



University
of Glasgow

College of
Medical, Veterinary
& Life Sciences

RESEARCH STRATEGY

EXECUTIVE SUMMARY



2021-2025

**WORLD
CHANGING
GLASGOW**



Our vision

To develop an integrated and supportive research community that connects research excellence from across the University to tackle major bioscience and health challenges locally and globally.

Introduction

The University of Glasgow is a world-leading research-intensive University and is a member of the Russell Group of research elite Universities within the United Kingdom. The excellence of our research is central to our global reputation and is of fundamental importance in establishing an environment that attracts the highest calibre UK and international students from across the world. In addition, our ability to identify, and capitalise on, innovation and enterprise opportunities is centrally dependent on the quality of our underpinning research. The College of Medical, Veterinary and Life Sciences is a research powerhouse within the University, carrying out world quality research in a range of subjects with reach into innovation, and research-led teaching, at all levels. We have a proud history of paradigm-shifting basic bioscience research, global challenges research and cutting-edge clinical research all of which provide the basis for, and will be developed and supported through, our research strategy.

The dramatic increase, over the past 20 years, in the range and complexity of technologies available to bioscience researchers has revolutionised the way that research is conducted. One of the consequences of this is that few people are expert in all the technologies that they require to pursue their research at a cutting-edge level. Thus, Team Science, in which groups collaborate to address important bioscience and biomedical questions, has become increasingly common and is actively encouraged by the majority of funding agencies. Therefore, in addition to individual researchers pursuing specific projects, there is considerable emphasis on pooling resources to configure teams that are optimally aligned to tackle research questions of fundamental importance. For the University of Glasgow, and as outlined below, coalescing research excellence around research questions in areas in which we currently have, or can develop, an international reputation is of central importance. We believe that where such groupings tackle questions of specific relevance to our geography and local community they will be particularly competitive for external funding. Developing internationally competitive collaborative groupings in niche areas, and providing an outstanding and supportive technical infrastructure, is therefore a major goal of the research strategy.

Research funding has always been competitive. However, the effects of the pandemic have shaken the research community to its core and many charitable funders, on whom we rely for significant support, have had their income streams badly hit. This means that, for a few years at least, competition for charitable funds will be intense and the nature of what they fund may also change. Restricted access to charitable funding will also inevitably mean that competition for funding from other agencies will also be keen. We will therefore provide intensive mentoring support for our future research leaders to ensure that they have the optimal chance of attracting high-level grant funding. For Early Career Researchers in particular, we will put strategies in place that will enhance their chances of establishing a strong research niche and a renewable funding base.

Finally, a major aim of the strategy is to change our research culture especially as it relates to PDRAs and to provide mentoring support to ensure that our PDRAs maximise the benefit of their time with us and are expertly advised on the wealth of career opportunities available to them.

The research strategy is divided up into 3 pillars which align with the University research strategy, and which are outlined in bullet-point form in the next pages.

Professor Gerry Graham, MVLS Dean of Research





Pillar 1: Collaboration

Through this pillar we will identify, and develop, key areas of strength within the College. Where appropriate, these will be provided with support to allow them to develop into internationally competitive, externally funded, Centres of excellence. In so doing we will enhance the University of Glasgow's international reputation and further improve our ability to attract researchers of the highest calibre from across the world.

Our priorities:

- To support our existing externally funded centres of excellence.
- To increase the number of externally funded centres of excellence in the College.
- To review University-badged centres of excellence and develop them for external funding.
- To identify, support and develop new cross-cutting themes.
- To interact across the University to configure optimal groupings for pursuing key bioscience and biomedical questions.
- To provide a forum for any college staff member to propose, and develop, new strategic opportunities.



Pillar 2: Creativity

Much of the research that is performed in the college is fundamentally creative in nature. However, creativity in research requires time to develop and mature and also requires a suitably well-developed technological environment to allow it to reach full maturity and international competitiveness. We propose a number of initiatives to enhance creativity which we believe will improve our outputs, make us more competitive for external grant funding and bring in significant commercial income.

Our priorities:

- We will develop a range of centrally-managed technology-focused facilities within the College, that will deliver expertise and equipment to underpin our research. We will transform our IT and data infrastructure.
- We will enhance our capacity to lead and deliver clinical trials of national and international importance.
- We will support ambitious strategic funding applications with dedicated support, including time for academics to develop and deliver.



Pillar 3: Careers

We will transform our approach to research careers, recognising that our success is underpinned by an essential pipeline of expertise and that team approaches to science are increasingly essential. We will develop and deliver valuable research training and transferable skills and equip our earlier career researchers for a diverse range of careers in many sectors.

Our priorities:

- To work with the Dean for Postgraduate Research to align doctoral training programmes with the aspirations of the College.
- To embed within our PDRA community an appreciation that their training will equip them for multiple career options.
- To provide opportunities for technicians and technologists to undertake undergraduate or postgraduate degrees to help develop their careers.
- To provide intensive mentoring for future leaders within our earlier career community with a view to helping them to achieve sustainable grant funding.



Research Strategy Pillars

Vision

Our vision is to create an integrated research environment that will connect the cumulative research excellence from across the College of Medical, Veterinary & Life Sciences with our sister colleges in the wider university to optimally address the major challenges facing Scottish, UK and Global society in the next decade. Through this strategy, we will reimagine our relationship with the city of Glasgow reflecting our centuries old status as a civic University and cement our reputation as a world leading research intensive university.

Values

- Ambition & Excellence
- Curiosity & Discovery
- Integrity & Truth
- Inclusivity

Inputs

- Infrastructure and equipment investment to underpin research excellence.
- Investment in support for ambition at all career stages.
- Professional service alignment with strategy
- Informed benchmarking.
- Porous structures and agile processes to enable rapid response to opportunity.

Collaboration

Recognising the importance of collaboration for addressing research challenges.

Developing and sustaining:

- Existing Centres of Excellence
- Cross-cutting themes and new Centres
- New strategic opportunities

Creativity

Recognising the fundamental role of creativity in academia.

Supporting freedom to be creative through:

- World class facilities and expertise
- Structured support for creativity and ambition
- ENGAGE hub

Careers

Helping each other to succeed

With:

- Coherent approach to doctoral training
- PDRA career support
- Focussed support for technician and technologist careers
- Elite mentoring for future research leaders

Outcomes

- Enhancing Glasgow's reputation in these important research areas.
- Attraction of world leading experts to Glasgow.
- Increases in related grant funding.
- Increased quality of research publications.
- Award of external funding for new National Centres of Excellence.
- Increase in grant funding.
- Increase in income from other external services including commercial entities.
- Improve success rates for programmatic grant renewals.
- Increased number of spin-outs from college research.
- Culture change that supports all career opportunities for PDRAs.
- Provision of new educational and career opportunities for PDRAs, technicians and technologists.
- Increased numbers of ECRs attracting programmatic level funding at the start of their independent careers.

Enablers

Porous, agile structures

Culture that values and invests in excellence

Shared college narrative and aligned strategies

Freedom to be creative



