

A low-angle photograph of three women in business attire standing outside a modern building with large glass windows. The woman on the left is wearing a light-colored trench coat and is smiling. The woman in the center is wearing a dark jacket and is also smiling. The woman on the right is wearing a dark jacket and a bright pink scarf. The background shows the building's facade and a clear blue sky.

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# Vice-Chancellor's introduction



*'The University continued to invest in staff, including 78 new members of the academic staff, supported by 165 new research staff appointments.'*

This Annual Review records a year in which we celebrated some significant anniversaries and achievements. It also saw the fruition of several major developments which will enhance our research, teaching and other facilities on campus.

In February our Department of Meteorology received a 2006 Queen's Anniversary Prize. The Department is engaged in the very highest quality of research, which is central to the global debate about climate change. In May the department celebrated 40 years of Meteorology at Reading.

On 17 March, festivities marked 80 years of excellence at Reading, with the anniversary of the awarding of our Royal Charter. Reading is very much an innovative and forward-looking university, but we take great pride in the University's heritage, and 80 years on our values and traditions remain intact.

A series of events marked the playwright Samuel Beckett's centenary, co-ordinated by the Beckett International Foundation, and culminating in a highly successful April charity gala evening which raised over £22,000 for Macmillan Cancer Support. The University is, of course, internationally famous for its collection of Beckett manuscripts and papers.

The year saw, among others, the completion of the multi-million pound rebuild of the Centre for Dairy Research, and the refurbishment of the teaching space in Chemistry and of the Philip Lyle Building, which provides

Biological and Computing Services. In July, the turf was cut for the new £6.4 million Carrington Building, a Student Services Centre that will bring together all of the University's welfare, careers and student support functions. Student satisfaction with courses at Reading places us in the top ten in England in the National Student Survey.

The new Institute of Health Sciences was established at London Road in January. We also launched two initiatives aimed at improving and supporting teacher training.

A new National Centre for Earth Observation will monitor both global and regional changes in the environment; scientists in the School of Biological Sciences have been working in the field of avian flu.

The University continued to invest in staff, including 78 new members of the academic staff, supported by 165 new research staff appointments.

Finally, this year as last, our alumni generously donated almost one-quarter of a million pounds to our Development Campaign, which is a renewed vote of confidence in the University's many educational activities, and in the future generations of Reading graduates who will go on to achieve great things in their chosen careers.

A handwritten signature in dark ink, appearing to read 'Gordon Marshall', written in a cursive style.

Professor Gordon Marshall





# Research



# Ancient lakes of the Sahara

The Sahara has not always been the arid, inhospitable place that it is today – it was once a savannah teeming with life, according to researchers at the Universities of Reading and Leicester.

*‘Over the last 10,000 years, there have been two distinct humid phases, separated by an interval of highly variable but generally drying conditions between roughly 8,000 and 7,000 years ago.’*

**Dr Kevin White**  
School of Environmental Sciences

Dr Kevin White of the University of Reading and Professor David Mattingly of the University of Leicester used satellite technology and archaeological evidence to reveal new clues about both the past environment of the Sahara and of human prehistory in the area.

Eight years of studies in the Libyan desert area of Fazzan, now one of the harshest, most inaccessible spots on Earth, have revealed swings in its climate that have caused considerably wetter periods, lasting for thousands of years, when the desert turned to savannah and lakes provided water for people and animals.

This, in turn, has given us vital clues about the history of humans in the area and how these ancient inhabitants

coped with climate change as the land began to dry up around them again.

‘The climate of the Sahara has been highly variable over the millennia and we have been able to provide much more specific dating of these changes,’ said Dr White. ‘Over the last 10,000 years, there have been two distinct humid phases, separated by an interval of highly variable but generally drying conditions between roughly 8,000 and 7,000 years ago. Another drying trend took place after about 5,000 years ago, leading to today’s parched environment.’

The researchers determined where surface water was once present by using radar images of the desert taken from space. These images showed





rivers, lakes and springs now buried below shifting sand dunes. As these bodies dried out thousands of years ago, the resulting mineral deposits cemented the lake sediments together and these hardened layers are detectable by radar.

'This information was essential because archaeologists need to focus

their efforts near ancient rivers, lakes and springs, where people used to congregate due to their basic need for water,' said Dr White. 'We found large quantities of stone tools around the ancient water sources, indicating at least two separate phases of human occupation.'

Dr Kevin White has used satellite imaging to identify ancient rivers, lakes and springs



# Bird flu vaccine

*‘Since many experts believe we are on the verge of an influenza pandemic, it is important to understand what are the options for protecting the population against bird flu using vaccines.’*

**Dr Wendy Barclay**  
School of Biological Sciences

**Making vaccines against bird flu is difficult and several problems need to be overcome before production of a vaccine can begin , says Dr Wendy Barclay, from the School of Biological Sciences.**

There are worldwide anxieties about the spread of influenza and mutation of the H5N1 virus to acquire the ability to transmit easily from person to person. ‘Since many experts believe we are on the verge of an influenza pandemic, it is important to understand what are the options for protecting the population against bird flu using vaccines.

‘Making vaccines against bird flu is not as easy as making the sort of flu vaccines we use every year to protect the elderly against epidemic human flu,’ explains Dr Barclay. H5N1 can be deadly, so it is very dangerous to work with and must be carefully contained. A further problem is the production of the vaccines. Currently, this relies on large numbers of chicken eggs, which may become limited if bird flu continues to spread.

However, using genetic engineering techniques, Dr Barclay’s team have shown that safe versions of the bird flu viruses can be made, and produced in cell cultures rather than eggs.

This autumn, a pilot bird flu vaccine originating from the University of Reading and produced by the vaccine company SanofiPasteur was tested in human volunteers in Norway. The team are also addressing the reports that getting the vaccines to work well in people presents additional hurdles. ‘The bird flu vaccines that have been made so far, and are currently in clinical trials, work less well than normal flu vaccines,’ says Dr Barclay. ‘Adjuvants, which are chemicals that aid the response to vaccination are being trialed to see whether this can help make the vaccine work better at low doses.’

‘In the next few years, H5N1, or another avian influenza virus, could emerge as the next human pandemic virus or it may be that it doesn’t happen. Some people have argued that we should not invest in production of H5N1 vaccines yet since we don’t know exactly which strain of the virus will be the source of the next pandemic,’ explains Dr Barclay. ‘Whether or not a bird flu vaccine is available when the pandemic strikes will hugely affect the public health response and could make a very large difference to mortality rates.’



# Defra publishes TB report

**Bovine tuberculosis (TB) is a growing problem in Great Britain with an 18% year-on-year increase in cattle culled. Government costs for 2004 were £88.2m. There is great concern about the inability to control this rising epidemic using present methods of cattle testing and culling.**

The Government has identified an urgent need to re-examine its bovine TB control policies. To assist Defra in providing advice to the Government, Dr Tony Wilmshire and Mr Nick Taylor of VEERU (Veterinary Epidemiology and Economics Research Unit), in the Department of Agriculture, were asked to carry out a review of the international evidence for an interrelationship between cattle and wildlife in the transmission of bovine TB.

The report concludes that there is strong evidence that British badgers can provide a reservoir of infection

for bovine TB. There is also good evidence for contamination of fields, cattle housing and feed stores through indirect contact with discharges from infected badgers.

Since 1997, studies of badger culling exercises in Britain have so far failed to provide any clear indication that culling badgers has a useful effect on the incidence of herd breakdowns. In fact culling may result in increased movement of badgers, thus increasing the potential for spread of disease.

There is also evidence for both local and long-distance herd to herd transmission not involving badgers, as in other countries. This emphasises the need for effective and comprehensive control measures within the cattle population and continuing research into other strategies, such as badger vaccination.



# Foreign property owners double



**The rising tide of foreign, often anonymous property owners, in the City of London highlights its continuing unique appeal, but could threaten its long-term future.**

This is the main conclusion of 'Who Owns the City 2006?' – the third major report published by Development Securities PLC on ownership and occupation in the City of London.

The report, written by Colin Lizieri, Professor of Real Estate and Finance at the University, for Development Securities, reveals that over 45% of City office space is now owned by foreign investors. That compares with 20%, according to the first 'Who owns the City?' report published in 1998 and

38% in the second such report published in 2001.

German investors' share of commercial City space doubled between 2000 and 2005, from 8% to 18%. The next two most dominant overseas investors are the US and Japan with respectively 6.8% and 2.5% of commercial City space.

Whilst this significant rise in inward investment indicates the current confidence in the City and enhances property market liquidity, the increasingly fragmented character of the ownership of City properties does raise some serious long-term concerns says the report. There is a fuller account and address for the report at [www.extra.reading.ac.uk/news](http://www.extra.reading.ac.uk/news)



# Health check on Planet Earth

Environmental science and climate change research has been boosted by the establishment of a new National Centre for Earth Observation (NCEO), led by newly appointed Science Director, Professor Alan O'Neill, currently at the University of Reading.







*‘Accurately predicting what’s going to happen to the environment on Earth this century is the big scientific challenge. It isn’t enough to look at, say, the atmosphere on its own to find out how the environment is going to change.’*

**Professor O’Neill**

National Centre for Earth Observation

**Environmental science and climate change research has been boosted by the establishment of a new National Centre for Earth Observation (NCEO), led by Science Director, the University’s Professor Alan O’Neill.**

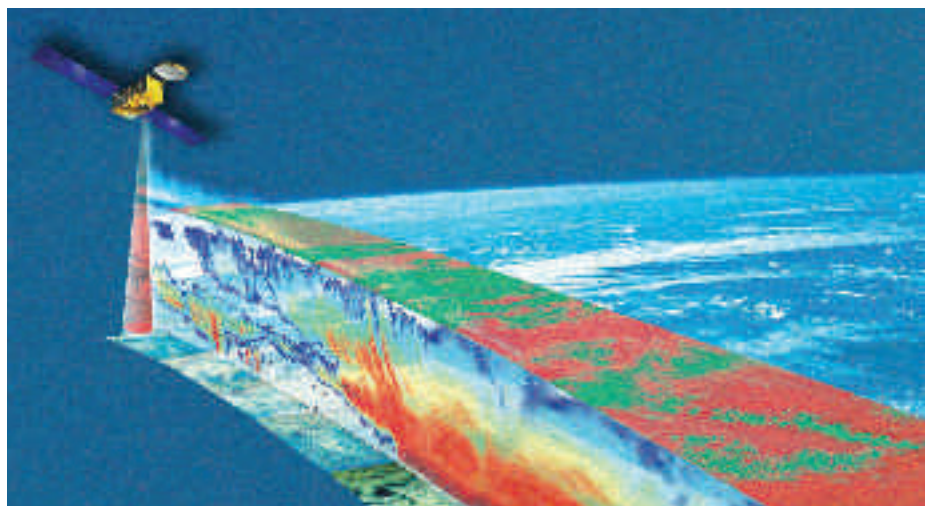
The new centre, proposed and funded by the Natural Environment Research Council (NERC), will have overall responsibility for NERC’s suite of Earth observation centres of excellence. These centres use data from Earth observation satellites to monitor both global and regional changes in the environment, and to develop a detailed understanding of these changes so that future environmental conditions can be predicted. The centres have already highlighted significant environmental changes – for instance ozone depletion, atmospheric pollution, and melting sea ice.

The National Centre will build on NERC’s considerable expertise in this area: NERC is already responsible for the UK’s subscription to a number of European Space Agency programmes, including the Earth Observation Envelope Programme – worth around £47 million annually.

Professor O’Neill said: ‘Accurately predicting what’s going to happen to the environment on Earth this century is the big scientific challenge. It isn’t enough to look at, say, the atmosphere on its own to find out how the environment is going to change. What we need is a comprehensive picture of all the interactive elements. We want to give planet Earth a real health check, to diagnose its state of health and give a prognosis for the future. Earth observation satellites can be likened to body scanners in this respect.’

He went on to explain his vision for the centre. ‘Europe and the UK in particular already play a leading role in this field. I believe that building a foundation of strong, cohesive communities is a critically important social dimension for effective science. My new role presents a great opportunity to have a positive influence on the wide spectrum of science and applications involving Earth observation. I am very much looking forward to working with colleagues across that spectrum.’

Professor O’Neill will identify strategic science priorities for NERC’s national Earth observation programme and develop a programme to deliver them when the NCEO, which will be based at the University of Reading, is launched in 2008.



# Brave new world: ageing research at Reading



*‘This AGENet summer event was to update our colleagues and friends on the various new developments in ageing research at the University of Reading.’*

**Professor Peter Lansley**  
Director of AGENet

**The amount of research into ageing at the University of Reading has increased considerably in recent years, and the wide range of topics in which academics at Reading are engaged was highlighted at a special workshop in July.**

Topics presented covered a wide range of issues, including NHS care for older people, the role of community matrons and health in later life – all associated with improving the quality of life of older people.

‘Brave new world: Ageing Research at the University of Reading’ was organised by AGENet, the University’s unique network of researchers, charity workers, healthcare professionals and members of the public interested in ageing, impairment and disability.

‘This AGENet summer event was to update our colleagues and friends on the various new developments in ageing research at the University of Reading,’ said Professor Peter Lansley, the Director of AGENet. ‘These include

the new Institute of Health Sciences at the London Road campus, new researchers in the field of ageing and the success of the Reading based SPARC Research initiative, which is encouraging new young researchers into the field across the UK.’

During the day, six specialists gave presentations about their work. Professor Margot Gosney introduced the new scene of ageing research at Reading,

Sharon Killick of the University’s School of Health & Social Care discussed community matrons, while the School’s Wendy Martin considered ‘Risky bodies? Health, risk and ageing in later life’.

Other topics included Professor Christina Victor who looked at the issue of mental health in a talk entitled ‘Use it or lose it’, and Dr David Oliver who discussed ‘Joined up services for falls and fractures: Can we turn policies into reality?’.





# Suppose we all ate a healthy diet

**Food consumption patterns would change dramatically if everyone ate a healthy diet, according to the findings of the Rural Economy and Land Use research project (RELU) at the University of Reading, led by Professor Bruce Traill. If everyone followed official guidelines for healthy eating, consumption of fresh fruit and vegetables would increase by 50%, whilst consumption of cheese would decrease by 75%.**

The research shows how much change in overall consumption is implied by healthy eating recommendations, and helps us understand and assess how much agriculture and land use will need to adjust.

Both the Department of Health and the World Health Organisation have produced guidelines for intake of a range of nutrients, the more important ones being that intake of saturated fats should comprise less than 10% of total energy intake, sugar also less than 10% and fruit and vegetable intake should be above 400 grams per day.

But data show that in 2003–04, saturated fat and sugar intakes were around 40% too high, while fruit and vegetable consumption was about 20% below the guideline.

- Various categories of fruit and vegetables, bread and fish, would have to increase by between 40% and 50%.
- Biggest losers are cheese (down 75%), confectionery, sugar and soft drinks (all down 30–35%). Meat and milk consumption would fall by around 15%, fats (vegetable oils, butter and margarine) by about 20%.

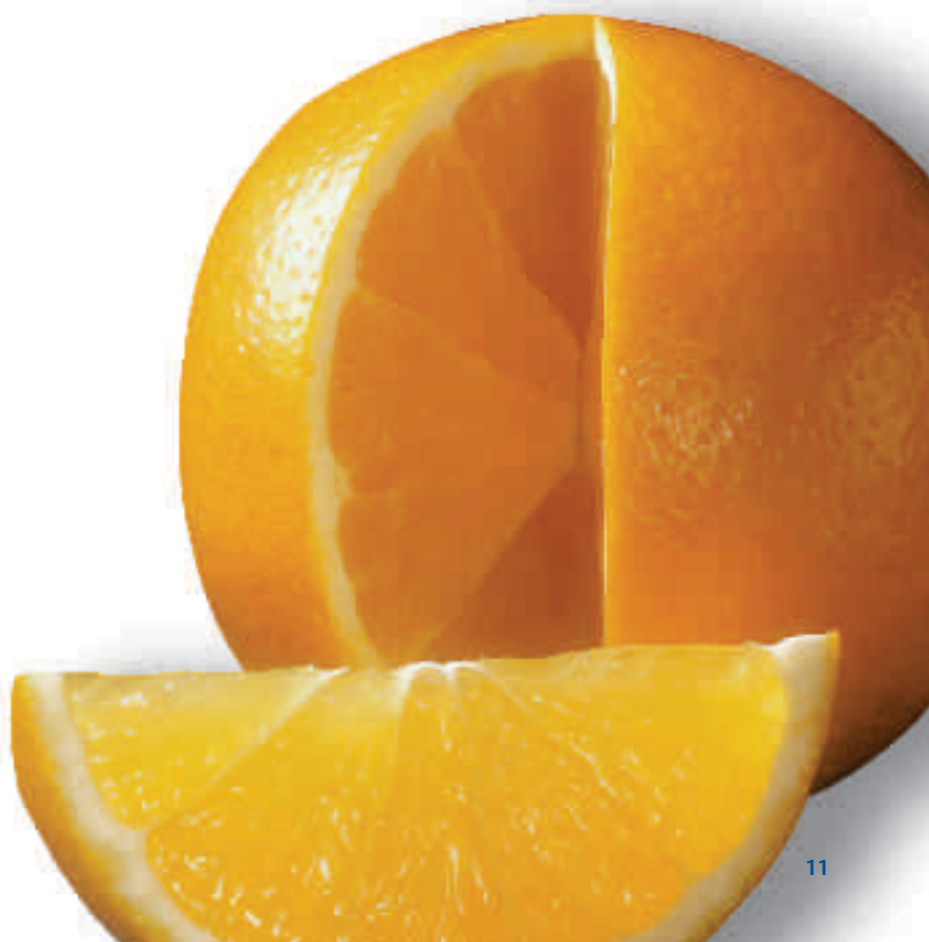
The team's conclusions are based on data from the Government's Expenditure and Food Survey, which shows food consumption patterns for 7,000 households, by making the simplifying assumption that people choose their present food consumption patterns because they represent their 'favourite' diets given their personal food preferences, incomes, time pressures and existing food prices; and that in changing to a healthy diet, people would change their existing food consumption as little as possible.

Professor Traill said: 'Another stage of the research project will look at the impact of consumption changes on land use, imports and exports. For example, if all of the increased fruit and vegetable consumption were met from imports, there would be no impact on UK land use, though those concerned with food miles might worry.'

'If all of the adjustments were made through UK farm-output changes, there would be substantially increased land under fruit and vegetables and cereals and cut-backs in livestock farming. The final outcome will lie between these extremes and depend upon the ability of farming to adjust and the preference, if any, of consumers for home produced foods.'

*'In 2003–4, saturated fat and sugar intakes were around 40% too high.'*

**Professor Bruce Traill**  
School of Agriculture, Policy & Development



# Livestock Guru helps make poverty history



*‘Livestock are vital to the estimated two-thirds of the 2.1 billion poor households living on less than \$2 a day.’*

**Dr Claire Heffernan**  
Director of the Livestock  
Development Group

**Researchers at the Livestock Development Group (LDG) in the School of Agriculture, Policy and Development have developed a unique, multi-media learning program for poor farmers, which is truly helping to fight global poverty with knowledge.**

The Livestock Guru computer program specifically responds to the needs of the most vulnerable groups in developing countries. By way of a touch-sensitive computer screen which even those unable to read can use, the Guru teaches farmers how to diagnose, prevent and where possible, to treat specific animal diseases – thus helping them make the most of the livestock so vital to their survival.

For use internationally, different versions of the Livestock Guru program have been created to suit the visual and linguistic requirements of various populations and has been used in countries as diverse as Kenya, India and Bolivia.

In India, the technology – developed with the help of funding from the Department for International Development (DfID) – is distributed through a number of local institutions such as Village Knowledge Centres, Dairy and Farmer Associations and other community-based organisations. ‘El Promotor’, a Bolivian version of The Livestock Guru, was launched in the high altitude, Altiplano region among poor Andean farmers. Participating in-country institutions include the government, NGOs and FEDEPLO, the local federation of milk producers and the program has now been distributed to an estimated user population of 5,600 poor households.

According to Dr Claire Heffernan, Director of the LDG, there has been an overwhelming response to the Livestock Guru.

‘Livestock are vital to the estimated two-thirds of the 2.1 billion poor households living on less than \$2 a day,’ she said. ‘However, our interviews with people in over 3,000 poor households on three continents showed that access to accurate and timely information about the livestock in their care was considered to be a major constraint to livelihood security. Hence, poor households were not interested in handouts; their demand was simply for knowledge. And so, to address this need, the Livestock Guru program was created.’

Studies have demonstrated that use of the program dramatically enhances learning outcomes. For example, in Bolivia, researchers found that in some cases farmers showed up to a 44% increase in basic knowledge regarding the diagnosis, treatment and prevention of important livestock diseases. A key benefit of the program is its ability to transmit the knowledge demands of farmers to decision-makers. Unlike traditional methods such as television and radio, the Guru is able to measure the demand of users for particular material, thereby enabling decision-makers to understand the concerns and needs of the poor.





Enterprise

# £5 million to invest in universities



*‘We consider it an exciting opportunity both to help commercialise the University’s world-class research and to realise the benefits of closer working with business.’*

**Sue O’Hare**  
Technology Transfer Manager

**The University was one of a consortium of eleven universities in the South East of England which won a competitive bid for £5 million in the third round of awards from the Higher Education Innovation Fund (HEIF). The funding is aimed at supporting Government’s drive to realise greater economic and social benefit from the UK’s investment in its knowledge base.**

The CommercialiSE partnership will use the HEIF award to create an integrated, unified and sustainable commercialisation and funding framework for academics, students and alumni from the participating universities, with the aim of generating £20 million of added value for the UK within two years.

The partners include Brighton, Buckinghamshire Chilterns, Chichester,

Cranfield, Greenwich, Kent, Kingston, Portsmouth, Reading and Sussex Universities, with Oxford Brookes University as lead partner.

Alongside the university partners is Finance South East Ltd, a specialist funding organisation for the region, which will manage the funds available to innovators through CommercialiSE. In addition the SEEDA Enterprise Hubs and South East Sector Consortia will facilitate the commercialisation of ideas supported by the consortium.

Applicants with early-stage business ideas will be considered for up to £50,000 of proof of concept funding, while applicants with proven ideas ready to progress to full commercialisation will have access to the CommercialiSE Seed Fund, which will offer awards from £50,000 to £250,000.



# Cascade Fund investment

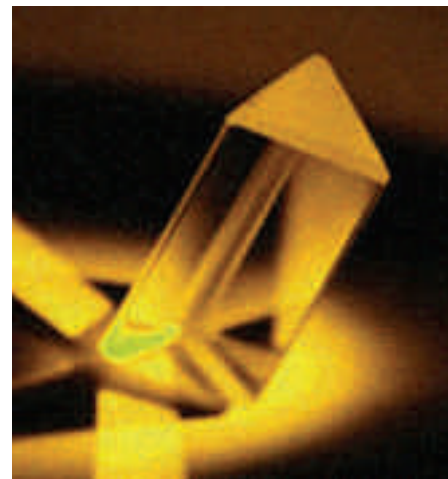
**Dr Kim Watson, Reader in Structural Biology, received early stage, or 'seed', investment from the Cascade Fund, bringing the total number of investments made by the Fund in technology from Reading to seven. Two separate investments will support the establishment of a business case for a spin-out company providing protein crystallography solutions to the pharmaceutical and biotechnology industries.**

Protein crystallography is the study of the three-dimensional structure of biological molecules at atomic (or near atomic) resolution using x-ray diffraction. Knowledge of the structure or 'form' of a molecule can aid understanding of its biological function, provide a major building block in our search for new therapies and is key to our understanding of disease

mechanisms. Such detailed understanding of protein structure and function is an important underpinning for life sciences. Pharmaceutical companies utilise protein crystallography as part of their core research platform for drug development.

The business idea has evolved through the award of a University Enterprise Fellowship to Dr Kim Watson which has provided her with training and a business mentor from Finance South East who runs the Merlin mentoring programme.

Dr Watson led a Department of Trade and Industry Global Watch Mission in June 2004 to visit emerging structural genomics centres (including protein crystallography) in China and Japan. This was an opportunity to explore areas of potential collaboration and technology transfer with the UK.



# Enterprise agenda

**The Government has increasingly put forward the view that utilising the intellectual capital and intellectual property (3rd stream activity) that exists in universities is essential to the economic and cultural prosperity of the UK.**

'Navigating the 3rd Stream' was a series of events, held throughout the year, which aimed to explain the purpose of the Enterprise agenda, explode some of the myths surrounding the concept

of 'Enterprise', look at ways in which staff can become more involved in 3rd stream related activity and examine the help and support available to them.

The series was sponsored by BBSRC, endorsed by the Arts and Humanities Research Council (AHRC), the Engineering and Physical Sciences Research Council (EPSRC), the Economic and Social Research Council (ESRC) and the Natural Environment Research Council (NERC).

## KTP award



*‘The KTP proved a superb platform to provide ‘fresh’ eyes on opportunities long discussed within the organisation and to kick-start our new product development activities.’*

**Dan Davies**

Director of Engineering, Solarcentury

**A Knowledge Transfer Partnership (KTP) between the University of Reading and London-based company Solarcentury – which led to the development of new solar technologies – has won a prestigious award from the DTI.**

The project partners received their award from Trade & Industry Secretary, the Rt Hon Alan Johnson MP, during a high profile event celebrating KTP’s thirtieth anniversary in March. Reading was one of just nine KTPs out of 320 nominees to win an award for best project in 2005.

KTPs aim to foster innovation and accelerate wealth creation by forming partnerships between companies and ‘Knowledge Base’ organisations, such as universities, in response to specific and strategic projects. The award-winning Reading project established a successful

partnership between the University’s School of Construction Management and Engineering and Solarcentury.

The project, supervised by the University’s Dr Anne Wheldon, saw a Reading graduate working on and strengthening the development programme at solarcentury. Martyn Berry, who undertook an MSc in Renewable Energy and the Environment, researched and developed building cladding and roofing products, which utilise solar technology to provide power for buildings.

The University of Reading Knowledge Transfer Centre is currently the most successful in the UK, with 44 programmes helping companies in diverse sectors to access University expertise and technology.



Above: Dr Anne Wheldon with graduate Martyn Berry also pictured right testing a solar panel



# Grant for entrepreneurial academics



Professor Jon Gibbins of the School of Biological Sciences has been awarded a grant of £50,000 from the SEPOC Fund

**The University of Reading has joined a collaboration of universities delivering the South East Proof of Concept (SEPOC) Fund to academics to investigate proof of concept and the commercial potential of research.**

Lack of investment available to complete the proof of concept stage is a key barrier to greater commercialisation in universities, as confirmed by the Lambert Review. Other participating universities include University of Brighton, University of Kent, University of Greenwich, Oxford Brookes University and University of Portsmouth.

SEPOC, to be managed by Finance South East Ltd for two years, has been financed by the Higher Education Innovation Fund to provide grants of up to £50,000. During this time SEPOC has supported over 30 academics and almost half of these projects have already progressed to the next stage of commercialisation which would

include activities such as the formation of a collaboration or the negotiation of a licence.

Professor Jon Gibbins of the School of Biological Sciences has been awarded a grant of £50,000 from the SEPOC Fund. The grant will enable Professor Gibbins to develop a new assay for the development of novel anti-thrombotic therapies, exploiting Intellectual Property developed in his laboratory. Thrombosis is the formation of unwanted blood clots in the circulation that lead to heart attacks and strokes. It is a significant cause of disease and mortality in the Western world and carries huge financial consequences. Despite recent advances there are still significant unmet medical needs which this project is aiming to address. Professor Gibbins' work is part of a portfolio of intellectual property in the field of thrombosis.

## Strategic partnership

**In July, ANGLE plc and the University of Reading announced a 20-year strategic partnership to commercialise University intellectual property. ANGLE is a stock-market listed international venture management and consulting company focusing on the commercialisation of technology and the development of technology-based industry.**

The University is the first of a number of partners planned by ANGLE, which reflects the value of our research and positions us firmly at the leading edge in this increasingly important area.

This exciting development will enable a step change in commercialisation, complementing our in-house capabili-

ties and making the process easier and less burdensome for inventors. ANGLE will provide the University with consultancy services and access to dedicated investment funding and experienced management for spin-out companies. In return ANGLE has a right of first refusal to consider investing in all intellectual property which the University and inventors decide to commercialise. It will also receive a share in all commercialisation proceeds.

In total, ANGLE expects to invest at least £3 million over the first five years of the agreement and expects that this will be funded from existing resources.

## New Reading laser lab



PhD student Justin Steele-Davies in the new laser lab

**The University of Reading has developed a laser laboratory that is capable of showing some of the fastest physical processes known. The Ultrafast Laser Laboratory (ULL) can generate high energy laser light pulses with durations less than one tenth of a millionth of a millionth of a second long. The pulses can be tailored to have a particular shape and their properties can be measured.**

The Department of Physics and the School of Systems Engineering at the University received funding from the Science Research Investment Fund for

the project. This state of the art facility took nearly two years to design and build and now contains an impressive suite of recently developed instruments.

The laser pulses created in the ULL have a wide range of functions and will be used to investigate theories in fundamental physics as well as practical applications in medical science, DNA sequencing and even to discover more about the composition of archaeological finds.

For further information about the ULL facility visit: [www.ull.reading.ac.uk](http://www.ull.reading.ac.uk)

## Innovation Works



Local celebrity chef Heston Blumenthal

**The Innovation Works – a custom-built facility designed to stimulate creative thought – was launched at the University in November by the renowned chef, Heston Blumenthal.**

Based on the success of the Royal Mail's Innovation Laboratory (established in 2002), The Innovation Works@Reading

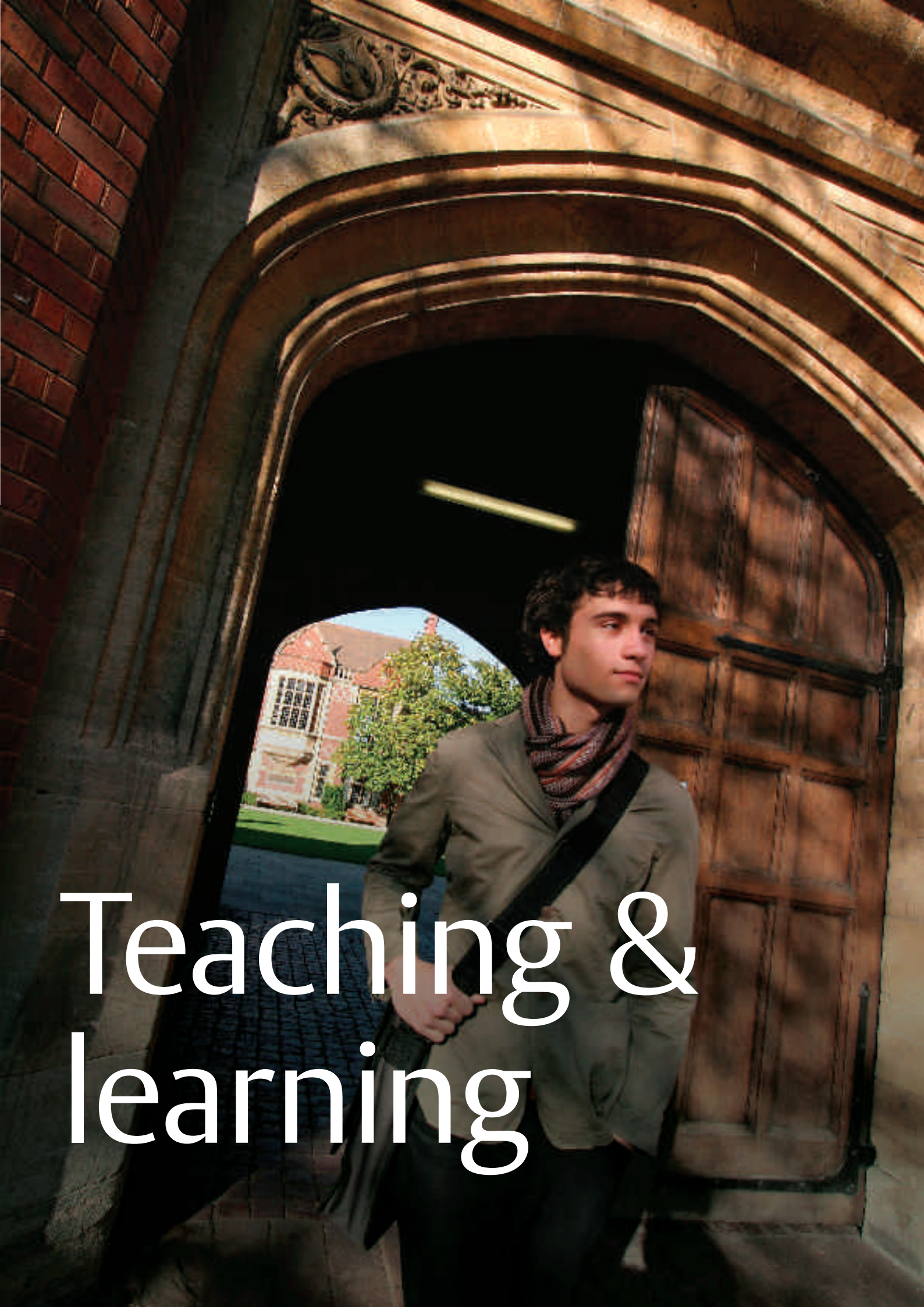
is only the fourth facility of its type in the UK, and the only Innovation Lab in the South East. It offers a whole new approach to solving business problems and helping people think 'outside the box'.

'The Innovation Works is essentially a creative thinking space,' said Kate Pitts, Project Manager at Reading's Innovation Lab. 'The different environments in the various zones have been specifically designed to help people come up with new ideas and concepts.'

'It uses the very latest technology, audio and visual equipment and lighting – it even has walls that you can write or draw on.'

The lab has been financed by the Government's Higher Education Innovation Fund (HEIF). It specialises in providing assistance for business planning, problem solving, scenario planning and modelling, and creativity sessions.





# Teaching & learning

# Students honour members of staff



Dr Ben Cosh

## **Congratulations to this year's winners of the Student Award for Outstanding Contributions to Teaching and Learning Support.**

Each year students are invited to nominate a member of staff they feel has had the greatest impact on their learning. All members of staff involved in teaching and learning support can be nominated, so lecturers, personal tutors, technical support staff, study advisors are all eligible for the award. Four awards are made, recognising the contributions made by staff in each of the faculties.

Students are invited to reflect on various aspects of teaching and learning support in their nomination to inform the Award Panel, and provide examples to enhance their nomination, including how the member of staff:

- motivates and inspires students
- seeks feedback from students on their teaching and takes their views into account
- takes an active interest in students' academic development
- gives constructive feedback to support students' learning

The 2006 winners of the Student Awards for Outstanding Contributions to Teaching and Learning Support were:

### **Dr Sheila Billard (Life Sciences)**

Sheila is a lecturer in the School of Psychology and Clinical Language Sciences. She was nominated in response to her enthusiasm and dedication to student learning.

### **Dr Julia Boorman (Economic and Social Sciences)**

Julia is a lecturer in the Institute of Education and was nominated because of her passion for her subject and the efforts she makes to pass this enthusiasm on to her students.

### **Dr Ben Cosh (Science)**

Ben is the Director of the Foundation Year in Sciences and from the nominations received clearly motivates and enthuses students.

### **Mrs Lesley Owen (Arts & Humanities)**

Lesley is Departmental Secretary in Applied Linguistics who received nominations not only in recognition of incredible administrative proficiency but also for providing invaluable pastoral support and departmental community spirit.



Dr Sheila Billard



Dr Julia Boorman



Lesley Owen



# Students top international trading competition



**Students from the ICMA Centre at the University have won first-prize in the prestigious 3rd annual Rotman International Trading Competition held at the University of Toronto's Rotman School of Management.**

The team of 4 traders beat 37 other teams from a veritable 'Who's Who' of the best finance schools in the world including MIT (Sloan School of Management), Carnegie Mellon University (Tepper School of Business) and Duke University (Fuqua School of Business).

The competition involved trading four separate cases ranging from simple open outcry futures to a complex quantitative analysis case which utilises simulated trading software.

The competition was at the highest level and by all accounts very intense, but once again the ICMA Centre produced a winning team having come 3rd in 2004 and 2nd in 2005.

John Board, Director of the ICMA Centre, commented: 'This win is especially welcome in light of the recent £5m donation to the University of Reading from The International Capital Market Association (ICMA) to fund further development of the ICMA Centre. This development will include a new state-of-the-art 50-station dealing room which will further enhance the ICMA Centre's practical edge in finance education.'

# Institute of Health Sciences

**The new Institute of Health Sciences was formally established on 1 January 2006.**

It is the latest step in the University's growing health related research and training activities. The Institute is based on our London Road campus, but will draw on support from academic and administrative staff on the main Whiteknights campus.

A key part of the University's health strategy and agenda is to work closely with local NHS Trusts, and we expect that the Institute will be the focus for this activity to grow.

The inaugural Director of the Institute is Professor Margot Gosney, Chair in Elderly Care Medicine, a joint post between the University and Royal Berkshire and Battle Hospitals. The Institute will also be staffed by an administrator, part time secretary and two research

fellows. There will also be a number of associated staff members from the University and the NHS Trusts.

The main aims of the Institute are to bring together University academics working in different areas in the University and also University academics with local NHS Care Trusts, to increase our research activity and income in the area of health and to contribute to the regional agenda.



The launch of the Institute was attended by (L to R) Professor Margot Gosney, Director of the Institute, Professor Gordon Marshall the Vice-Chancellor and Professor Dianne Berry, Pro-Vice-Chancellor for Research.

# Blackboard Academic Suite enhancements

*The new Academic Suite extends the current system to incorporate a Content System, a Community System and an e-Portfolio feature*

**With more and more students owning their own desktop or laptop computers, internet access in halls of residence rooms, wireless network areas on campus, increasing student expectation for online study, and staff embracing the potential that virtual learning systems offer, the University has recently invested in a three-year licence for the expanded online teaching and learning environment Blackboard Academic Suite. This investment enables us to offer students an exciting and engaging mode of study.**

Members of staff have been using the Blackboard Learning System for several years now for a range of teaching activities including delivering lectures and materials to distance learning students, providing support to students studying part-time using discussion forums, making resources to campus-based students, enhancing face-to-face teaching sessions, giving students feedback on their academic performance using the assessment and quiz tools.

The new Academic Suite extends the current system to incorporate a Content System, a Community System and an e-Portfolio feature. The Content System will enable the efficient management of learning content at the School and institutional level, as well as streamlined system administration; the Community System can be used to support online communities and allow targeted delivery of content and information to both staff and students within Schools, other work or social groups and associations; finally the e-portfolio feature supports the development and implementation of electronic portfolios by students and staff and could be used to support the personal development and planning of students. Moreover, the system supports multi-language options, which will be particularly useful for modern language teaching.

The new features of the Blackboard Academic Suite are being piloted across the University this year and after evaluation, plans will be made for the roll out of the whole system to all staff and students in the University.





## Educating educators



**The University launched an initiative during the year aimed at improving the number of teachers in schools.**

Through the Student Associates Scheme, it offered an £800 tax-free bursary for students throughout the Berkshire and Hampshire areas to encourage both undergraduates and postgraduates to take up a career in teaching.

This is a Government initiative which offers university students work placements in foundation, primary and secondary schools. The scheme provides a high quality training experience and is designed to help those considering teaching to make an informed decision about their chosen career and also for those who have not considered teaching to see it as a potential career route.

## Students give thumbs up



**Students expressed an impressive 82% level of satisfaction with their course at the University of Reading, according to the National Student Survey.**

In the survey for the Higher Education Funding Council for England (HEFCE), Reading was rated 22nd out of 129 UK institutions for students being satisfied with their course. Over 1,300 final year students from Reading took part in the national survey.

‘We are delighted with the results’ said Professor Rob Robson, Pro-Vice-Chancellor for Teaching and Learning. ‘The survey shows that students attending Reading will enjoy their studies here and can expect a high level of support from their department’.

# Collaborations



*Three colleges – Berkshire College of Agriculture, Bracknell and Wokingham College and Newbury College – are working with the University to deliver a new course*

**A new qualification that will help improve the standards, skills and status of childcare and education support staff in the Thames Valley region was launched by the University in collaboration with three further education colleges.**

The Foundation Degree for Supporting Children's Development and Learning (FDEd), commenced in September 2005, focusing on professional practice in childcare and learning support skills for staff working in a variety of care and education settings.

Three colleges; Berkshire College of Agriculture, Bracknell and Wokingham College and Newbury College are working with the University to deliver the course. These colleges are already experienced in the delivery of a range of awards, and two of them are Centres of Vocational Excellence for the Early Years.

As students will need at least two years' previous experience and to be working at least part-time in a childcare or educational setting during the programme, the degree will enable students to develop their knowledge, skills and understanding throughout their professional lives. There will also be opportunities to progress to an honours degree and, if appropriate, Qualified Teacher Status (QTS).

Each college offers a different pathway; Birth to 3 years, the Foundation Stage, or 5–11 years according to their specialist expertise and the needs of local students.

On the overseas front, the session saw the completion of the first year of the MSc in Network and e-Business Centred Computing, a jointly-awarded degree programme with the Aristotle University of Thessaloniki and the Universidad Carlos 3 de Madrid, funded through the EU Erasmus Mundus Scheme.

The programme has been devised to give future digital economy professionals the capability of understanding the technical underpinnings and business opportunities of the new economy. It provides in-depth study and training for students, encompassing state-of-the-art principles and techniques through a set of in-depth specialist modules. The programme involves 18 months of study, with students spending a term in each of the three partner universities during the first year covering the taught modules. Students then gain research and development skills through a substantial 6-month research and development project undertaken in one of the participating institutions. The programme also provides an opportunity to study in a multi-cultural environment, sharing knowledge with other students from different backgrounds.





# Around the University





The Vice-Chancellor, Professor Gordon Marshall cuts the anniversary cake watched by, from left to right: Dr Geoff Botting, Chancellor The Right Hon, the Lord Carrington, Mr Timothy Ford and Pro-Vice-Chancellor Dianne Berry

# Celebrations

The University celebrated the 80th Anniversary of the granting of its Charter with a series of festivities. The day, 17 March 2006, was marked by a cake-cutting ceremony. Staff and students gathered to see Vice-Chancellor Professor Gordon Marshall cut a giant birthday cake.

A spread from *Four Score and More* designed by Shoko Mugikura in the University's Department of Typography & Graphic Communication



*Four Score and More*, a book covering the history of the University from its inception in the 1890s until the present day was written by Professor Cedric Brown, Dean of the Faculty of Arts & Humanities, in commemoration of the University's 80th year.

The University organised a number of other events to commemorate the 80th anniversary. In February, the celebrations kicked off with a sports festival.





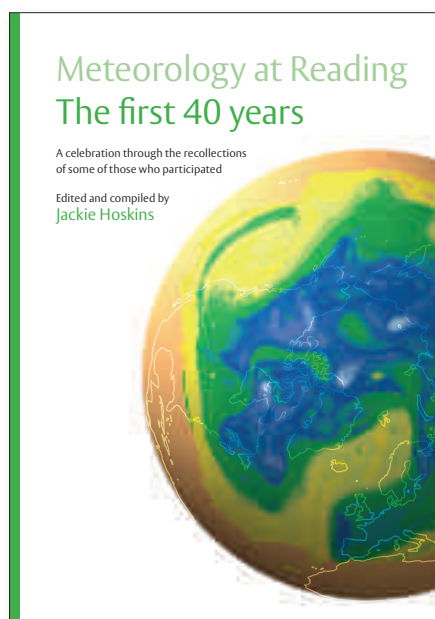
## Queen's Anniversary Prize

The University's Department of Meteorology was awarded the Queen's Anniversary Prize for Higher and Further Education at a ceremony at Buckingham Palace in February, attended by the Vice-Chancellor Professor Gordon Marshall, President of Council Mr Timothy Ford and Head of the Department of Meteorology Professor Keith Shine.

The Queen's Anniversary Prizes are awarded for exceptional contributions by institutions in the Higher and Further Education sectors to the wider community. Reading's Department of Meteorology is recognised as one of the outstanding departments of its kind in the world.

The Department, is internationally renowned for its training and research in weather, climate and physical oceanography.

Above: Professor Keith Shine and Vice-Chancellor, Professor Gordon Marshall receive the Queen's Anniversary Prize

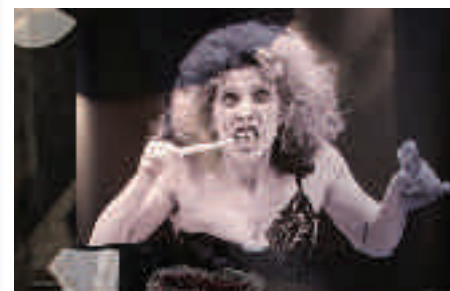


## Weathering 40 years

In May, the Department of Meteorology celebrated the 40th Anniversary of its foundation by the late Professor Reggie Sutcliffe. The celebrations included an afternoon of seminars from 'friends and relatives' of the Department with a wide range of subjects from severe weather events and the carbon cycle, to climate change and oceanography. A book of recollections *Meteorology at Reading: The first 40 years*, was edited and compiled by Mrs Jackie Hoskins and produced with the assistance of the Design and Print Unit in the Department of Typography & Graphic Communication. An Open Day and Alumni Reunion was attended by approximately 250 past and present students and staff.



Staff in the Department of Meteorology celebrate 40 years of teaching and research



## Beckett Centenary

The centenary of Samuel Beckett was marked, organised by The Beckett International Foundation at the University. Highlights included an exhibition of the photographer John Haynes' work at the University's Museum of English Rural Life and the world premiere of Beckett's novella, 'First Love'. Over £22,000 was raised at a gala evening hosted by Oscar-winning film director Anthony Minghella in aid of Macmillan Cancer Relief on 2 April, which saw Hollywood A-listers including Jude Law, Billie Whitelaw, Alan Rickman and Felicity Kendal perform excerpts from his works at Reading Town Hall.

'Samuel Beckett – The Irish European' exhibition, relating the story of Beckett's life and achievements, was held at Reading Museum and John Banville, the distinguished Irish novelist and 2005 Booker prize-winner, spoke about Beckett's late prose works.

The University of Reading's unique Beckett collection of manuscripts, papers, photographs and other materials received recognition this year as having outstanding national and international importance.

# Enhancing the student experience

## Major investment

The International Capital Market Association (ICMA) announced a donation of £5 million to the University to fund further development of the ICMA Centre, the Business School for Financial Markets. The money will finance a three-year building project to expand teaching facilities and add new dealing rooms, seminar rooms and staff offices.



The new building is expected to be open for students in 2008

It will allow the expansion of existing programmes, the introduction of new and innovative degrees and the capability to offer more tailored courses for the industry.

This most recent contribution brings the total of ICMA's investment in the University of Reading to over £10 million.

## New Student Services Centre

Named the Carrington Building, the new resource will bring together welfare, careers and the administrative support functions currently dispersed across the campus. It is named in honour of The Rt Hon the Lord Carrington, Chancellor of the University since 1992.

Reading is justifiably proud of its long tradition of providing a supportive framework to enable its students to achieve their academic potential, and this new Centre will allow these services to be managed in a more coherent and accessible way.



## Students' Union extension



Reading University Students' Union (RUSU) is to have a new extension housing volunteer and membership services, advice centre, media centre and representation group extension, costing in the region of £1.75 million.

The development is joint-financed by the University and the Students' Union.

The new ground floor will have a purpose built volunteers centre, an extensive media centre and suite, private and confidential advisors' offices, informal meeting spaces and a luxury new Union entrance.

## SportsPark

The University is investing £2m on improving its Sports Centre facilities. Plans include an extension to the fitness studio, construction of a new male changing area, the reconfiguration of the women's changing area and converting a free weights area into a yoga studio. The new Bodyworx fitness studio will be fitted with a range of state of the art equipment and a much larger cardiovascular area.



# Awards & people



## Innovation and Research Award

**Petra Rudloff from the School of Construction Management and Engineering has won the prestigious International Innovation and Research Award from the Chartered Institute of Building (CIOB).**

Petra won the award for a dissertation submitted as part of her Master's degree in Project Management. Petra developed her study from her involvement with the London Thames Gateway Development Corporation where she is responsible for delivering major urban regeneration projects in East London. The dissertation explored alternative ways of managing urban regeneration, highlighting the fact that practitioners in the regeneration process favour a 'softer' management approach than the one currently adopted.



## Leverhulme

A University of Reading philosopher has been awarded £50,000 in recognition of her research achievements. Dr Emma Borg, of the School of Humanities, is one of just 26 academics who have won a prestigious Philip Leverhulme Prize.

Dr Borg, described by one colleague as a 'highly energetic individual and an extremely able philosopher', researches the area of philosophy of mind and language. As well as achieving international recognition for her research, Dr Borg is also a popular and effective teacher.

'I'm obviously very happy indeed to have been awarded the Leverhulme Prize,' she said. 'The award will allow me to develop my research, which considers the overarching questions of the structure of the human mind.'



## Research presented to MPs

Dr Chris Stokes from the School of Human and Environmental Sciences was invited to the House of Commons in March to present his recent climate-change discovery to MPs at a special reception organised by Science Engineering and Technology (SET) for Britain. Dr Stokes was selected from several hundred applicants and joined other aspiring and enthusiastic younger scientists, engineers and technologists who presented their recent discoveries as part of UK National Science Week. Dr Stokes and colleagues at the University of Reading and Moscow State University discovered that glaciers in one of the mountain ranges of the former Soviet Union are experiencing widespread retreat. Mountain glaciers are a relatively reliable indicator of climate change – if they are melting across the world, it could mean an increase in sea level, potentially displacing millions of people.

## Top Award

A Knowledge Transfer Partnerships (KTP) programme between the University and GAP Activity Projects won the Voluntary Sector Project of the Year category at the prestigious Computing Awards for Excellence ceremony in November.

Reading's project, with Reading BSc Computer Science graduate, Tom Robinson, 24, was supervised by Dr Rachel McCrindle and Dr Shirley Williams of the School of Systems Engineering. The University of Reading was congratulated by the Trade and Industry Secretary, the Right Hon Alan Johnson MP in May 2006: 'The KTP programme provides vital, practical help to businesses', he said.

## Officers appointed

A unique partnership with Thames Valley Police enabled the University to benefit from a joint funding initiative

From left to right: Pro-Vice-Chancellor (Enterprise) Professor Carl Stychin, the Rt Hon Alan Johnson MP, KTP Manager Kate Darby



offered by the Thames Valley Police Authority for the recruitment of four dedicated Police Community Support Officers. The PCSOs have become a familiar feature on University property and their presence has made a valuable contribution towards the reduction in the annual crime statistics.

## Royal Society Award 2005

Professor Howard Colquhoun, of the Department of Chemistry, won the 2005 Royal Society Award for the Research in Materials Chemistry.

The work leading to this award involved the use of molecular tweezers to read sequence-information in synthetic copolymer molecules. Professor Colquhoun has also been awarded a Royal Society Leverhulme Senior Fellowship to support his research next year, during a period of study leave in Cambridge as a Visiting Fellow of Clare Hall.



Professor Howard Colquhoun



## Award for RISIS

Staff in the RISIS Development and Support Office and the ITS-CISS Office have won an award for their use of automated procedures in the context of maintaining module data.

The development of the software (SITS) to serve the needs of users in faculty offices and in schools was judged to be one of the best examples of automation from the hundred-plus higher

education institutions which use SITS in the UK.

The RISIS Office is continuing to develop facilities for entering and updating module data. The plan is to provide schools with the facility to view and amend directly on the portal the textual data (module descriptions) associated with their modules.



From left to right: Alison McCarroll, Katie Gumbrell, Vanessa Leivers, Rachel Crabtree, Teresa Jones, Serena King and Marcel Perpete

## First in citations

The University reached top spot in Agricultural Sciences in UK citations ranking, achieving 6th place overall.

The May issue of *Science watch*, the bimonthly newsletter published by Thomson Scientific, a business of The Thomson Corporation, ranks United Kingdom universities based on both the total number of citations as well as their impact (or the average number of citations per paper) during the 2001–2005 period.



## Honorary degrees

**Dr Tony Corley**, former University of Reading economics lecturer and renowned academic: Doctor of Letters (DLit) in December

**Martin Green**, farmer and amateur field archaeologist: Doctor of Science (DSc)

**Heston Blumenthal**, chef and restaurateur: Doctor of Science (DSc)

**Professor James Knowlson**, Emeritus Professor of French and creator of the Beckett Archive and the Beckett International Foundation: Doctor of Letters (DLit)

**Anthony Minghella**, film director and Patron of the Beckett International Foundation: Doctor of Letters (DLit).



left to right:  
Dr Tony Corley,  
Martin Green,  
Heston Blumenthal,  
Professor James  
Knowlson,  
Anthony Minghella

## Whisking up a cake

University pastry chef, Clare Ringrose, single-handedly created the beautiful Anniversary cake that was the centre piece of the Charter Day celebrations.

She also made 1,000 extra individual portions of the iced sponge cake so that there was enough to serve everyone. Over a period of three weeks, on top of her usual workload, Clare whisked, creamed, baked and iced 40 20' × 15' trays of sponge mixture to total 3,000 portions.

The enormous amount of sponge cake required 300 eggs, 53 kilos of flour, 35 kilos of icing and 12 kilos of jam. 'It

was hard work, my arms ached because of rolling out so much icing, but I did have a sense of accomplishment when it was finished,' said Clare.

'This was the biggest cake I have ever made. It took six people to wheel it across from the Cedars kitchen to the Palmer building on a trolley. I was so glad the weather was good.' Clare has worked for the University for 11 years. As well as being asked to create giant cakes, she is responsible for providing pastries, cakes and sweets on a daily basis for the University hospitality venues.



*'This was the biggest cake I have ever made. It took six people to wheel it across from the Cedars' kitchen to the Palmer Building on a trolley.'*

**Clare Ringrose**  
University pastry chef



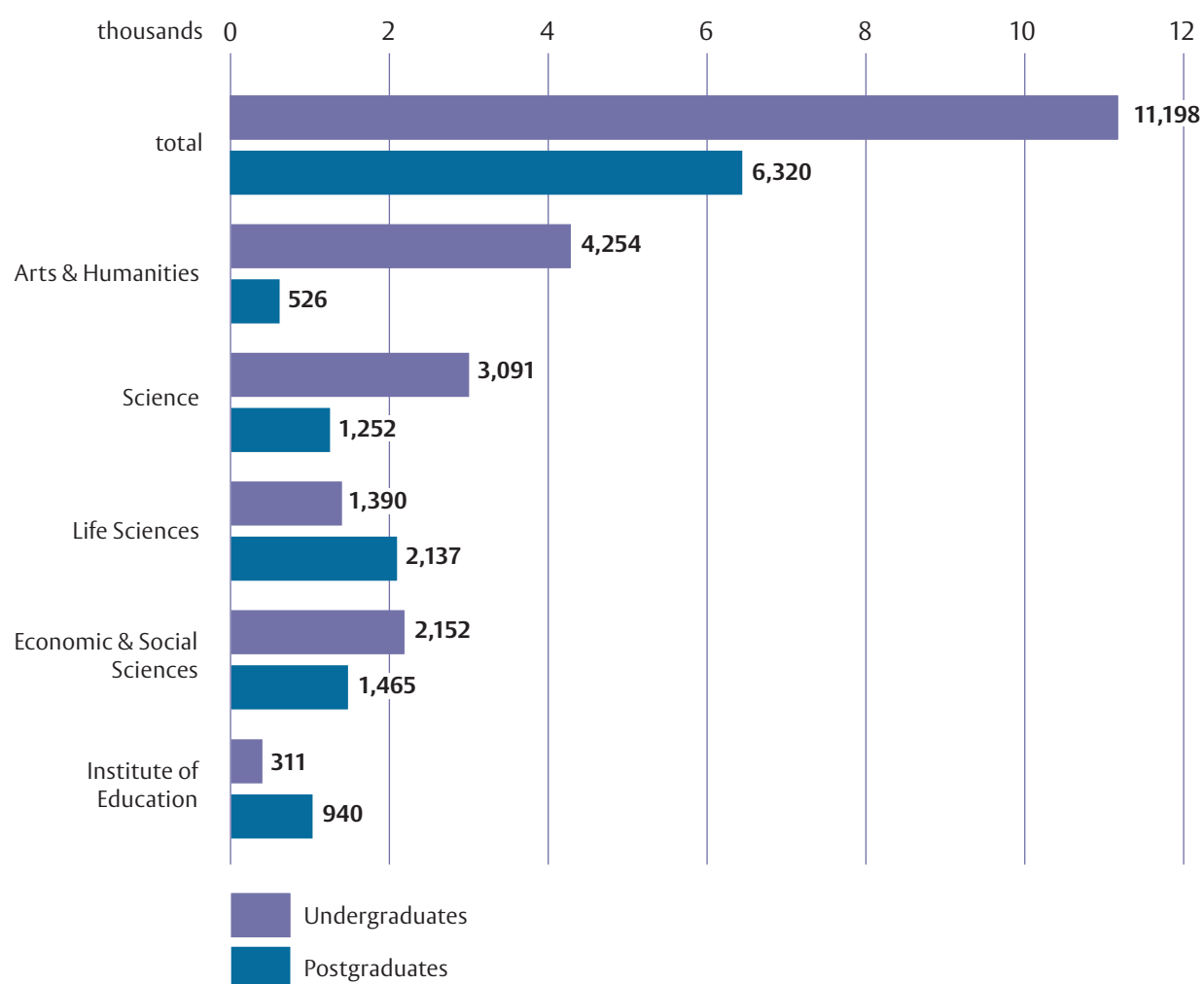


Dol-ene Vita  
Espresso Bar

Dol-ene Vita  
Espresso Bar

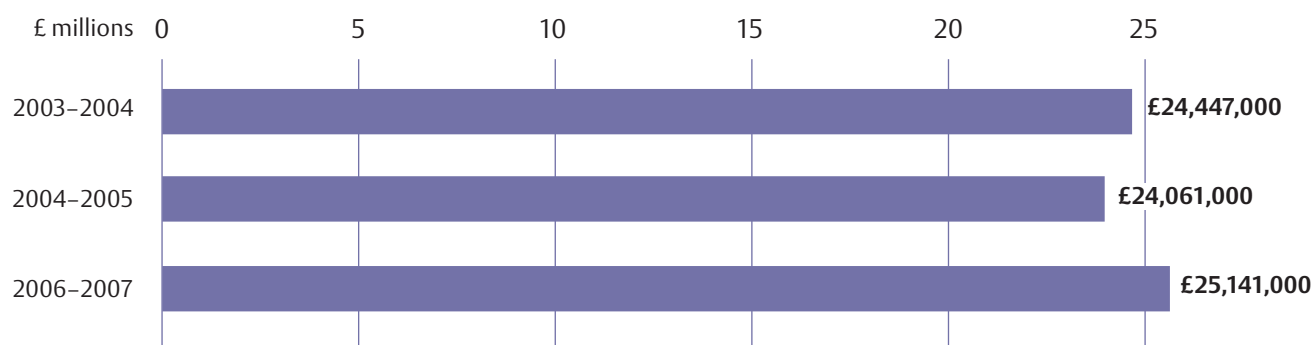
Facts & figures

## Student numbers 2005–2006



## Research grants and contracts

From research councils, industry, EU and other sponsors

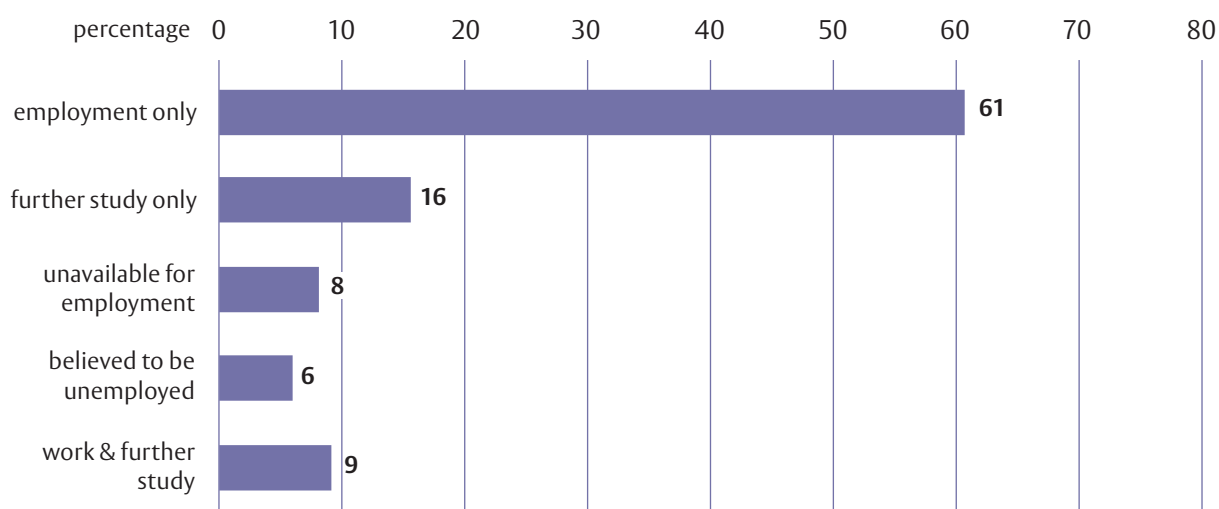




## Careers information

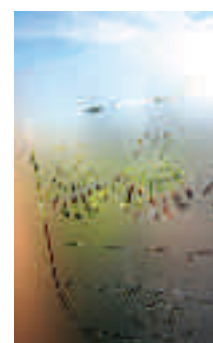
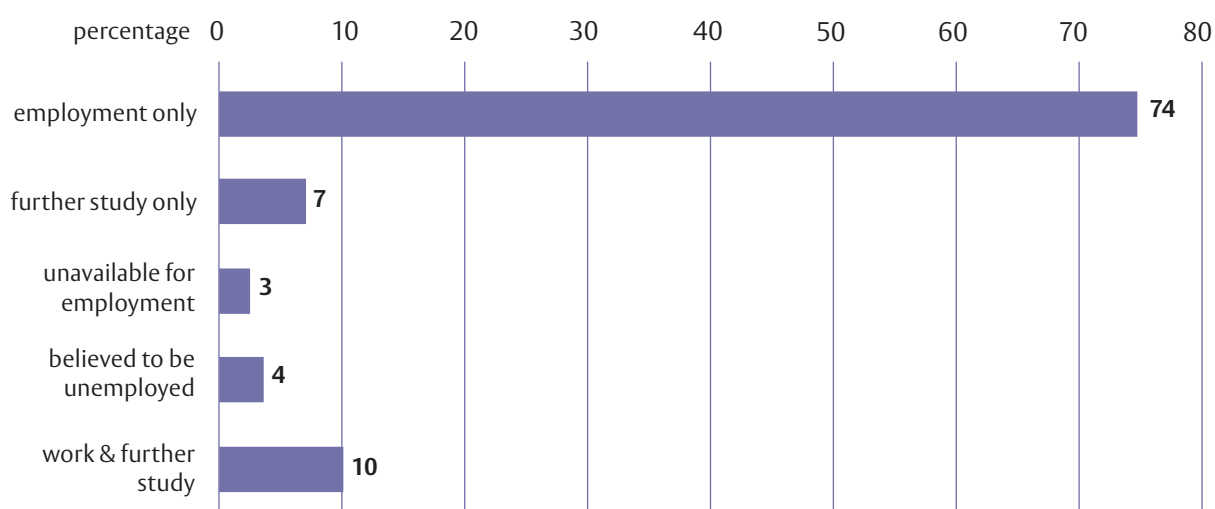
### Destination of leavers (graduates) 2005 as at January 2006

#### First degree



### Destination of postgraduates 2005 as at January 2006

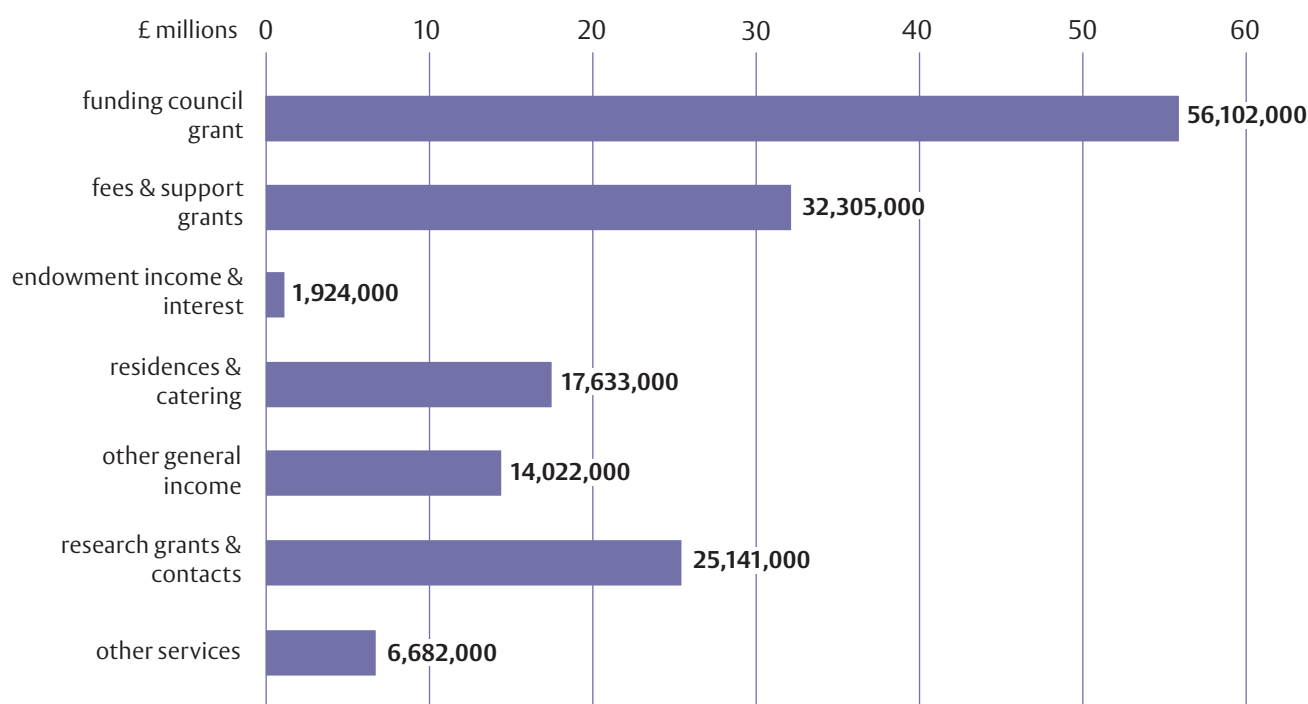
#### Higher degree



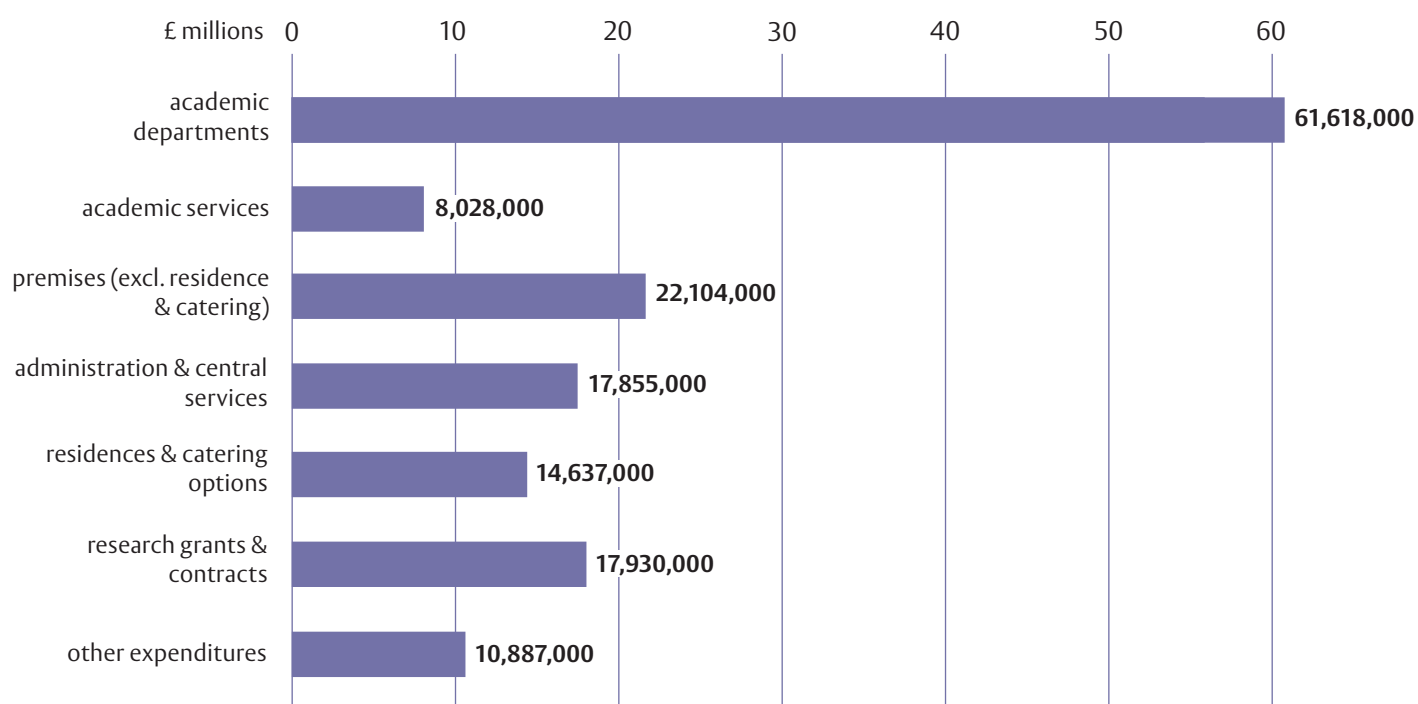
# Financial summary

From the consolidated financial statement  
for the year ended 31 July 2006

Income total: £153,809,000



Expenditure total: £153,059,000





## Visitor

Her Majesty The Queen

## The Officers of the University

### Chancellor

The Right Hon the Lord Carrington, KG, GCMG, CH, MC, PC

### Vice-Chancellor

Professor Gordon Marshall, CBE; BA, Stirling; DPhil, Oxford; FBA; AcSS

### President of the Council

Mr Timothy Ford, FRSA, FICPD

### Vice-President of the Council

Dr Geoff Botting, BSc, PhD

### Treasurer

Mr David Luffrum, CPFA

### Pro-Vice-Chancellors

Professor Dianne Berry, BSc, CNAA; DPhil, Oxford; CPsychol, AFBPsS, AcSS

Professor Tony Downes, BA, BCL, Oxford

Professor David Rice, BSc, Hull; PhD, DSc, Exeter; CChem; FRSC

Professor Carl Stychin, BA, Alberta; LLB, Toronto; LLM, Columbia

### Deans of the Faculties

#### Arts and Humanities

Professor Cedric Brown, BA, PhD, Reading

#### Economic and Social Sciences

Professor James Pemberton, MA, PhD, Cambridge

#### Life Sciences

Professor Rob Robson, BA, York; PhD, Wales

#### Science

Professor David Porter, BSc, Wales; PhD, Leicester

### Director of Academic Services

Mr Keith Hodgson, BA, Leicester

### Director of Facilities Management

Mr Colin Robbins, BSc, Portsmouth; FRICS

### Director of Finance and Corporate Services

Mr David Savage, BA, London; FCCA

### Director of Information Services

Mrs Annette Haworth, MA, Oxford; Diploma in Computer Science, Cambridge; FBCS, FRSA

### Director of Student Services

Mr Bill Watts, BSc, London

### Auditors

KPMG LLP