Yunus Centre on Medical Research Council and Scottish Government funded work to document the history of social enterprise in Scotland.

4.   Targeting future investments

GCU Research Centres

4.1   We will invest University resources in promoting the highest quality research within and across Research Centres and Groups to grow research income from large research projects and enhance knowledge exchange and innovation through related sources of government support and direct industry funding (e.g. industry-sponsored PhDs), the latter driven and guided by an associated Knowledge Exchange Strategy. In particular, our research will reflect and respond to the UKRI's mission to convene and catalyse by listening to and connecting diverse communities to create new combinations, by working in partnership with others.

4.2   The distinctive approach to research that we seek to develop – research-with-impact to tackle the SDGs - requires greater collective endeavors locally, nationally and internationally. This involves building on our distinct approach to knowledge exchange whereby our Social Innovation Networks and incubator work with over 300 members from 40 different countries, creating enterprises, locally and beyond, whose primary purpose is social benefit rather than private profit.

4.3   Moving forward we plan a new vehicle to connect the Research Centres and social innovation knowledge exchange approach. This is part of turning the University inside-out, co-locating researchers and research students in dedicated physical space centred around **'Common Good Hubs'**, on and off campus, whereby community groups, researchers, and knowledge exchange professionals can converge around time-bound thematic approaches addressing global challenges through local solutions. Such spaces would also serve as a host for intensive and new concentrations and combinations of researchers, including Early Career Researchers and PhD students, in a supportive, co-productive environment.

4.4   Alongside this, we will create another cross-University initiative on **'data science for the Common Good'**; led by our SMART Technology Centre and building on our commitment to remote and open access to data exemplified in our hosting of an ESRC-funded SafePod. This is the research arm of a GCU-wide programme, including curriculum design, responding to

increasing roles of Artificial Intelligence, Data Science, Data Analytics and Machine Learning reflected in the 2020 *Scottish Technology Ecosystem Review* led by Professor Mark Logan.

4.5 **New centres** are also likely to emerge from growing research groups and reflecting global trends and needs as indicated by the SDGs. Plans for new centres will be supported via our process for approval and renewal, allowing us to be adaptable but also strategic in encouraging strong international, multi-sectoral and inter-disciplinary research both within and across the University. This will be underpinned by strong methodological foundations and related individual scholarship drawn from the appropriate academic disciplines.

Postgraduate Research (PgR)

4.6 Corresponding to GCU's continued growth and improved performance with respect to research excellence and funding, our full-time PhD cohort has almost doubled over the past 10 years, alongside establishment of Professional Doctorate and Master of Research programmes. To significantly increase PgR student numbers will require innovation, and consequent growth, across this portfolio of programmes, including part-time. An example of this is the recent creation of a Doctorate in Business Administration, as part of the Professional Doctorate suite. As well as the DBA enhancing growth in student recruitment to such programmes, we expect further development and consolidation of similar discipline and professionally-oriented degrees including our taught doctorates in psychology and physiotherapy. Similarly, we have developed a more-specialised Master of Research programme for Biosciences and, based on our research strengths, MSc degrees in Social Innovation, Climate Justice, Economic & Social Justice, Human Rights and Data Science, all reflecting our institutional Common Good mission.

4.7 Related future developments will include greater focus of academic expertise and the use of academic research networks and strategic collaborations (including staff and student exchange programmes), both nationally and internationally, to attract good students. Therefore, we will seek to focus PgR student support around challenges and themes emanating from the SDGs and encourage greater support for PgR studentships from external competitive funders as well as industry. This will require marketing plans (including digital story telling) to ensure that we link our disciplinary bases to the SDGs, and new procedures and processes (such as ongoing recruitment panels in each School) to be put in place to deal with applications swiftly and to make awards on an ongoing basis throughout the academic year. It will also require creativity in how such panels spend their allocated own funds; such as part-awards and partnerships with other funders in industry and other sectors. These partnerships, such as membership of Scotland's ESRC Doctoral Training Partnership in Social Sciences, help build confidence as well as reflect research excellence, in this case, in Social Policy and Social Work.

4.8 Finally, PgR student workspaces should be adaptable and embedded with GCU entities that reflect excellence and strong research cultures, enhancing the PgR student experience.

Collaboration and partnerships

4.9 We will continue to generate research-based collaborations - local, national and international - combining *bottom-up collaborations* established by our community of researchers with more *top-down initiatives*. This will include further embedding of national and local strategic research partnerships – such as with Glasgow City of Science & Innovation, NHS Lanarkshire, the West of Scotland Academic Health Sciences Network, Public Health Scotland and with the Scottish Institute for Policing Research (where we lead on the Public Protection theme). It also includes SMEs and large business collaborations vital for achieving the SDGs.

Figure 2

International Research Partnerships with Universities

Glasgow Caledonian University

North America

University of the Baja California
New York University
University of British Columbia
University of California San Diego
University of Victoria

South America

University of Sao Paolo
Fundación Universitaria, Bogotá
Universidad de Antioquia, Medellín
Universidad de Istmo, Panama
Universidad Católica Santa María La Antigua
Universidade Federal do Rio de Janeiro
Federal University of the State
of Rio de Janeiro
Universidad Técnica Federico
Santa María, Chile
Universidad de Desarrollo, Chile

Europe

Erasmus University
University of Bergen
University of Bern
University of Bologna
University of Florence
University of Parma
University of Utrecht
University of Aveiro
University of Alicante
University of Deusto
University of Dortmund

Africa

University of Western Cape
University of the Free State
Rhodes University
Northwest University
University of Johannesburg
Nelson Mandela University

Asia

University of Ruhuna in Sri Lanka
National University of Management, Cambodia
Kasetsart University, Thailand
Thammasat University, Thailand
National University of Economics, Vietnam
Atma Jaya Catholic University of Indonesia
Sunway University, Malaysia
Yangon University of Economics, Myanmar
Mindanao State University, Philippines
Sungkyunkwan University, South Korea

Australasia and South Pacific

Australian National University
Monash University
Royal Melbourne Institute of Technology
Swinburne University
University of Melbourne
University of Otago
University of Queensland
University of Samoa
University of Western Australia

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4.10   Internationally, partnerships will be based on assets we have established through our London and New York campuses, and digital platforms and collaborations we have invested in, and for which we have attracted funding, to address the SDGs challenges. Examples of the latter are the Climate Justice Repository, Common Good First and the African Leadership Network, along with other university-to-university partnerships and wider international collaborations being developed through Erasmus+ and Global Challenges funding. Key research partnerships with leading universities, evidenced by funding and joint publications, are illustrated in Figure 2. Amongst other things, these partnerships display great potential, post-Brexit, to collaborate with universities both within and outside of European Commission funding streams, for which new plans will be developed.

4.11   Hence the requirement for a research environment to address the challenges reflected in global trends, both locally and in terms of international partnership. Campuses need to provide new types of research space; to allow researchers to interact and co-create with communities, students and other stakeholders as well as with each other; both in-person and digitally. As well as more of a technological focus on infrastructure, flexibility will be required, so as to allow for non-traditional approaches to laboratory access, other forms of data collection and collaborations and even new structures to link more-specialist centres. There are new challenges to how we develop our spaces, especially in the light of Covid-19. We need to learn from these experiences and create environments that allow for close interaction within a secure environment.

5.   Strategic goals and enablers

5.1   Our strategic research goals are to:
   I.   Conduct leading-edge, interdisciplinary research, addressing the SDGs via our three societal challenges of *Healthy Lives, Inclusive Societies* and *Sustainable Environments*.
   II.   Capture and promote evidence of research impact with our stakeholders in public and private sectors and in civil society.
   III.   Extend our research capacity, capability and culture, focused on achieving the highest standards of research excellence.
   IV.   Contribute to continued development of academic culture and sense of community within the University through group, centre and cross-campus working on research-with-purpose.
   V.   Strengthen our research-teaching nexus.

5.2   These goals will be enabled by:
   i.   Targeting resources and creating research structures to support research addressing our societal challenges, and monitoring corresponding progress in research income, activity and outputs, not only to meet the challenges but also achieve standards required by the Research Excellence Framework.
   ii.   Creating research spaces to enable connectivity amongst researchers and PhD students as well as between these groups and our various stakeholders, including an overarching social innovation hub devoted to community engagement for research and researcher connectivity.
   iii.   Our commitment to continued enhancement of Research Infrastructure, as exemplified by our support for Open Access to Research whereby our research practice is open, transparent and reproducible; demonstrated by our PURE research information system and repository and development of flexible cloud storage, computer and analytic capability for research. All research active staff are responsible for ensuring that their research is made freely available wherever possible and fully comply with the publishing requirements of their research funders. An open access philosophy is critical to the global knowledge exchange required to meet the SDGs. To

strengthen this commitment, we will consider the Declaration on Research Assessment (DORA) which aims to develop and promote best practice in the assessment of scholarly research.

iv. We will work with stakeholders across GCU to ensure that our Research Infrastructure supports researchers across the entirety of the Research Lifecycle from project initiation to completion and the open sharing and preservation of outputs.

v. Ensuring, through researcher development training and peer-review processes, that impact is considered 'early and often' in development and conduct of research and forms part of our strategy to maintain and enhance our drive for effective and sustainable knowledge exchange.

vi. Placing research excellence at the heart of recruitment and personal development, providing strong researcher development programmes and supporting early career researchers and research support staff development, both within Schools and University-wide.

vii. Promoting research culture via, amongst other things, activities such as an annual research celebration, regular meetings of our Professoriate and articulation of our research successes across internal and external multi-media.

viii. Conducting the continuous review, monitoring and consultation with our newly-established Early Career Researchers (ECR) Group, Professoriate and all categories of staff to ensure continued accreditation in HR Excellence in Research which accompanies and is supported by commitments to:
    a. GCU's Enhanced Athena SWAN Action Plan and Equality & Diversity policies;
    b. The Concordat to Support Research Integrity of Universities UK;
    c. Vitae's Concordat to Support the Career Development of Researchers;
    d. The Knowledge Exchange Concordat; and
    e. Post-COVID research recovery, accounting for differential impacts on staff of the pandemic.

    Priorities for such review and monitoring will be to enact lessons from best practice in gender and race equality mainstreaming, reflecting our commitment to the SDGs not only in what we research but also in how we conduct and manage research.

ix. Using our marketing and recruitment strengths to promote PgR student excellence, along with enhancements in our estate and culture and continuous review of researcher development programmes to significantly improve the PgR student experience.

x. Continuing to drive impactful engagement, co-production and knowledge exchange with the public in line with RCUK's Concordat for Engaging the Public with Research and the UKRI's mission to connect diverse communities and create new combinations.

xi. Expanding our collaborative networks both locally and internationally, underlining place as a key driver for our research outputs and responding to changes in the UK's relationship internationally, both with Europe and across the globe.

xii. Supporting the principles of research-led and research-informed teaching, equality of learning opportunities and flexible learning, as articulated in the corresponding GCU Strategy for Teaching & Learning 2030, and involving researcher participation in teaching and curriculum design, planning modules for engagement of students in research, and ensuring experience from Knowledge Transfer Partnerships, and related innovation activities, are transferred into teaching examples. This will include working with GCU's Educational Research and Evaluation team within the Department of Academic Quality and Development within the Directorate of Learning & Student Experience, which is supporting the University to develop a robust evidence base for enhancement of the student learning experience, including evaluation of impact as well as working to strengthen the University's critical mass of research in this field.

6.   Expected Research Outcomes in 2030

6.1   Overarching institutional Strategic Indicators through to 2030 include our performance in the Times Higher Impact Rankings, for which research is a key component, and our performance in the two REFs likely to take place during the 2020s. Underpinning this, and reflecting the Strategy 2030 goals of sustainable growth, expected Research Outcomes (ROs) cover standard measures of research excellence (ROs 1-3, 5), student experience reflective of excellence (RO 6) or seek to enable excellence through a strong research environment (ROs 4, 7). Whilst some of these ROs are more within the control of our research-active community, others require not only cooperation across the University but also oversight and ownership – for example, in the case of research, RO7.

6.2   The ROs are as follows:
RO 1: 30% increase in annual research income (from a high of £5.7m to £7.5m per annum).
RO 2: Increase proportion of academics presenting a portfolio of work judged to be 3*/4* from 24% (REF2014) to 40% (REF2028; based on current REF scale from 1*=nationally-recognised to 4*=world-leading).
RO 3: Build a portfolio of impact that demonstrates a range of economic, environmental, cultural and other societal benefits and maintains REF impact positions for those in top third and moves other GCU entries into the top half of their respective Unit of Assessment.
RO 4: Create or re-approve a minimum of eight University Research Centres and initiatives on social innovation and data science for the Common Good spanning our three societal challenges.
RO 5: Grow new intake of postgraduate research students by 20% (from 96 in 2019-20 to 115), sustaining sector-based completion rates.
RO 6: Increase overall satisfaction with postgraduate research student experience to 90% (85% in 2018-19).
RO 7: Increase the proportion of academic staff with a doctoral-level qualification to 65% (57% in 2019-20).

7.   Research, People Plan and Values Alignment

7.1   This Strategy has sought to demonstrate a strong commitment to GCU staff, aligning with our Action Plan for the 2019 *Concordat to Support the Career Development of Researchers* and with our co-created institutional values in several ways.

7.2   The Strategy seeks to enhance our *Creativity* through a dynamic research group and research centre model set in a unifying framework that seeks to address the new and ongoing challenges of our day, allowing us to draw inspiration from working with others and across disciplines. Our promotion of Equality, Diversity & Inclusion, encompassing commitments to Athena SWAN, the research concordats and HR Excellence in Research (see Section 5.2) encourage *Responsibility* for academic careers, our work, study and environment and, hopefully, empowers everyone to contribute. Our *Confidence* will be sustained and grow through realisation, in addressing the SDGs, that positive change through research excellence is within our power to achieve. Relatedly, and finally, our research, set within and led by an SDG framework, aligns with our core value of *Integrity* as we, The University for the Common Good, strive to make a positive difference in the world.