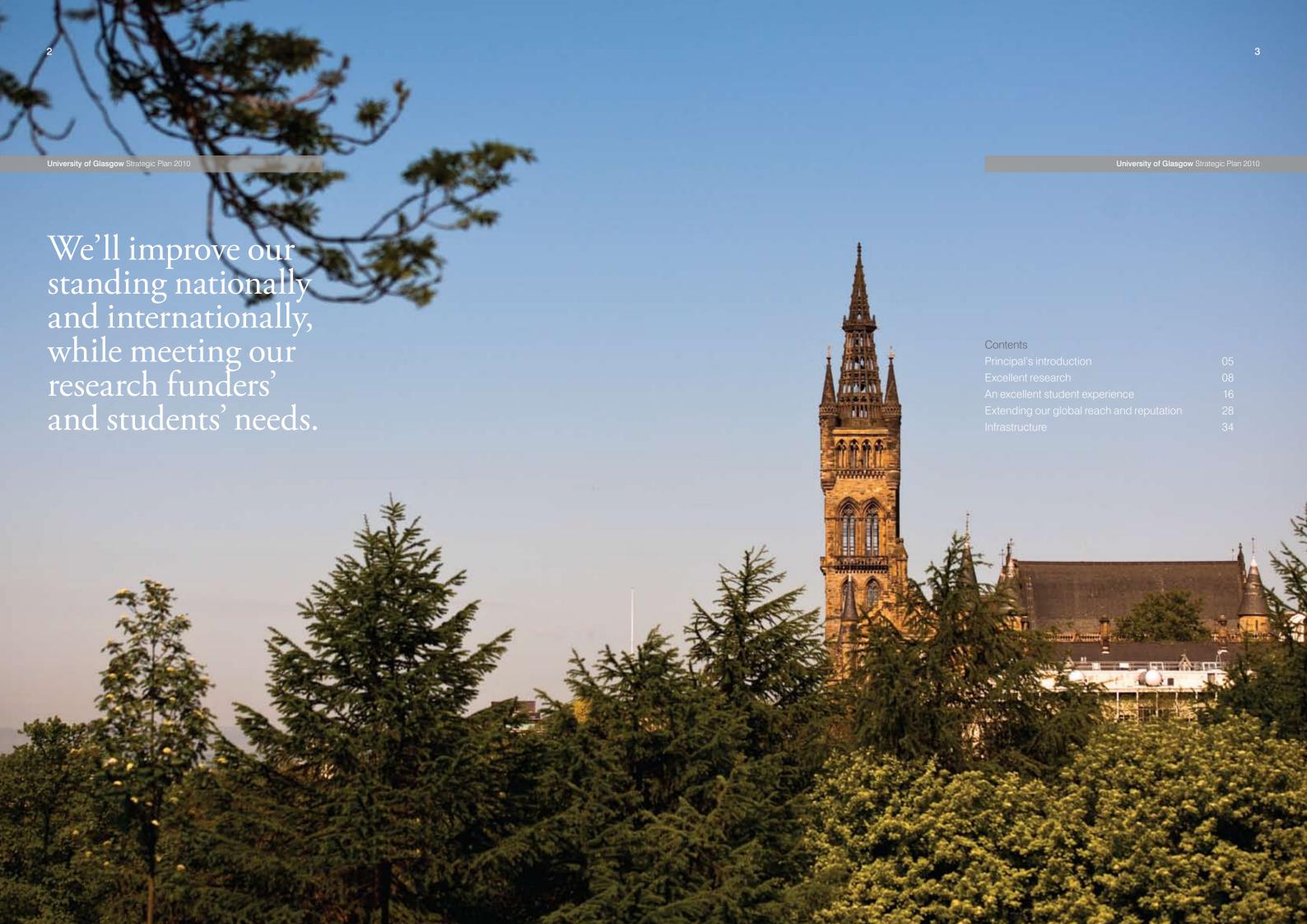


University of Glasgow

Glasgow 2020 – a global vision











This vision outlines our strategy to build on our position as one of the world's great broad-based research-intensive universities.

The strategy identifies our priorities for the next five years, during which we'll focus our resources on maintaining existing, and developing new, world leading activities. We'll improve our standing nationally and internationally, while meeting our research funders' and students' needs. The strategy's three main themes are:

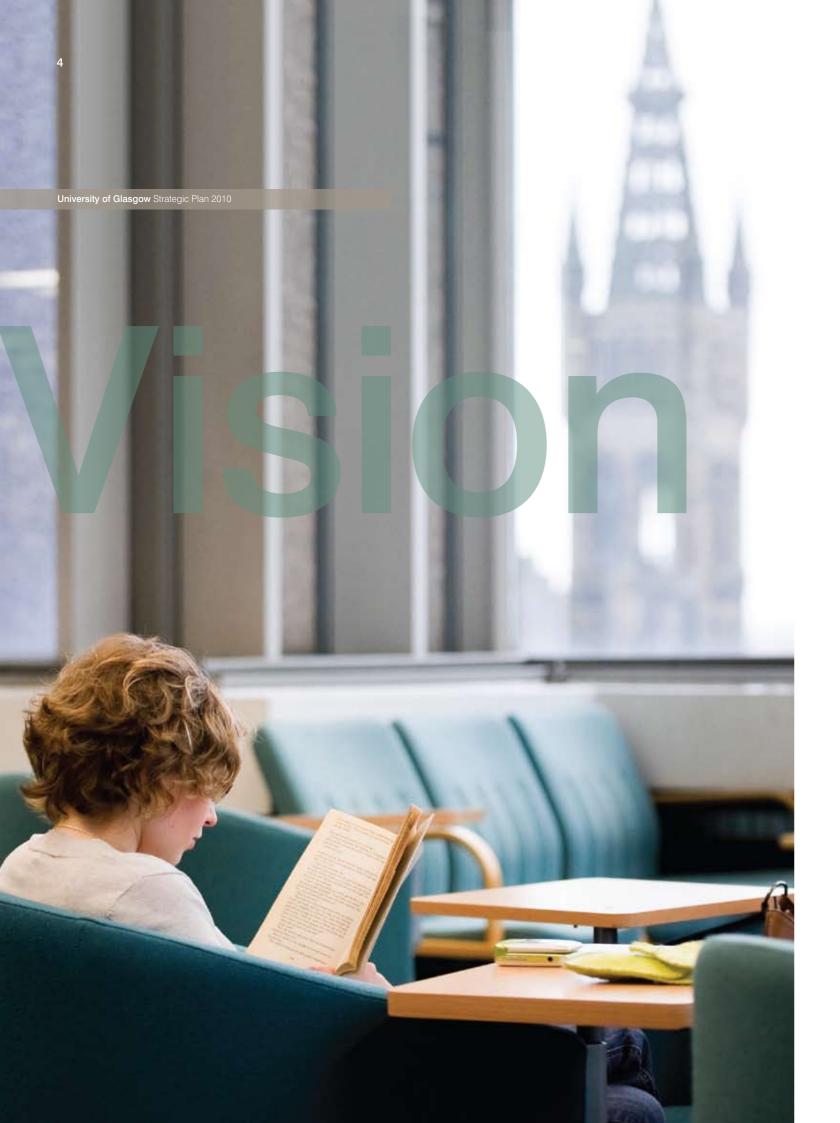
focus
global reach
multi-disciplinary approaches.

We'll focus on students' and research funders' needs, aligning our investments with our strategic priorities. We'll streamline our systems and processes to make the most of our resources, and minimise bureaucracy.

We'll extend our global reach to become a truly international university with a multi-cultural community of students and staff. We'll prepare students for political and social environments worldwide, and develop international alliances and partnerships.

We'll encourage multi-disciplinary approaches by supporting and developing networks of researchers.

We'll create world leading, multi-disciplinary research institutes that meet our funders' strategic needs.



Vision – The University of Glasgow aims to enhance its position as one of the world's great, broad-based, research-intensive universities. Mission – Our mission is to undertake world leading research and to provide an intellectually stimulating learning environment that benefits culture, society and the economy.

Values -

Our mission informs everything we do. But we also share a set of values – integrity, credibility, openness and success. These values define the way we work. As an organisation we work most effectively when motivated by the common values we see in each other's behaviours and attitudes.

Integrity

Being consistently honest and fair in our dealings with others. Our collegiality means that we respect each other's interests and abilities as we work together towards a common goal.

Credibility

Our authority is built on innovation, on academic rigour, and on the way we work together to find answers to the problems facing mankind today.

Openness

Our inclusiveness embraces diversity by valuing and respecting the perspectives and contributions of all our colleagues and students.

Success

Our reputation for excellence ensures that we are continually striving to be better than we are in everything we do. The innovation that we prize sees us changing the world around us by applying creative solutions to problems.

Underpinning these values is responsiveness - our commitment to responding to the needs of our colleagues, students, research funders, sponsors and visitors in a helpful, timely and sensitive manner.



Our vision

To enhance our standing as a community of world-leading researchers by promoting excellence within disciplines and inter-disciplinary teams tackling global challenges – providing cultural enrichment and benefiting the economy.

Our research funders' needs

Our research is funded by, among others, UK Research Councils, charities, UK and international industries, and regional and national government. Where they commission their research, development and consultancy is their choice, and will be influenced by a range of factors.

They choose to work with institutions and organisations that reliably deliver high quality research within sensible budgets and timings. And increasingly, they expect the research they fund to have impact beyond the academic community.





We will meet our research funders' needs in three key ways:

1. Developing research strengths and multi-disciplinary activities

It's essential we develop and support research activity in areas of global significance. We must also continue investing in our research infrastructure and improving our internal processes.

We'll continue to develop our research strengths and demand strong research cultures and effective leadership in all disciplines. We'll make targeted investments in priority areas where we're currently engaged in world leading research. And based on a range of indicators, we should establish and maintain advantage over our peer institutions.

Our priority areas include:

- · Accounting, Finance and Economics
- · English, Celtic and Gaelic
- · History of Art and Theatre, Film and TV Studies
- · Computing Science
- Civil Engineering and Electronics and Electrical Engineering
- · Chemistry and Physics
- Statistics
- ... and the Research Institutes within the College of Medical, Veterinary and Life Sciences (MVLS):
- · Biodiversity, Animal Health and Comparative Medicine
- · Cancer Sciences
- · Cardiovascular and Medical Sciences
- Infection, Immunity and Inflammation
- · Molecular, Cell and Systems Biology
- · Neuroscience and Psychology

We'll establish a Research Institute of Health and Wellbeing.

We'll also encourage research networks that bring together researchers to develop their common interests in a strategically significant research theme. Such networks will help build research communities, establish greater internal and external presence, and coordinate bids for research funding.

2. Grow our community of PhD students

We want to expand our postgraduate community and attract the best postgraduate research applicants, domestically and internationally. We'll develop scholarship endowment funds and award scholarships that support our research priorities.

3. Extend knowledge exchange

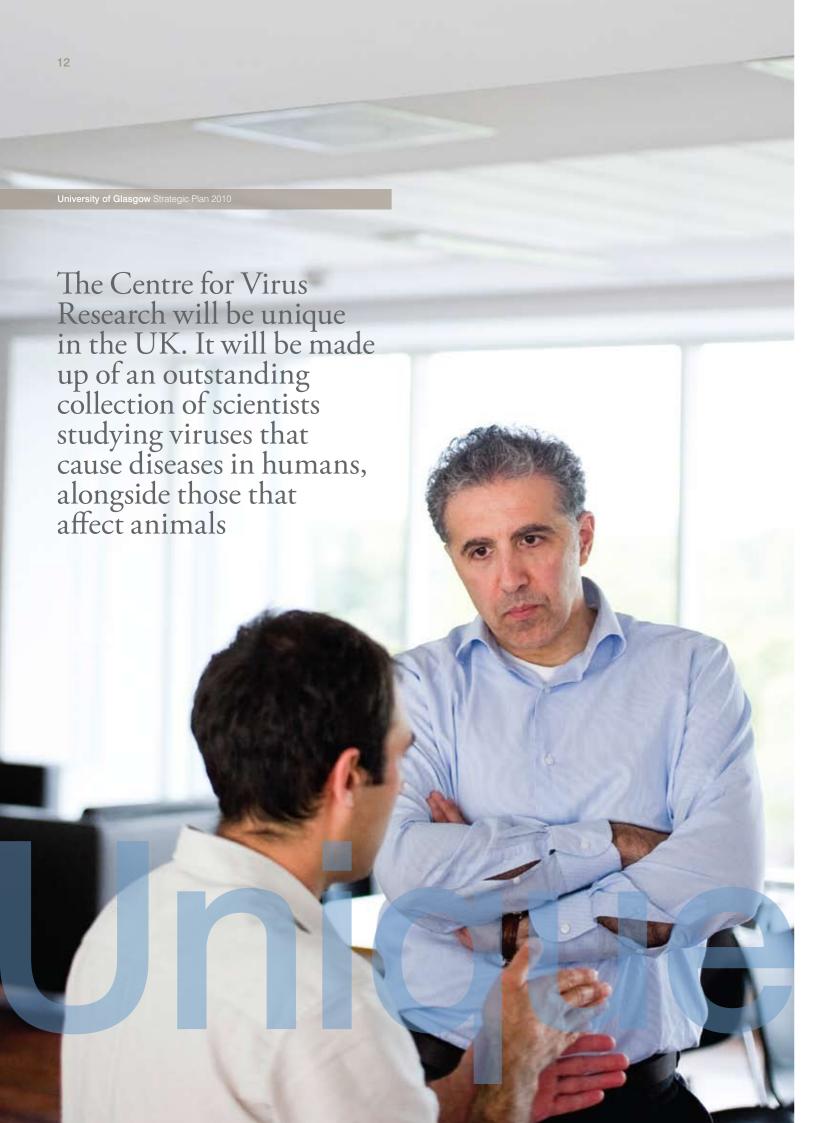
We want to become well known for our excellent knowledge transfer development. In areas where we haven't identified commercially significant development opportunities, we'll simply share knowledge with businesses and organisations who can benefit from it.

We'll work with charities, voluntary and social enterprise groups, using our knowledge and experience to help them strengthen communities, transform public services and support social enterprises.



10





A university that invests in world-leading science

Significant investment is being made into a new multi-million pound centre for virus research at the University of Glasgow. In 2009, twelve universities responded to a UK-wide call for bids to host an international centre of excellence in virology. Glasgow was judged to represent the strongest case As a result, the University has secured £28m over five years to establish the Medical Research Council University of Glasgow Centre for Virus Research, or CVR.

Viral diseases are a major threat to health and a burden to the economy. Recent events have brought acute infectious diseases like influenza to the fore, but viruses can also cause serious diseases such as liver failure or cancer. Many emerging threats to human health can also come from viruses that originate in animals. To meet these challenges, the CVR will remove the current artificial distinction between human and veterinary virology, instead recognising the links between human and animal health. The aim is to gather expertise on many virus

types and provide a resource for training the next generation of scientists and clinicians. As viruses constantly evolve, these experts will seek new approaches to virus detection and help to develop antiviral drugs and vaccines.

'The CVR will be a unique research centre in the UK,' explains Professor Massimo Palmarini, the Centre's Director and an expert in animal retroviruses and bluetongue. 'It will be made up of an outstanding collection of scientists studying viruses that cause diseases in humans, side by side with those that affect a variety of animal species. We will take a holistic approach to virology, encompassing molecular virology, virus-host interaction, virus evolution, epidemiology and mathematical modelling. And we will collaborate with national and international partners in order to provide a strategic research framework that addresses the evolving threat to health and economic security presented by viral diseases across the world.'



A university that pushes the boundaries of research

The University has become the UK's new home for textile conservation. In a development that is bringing conservation training to Scotland for the very first time, the UK's Textile Conservation Centre, recently based at the University of Southampton, has relocated to Glasgow.

'Textile conservation is a part of object based conservation,' explains Professor Nicholas Pearce, Head of the University's School of Culture and Creative Arts. 'There are conservation specialisms across materials like metals, textiles, paintings, ceramics and glass. Textile conservation has an important place because most museums, private collections, or organisations like the National Trust have textiles, many of them of international significance. Conservation is about preserving these objects so that people can enjoy them in the future.'

'We have a well-established history of working on big, collaborative projects with museum and gallery institutions across the UK and internationally,' he says. The University's reputation in the subject is also second-to-none – according to the 2008 Research Assessment Exercise, History of Art research at Glasgow is the most highly rated of any university in the UK.

'In terms of research, it's looking at the way in which science can bring on board new treatments for objects,' explains Professor Pearce. 'It can help us to push the boundaries not only in terms of treatments, but even in technical examination, which might tell you a lot about the processes that have gone into making a particular object.' Students are also set to benefit, with the introduction of two new postgraduate degree programmes at Glasgow – a Masters in Textile Conservation and a Masters in Dress and Textile History. Applications for places have already been received from across the globe.





How can we meet their needs?

Visionary course development, delivery and review

We have a superb reputation among peer researchintensive universities for the quality of our teaching and student satisfaction. We recognise and reward our staff for their excellent teaching and their invaluable contributions to course development.

Our research staff bring fresh knowledge, understanding and application to our course content With the Graduate Attributes programme we can make sure students see how their broader university experience helps them develop their personal strengths. We'll also monitor and enhance our teaching and assessment methods continuously, and keep up with the latest technologies.

Effective student engagement and support

Our commitment to student engagement at the University of Glasgow is longstanding. Almost all our internal decision-making bodies have student representatives, and we use student surveys to help enhance their experiences here.

Major changes to our systems and procedures will also change the student experience – giving them easier access to course and assessment information, and self-enrolment facilities.

We will develop the SRC Student Advice Centre, which provides wide-ranging independent support

on academic and social issues. The University
Learning and Teaching Centre will find more ways
to help students adjust to the University learning
environment and manage their learning experiences.
And Personal Development Planning (PDP) will
continue to help students make the most
of their time here.

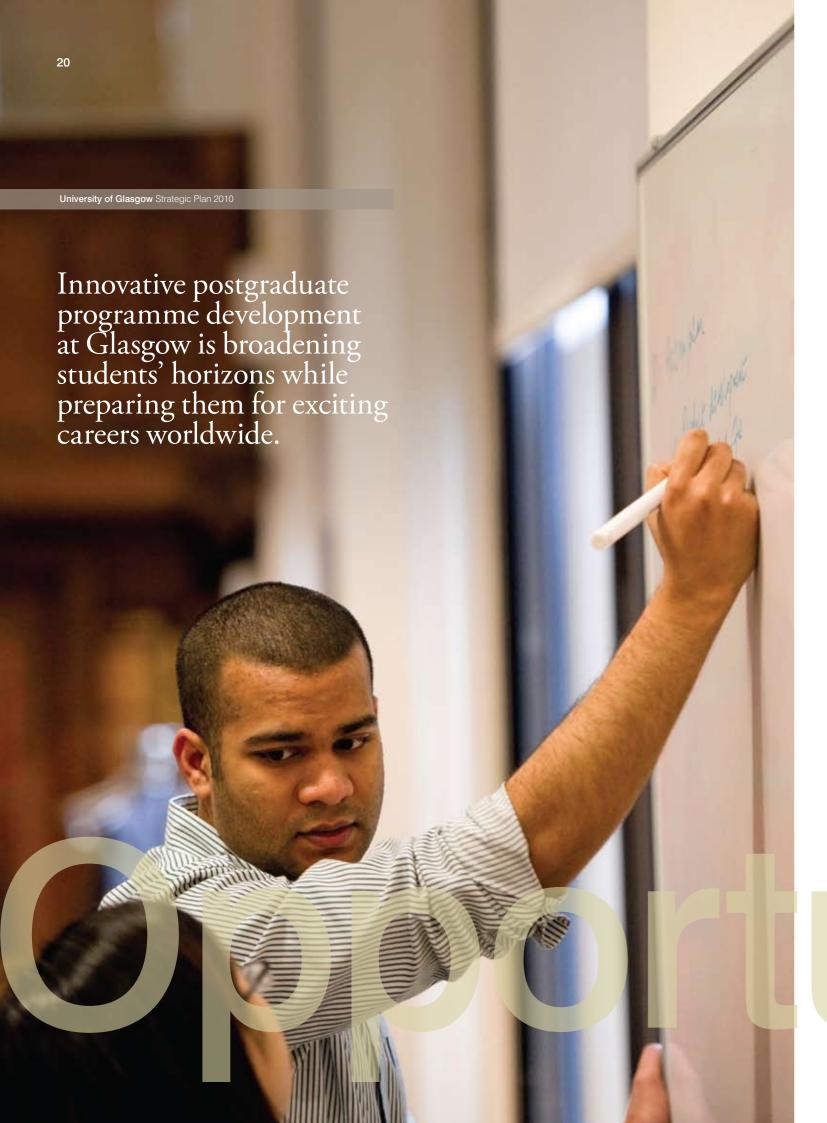
Excellent learning environments

We're upgrading our lecture theatres and looking at new ways to develop teaching spaces in response to changes in learning and teaching patterns.

We're also developing flexible, 'touchdown' spaces where students can work individually or in groups, or even socialise.

We'll add more course materials to our Virtual Learning Environment (VLE), including multimedia and interactive content, and extend campus WiFi coverage even further.

The University has excellent social facilities for students – two students' unions, SRC, Clubs and Societies, a Sports Association, and some of the UK's best sports and recreation facilities. The SRC supports a growing student volunteering culture that encourages involvement with a wide range of community groups, while developing students' own skills and attributes.



A university that offers unique international study opportunities

Innovative postgraduate programme development at Glasgow is broadening students' horizons while preparing them for exciting careers worldwide. The range of study destinations available as part of the University's International Masters in Russian, Central and East European Studies, for example, offers students unparalleled choice.

This programme has expanded from the original European partner universities in Hungary, Poland, Estonia and Finland, to include new partners in Kazakhstan and Azerbaijan. Students study for 18 months, spending Year 1 at Glasgow before moving to one of the partner universities for Semester 1 of Year 2. Their dissertations are jointly supervised by both institutions, providing not only an international study experience, but also opportunities for further academic collaboration.

'What we are trying to do is make sure that when they leave here, our graduates are prepared for tremendous careers anywhere in the world,' explains Senior Vice Principal Professor Andrea Nolan.

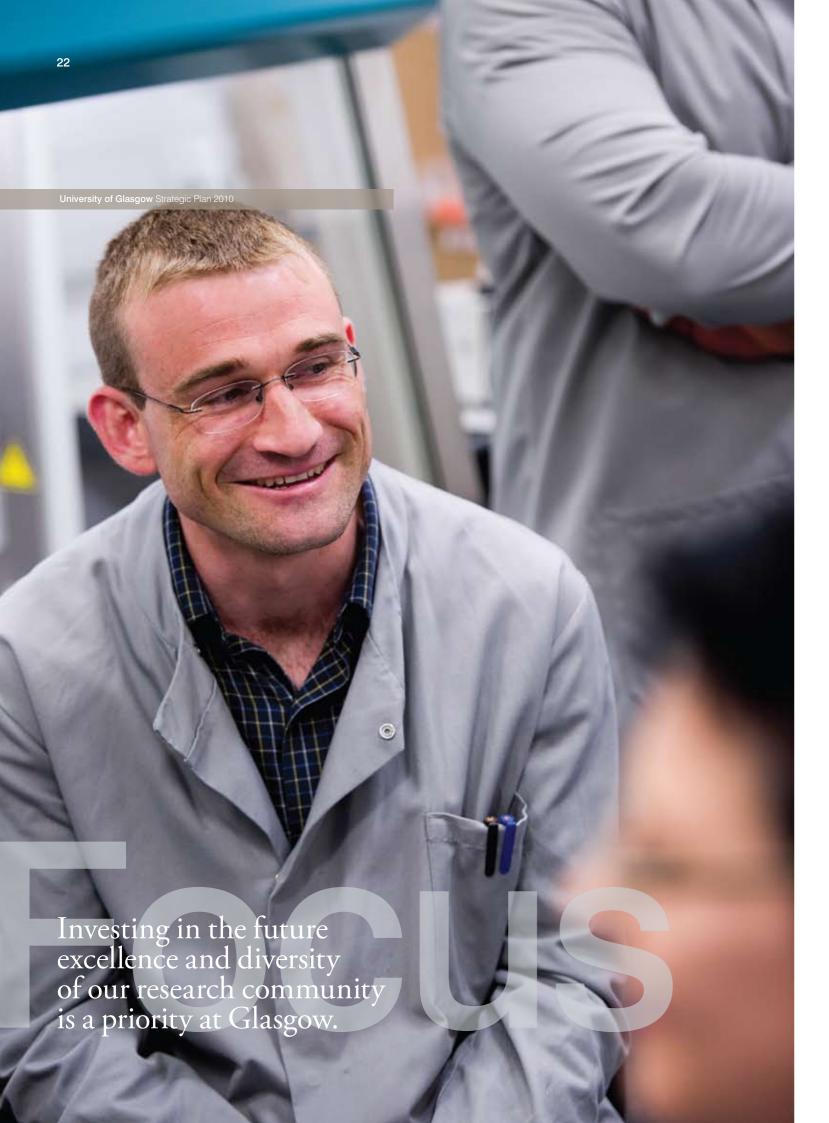
The next phase of developing this multilateral partnership will include collaboration in research and postgraduate research student training.

A university that makes the right connections

Glasgow's commitment to working with international centres of excellence has been strengthened by the University's successful bid to become a strategic partner of the Indian Institute of Science, Education and Research, Pune.

The bid follows a declaration, signed by the Indian and British Prime Ministers in 2008, of the UK as the 'partner of choice' for new Indian institutions. Under the UK-India Education and Research Initiative scheme, the first phase of partnership will feature reciprocal visits led by our International Dean for the region.

The focus is on providing training and consultancy for exemplary learning methods, and development that encourages the integration of natural and social sciences in research and teaching. The second phase of activity will expand to include research collaboration and potentially joint or split-site PhDs.



A university focused on research growth

Investing in the future excellence and diversity of our research community is a priority at Glasgow. The Lord Kelvin/Adam Smith Scholarship scheme, for example, is supporting early career researchers who have the potential to become leaders in their chosen fields.

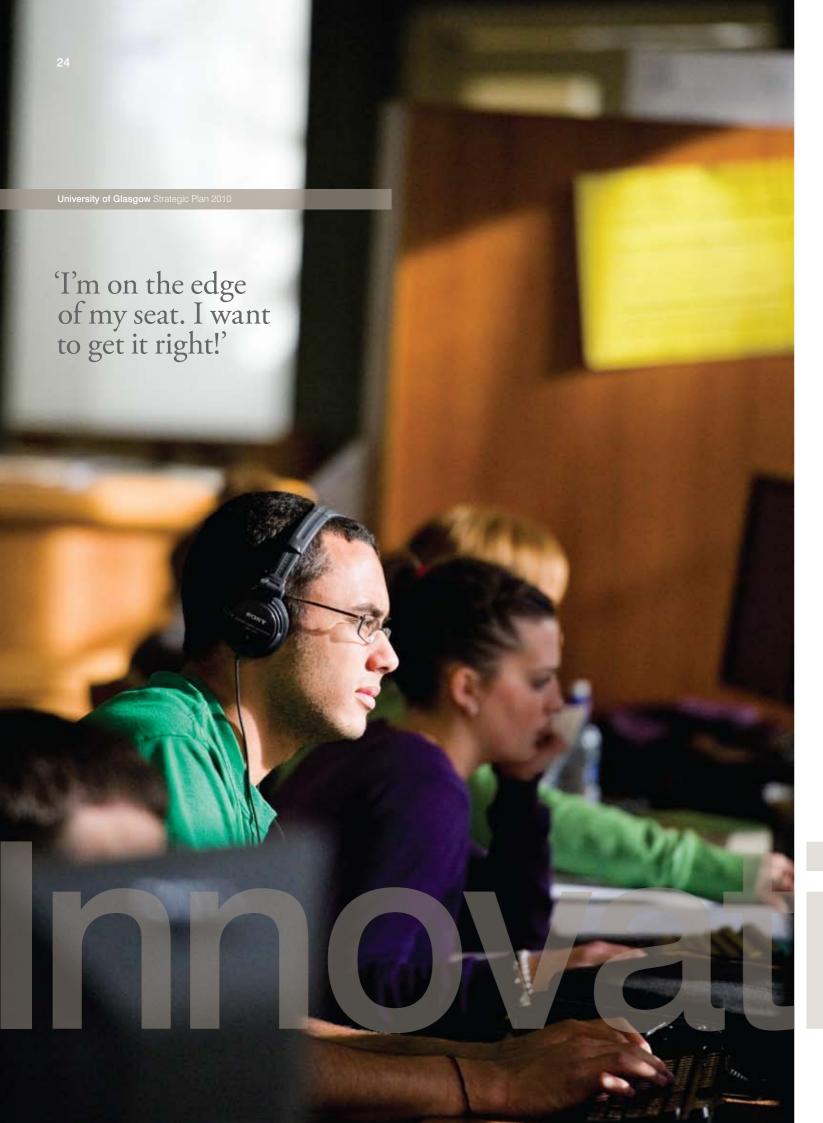
Current scholar Emma Laurie is being funded by the scheme to participate in an interdisciplinary collaboration that spans the School of Geography & Earth Sciences, the Institute of Infection, Immunity & Inflammation and the Institute of Biodiversity, Animal Health & Comparative Medicine. Working in Dar Es Salaam, Tanzania, she is investigating the relationship between malaria and household vulnerability.

'Statistics obscure human suffering,' she explains.
'This research is not concerned with large statistics, but with the individuals behind them. Malaria impacts upon the entire household. It disrupts education.
It disrupts employment. My research is focused on determining these impacts along with others,

establishing if or how they differ according to the social and economic status of the households as well as the gender and age of its members.

'In bringing together multiple aspects of malaria and understanding the relationship households have with the disease, I hope to help produce prevention policies which are scientifically sound and also tailored to be appropriate to the population.'

Other research projects supported by the scheme include an investigation into the design of sustainable urban drainage systems, and an examination of the theatricality of political trials. Stimulating and sustaining leading-edge interdisciplinary research in such diverse areas of interest, the scholarships offer the opportunity for outstanding students from across the world to participate in some of the most exciting areas of research taking place at Glasgow, while also developing their research skills.



A university with an innovative approach to teaching



How do you help students learn a difficult skill like computer programming?

- a) improve motivation levels
- b) diagnose problems early and offer peer assisted learning
- c) use voting handset technology to improve engagement with lectures
- d) all of the above.

Dr Quintin Cutts is never afraid to try something new. Using all of these methods and more, he's been helping students to become better learners, and this year he's been recognised with a national award from the Higher Education Academy for his efforts.

Perhaps surprisingly, some of Dr Cutts's theories about teaching computer science come from his experiences of learning to scuba dive as a postgraduate and later, training others to dive.

'I was struck that some of the best divers didn't look like they were going to be good at the beginning,' he says. 'It took them a long time to learn a few core skills that you've got to get, like clearing your mask.

'Computer programming is the same. Around the world it's viewed as being a problem course – high drop out rate, high failure rate. There's an attitude that people either can or can't do it. And I just don't buy that. It's like the diver. Everyone gets there in the end if they put enough effort in.'

One of the ways Dr Cutts is improving motivation levels among his students is by using electronic voting handsets similar those used in the television programme Who Wants to be a Millionaire. He has found that students presented with a problem-solving task and asked to use the handsets to give an answer are twice as likely to construct a response as those simply asked to put their hand up.

'The two reasons handsets are really good are because they're anonymous and yet they're engaging,' Dr Cutts explains. 'Students answer because they're anonymous, and because they answer they're more engaged in the class. One student said in his feedback, "I'm on the edge of my seat. I want to get it right!" You could tell it was a real motivation for him to be there and do well.'

Understanding that students learn at different speeds and in different ways, Dr Cutts has also been helping those found to be struggling by offering a system of peer assisted learning. In a completely redesigned course induction session last year, Dr Cutts asked new undergraduates to use their voting handsets to text in any problems that they were worried about. Second year students were then brought into the session to discuss how they had dealt with similar issues and act as mentors.

'The students were really enthusiastic about this sense of collegiality and being looked after,' Dr Cutts says. 'We got rave reviews. They were pleased to be part of an institution that cared about them.'



A university where students are listened to



Morven Boyd, Glasgow's student Vice President for Learning and Development clears her throat. 'I do feel that students have quite

a big voice here,' she says.

For the last year, Morven has worked to represent the needs and opinions of Glasgow's students as one of four sabbatical officers at the Students' Representative Council (SRC). She's pleased to see that more than ever, students are getting involved in the governance of their University.

'We've got a massive network of student class representatives,' she says. 'This year, 642 reps were trained at Glasgow, which is more than half of all the reps trained in Scotland. After training they attend staff student liaison committees, which is a way for staff and students to discuss what's working and what's not in their degree programmes. Students can give their opinions.'



Sophie Hall, Vice President for Student Support, adds, 'Another thing we have is our advice centre, which is a great way for us to keep on top of issues

affecting students. If someone comes forward with a problem and there's nothing in place already to help them, then we can take the matter further.'

The University's new Student Carers' Policy, which Sophie helped to draft this year, is a case in point. 'We recognised that there was no dedicated policy to support students who have care responsibilities,' she explains. 'We wanted to make sure that if these students needed time off then there would be a mechanism in place to make sure that they could catch up, without any detriment to their studies.

'We are the first university in the UK to have a dedicated carers' policy for students,' Sophie continues, 'and it all happened because of students coming in with an issue and us being able to take it further, in this case to the Student Support and Development Committee.'

We have strategic alliances and collaborative research links with leading universities across the world

We'll achieve our vision by:

Strengthening international partnerships

We have strategic alliances and strong collaborative research links with leading research-intensive universities across the world. Throughout the planning period, we'll develop more strategic international alliances that bring mutual and sustainable benefits. Part of our strategic plan is a programme of international outreach activity, using a range of academic, business and alumni networks.

Expanding our international student community

International students can enrich university and city life with their different experiences and perspectives. Expanding our international student community will mean focusing on international students' integration and offering them an exceptional experience.

Providing international learning opportunities

Students are attracted by opportunities to live and study overseas. We currently offer a wide range of international study opportunities and work placements through credited and voluntary courses, and links with employers. We provide preparatory language courses to support international learning, and we'll keep developing opportunities through our international networks and European partners.

Developing collaborative degree programmes

We'll continue building our portfolio of high-quality collaborative programmes with a range of strategic partners, including members of our international networks.

We'll work with education providers such as Kaplan International Colleges to develop new partnership models of teaching and learning – combining our strong academic profile with our partners' extensive market reach.



Extending our global reach: from USA to Africa to China

The University has developed a flagship partnership with Columbia University in New York. This link aims to develop joint research; to create exchange programmes for staff and students; and to share knowledge internationally. We have developed collaborations in a shared area of expertise biomedical science - specifically cardiovascular medicine, neurobiology, clinical trials, public health, comparative medicine, and cancer research. So far, this has resulted in exchange visits for staff, a successful lectures series and a £100k fund for developing a Glasgow/Columbia joint programme in cancer research. Other fruitful activities have included joint presentations on research funding opportunities, joint publications in cardiovascular physiology and pharmacology, joint research into the genetics of cardiovascular disease and research links in spinal cord neuroscience.

Looking to the future, we plan to sign a Memorandum of Understanding and make a joint appointment in cardiovascular research. We will explore future research collaboration in integrative and systems biology, joint clinical trials, and bioengineering. We will develop student exchange programmes and joint programmes between the Business Schools. In all of this, we believe we will transfer knowledge to the benefit of both partners, our respective countries, and to the wider world.

In Tanzania, our partnership is with a new public institution, the University of Dodoma, founded in 2007. The Dodoma collaboration reflects our traditional commitment to philanthropic activity – essentially a capacity building partnership at this

stage, to aid this new university with its ambitious growth plans. Joint development plans, with an emphasis on developing staff research capacity and curriculum development, have already attracted \$3.8m from international funding agencies, with another major joint funding bid through the World Bank currently pending. Our priorities for joint academic activity are nursing and sustainable energy, and as the University of Dodoma continues to grow, we will explore other areas of shared activity.

Our engagement with China includes working with a range of partners to further our education, research, development and innovation agenda. Nankai University, one of the prestigious '985' group of Chinese universities, is located in Tianjin city. Nankai and Glasgow have a history of research collaboration in the areas of politics, chemistry, biology and engineering, and the ongoing commitment to developing broader and deeper links was marked by the signing of a Memorandum of Understanding in 2009. Joint research projects will be enhanced with student exchanges, and the development of a further strand of academic engagement in the area of art and cultural exchange. Glasgow's world-leading academic reputation in art history, its interest in Chinese art, and the city's important Chinese collections, access to which are supported by the Collaborative Framework Agreement between the City of Glasgow (through Glasgow Life) and the University, offer a unique platform for developing our strategic partnership with Nankai University and connecting the local communities for mutual enrichment.



Our commitment

Our students, staff and research funders will expect the university's infrastructure to be 'fit for purpose'. This will mean using the estate's buildings and resources more efficiently.

Physical infrastructure

Our architectural heritage and award-winning new buildings attract students, staff, and visitors from all over the world.

We will continue to invest in our estate through a number of major projects, including:

- moving some of the Western Infirmary and Yorkhill teaching and research activity to the new South Glasgow Hospital
- a new Cancer Science building at Garscube Campus focusing on Translational Research
- a new world-leading Centre for Virus Research on the Garscube Campus
- acquiring the Western Infirmary site as room for future expansion
- upgrades to the library, lecture theatres, seminar rooms, teaching laboratories and informal learning spaces
- a rolling programme of IT and research equipment upgrades.

Using the estate more efficiently

Maintaining and running the university estate is second only to staff salaries in terms of expenditure. By reducing our overall estate and using what remains more efficiently, we can reduce running costs and focus on infrastructure quality. As well as ensuring refurbishment and new build projects make the most efficient use of available resources, we can make better use of existing teaching spaces by:

- · developing a better understanding of how we use them
- providing online access to timetabling and room booking information
- removing the peaks and troughs of room use in each teaching week.

Reducing our carbon footprint

The Scottish Government has set challenging targets for carbon reduction, and we've agreed a Carbon Management Programme. Among its many objectives are plans to raise staff awareness of energy use, invest in more energy-efficient appliances and ensure new buildings and refurbishment projects meet the highest achievable standards of energy efficiency.



Infrastructure

