2007/08

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2. From research councils and other government agencies

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Grand Total £’000 212,226

Note:
The above list sets out the total project value of research grants funded from these sponsors. The sponsors will have contributed the total amount, with the exception of some governmental sources (including research councils) and charitable sources, who fund the majority with the balance being received indirectly via the Scottish Funding Council.

Front cover: The Informatics Forum, Crichton Street.
2007/08
Our Vision

To shape the future by attracting and developing the world’s most promising students and outstanding staff.

2007/08
Our Mission

The mission of our University is the creation, dissemination and curation of knowledge. As a world-leading centre of academic excellence we aim to:

• enhance our position as one of the world’s leading research and teaching universities and to measure our performance against the highest international standards

• provide the highest-quality learning and teaching environment for the greater wellbeing of our students and deliver an outstanding educational portfolio

• produce graduates fully equipped to achieve the highest personal and professional standards

• make a significant, sustainable and socially responsible contribution to Scotland, the UK and the world, promoting health and economic and cultural wellbeing.
“We are proud of our heritage as one of the great universities of Scotland and of the UK, but increasingly the research we carry out is transcending national boundaries and is shaping the lives of people all over the world.”
The past year has witnessed continued achievement and success across the University. This is especially encouraging when set against the backdrop of the present uncertainties in the global economy.

In the current demanding financial climate, the University’s position remains solid. We continue to attract high levels of external research funding as outlined in the Financial Review (pages 24 and 25) – a testament to the quality and innovation of our academic staff. The University remains hugely popular with students of the highest calibre. Once again last year, we did not enter the UK Clearing system for any of our undergraduate programmes and we continue to be the institution of choice for a growing number of students from around the world (page 33).

We have successfully positioned ourselves as a global player in research and teaching. This is reflected in the growing international reputation of the University and its stock as one of the world’s key higher education institutions.

We are proud of our heritage as one of the great universities of Scotland and of the UK, but increasingly the research we carry out is transcending national boundaries and is shaping the lives of people all over the world. Our present-day pioneers are building on the innovation of their distinguished forerunners – such groundbreaking academics as Joseph Lister, Sir James Young Simpson and James Clerk Maxwell, whose work changed lives for the better.

The ongoing development of our central area is physical testimony to our ambitions and our innovative capacity, and we were proud in 2008 to open the cutting-edge buildings which make up the Potterrow development – the Informatics Forum, the Dugald Stewart Building and the new University Visitor Centre.

The areas of University life on which we have chosen to focus in this year’s Annual Review are a snapshot of the work that we are undertaking in a multitude of fields, and the articles are intended to showcase the breadth and diversity of our endeavours and the extent to which our research, discoveries and achievements are of international significance.

Our partnership with the Kingdom Foundation is a fine example of how our work transcends national boundaries. Following a £16 million endowment by Prince Alwaleed Bin Talal, shared equally between our University and the University of Cambridge, we are establishing a new research centre in Islamic Studies which will carry out research and public engagement aimed at enhancing understanding between the Muslim world and the West.

One of the greatest global challenges that we are currently facing is climate change, and our researchers are playing a key role not only in tracking its impact but in mitigating its effects. In this year’s Annual Review, we highlight the work of Professor Martin Siegert and his team in Antarctica, as well as the University’s contribution to the creation of a hybrid car that uses hydraulic power to supplement its conventional engine.

We are making major contributions to advances in animal sciences and stem cell therapy. A milestone has been the recent merger between the University and the Roslin Institute to create a world-leading centre for research into genetics and genomics, infection and immunity, neurodegeneration and developmental biology. Funding from Scottish Enterprise and the Medical Research Council in collaboration with the UK Stem Cell Foundation is helping to advance our knowledge of how stem cells can be used to fight life-threatening conditions.

Our global aspirations are not just about looking ahead to our international future – they are also about celebrating our international past. To mark its 150th anniversary, the University’s General Council held its first ever meeting in North America, where our historic links with the US were celebrated in a series of events in Washington DC.

This year’s Annual Review would not be complete without a summary of our wonderful track record in sporting achievement. This year we were able to mark the achievements of the University’s sporting greats with the creation of a Hall of Fame, which includes world-renowned athletes such as Eric Liddell.

On a personal note, it was a great privilege for me to welcome University Olympians to a reception at the British Embassy in Beijing, attended by two of our most distinguished alumni, the Prime Minister, Gordon Brown, and triple gold medallist Chris Hoy. Chris is a marvellous ambassador for the University and his world-beating performance in Beijing is an excellent example to us all of what can be achieved in the international arena when you set your standards high.

Professor Sir Timothy O’Shea BSc, PhD, FRSE
2007/08
Investing in the Future: Revitalising the Heart of the University Campus

With the opening of the new buildings for the Schools of Informatics and Philosophy, Psychology & Language Sciences (PPLS), the University of Edinburgh has taken a big step towards refurbishing the heart of the campus while also uniting the staff of two previously widely scattered Schools.

The £60 million project, which occupies what was for many years an open car park lying between George and Bristo Squares, has brought new definition to the central core of the University, with a clear pedestrian route now linking the two squares. Equally importantly, they are bringing benefits to the Schools in improved communications and greater contact between staff, resulting already in even greater research output.

Angus Currie, the University’s Director of Estates & Buildings, says that under a development framework endorsed by Edinburgh City Council in 2004, a major goal is to create a more coherent and identifiable precinct in the traditional heart of the University. He says the aim is to improve the access linking the iconic buildings of the University – Old College, the Old Medical School and McEwan Hall – with George Square and the Main Library. This will ultimately mean narrowing and realigning the dual carriageway that loops around the Potterrow student centre and Business School buildings, which will be demolished, creating significant new development opportunities and a more pedestrian-friendly environment to the north.

"To get approval for the projects it was important that we showed we had a coherent long-term vision for the whole area," Mr Currie explains. "We have gone through a lot of consultation with the City Council, Historic Scotland and community groups, and I think the way the University approached it, right from the very early stages of planning, has been a good piece of town and gown relationship building," he says.

The Informatics building – named the Informatics Forum – was designed from the start as a "building for interaction", says Professor Michael Fourman, Head of the School of Informatics.

"Being together under one roof for the first time lets us exploit and recognise the commonality of what we are doing, to find out about each other's methodology and ideas," he explains. "We have a lot of informal meeting spaces and there is a lot of visibility, so when people are moving around the building they are easy to see, and it has a lot of vertical connectivity. It's already making a difference: there are people who have been in the School for years but have seldom spoken to each other because their offices were literally miles apart, and now they are writing papers together. Also, the students now get access to the whole range of staff, rather than just the ones in the building where they happened to be."

Professor Fourman tells us that because the building is so interactive, he hopes it will be used as a pilot study for a research project looking at how architecture affects academic work. This may lead to a wider study comparing various computing departments that are housed in new buildings to find what works and what doesn't.

Another feature of the building is the art on display, particularly a number of Eduardo Paolozzi prints and sculptures. Professor Fourman explains: "One of the things we're doing is looking at the links between technology and the arts. We're interested in how people and machines acquire, store, process and communicate information. Art can be an important part of that, and we are collaborating with the Edinburgh College of Art in this area – having these pieces on display is a great way of anchoring that."

The adjacent Dugald Stewart Building, housing PPLS, also brings together what had been a very scattered School, and Professor April McMahon, Head of the College of Humanities & Social Science, says the new building was "absolutely vital for PPLS".

"The School was previously spread over six different sites and that simply didn't allow us to properly develop the kinds of interdisciplinary projects we really want to be working on," she explains. "The new building allows our students to interact better, it allows academics and researchers to interact better – it's a huge step forward."

"Interaction is the key and that is something we think this building is ideally set up to capitalise on. We're taking things to a new level – we've given all postgraduates laptops and the whole building is wireless to enable people to work in the break-out areas and the common rooms – it's really quite exciting."

Between the Informatics Forum and the Dugald Stewart Building lies a new, state-of-the-art Visitor Centre, which encompasses a gift shop, information centre and exhibition space. The Centre provides a focal point for anyone who has an interest in the University – past, present or future.

Further building projects are also planned. The third phase of the development will see another L-shaped building on the site, creating an internal courtyard. Meanwhile, Angus Currie says his department is pressing ahead with a range of other important works on University buildings. A project is under way to replace McEwan Hall's lead roof, after which a full renovation of the interior will be planned.

A full refurbishment of the Old Medical School building has also begun, with work on the south-west extension recently completed and work on the west wing due to start shortly. A £60 million overhaul of the Main Library is entering its second stage, and work has begun on the Astor Ferguson Building, which will see a new floor added and a pavilion extension built on to Buccleuch Place, for the University’s Business School. Internal refurbishment of Appleton Tower is nearly complete and the next goal will be to overlaid its exterior and create a new entrance.

"This is an extremely complicated period of planning, which saw us move more than 1,000 University staff during the summer," Mr Currie says. "This work is essential – all the 1960s and early 1970s buildings are tired, and we are now looking at what will be next, with appraisals under way on both David Hume Tower and the William Robertson Building."
From left: Professor Bob Ladd, Head of the School of Philosophy, Psychology & Language Sciences, Professor April McMahon, Head of the College of Humanities & Social Science, and Professor Michael Fourman, Head of the School of Informatics, in the atrium of the Informatics Forum.
Close Collaboration: Developing Europe’s Research Hub for Islamic Studies

The University is set to take a leading role in developing greater understanding between the Muslim world and the West with the opening of its new HRH Prince Alwaleed Bin Talal Centre for the Study of Islam in the Modern World.

The Centre was established with £8 million in funding from HRH Prince Alwaleed Bin Talal, Chairman of the Kingdom Foundation in Saudi Arabia, and builds upon the University’s long-standing status as one of the world’s leading institutions in the field of Islamic and Middle Eastern studies.

Professor Carole Hillenbrand, recently retired Head of Islamic & Middle Eastern Studies (IMES) in the University’s School of Literatures, Languages & Cultures, says that Arabic has been taught at the University of Edinburgh for more than 250 years. Since the middle of the 20th century, the areas of study and the number of students have expanded enormously. Among the famous scholars who have taught at the University are Professor William Montgomery Watt, renowned for his work on the Prophet Muhammad; Dr Richard Bell, whose name is almost synonymous with Qur’anic studies; and Professor L P Elwell-Sutton, who was an outstanding scholar in the field of Persian studies.

More recently, in 2005, Professor Hillenbrand was the first non-Muslim to win the King Faisal Prize for Islamic Studies, which is widely regarded as the Arab world’s equivalent of the Nobel Prize. Her husband, Professor Robert Hillenbrand, and his colleague Dr Andrew Newman, have also been awarded prestigious prizes from the Middle East in recent years.

The University won a highly competitive bidding process to host the new Study Centre. Professor Hillenbrand explains: “The Prince has already endowed two centres in the US, at Harvard and Georgetown, to promote better understanding between the Muslim and Western worlds and he wanted to do the same in the UK. The two successful universities were Edinburgh and Cambridge. This new Centre is an incredible opportunity – we have the potential now at Edinburgh to become one of the two most influential institutions for these studies in the UK, if not in Europe.”

Professor Hillenbrand says the two UK centres will focus on complementary areas: “Edinburgh is going to look at the ongoing contribution of Islamic civilisation, and we will also study Muslims in Britain. We deliberately chose one subject that goes right back in history, and one very contemporary project. It is extremely important nowadays in Britain that we know more about Muslims who live here and that we understand how young diaspora Muslims feel in the UK and try to establish good relations with them. Nothing could be more timely.”

She says that the level of funding and staffing provided by the Centre will allow important new work to be done in these areas. “We want to be the best place in the UK for the study of Islam in the contemporary world, especially relating to issues of Islam in Britain,” she explains.

“What we need in a post-9/11 world is knowledge and understanding of different cultures and religious belief systems as well as respect for their various achievements. That’s why we have chosen a project that will aim to embed knowledge of Islamic civilisation into our educational system.”

Professor Hillenbrand continues: “The University of Edinburgh has for a long time had a very strong reputation in classical Islamic studies and the idea is that we will develop a comprehensive educational outreach programme that will go out to schools and to the public to tell them about what Muslims achieved in the Middle Ages in physics, astronomy, mathematics, medicine, architecture – areas where Muslims were advanced for the age.”

The new Centre will be led by a Director who will be known as the HRH Prince Alwaleed Bin Talal Professor of Islam in the Modern World. Other staff will include an outreach officer, an administrative officer, two outreach postdoctoral fellows and three outreach doctoral students. The new Centre will be housed close to IMES in George Square, and Professor Hillenbrand says there will be a high level of collaboration between colleagues there.

“We expect to have seminars, conferences, symposia and public meetings and we want to engage with the wider community – the Scottish Parliament, the Scottish Government, community leaders – not just Muslims,” she says. “It is just as important to engage with non-Muslim groups to spread knowledge and therefore understanding.”

Professor Yasir Suleiman, Head of the Department of Middle Eastern Studies and Director of the Centre of Middle Eastern and Islamic Studies at the University of Cambridge, says the Cambridge centre will concentrate initially on working on Muslim identities in Britain, and on the representation of Muslims and Islam in the media in the UK and Europe.

As well as the close links that will exist between the two UK centres, there is also a strong bond between Professor Suleiman and the University of Edinburgh – he taught at the University for 16 years and was part of the bid team that brought the Centre to Edinburgh. He says: “The two centres will cooperate with each other, and they will also cooperate with the two US institutions, along with two other centres, at the American University of Beirut and the American University in Cairo, that are funded by the Prince and that look at Western, and particularly American, life and society.”

Professors Hillenbrand and Suleiman agree that thanks to the support of the Kingdom Foundation, the UK can emerge as Europe’s research hub for Islamic studies.
Professor Carole Hillenbrand, recently retired Head of Islamic & Middle Eastern Studies, in the School of Literatures, Languages & Cultures.
Ice and Isolation: Unlocking the Earth’s Secrets in Antarctica

The University of Edinburgh is leading an international research consortium that aims to unlock the secrets of a lake that has lain sealed deep under the Antarctic ice sheet for tens of thousands of years.

The existence of Antarctic sub-glacial lakes has been known since the 1970s, but it is only recently that scientists have begun a concerted effort to study them, believing they may hold vital clues to previous climate change events and also provide further evidence as to how life developed and whether it could exist on other planets.

Professor Martin Siegert, Head of the School of GeoSciences at the University of Edinburgh, has been the driving force behind a project focusing on Lake Ellsworth, a sub-glacial lake about the size of England’s Lake Windermere. It is 160 metres deep and lies three kilometres under the West Antarctic ice sheet.

The project draws together some 15 UK universities, led by the University of Edinburgh, along with institutions from the US, Belgium, Germany, Sweden, New Zealand and Chile. The intention is to drill through the ice cover and into the lake, then extract samples of water and sediment from the lake floor and use a remote-controlled camera to provide the first ever film footage from a sub-glacial lake.

Professor Siegert has put forward a £6.7 million funding proposal to the Natural Environment Research Council and, if successful, his team will go to the other guys’ tent for a change of scene.” he explains.

He says the project can address questions of science such as: Is there life in sub-glacial lakes and how does it function? Are there sediments on the floors of sub-glacial lakes that might contain records of past changes in the ice sheet? Are the conditions in sub-glacial lakes analogous to other planets?

“The expectation is that there will be microbial life – it would be a huge surprise to find nothing,” Professor Siegert says. “What we are really interested in studying is how they are surviving, and the adaptation strategies they use to live in an environment with no sunlight and very high pressure. This knowledge can help us to understand how life evolved on our planet and how life may exist on other planets. So far, we have found that microbial life can exist in the vents of volcanoes, deep under the ocean and even in the cooling rods of nuclear reactors – wherever water is present.”

Professor Siegert says that if water really is the key to life, then the great question to ask is whether there is water-based life elsewhere. He points to Jupiter’s moon Europa, which has an ice crust some 11 kilometres thick with liquid water beneath it. “If there is life on Europa, it will be under complete darkness, lots of pressure, and having to use chemicals to power biological processes in exactly the same way that whatever is living in a subglacial lake will,” he explains.

The study could also cast important light on what changes have previously occurred to the vast West Antarctic ice sheet. “Some people think it has changed through natural processes in the past, but we don’t know when that happened, because there is no record of ice sheet change,” Professor Siegert says. “To get that record we need somewhere where there has been a persistent yet variable rate of accumulation of some material, in a very low-energy environment, and in a location that is critical to any change that we are trying to look at,” he explains. “It so happens that a sub-glacial lake would capture that record. If we can obtain a sample of the sediment from the bottom of Lake Ellsworth, we can determine when it wasn’t a lake; in other words when the West Antarctic ice sheet was last not there.”

Work has already begun at the site, with Dr Neil Ross, Research Associate at the University’s School of GeoSciences, spending four months there during 2007 and 2008 as part of a four-strong team conducting radar and seismic surveys to learn more about the lake. Dr Ross flew from Punta Arenas in Chile to the British Antarctic Survey (BAS) Rothera Research Station base on the Antarctic Peninsula, then on to Lake Ellsworth, “a distance equivalent to Edinburgh to Milan – but a six-hour flight in a Twin Otter”.

“Dan Fitzgerald from the BAS and I went in as a kind of advance party for the first week, with very limited living equipment,” Dr Ross explains. “You don’t realise how isolated you are until the plane takes off and you look around and there is absolutely nothing. That was pretty exciting. They started supply flights during that time and in total we had about 11 plane loads of equipment – around four tonnes of scientific equipment, with food and supplies on top of that.”

He says that even in summer, the weather was savage: “We had some really bad storms during December, where in some cases we were stuck in our two tents for seven days out of nine. We had two people in each tent, and all you could do was go to the other guys’ tent for a change of scene.”

Professor Kathy Whaler, Head of the Research Strategy Group for the School of GeoSciences, says the Lake Ellsworth project demonstrates the greater opportunities that have come with the creation of the School.

“We now have the capability to lead big, international projects like this, encompassing a wide range of different research areas, from geophysics, surface processes and remote sensing through to ecology, climate change and how life evolved on Earth,” she explains.

Professor Whaler adds that working with the BAS on this project builds on the School’s existing close links with other research centres such as the Centre for Ecology & Hydrology and the British Geological Survey.
Professor Martin Siegert, Head of the School of GeoSciences, by one of Edinburgh’s geological wonders, the locally known “Samson’s Ribs” at Salisbury Crags, Arthur’s Seat.
Roslin Institute researchers have combined with experts from the University of Edinburgh’s Royal (Dick) School of Veterinary Studies (RDSVS) to create a world-leading centre for the study of animal sciences known as the Roslin Institute of the University of Edinburgh.

The merger means the Roslin Institute and the RDSVS now host some 50 scientific groups focusing on genetics and genomics, infection and immunity, neurodegeneration and developmental biology, and will represent the hub of veterinary research within the University.

Professor Elaine Watson, Head of the RDSVS, says the merger has given the School critical mass, has allowed for a great increase in its interdisciplinary abilities and will enable much more work to be done that has a direct relation to human health issues. Following the merger, the School and the Institute will move to new buildings as part of a major development at the University’s Easter Bush site.

“This is an enormous boost to our research effort,” she explains. “With our fantastic new facilities and equipment and our links with the Medical School, we are going to be highly competitive for getting grants and highly attractive for recruiting new staff. Having a world-class research institute located right next to our clinics and practices presents us with boundless opportunities for our patients, and ultimately human beings, to benefit from the translational and comparative research being carried out right next door.

“Our students will also benefit from unprecedented exposure to top-quality research, addressing the global shortage of veterinary-trained researchers.”

Professor David Hume, Director of the Roslin Institute and Research Director of the RDSVS, says that the expanded Institute is also much more cost effective, with reduced overheads and operating expenses, “so we essentially get more science done for the money we receive”.

“The Roslin Institute gains from being integrated into the intellectual powerhouse of the University of Edinburgh, with its tremendous wealth of experience and resource available to us,” he says.

Following the merger, the Institute is embarking on a recruitment drive with the aim of attracting 10 more research groups, building its staff numbers to 500. The Institute has received £40 million in research funding from the Biotechnology and Biological Sciences Research Council for the next five years, and its total research budget for 2008 was around £25 million.

Professor Hume says that while the Institute gained international fame with its creation of Dolly the sheep, the first mammal to be cloned from an adult cell, it also has a proud record in other areas of developmental biology. “We are probably best known in the livestock industries for our work on quantitative genetics and the development of new approaches to breeding that essentially optimise production without generating inbreeding,” he explains.

“At the same time, many of the people joining Roslin from the RDSVS work in the area of infectious diseases and immunity so there is a tremendous synergy from bringing those different expertises into one organisation.”

Professor Watson says another exciting development has been the creation of the Easter Bush Research Consortium, which sees the Institute and School joining forces with the Scottish Agricultural College and the Moredun Research Institute. The consortium will streamline research on disease controls and treatments, food safety, animal welfare and sustainable management of farm animals and also focus on animal and human health. A key part of its work will be to identify new and emerging diseases that can pass from livestock and wild animals to humans, and to understand the ways in which these diseases work.
Professor Elaine Watson, Head of the Royal (Dick) School of Veterinary Studies, outside the University's Hospital for Small Animals.
2007/08

International Relations:
The General Council Crosses the Atlantic

The close ties that link the University of Edinburgh and the United States of America were celebrated in 2008 when the University’s General Council held its first ever meeting in North America, giving hundreds of US- and Canada-based alumni an opportunity to participate in Council activities.

The Washington DC meeting was part of a three-day programme of events that celebrated the General Council’s 150th anniversary. Other activities organised in partnership with the University’s Development and Alumni office and Protocol office included a ceremony at the British Ambassador’s Residence to bestow an honorary doctorate on astronaut Neil Armstrong, a conference on how businesses are approaching climate change, and a gala dinner at the Library of Congress, with guest speaker, former Foreign Secretary and Edinburgh alumnus Sir Malcolm Rifkind.

The General Council meeting was hosted by the University of Edinburgh’s exchange partner, Georgetown University. After the meeting, robed Council and University members, headed by Acting Mace-Bearer and Chairman of the University of Edinburgh USA Development Trust Dr Roualeyn Fenton-May, processed across the campus to Healy Hall and the Office of the President of Georgetown University.

Dr Ann Matheson, Secretary of the General Council, says that the connections between the University and the United States are now stronger than ever, thanks to a growing number of formal and informal partnerships and exchange schemes between the University of Edinburgh and many of the most prestigious universities and colleges in the US.

“At the Washington meeting, about 70 per cent of attendees came from the US and Canada,” Dr Matheson says. “It was very gratifying that members got up in the meeting and thanked the General Council and the University for coming to the US, and made the point that they would receive a first-rate education with such well-established, long-standing partnerships and the gateway to Europe. It is bound to be an enriching experience.”

Dr Matheson explains that the General Council, the body of all the University’s graduates, was created by an Act of Parliament in 1858 to give alumni a continuing voice in the governance of the University. “In the early days, they were very much involved in pressing for change from the then uniform curriculum to one that offered students a wider range of courses, and they also strongly supported the admission of women as students.

“In the beginning, the General Council was very active in helping the University evolve, expand and develop, but over the intervening 150 years, as the University has professionalised and developed its skills, the role of the General Council has adapted to these changes. Now we could ideally characterise our role as being akin to that of ‘wise advisors’, and we are very careful to be constructive rather than interfering.”

Until 2004, all of the General Council’s statutory meetings were held in Edinburgh, but Dr Matheson says that with 145,000 graduates scattered around the world, the decision was made to hold its June meeting away from Edinburgh every other year, beginning with London in 2004, Paris in 2006, and Washington DC in 2008. “The feedback that we have received from graduates who are living for example in the US or the rest of Europe has been very positive, with many people saying they are delighted to have been able to attend the meetings,” she explains.

The conferment of Mr Armstrong’s doctorate honoris causa was another highlight of the anniversary events. The laureation address was delivered by fellow astronaut and Edinburgh graduate Dr Piers Sellers, who said that when Mr Armstrong first stepped on to the Moon’s surface, he united the world in a way seldom seen before or since. As well as reflecting Mr Armstrong’s contributions to aeronautics, education and business, the degree also reflected his family links to Scotland – his family comes from the south of Scotland and in 1972 he was made a Freeman of the burgh of Langholm.

Edinburgh alumni were also able to participate in the conference on how businesses are responding to climate change, held in the Rotunda of the British Embassy. Senior representatives from Wal-Mart, Coca-Cola, Citigroup, the FTSE and Climate Change Capital took part. The keynote speech was delivered by Jennifer Layke, Deputy Director of the Climate and Energy Program at the World Resources Institute and the meeting was chaired by Dr Craig Mackenzie, Director of the University of Edinburgh’s Carbon Benchmarking Project.

Dr Matheson says holding the General Council meeting in Washington DC reinforced the strong ties between the University and the United States. “We have a historical connection with the United States that goes back about 300 years, and in fact the higher education system in the United States is essentially modelled on the University of Edinburgh system.”

The University of Edinburgh currently has about 1,500 American students – its biggest cohort from overseas – and is very active in recruiting from the US. Rebecca Gaukroger, Assistant Director of the University’s International Office, says she spends about 10 weeks a year in the US, building relationships with colleges, high schools and individual students. “In any year, as many as 100 different US institutions send us students, and we are hoping to build student numbers even further in coming years,” she explains.

Anna Maslow, from Roanoake, Virginia, is about to enter her third year studying International Relations at the University and says she wanted to study at Edinburgh to give her degree “extra weight”. “In America there simply are no institutions of higher learning with such well-established, long-standing history and reputation.”

Enoch Ebono graduated with a History degree from the University in 1987 and is now Assistant General Counsel at the US Trade and Development Agency. She says: “I would recommend studying at Edinburgh to US high school students. I would tell them that they would receive a first-rate education at one of the ancient universities in Scotland; that they would learn in an environment of great beauty and distinctive culture; and that they would be at the gateway to Europe. It is bound to be an enriching experience.”
Dr Ann Matheson, Secretary of the General Council.
Gearing up for Green Travel: University Research Drives Commercial Innovation

University of Edinburgh researchers are contributing to the creation of a hybrid car that uses hydraulic power to supplement its conventional engine, dramatically improving its fuel economy at a lower cost than the more familiar electric hybrid systems. The car is likely to enter commercial production soon.

The system, developed by Artemis Intelligent Power, replaces a car’s conventional gearbox and drive train with a hydraulic transmission that distributes power to hydraulic motors situated at each wheel. Dr Niall Caldwell, Senior Engineer at Artemis, says the process evolved out of mechanical engineering work undertaken at the University by Professor Stephen Salter and Dr Win Rampen.

Professor Salter and Dr Rampen’s research aimed to generate electricity from wave power. In order to commercialise this technology, Dr Caldwell explains, they had to look for mainstream applications. To begin with, the team looked at farm machinery before moving on to on-road vehicles. Dr Caldwell says that after proving the technology using small demonstration vehicles, Artemis received government funding to build a demonstrator based on a BMW saloon: “That has been a big success and has conclusively proven that it is possible to make a hydraulic hybrid vehicle that saves a lot of fuel compared with the conventional manual transmission.

“We have proven over the standard European driving cycle that we get about a 27 per cent reduction in fuel use, and in stop-start urban driving we get more than a 50 per cent reduction in fuel use.” Artemis has licensed the technology to Bosch, which will commercialise the process.

Dr Caldwell says the advantage hydraulic hybrids have over electric hybrids is that they are much more efficient in capturing the energy released through braking. “An electric hybrid can really struggle to capture that energy, and in fact the harder you drive it the more of that energy is wasted,” he explains. “You can end up in a situation where you would be better off in a conventional diesel car, but that is not the case with hydraulic hybrids because there is hardly any limit to how quickly you can store energy. This means the technology is most appropriate for vehicles that work in the city, such as city buses, garbage trucks and delivery vans, and that is the sort of area Bosch is targeting for the first commercialisation of the technology.”

In this new hybrid vehicle, hydraulic motors, housed in the space that would be taken up by the differential in a conventional car, drive the wheels and a hydraulic pump occupies the place where the standard gearbox would be. “It still has the standard engine, but because there is no mechanical link between the engine and the wheels, we can run the engine at the optimum speed for fuel consumption,” explains Dr Caldwell.

“When you accelerate, the motors at each wheel use stored hydraulic energy and when that is exhausted the engine starts and provides the energy in a seamless fashion. Once you are moving steadily the engine speed will drop almost to idle, just enough to keep the car moving. Then when you decelerate, the motors grab the energy and store it for the next acceleration.”

Dr Caldwell says that this system is less expensive, and uses simpler, more readily available parts than an electric hybrid. The usual approach with electric hybrids is to make a parallel system, which runs alongside the existing mechanical gearbox, he explains: “The electric system is an addition to the overall vehicle, whereas we substitute our transmission for the existing gearbox, allowing us to provide a hybrid system at a much smaller additional cost compared with an electric system.

“Our aim is to make hybrids an economic rather than a lifestyle choice, because large fleet users need to have an economic justification. An electric hybrid system can double the cost of a bus, and the payback time is very long, but we think that we can add hybrid functionality to a vehicle for much less than an equivalent electric system.”

He continues: “We also hope to demonstrate the technology for larger vehicles, such as a city bus, so we are hoping to get a project together for showing the potential of scaling the technology up.”

In the meantime, Dr Caldwell and his team are raising funds to create a wind turbine demonstrator. “The technology was always conceived with renewable energy in mind and wind turbines are a very large market now,” Dr Caldwell says. “Problems with conventional gearboxes in wind turbines are proving a real stumbling block to their effective commercialisation, especially off-shore where it costs so much to service, and we believe our technology can do away with that weak link. We’ve already designed a transmission which we hope to make and demonstrate, and that is a really active area that we are pushing into.”

In 1998, when Artemis Intelligent Power emerged from what is now the School of Engineering & Electronics at the University of Edinburgh, four companies were started by University staff and students. Throughout 2007 and 2008, a record 26 new companies were formed, reflecting the increased significance the University places on company formation as a way of transferring its knowledge and intellectual property into the wider economy. The University is now the leading creator of technology and knowledge-based companies in Scotland. Those companies successfully raise millions of pounds in investment each year and provide a large number of high-quality, high-value jobs.
Dr Niall Caldwell, 
Senior Engineer, 
Artemis Intelligent Power.
A Hall for Heroes: Honouring Sporting Achievement

The outstanding sporting achievements of University of Edinburgh students and graduates over the years have been celebrated with the creation of a Hall of Fame at the University’s Centre for Sport and Exercise (CSE).

The first inductees were Eric Liddell, gold medal winner of the 400m at the 1924 Olympic Games, Alison Ramsay, the most capped British women’s hockey player of all time, three-time Olympic rowing silver medallist Katherine Grainger, and Scotland and British Lions rugby great Andy Irvine.

The Hall of Fame was announced just before the start of the 2008 Beijing Olympics, which saw several University of Edinburgh students and graduates contribute to Great Britain’s outstanding results. Cyclist Chris Hoy, who graduated in 1999, became only the second Briton to win three gold medals at the same Games; Katherine Grainger, who graduated in 1997, won her third silver in successive Olympics; student Stephen Dick and alumnus Alistair McGregor competed with the men’s hockey team; and Euan Burton, who studied for a year at the University and still trains at the CSE, competed in judo. Those achievements were marked with a reception hosted by the University at the British Embassy in Beijing, and attended by Prime Minister Gordon Brown, his wife Sarah, British Olympians and China-based University of Edinburgh alumni.

Jim Atken, Director of Sport and Exercise at the University, says the Hall of Fame is an opportunity to formally acknowledge the continuing success that Edinburgh athletes have enjoyed after graduating. To be considered for the Hall of Fame, athletes must have been a student at the University and either have won a medal at an Olympic or Commonwealth Games or World Championship, or have made more than 100 international appearances at senior level.

“We were faced with a huge range of athletes to choose from, and future years will likely see the induction of such sporting stars as Olympic hero Chris Hoy, football internationalist Julie Fleeting, or rugby players such as Gregor Townsend or Simon Taylor,” Mr Atken says. “By acknowledging our graduates in this way, they can serve as an inspiration to current and future generations of students.”

Further excellent performances from University students and alumni seem likely with the CSE and Edinburgh University Sports Union (EUSU) jointly offering bursary programmes that support nearly 30 individual athletes and 13 top teams. Mr Atken says the bursary programme is aimed at students of a junior international standard or better, and provides financial support to help with coaching or training costs, as well as free sports medicine, gym membership, supervised strength training and conditioning, mentoring and sports psychology support.

“We have introduced a new value-added bursary programme for athletes with a particular eye on the London Olympic Games in 2012 and the Glasgow Commonwealth Games in 2014,” he explains. “Through that we are helping athletes who are real 2012 hopefuls, including Nony Mordi, who is a medical student and a triple jumper who got her first Great Britain international vest this year, and the very talented fencer Lisa McKenzie.”

Mr Atken continues: “There are no guarantees, but nearly 60 per cent of the Beijing team were either at university or were graduates of universities, so the university sector is a fantastic developing ground for elite athletes. Edinburgh has a very strong profile in performance sport, for a number of reasons, including our strength in sports medicine, our innovative conditioning programmes and our sports bursaries, which lead the way in Scotland.”

Among the outstanding athletes who have benefited from the CSE/EUSU’s help is second-year medical student Anne Ewing, who won her age group in the 2008 British Sprint Triathlon Championships and came third overall. She says the bursary programme was one of the biggest factors in the improvements she made during the year. “The strength and conditioning training has made me much stronger, in all three disciplines.

The CSE has just opened an indoor climbing wall and bouldering facility, and is planning a £5.5 million extension of its Pleasance gymnasium and indoor sports facilities, as well as progressing further improvements at Firbush Point Outdoor Centre and Peffermill Playing Fields.

Partnerships are key to the University’s sporting success. Close links between the CSE and EUSU have seen the University achieve top-five placings in British University Sports Association rankings for the last three years. These achievements will be further underpinned through new strategic partnerships with the likes of Scottish Hockey, Scottish Football and the Scottish Institute of Sport, and by building on the success of hosting major events such as the 2008 British University Games and the European Men’s C Division Basketball Championships and the World Universities Hockey Championships in 2010.
Jim Aitken, Director of Sport and Exercise, on the newly installed climbing wall in the University’s Centre for Sport and Exercise.
2007/08

From Stem Cell to Solution:
Leading the Way in Stem Cell Therapy

University of Edinburgh scientists are advancing their knowledge of how human embryonic stem cells can be used both to fight the ravages of liver disease and to help mend broken bones and cartilage, as a result of a multi-million pound funding injection.

Professor John Iredale, Professor of Medicine at the MRC Centre for Regenerative Medicine (CRM) at the University of Edinburgh, says the funding from Scottish Enterprise and the Medical Research Council (MRC) in collaboration with the UK Stem Cell Foundation is very important and timely, and makes a significant difference to the work his team is doing on creating cells that mimic the function of liver cells, or hepatocytes.

He says the liver is the body’s “great unsung hero, a biochemical factory responsible for myriad biological and physiological functions.” The cell that does all this is the hepatocyte, and Professor Iredale’s project is aimed at generating large numbers of hepatocyte-like cells from human embryonic stem cells. He stresses that the immediate aim is not to create cells that will be put into human beings, although this may ultimately be possible.

“The work we are doing has two much more direct benefits,” he explains. “The first is that, at the moment, to test the effect drugs have on the liver, we have to use hepatocytes that invariably come from the damaged livers of sick people, and that means our resources for drug testing have significant limitations. If we can create large numbers of uniformly high-quality hepatocyte-like cells, we can create a resource that will allow drug testing to be achieved to a new standard, which perhaps sounds mundane but is very important.

“The other area concerns the development of a device that can function like a dialysis machine for the liver. No one has yet been able to do this, and a key issue has been obtaining a regular supply of high-quality hepatocyte-like cells. If we can secure that supply, then the development of such a machine can move forward.”

Professor Iredale says his team is the leading group in the world in terms of generating hepatocytes from embryonic stem cells. “We currently have an emphatic advantage over US researchers in being able to use human embryonic stem cells, because as things stand, the only way to make a human hepatocyte-like cell is to use human stem cells. It now seems possible that other kinds of human cells can be transformed into stem cells (so-called reprogramming). Theoretically, these cells could then be developed into hepatocyte-like cells, so the research we are doing here will inevitably help with any future work done on re-programmed cells when that comes on line.”

Dr Brendon Noble, also based at the MRC Centre for Regenerative Medicine, is Coordinator of the Bone and Cartilage Repair Programme. Dr Noble tells us that the funding will help his team in its work involving directing both embryonic and the patient’s own stem cells into cells that make bone and cartilage.

“Cartilage damage from injury or diseases, such as osteoarthritis, is a major problem worldwide,” he explains. “If we can prevent cartilage from breaking down, or repair it, then we could potentially reduce the need for hip replacements. Equally, there are patients who have been involved in traumatic accidents where their bones have been shattered. If we can find a way of healing the bone using stem cells then we can dramatically improve the quality of life for these patients.”

Dr Noble says the new two-year funding was an “important injection of capital”, but he does not expect to be using the embryo-sourced, stem cell-derived cells in clinical tests soon: “When you are talking about putting someone else’s cells into a person, there are technical issues over rejection. We also need to make absolutely sure that having turned these cells into bone-forming cells, for example, that they are stable and do not revert to being a stem cell, and we will continue going through a very rigorous process to ensure any future procedure is safe.”

In contrast, therapies derived from the patient’s own stem cells will be used in clinical trials in the next few years.

Unlike bone, cartilage is largely unable to repair itself, and Dr Noble says his team’s aim is to provide a repair system. “We have been working on cartilage cells before, but it has been basic research without resources for translation to clinic,” he explains. “The scale of this funding means we can take this project rapidly forward and take advantage of our scientific lead in this area.” He says the cartilage studies are likely to involve working with people who have suffered traumatic injuries, but a long-term objective is to try to address the hugely painful and debilitating illness of osteoarthritis, which can often result from cartilage damage.

The MRC Centre for Regenerative Medicine brings together researchers from the former Institute for Stem Cell Research and clinicians from the University’s Medical School. The Centre was officially launched in November 2007, and in 2011 will move into a new £59 million building, which has received substantial funding from the Scottish Government and Scottish Enterprise, at Edinburgh BioQuarter. Centre Director Professor Sir Ian Wilmut says the goal of the Centre is to produce new treatments for human disease through innovative research with stem cells. “We think we are unique in Europe in bringing together such a wide range of researchers, from basic science through to clinicians and people interested in using the stem cells in research and in medicine.”

Professor Wilmut was awarded the 2008 Shaw Prize for Life Science and Medicine, along with Professor Keith Campbell and Professor Shinya Yamanaka, for their work on cell differentiation in mammals. He says the prize recognises both the efforts of everyone who had worked on the research, and also the value of research with embryos and stem cells and the contribution it can make to human medicine.
Dr Brendon Noble (left) and Professor John Iredale of the MRC Centre for Regenerative Medicine, outside the Royal Infirmary of Edinburgh, where patients will benefit from the result of their research.
2007/08
The Review of the Year

August 2007
The James Tait Black Memorial Prizes announced at Edinburgh International Book Festival

For the first time, the winners of the University’s James Tait Black Memorial Prizes were unveiled at an event at the Edinburgh International Book Festival. The fiction prize was awarded to Pulitzer Prize-winning author Cormac McCarthy for his novel *The Road*. The biography prize was given to Byron Rogers, pictured at lectern, for his book *The Man Who Went Into the West: The Life of RS Thomas*. The James Tait Black Memorial Prizes, founded in 1919, are the oldest literary awards in the UK. The Prizes are traditionally judged by senior staff from within English Literature at the University, assisted by a reading panel of postgraduate students. The shortlist and eventual winners are selected by Professor Colin Nicholson (pictured, seated) and Dr Roger Savage.

September 2007
The University officially launches Scotland’s first Confucius Institute

The Confucius Institute for Scotland – a national centre to promote economic, educational and cultural ties between Scotland and China – was launched at the University by First Minister Alex Salmond. The Institute joins a global network of more than 140 institutes to develop effective business, cultural and academic links with the fastest growing economy in the world. Backed by the Chinese Education Ministry, it offers a range of cultural and academic programmes to develop awareness of modern China, its history and culture. The University’s Principal, Professor Sir Timothy O’Shea, says: “Productive collaboration between the University of Edinburgh and China stretches back at least a century and a half. This new institute will strengthen these cultural and academic interactions, and create new possibilities for further Scottish engagement with China.”

October 2007
The University’s International Office launches the Global Horizons festival

The University’s International Office launched the first Global Horizons festival intended to challenge participants’ views of the world. The organisers’ aims were to highlight, celebrate and promote the diversity and benefits that our international student population brings to the University and the local community. The festival had three strands – debate, international information sessions and cultural celebration. Four days of events brought together students, staff and the wider community. The University’s Principal, Professor Sir Timothy O’Shea, says: “The University’s inaugural Global Horizons event will celebrate our long-standing international links and connections. The event promotes international exchange and mobility, debates on major global issues and seeks to develop understanding and integration across the University and local community. In an increasingly globalised world, it is vitally important that our students are equipped with the knowledge and opportunities to develop as global citizens. Global Horizons is an opportunity for you to develop and challenge your view on the world.”
November 2007
New University tartan unveiled on St Andrew’s Day

The University’s new tartan was officially revealed at an event on St Andrew’s Day. Six overseas students from China, India and Australia, who had all come to the University after winning places on the prestigious Scottish International Scholarship Programme, were selected to showcase the tartan at the launch. The tartan’s design was created using muted versions of the University’s official colours of blue, red and white. These shades were overlaid to create an ancient-style tartan, reflecting the tradition and history of the University. The design was incorporated into the Scottish Tartans World Register.

January 2008
Students and staff mark Holocaust Memorial Day

University staff and students gathered with members of the local community to mark Holocaust Memorial Day at a special event held at the University Chaplaincy. The event, which was themed ‘remember, reflect and react’, provided the chance to remember the many millions of people who lost their lives in the Holocaust, as well as the victims of more recent examples of genocide such as the conflict in Darfur and ethnic cleansing in Rwanda and Bosnia.

Holocaust survivor and Edinburgh resident David Goldberg was the guest speaker at the event. He arrived in the UK in 1939 as part of the Kindertransport, which rescued children from Nazi-occupied Europe in the months preceding the outbreak of World War II.

December 2007
The University scoops National Energy Efficiency Award

The University was awarded a National Energy Efficiency Award for energy management in buildings. The accolade was given for installing a combined heat and power (CHP) system with cooling to serve the George Square campus. The award judges commended the University’s partnership approach to optimising the CHP systems and its proactive commitment to tackling climate change. Since 2003, the University, led by Estates & Buildings, has installed CHP systems in three of our five campuses. The systems now generate £1 million savings annually and have cut carbon emissions by more than 4,000 tonnes per year.
2007/08
The Review of the Year continued

February 2008
Red Snake excavations reveal true might of Persian power

Edinburgh archaeologists were part of an international team which unearthed compelling evidence that the Persians matched the Romans for military strength and engineering prowess, during an excavation at an ancient wall in Iran. The Great Wall of Gorgan in north-eastern Iran, also known as the Red Snake, is more than 1,000 years older than the Great Wall of China and longer than Hadrian’s Wall and the Antonine Wall put together. It features more than 30 military forts, an aqueduct and water channels along its route. Until recently no one knew who had built the wall, but scientific dating revealed that it was built in the fifth or sixth century CE, by the Sassanian Persians. Excavations also reveal that the wall bustled with life, and suggest an estimated 30,000 soldiers could have been stationed there.

March 2008
The University reaches out to the community with Discover Science

The University once again took part in the Edinburgh International Science Festival, joining forces with the National Museum of Scotland to offer a packed programme of family science activities. Staff and students from the Colleges of Science & Engineering and Medicine & Veterinary Medicine took part in this important contribution to the University’s public engagement programme. Events included practical workshops – many of which were free – which provided children with the opportunity to take part in a range of science activities such as chemistry experiments, computer programming and meeting medics and vets.

April 2008
Architecture undergraduate named inaugural International Student of the Year

Architecture student Nirupa Puliyel became the first winner of the University’s International Student of the Year Award. The new award was introduced as part of the International Office’s Global Horizons event, which seeks to recognise the valuable contribution that international students make to the University, the local community and to Scotland. First-year undergraduate Nirupa, who is from Delhi in India, won the prize with her essay on life as an overseas student. In her piece she compared the 13th-century Scotland depicted in the film Braveheart and the Edinburgh she is familiar with today.
May 2008
Chinese students stage charity concert for earthquake victims

The University hosted a gala concert in aid of the people affected by the earthquake that devastated parts of China’s Sichuan Province. The idea for the concert came from Chinese students at the University who, in association with the Chinese Consulate in Edinburgh and other Chinese community organisations in Scotland, put together the event in just a few days. The concert featured the renowned China Disabled People’s Performing Art Troupe as well as students from the Royal Scottish Academy of Music and Drama. The earthquake was the most powerful to hit China in 30 years and claimed tens of thousands of lives.

June 2008
New breast cancer research unit opens at the University

HRH The Prince of Wales officially launched a pioneering new breast cancer research unit at the University. Based at the Institute of Genetics & Molecular Medicine, the Breakthrough Breast Cancer Research Unit, Edinburgh, brings together some of the best scientists and doctors in Scotland who will work towards developing a centre of excellence for world-class breast cancer research. The unit’s location, adjacent to the Edinburgh Breast Clinic, will help ensure laboratory results are turned into direct benefits for patients as quickly as possible. The Unit’s Director, Professor David Harrison, says: “By bringing together some of the best scientific and clinical minds in the country, we will be able to improve treatment available for women and ensure patients are able to reap the benefits of our work as quickly as possible.”

July 2008
Aboriginal smoking ceremony marks return of remains

The University marked the official handover of Aboriginal remains with a ritualistic smoking ceremony, carried out by four members of the Ngarrindjeri people. The University has held the remains – a tiny bone from the ear of an Aboriginal woman – for more than 100 years. Dr John Scally, Director of University Collections, says the handover completed an important process: “Over the past decade we have been returning human remains to the Aboriginal cultures from which they came. We are very happy that through returning them we are able to build a new relationship with the indigenous people of Australia.”

A member of the Ngarrindjeri people performs the smoking ceremony outside the McEwan Hall, Edinburgh.
In 2007–08, the University’s strong financial performance of the recent past has continued, with income growing to £555 million, reflecting the breadth and quality of the University’s teaching, research and commercialisation activity. The University’s role as a driver of economic growth has never been more significant or more important.

The 2007–08 surplus, at £5.2 million, was lower than the previous year, which had an exceptional gain of £8.2 million from the sale of MTEM. Income was increased by the activities of the Roslin Institute, which became part of the University in May 2008, and the total turnover of £555 million was 16 per cent above the previous year.

Turnover growth was driven by a 9 per cent real increase from the Scottish Funding Council by way of new research pooling funding and continuing capital funding. 2007–08 was another buoyant year for student recruitment. In particular, fees from students outside the EU grew by 16 per cent and now total £38 million.

Income from research grants and contracts grew by £20.6 million (17 per cent), mainly due to the growth in new grants awarded and the impact of the change in the method of funding.

Residences, catering and conferences turnover is up by 8 per cent. This was the result of the first full year of new facilities coming on stream, as well as higher occupancy rates outside term time. In 2007, HECToR, the national high-performance computing service for the UK academic community, became operational and contributed to the £31 million academic services and support activities turnover.

Cash advances for the capital building programme increased balances on deposit. This, and the well above base rate interest, increased interest income to more than £8 million. This ‘windfall’ situation will not continue, as major new buildings commence on site in late 2008 and low interest rates become widespread.

Total expenditure increased by £79 million (17 per cent), with staff costs increasing by £28 million (10 per cent). Staff costs increases were due to above-inflation national pay awards, increased pension contributions and an increase in staff employed, with more than 200 arriving from the Roslin Institute.

Other operating expenses moved up by £48 million (27 per cent), mainly due to the HECToR facility, research grant expenditure and a general increase in the University’s activities.

During the year, the University received £7.9 million of new endowments. Turmoil in financial markets caused a fall in the value of the total endowment funds to £185 million. The total return on the fund, at -11.8 per cent, was below that of the benchmark due to the poor performance of the UK equity portfolio. Over the last five years, the fund has returned 7.7 per cent per annum compared to the benchmark of 7.8 per cent. By 31 October, the value of the endowment fund had fallen below £160 million. Any recovery will be dependent on UK and world financial markets and the investment strategy of the University. Net income received was £28.9 million or 4.92 per cent. Work has commenced on implementing a new investment strategy agreed by the Investment Committee.

Cash and short-term investments amounted to £142 million, an increase of £25 million. This was the result of strong income and expenditure performance, and advance receipt of funds for the capital building programme, which was almost entirely funded by external sources. A very complex capital building programme is planned to continue throughout the next three years.

During the year, the Informatics Forum, a £42 million project, was completed on budget and the first phase of the Main Library refurbishment was completed at a cost of £12 million. This and other major refurbishment projects, on the external valuer’s advice, are being charged to repairs and general maintenance, which at £34 million is 15 per cent above the level in the previous year.

The University has benefited for well over 10 years from a period of economic growth, which has boosted both public and private income to the University. In the current environment, the University will focus on delivering against its strategic aims and will continue to move forward strongly based on the quality of both its academic excellence and its managerial competence.
2007/08
Financial Review

Group Income and Expenditure Account for the Year Ended 31 July 2008

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<th>2007 restated</th>
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<td>Gains on disposal of fixed assets</td>
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<td>Surplus for the year transferred to accumulated income in endowment funds</td>
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<td><strong>Surplus for the year retained within general reserves</strong></td>
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Group Balance Sheet as at 31 July 2008

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<td>212,017</td>
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<tr>
<td>Net current assets</td>
<td>52,874</td>
<td>60,786</td>
</tr>
<tr>
<td><strong>Total assets less current liabilities</strong></td>
<td>1,265,620</td>
<td>1,147,263</td>
</tr>
<tr>
<td>Creditors: amounts falling due after more than one year</td>
<td>(61,524)</td>
<td>(62,674)</td>
</tr>
<tr>
<td>Provisions for liabilities and charges</td>
<td>(7,095)</td>
<td>(7,095)</td>
</tr>
<tr>
<td>Pension liability</td>
<td>(84,391)</td>
<td>(29,000)</td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td>1,112,610</td>
<td>1,048,494</td>
</tr>
<tr>
<td>Represented by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred capital grants</td>
<td>240,801</td>
<td>223,830</td>
</tr>
<tr>
<td>Endowments</td>
<td>130,401</td>
<td>154,009</td>
</tr>
<tr>
<td>Expendable</td>
<td>54,637</td>
<td>58,008</td>
</tr>
<tr>
<td>Permanent</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reserves</strong></td>
<td>185,038</td>
<td>212,017</td>
</tr>
<tr>
<td>Revaluation reserve</td>
<td>550,658</td>
<td>432,533</td>
</tr>
<tr>
<td>General reserves excluding pension liability</td>
<td>220,487</td>
<td>209,102</td>
</tr>
<tr>
<td>Pension reserve</td>
<td>(84,391)</td>
<td>(29,000)</td>
</tr>
<tr>
<td><strong>Total reserves</strong></td>
<td>686,754</td>
<td>612,635</td>
</tr>
<tr>
<td>Minority interests</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total funds</strong></td>
<td>1,112,610</td>
<td>1,048,494</td>
</tr>
</tbody>
</table>

The above information reflects the audited accounts for the year to July 2008 published in December 2008. The restatement of the figures for 2007 relates to changes required by the revised Statement of Recommended Practice (SORP): Accounting for Further and Higher Education issued in 2007 which the University has fully adopted in the financial statements. Anyone wishing further information is invited to contact the Director of Finance at the University.
Honorary Graduations and Other Distinctions

Those awarded honorary degrees between 1 August 2007 and 31 July 2008.

Lord Sainsbury of Turville
Former Minister for Science and Innovation
(Degree of Doctor honoris causa)

Mr Neil Armstrong
Former NASA astronaut and first man on the Moon
(Degree of Doctor honoris causa)

Professor David Milne
Former Managing Director/CEO
Wolfson Microelectronics
(Degree of Doctor of Science)

Professor Sir Keith O’Nions
Director General of Research Councils
(Degree of Doctor of Science)

Dr Richard Henderson
Former Director, MRC Laboratory of Molecular Biology, Cambridge
(Degree of Doctor of Science)

Professor Elmer Rees
Director of the Heilbronn Institute for Mathematical Research, University of Bristol
(Degree of Doctor of Science)

The Rt Hon George Reid
Former Member and Presiding Officer of the Scottish Parliament
(Degree of Doctor honoris causa)

Professor Annelia Sargent
Professor of Astronomy, California Institute of Technology, Director of Owens Valley Radio Observatory
(Degree of Doctor of Science)

Mr David Randall Thom
Director of Sound, Skywalker Sound
(Degree of Doctor of Music)

Mr Peter Riddell
Assistant Editor of The Times
(Degree of Doctor of Letters)

Professor Edward Manin Stolper
Provost elect, California Institute of Technology
(Degree of Doctor of Science)

Emeritus Professor Anthony Snodgrass
Laurence Professor of Classical Archaeology, University of Cambridge
(Degree of Doctor of Letters)

Professor Michael Anderson
Former Vice-Principal of the University of Edinburgh
(Degree of Doctor honoris causa)

Professor Xu Zhihong
Former President of Peking University
(Degree of Doctor honoris causa)

Mr Mark Cousins
Co-Artistic Director of Cinema China 07, columnist and presenter
(Degree of Doctor of Letters)

Professor Ian Howard
Principal of Edinburgh College of Art
(Degree of Doctor honoris causa)

Captain Eric Brown
Former Chief Naval Test Pilot
(Degree of Doctor honoris causa)

Ms Kim Jones
President and Managing Director of Sun Microsystems
UK and Ireland
(Degree of Doctor honoris causa)

Mr Anthony d’Offay
Art collector and philanthropist
(Degree of Doctor honoris causa)

Dr Leroy Hood
President, Institute for Systems Biology, Seattle, USA
(Degree of Doctor of Science)

Very Reverend Dr Sheilagh M Kesting
Ecumenical Officer of the General Assembly of the Church of Scotland
(Degree of Doctor of Divinity)
2007/08 Benefactors

This award recognises as University Benefactors individuals or organisations that have made significant contributions, financial or otherwise, to the University.

Dr Brian Lang
Principal and Vice Chancellor of the University of St Andrews
(Degree of Doctor honoris causa)

Mrs Lesley Hinds
Lord Provost of the City of Edinburgh 2003–2007
(Degree of Doctor honoris causa)

Professor John MacBeath
Chair of Educational Leadership,
University of Cambridge
(Degree of Doctor of Education)

Professor Sir Gordon Duff
Florey Professor of Molecular Medicine, University of Sheffield,
and Chairman, Commission on Human Medicines
(Degree of Doctor of Medicine)

Professor Kenneth Chien
Charles Sanders Endowed Chair in Medicine at Harvard Medical School
and Adjunct Professor at the Salk Institute, California
(Degree of Doctor of Science)

Dr George Gunn
Global Head of Novartis Animal Health
(Degree of Doctor of Veterinary Medicine and Surgery)

Reverend Robert A Funk
(Distinction of University Benefactor)

Professor Walter Sneddon Nimmo
(Distinction of University Benefactor)
Mr Jim Atiken
Mr Atiken, the University’s Director of Sport and Exercise, was awarded the AD Munrow Prize, which recognises outstanding contribution to the sports development field within higher education. The award reflects in particular the role that Mr Atiken played in helping to establish a united body for university sport in Scotland, Scottish Universities Sport.

Mr Andrew Angus
Engineering undergraduate Mr Angus was awarded the Sir William Siemens Medal. The award commemorates the achievements of engineer and inventor William Siemens, the pioneer behind global telecommunications corporation Siemens. The company awards the medals to students at a small number of schools, colleges and universities around the UK in recognition of their academic excellence.

Professor Sir Michael Atiyah
Professor Atiyah, an Honorary Professor from the School of Mathematics, received the Institute of Physics’ President’s Medal for his outstanding contribution to mathematics and theoretical physics. Professor Atiyah was one of the first to realise the mathematical importance of the problems that arise in quantum field theory.

Dr Philip Best
Dr Best, a lecturer from the Institute for Astronomy within the School of Physics, was awarded a Philip Leverhulme Prize for his research in astronomy and astrophysics. Philip Leverhulme Prizes are given to outstanding scholars under the age of 36 who have made a significant impact on their field of study, received international recognition and whose future contributions are held to be of high promise.

Professor Raj Bhopal
Professor Bhopal, the Bruce and John Usher Professor of Public Health, in the School of Medicine, won the Specialist Readership Award in the Medical Journalists’ Association’s annual Open Book Awards for his book Ethnicity, Race and Health in Multicultural Societies.

Professor Adrian Bird
Professor Bird, from the School of Biological Sciences, was the 2008 recipient of the Charles-Leopold Mayer Prize from the French Academy of Sciences for his work in the field of biology. Previous winners include Francis Crick, who discovered the structure of DNA, and Barbara McClintock, a genetics pioneer and winner of a Nobel Prize for physiology or medicine. Professor Bird is Director of the Wellcome Trust Centre for Cell Biology at the University and oversees a team of 15 research groups working in cell biology and molecular biology.

Mrs Karen Bowman
Mrs Bowman, the University’s Director of Procurement, was elected as representative for Scotland on the Council of the Chartered Institute of Purchasing & Supply (CIPS). CIPS is the professional body for procurement, purchasing and supply and is governed by a Royal Charter with objectives for public good. Mrs Bowman’s term of office will run from 1 November 2008 to 31 October 2011.

Professor Alan Bundy
Professor Bundy, Professor of Automated Reasoning in the School of Informatics, was elected to the Scottish Science Advisory Committee (SSAC). The SSAC is a group of experts from Scotland’s science community who provide the Scottish Government with independent advice on science and the opportunities for Scotland’s economy and society.

Professor Martin Fransman
Professor Fransman, Professor of Economics in the Management School, won a share of the Schumpeter Prize, a €10,000 book prize, for his work The New ICT Ecosystem: Implications for Europe. The prize is awarded every two years in recognition of a recent scholarly contribution related to the work of Joseph Schumpeter, who was an economist and political scientist and author of Capitalism, Socialism and Democracy.

Mr Ananda Galappatti
PhD student Mr Galappatti received one of the 2008 Ramon Magsaysay Awards, which, often described as the Asian Nobel Prize, recognise outstanding achievement in Asia. The award acknowledges Mr Galappatti’s outstanding work with victims of the Asian Tsunami of December 2004 and the conflict in Sri Lanka.

Dr Ashleigh Griffin and Dr Sarah Reece
University biologists Dr Griffin and Dr Reece won UK and Ireland L’Oréal Fellowships for Women in Science, beating more than 100 applicants. They received £15,000 each to support their ongoing research. Dr Griffin will use her award to support research on microbial diseases, while Dr Reece will use the money to further her research on malaria parasites.

Mrs Sheila Gupta MBE
Director of Human Resources Mrs Gupta was appointed to the Education Honours Committee. The role of the Committee is to review nominations within the field of education and make recommendations to the Main Honours Committee.

Dr Giles Hardingham
Dr Hardingham from Preclinical Veterinary Sciences won the Biochemical Society Colworth Medal for outstanding research by a young biochemist of any nationality. Donated by Unilever Research Colworth Laboratory in 1963, the award is made to a scientist under the age of 35, who receives £3,000 and is expected to deliver a lecture to the Society and at one of the Unilever Research Laboratories.

Professor Dai Hounsell
Professor Hounsell, from the Centre for Teaching, Learning & Assessment, was awarded a Fellowship of the Society for Research into Higher Education. The Society is a UK-based international organisation, which works to advance understanding of higher education.

Dr Timothy Jones
Postdoctoral Research Fellow Dr Jones was awarded a Royal Academy of Engineering/ EPSRC Research Fellowship, providing him with five years of funding to investigate energy efficiency in the next generation of microprocessors. This is the first time such a fellowship has been awarded to a researcher at the University of Edinburgh.

Ms Alexa Ispas
PhD student Ms Ispas won the top prize in the postgraduate category of the Scottish Institute for Enterprise Business Plan Competition for her new business start-up, Research is Cool. Her company offers a one-stop online resource for junior researchers looking for appropriate research vacancies.

Professor David Leigh
Professor Leigh, from the School of Chemistry, was praised as one of the leading chemists of his generation after winning in the theory category of the 2007 Feynman Prize for Nanotechnology. The prize is the oldest and most prestigious in the field and Professor Leigh is the first scientist from the UK to be awarded the honour.

In addition, Professor Leigh’s team also won a share of the Descartes Prize – the biggest research prize in Europe. The award is given annually to outstanding international scientific research teams.

Dr Oliver Maddocks
Dr Maddocks, who recently completed his PhD at the Institute of Genetics & Molecular Medicine, was awarded the Fulbright-AstraZeneca Research Scholarship. The scholarship is given annually to a postdoctoral scientist who wishes to carry out scientific research in the USA. He will work for a year at the University of Maryland, where he will investigate the role of bacteria in colon cancer development.
Professor Keith Matthews
Professor Matthews from the School of Biological Sciences was awarded the 2008 CA Wright Medal from the British Society for Parasitology (BSP) for his research into African sleeping sickness. The award is given annually to a member of the BSP, in mid-career, to recognise their contribution to the discipline.

Ms Fiona McAllister
PhD student Ms McAllister, who is studying in the School of Chemistry, has been awarded a Kennedy Memorial Trust Scholarship. These scholarships fund a year’s study at Harvard University or Massachusetts Institute of Technology (MIT). Ms McAllister is one of nine scholars chosen this year.

Professor Daniel McQueen
Professor McQueen of the Centre for Cognitive & Neural Systems in the School of Biomedical Sciences was elected as a Trustee of the British Pharmacological Society and appointed to be the Society’s Honorary Treasurer. He was also elected as the UK representative on the Council of the Federation of European Pharmacological Societies (EPHAR) and appointed to the EPHAR Executive Committee as Treasurer.

Professor David Porteous
Professor Porteous, Director of the Centre for Molecular Medicine, received the Bruce Preller Prize Lectureship 2008. The lectureship is awarded sequentially to an outstanding scientist in Earth Sciences, Engineering Sciences, Medical Sciences and Biological Sciences. Professor Porteous’ work focuses on the application of knowledge emerging from the Human Genome Project to the identification of risk factors, disease processes and new treatments for common disorders.

Professor Tony Trewavas
Professor Trewavas, from the Institute of Molecular Plant Sciences, was elected a Fellow of the American Society of Plant Biologists (ASPB). Established in 2007, the award may be granted in recognition of distinguished and long-term contributions to plant biology and service to the Society by current members.

Professor Veronica van Heyningen
Professor van Heyningen, Head of the Medical & Developmental Genetics Section at the MRC Human Genetics Unit, received the Henry Dryerre Prize Lectureship 2008. She was selected for the award in recognition of her outstanding contribution to genetics and developmental biology. The prize is awarded quadrennially to a distinguished scholar in the field of medical research.

Professor Philip Wadler
Professor Wadler, from the School of Informatics, has been elected a 2007 Fellow of the Association for Computing Machinery (ACM). Recognised for his contribution to the theory of programming languages, he joins experts from the world’s leading universities and laboratories.

Professor Sir Ian Wilmut and Professor Keith Campbell
Professor Wilmut, Chair of Reproductive Biology and Director of the MRC Centre for Regenerative Medicine, and his former colleague Professor Campbell, were awarded the Shaw Prize for life science and medicine in conjunction with Professor Shinya Yamanaka of Kyoto University. The prize is an international award to honour individuals who are currently active in their respective fields and who have achieved distinguished and significant advances.

Mr Timothy Wright
Mr Wright, the Chief Executive of Edinburgh University Press (EUP), has been elected to the Council of the Publishers Association (PA). Representing the large majority of UK publishing by turnover, the PA’s mission is to strengthen the trading environment for UK publishers.

New Year’s Honours List
University of Edinburgh staff members honoured in the New Year’s Honours list include:

Professor Jean Manson, Head of Transmissible Spongiform Encephalopathy, Roslin Institute
OBE for services to science

Professor Sir Timothy O’Shea, Principal and Vice-Chancellor
Knight Bachelor for higher education

Professor Sir John Savill, Head of College of Medicine & Veterinary Medicine
Knight Bachelor for services to clinical science

Professor Sir Ian Wilmut OBE, Chair of Reproductive Biology
Knight Bachelor for services to science

Queen’s Birthday Honours List
Three University of Edinburgh staff members were recognised in the Queen’s Birthday Honours List:

Professor Candace Currie, Director of the Child & Adolescent Health Research Unit (CAHRU) and Professor of Child & Adolescent Health
OBE for services to healthcare

Chancellor’s Awards 2007
These awards are presented in recognition of innovation, relevance, creativity and personal dedication. They are presented annually by HRH Prince Philip, Duke of Edinburgh, Chancellor of the University, at a dinner at the Palace of Holyroodhouse.

Professor David Leigh, of the School of Chemistry, received the Research Award in recognition of his pioneering work in nanotechnology.

Professor Susan Rhind, of the Royal (Dick) School of Veterinary Studies, was honoured with the Teaching Award for leading the development of a virtual veterinary practice within the School’s virtual learning environment.

Professor Donald Bloxham, of the School of History, Classics & Archaeology, received the Rising Star Award for his growing reputation for his research into genocide and war crimes.

Alumnus of the Year 2007
Ms Emily Maw
US-based lawyer Ms Maw was awarded the University’s Alumnus of the Year 2007 award. Ms Maw, Director of the Innocence Project New Orleans, in the USA, specialises in fighting miscarriages of justice. The Innocence Project works with prisoners in the states of Louisiana and Mississippi, which have America’s highest incarceration rates. Ms Maw’s legal experience began while she was a student at the University of Edinburgh’s School of Law. She took up an internship at the Louisiana Crisis Assistance Center, where she returned to work after graduation. Her caseloads included prisoners on death row and while at the Center, her work contributed to saving 10 people from execution.

Professor Richard Kenway, Vice-Principal (High Performance Computing and e-science) and Tait Professor of Mathematical Physics
OBE for services to science

The University Chaplain, Reverend Di Williams
MBE for services to higher education

www.ed.ac.uk
2007/08

Appointments

Appointments commenced between 1 August 2007 and 31 July 2008

COLLEGE OF SCIENCE & ENGINEERING

Personal Chairs

Professor Stephen Anderton
Personal Chair of Therapeutic Immunology

Professor Harry Braden
Personal Chair of Integrable Systems

Professor Jason Crain
Personal Chair of Applied Physics

Professor Andrew Dugmore
Personal Chair of GeoSciences

Professor Ian Halliday
Personal Chair of Physics

Professor Gary Loake
Personal Chair of Molecular Plant Sciences

Professor Keith Matthews
Personal Chair of Parasite Biology

Professor Malcolm McMahon
Personal Chair of High Pressure Physics

Professor Sean Nee
Personal Chair of Social Evolution

Professor Simon Parsons
Personal Chair of Crystallography

Professor Agata Smoktunowicz
Personal Chair of Algebra

Professor Asif Usmani
Personal Chair of Structural Engineering and Computational Mechanics

Professor Wyn Williams
Personal Chair of Mineral & Rock Magnetism

Professor Robert Donovan
Chemistry

Professor Ben Harte
GeoSciences

Professor Robert Harwood
GeoSciences

Professor Paul Jarvis
GeoSciences

Professor David Parker
Mathematics

Professor Ian Parsons
GeoSciences

Professor Allan Sinclair
Mathematics

Professor Keith Smith
GeoSciences

Professor David Sugden
GeoSciences

Professor Brian Upton
GeoSciences

Professorships

Professor Thomas Crowley
Chair of Earth Systems Science

Professor Vincent Danos
Chair of Computational Systems Biology

Professor Xiang-Yang Li
Chair of Multi-component Seismology

Professor Ferenc Nagy
Chair of Cell Biology

Professor Michael Tyers
C H Waddington Chair of Systems Biology

Professor Rose Zamoyksa
Chair of Immune Cell Biology

COLLEGE OF MEDICINE & VETERINARY MEDICINE

Personal Chairs

Professor Kathryn Ball
Personal Chair of Biochemistry & Cell Signalling

Professor Jamie Davies
Personal Chair of Experimental Anatomy

Professor Fouad Habib
Personal Chair of Experimental Urology

Professor Stephen Lawrie
Personal Chair of Psychiatry and Neuro-Imaging

Professor Gerald Lincoln
Personal Chair of Biological Timing

Professor Mike Ludwig
Personal Chair of Neurophysiology

Professor Ian Marshall
Personal Chair of Magnetic Resonance Physics

Professor James Ross
Personal Chair of Liver Cell Biology

Professor Marc Turner
Personal Chair of Cellular Therapy

Professorships

Professor Margaret Frame
Chair of Cancer Biology

Professor John Frank
Chair of Public Health Research & Policy

Professor Jacqueline Matthews
Moredun Chair of Veterinary Immunobiology

Professor Paul McKeigue
Chair of Genetic Epidemiology & Statistical Genetics

Senior Honorary
Professorial Fellows

Professor Geoffrey Boulton
GeoSciences

Professor Euan Clarkson
GeoSciences

Professor Kenneth Creer
GeoSciences

Professor Barry Dawson
GeoSciences

Honorary Professors

Professor Roger Crofts
GeoSciences

Professor David Elston
Mathematics

Professor Chris Glasbey
Mathematics

Professor Peter Gregory
GeoSciences

Professor Keith McNaughton
GeoSciences
Professor Jane Norman
Chair of Maternal & Fetal Health
Professor Susan Rhind
Chair of Veterinary Education
Professor Jürgen Schwarze
Chair of Paediatrics
Professor Jose Vázquez-Boland
Chair of Infectious Diseases
Professor Stephen Wigmore
Chair of Transplantation Surgery
Professor Ruth Zadoks
Moredun Chair of Veterinary Epidemiology

Honorary Professors
Professor Peter Andrews
Molecular & Clinical Medicine
Professor Ian Kunkler
Molecular & Clinical Medicine
Professor John Starr
Clinical Sciences & Community Health
Professor Tim Walsh
Clinical Sciences & Community Health

COLLEGE OF HUMANITIES & SOCIAL SCIENCE

Personal Chairs
Professor Thomas Archibald
Personal Chair of Business Modeling
Professor Paul Bailey
Personal Chair of Modern Chinese History
Professor Judith Barringer
Personal Chair of Greek Art & Archaeology
Professor Timothy Bates
Personal Chair of Individual Differences in Psychology
Professor Donald Bloxham
Personal Chair of Modern History
Professor Chris Clark
Personal Chair of Social Work Ethics
Professor Francis Cogliano
Personal Chair of American History
Professor Elizabeth Cowling
Personal Chair of 20th Century European Art
Professor Jane Dawson
The John Lang Chair of Reformation History
Professor Peter Dayan
Personal Chair of Word & Music Studies
Professor Andrew Erskine
Personal Chair of Ancient History
Professor David Greasley
Personal Chair of Economic History
Professor Caroline Heycock
Personal Chair of Syntax
Professor David Marshall
Personal Chair of Marketing & Consumer Behaviour
Professor John Macinnes
Personal Chair of Sociology of European Societies

Professor Michael Northcott
Personal Chair of Ethics
Professor Janette Webb
Personal Chair of Sociology of Organisations
Professor William Whyte
Personal Chair of Social Work Studies in Criminal & Youth Justice

Professorships
Professor Seth Armitage
Chair of Finance
Professor Marilyn Booth
Iraq Chair of Arabic & Islamic Studies
Professor James Crow
Chair of Classical Archaeology
Professor Maia Guell
Sir John Sinclair Chair of Economics
Professor Laura Marcus
Regius Chair of Rhetoric & English Literature
Professor José V Rodríguez Mora
Dugald Stewart Chair of Economics
Professor William Rees
Chair of Financial Analysis
Professor Richard Rodger
Chair of Economic & Social History
Professor Brian Stanley
Chair of Christianity in the Non-Western World
Professor Greg Walker
Masson Chair of English Literature
Professor Neil Walker
Regius Chair of Public Law

Honorary Professors
Professor Ian Campbell
Arts, Culture & Environment
Professor Sir Iain Chalmers
Health in Social Science
Professor Hans Goette
History, Classics & Archaeology
Professor Joseph Hamill
Education
Professor Marc Marschark
Education
Professor Howard Mellett
Health in Social Science
Professor Raymond Monelle
Arts, Culture & Environment
Professor Catharine Ward Thompson
Arts, Culture & Environment
2007/08

Appendix 1

1. Undergraduate Applications and Acceptances

<table>
<thead>
<tr>
<th></th>
<th>2006 Year of Entry</th>
<th>2007 Year of Entry</th>
<th>2008 Year of Entry**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Total</td>
</tr>
<tr>
<td>Applications*</td>
<td>20,578</td>
<td>24,636</td>
<td>45,214</td>
</tr>
<tr>
<td>Places taken up</td>
<td>1,842</td>
<td>2,319</td>
<td>4,161</td>
</tr>
</tbody>
</table>

* Figures defined as number of applications received in each cycle for entry in the same year or deferred entry the following year.
** UCAS reduced the number of applications per applicant from 6 to 5 from the 2008 entry cycle.

Appendix 2

2.1 Headcount by Level of Study and Gender 2007/08

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Taught Postgraduate</th>
<th>Research Postgraduate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>10,424</td>
<td>10,589</td>
<td>10,391</td>
<td>1,665</td>
</tr>
<tr>
<td>Male</td>
<td>7,855</td>
<td>7,851</td>
<td>7,816</td>
<td>1,169</td>
</tr>
<tr>
<td>Total</td>
<td>18,279</td>
<td>18,440</td>
<td>18,207</td>
<td>2,834</td>
</tr>
</tbody>
</table>

2.2 Headcount by College 2007/08

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Taught Postgraduate</th>
<th>Research Postgraduate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities &amp; Social Science</td>
<td>11,012</td>
<td>10,987</td>
<td>10,668</td>
<td>2,226</td>
</tr>
<tr>
<td>Medicine &amp; Veterinary Medicine</td>
<td>1,974</td>
<td>2,080</td>
<td>2,149</td>
<td>113</td>
</tr>
<tr>
<td>Science &amp; Engineering</td>
<td>5,293</td>
<td>5,373</td>
<td>5,390</td>
<td>495</td>
</tr>
<tr>
<td>Total</td>
<td>18,279</td>
<td>18,440</td>
<td>18,207</td>
<td>2,834</td>
</tr>
</tbody>
</table>
### 2.3 Headcount by Domicile 2007/08

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>Taught Postgraduate</th>
<th>Research Postgraduate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2005/06</strong></td>
<td><strong>2006/07</strong></td>
<td><strong>2007/08</strong></td>
<td></td>
</tr>
<tr>
<td>Scotland</td>
<td>8,508</td>
<td>8,661</td>
<td>8,487</td>
</tr>
<tr>
<td>Other UK</td>
<td>6,773</td>
<td>6,579</td>
<td>6,264</td>
</tr>
<tr>
<td>EU (non-UK)</td>
<td>1,167</td>
<td>1,217</td>
<td>1,238</td>
</tr>
<tr>
<td>Outwith EU</td>
<td>1,812</td>
<td>1,983</td>
<td>2,218</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18,260</strong></td>
<td><strong>18,440</strong></td>
<td><strong>18,207</strong></td>
</tr>
</tbody>
</table>

### 2.4 Headcount by Domicile Top 10 non-UK Countries

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>Taught Postgraduate</th>
<th>Research Postgraduate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2005/06</strong></td>
<td><strong>2006/07</strong></td>
<td><strong>2007/08</strong></td>
<td></td>
</tr>
<tr>
<td>United States of America</td>
<td>819</td>
<td>901</td>
<td>1,062</td>
</tr>
<tr>
<td>People’s Republic of China</td>
<td>158</td>
<td>164</td>
<td>154</td>
</tr>
<tr>
<td>Germany</td>
<td>192</td>
<td>172</td>
<td>154</td>
</tr>
<tr>
<td>Greece</td>
<td>67</td>
<td>51</td>
<td>55</td>
</tr>
<tr>
<td>Republic of Ireland</td>
<td>161</td>
<td>154</td>
<td>137</td>
</tr>
<tr>
<td>France</td>
<td>170</td>
<td>182</td>
<td>188</td>
</tr>
<tr>
<td>Poland</td>
<td>18</td>
<td>88</td>
<td>120</td>
</tr>
<tr>
<td>Italy</td>
<td>66</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>India</td>
<td>10</td>
<td>14</td>
<td>13</td>
</tr>
</tbody>
</table>
Appendix 3

Benefactions (This list reflects giving from 1 August 2007 to 31 July 2008)

Elsie Inglis Benefactors (£1,000–£4,999)
Abbey Bank
AdsiFab Ltd
Mr Iain Allan
Professor Ahmed Aisoraya
Analog Devices Limited
Professor Sir Michael Atiyah
Mrs Cynthia Atkinson
Mr J Allan Auchnie
The Baldoukie Trust
Mrs Lindsay Barclay
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Wolfson Foundation
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*Denotes donors to the University of Edinburgh USA Development Trust Inc., an independent organisation formed to advance the purpose of the University of Edinburgh.
### Research Grants and Other Sources of Funding

#### 1. From charities, industry and other institutions

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**European Union – Industry**

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**Total from charities, industry and other institutions £’000** 82,259
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5 Ice and Isolation: Unlocking the Earth’s Secrets in Antarctica
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11 The Review of the Year
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Appendices

Appendix 1 Undergraduate Applications and Acceptances
Appendix 2 Student Numbers
Appendix 3 Benefactions
Appendix 4 Research Grants and Other Sources of Funding

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Note: The above list sets out the total project values of research grants funded from these sponsors. The sponsors and research councils (including research councils and charitable foundations) who fund the majority, with the balance being received indirectly via the Scottish Funding Council.