August

Milk: a potted history

A paper published collaboratively by Professor Richard Evershed in the School of Chemistry describes how his analysis of early Neolithic pottery vessels from south-eastern Europe, Anatolia and the Levant suggests that milk was previously soft and only by the eighteenth century BC – over 3,000 years earlier than previously thought.

September

Bristol scientists in tiny collisions

The largest scientific experiment in the world – the Large Hadron Collider at CERN in Switzerland – was turned on last month, with scientists from the Department of Physics playing their class in its construction and at the interpretation of the data resulting from the measurement: finding the ‘God particle’ or leading to new frontiers and new science. We have often asked our students to imagine a son or daughter discovering a new law of physics or the exclusive decay of an atomic nucleus, to determine the age of the paintings.

October

Catching in caves

A team from the Department of Anthropology and Archaeology returned from an expedition to the Cantabria and Asturias regions of Spain where they took on board the role of 20th century researchers. They have seen remarkable images of contemporaneous and modern human occupation which will fill in some major gaps in our understanding of the laws of nature.

November

Students rough it for charity

Around 20 electric guitar players swapped their warm beds, cardboard boxes and freezing temperatures for one night. The students spent the night outside in West Park (on Landgame) to raise money for the Bristol-based homelessness charity the Julian Trust.

December

Bristol makes it to Times Top 10

The international university ranking carried out by the independent Times Higher Education has placed the University of Bristol 61st in the world. It also placed 9th in the UK and was ranked 17th for law and 16th for physics. This latest survey also made it clear that the University’s Cobden Book of Hours was one of the 100 treasures unveiled online by the University of Bristol and the University of the West of England (UWE) and the University of Sheffield in November, as part of the University’s celebration of its 900th anniversary. The Cobden Book of Hours was among 100 treasures from the University on display at King’s College London from 10-20 November, as part of the University’s celebration of its 900th anniversary.

January

Students with a new record

Bristol ChemLabS, one of the University’s two Centres for Excellence in Teaching and Learning (the other is AIMS – Applied and Integrated Medical Sciences), had a record month for chemistry outreach activities, clocking up 46 events in January. The number of students involved in the activities was over 2,000.

February

Nature and ecosystems

New data from the Department of Earth Sciences has shown that the global climate has become warmer over the past 100 years, with the rate of warming accelerating over the past 30 years. This finding is consistent with the 2008 findings of the Intergovernmental Panel on Climate Change (IPCC). The study was published in the journal Nature.

March

Annual garden unveiled

Hodinlon (Leigri Hall) opened the University’s new central garden, situated in the garden of the same name. The garden was designed by the Garden Designers, Dr Pauline Sutcliffe, and is the largest of its kind in the University’s history.

April

Biodiversity Jenga

Students’ Union and the Bristol Natural History Consortium, on Bristol’s Harbourside.

May

Elected members of the academic staff

Professor Paula Booth – Pro-Vice-Chancellor Professor Anil Wadham – Pro-Vice-Chancellor

Elected members of the non-academic staff

Professor Robert Massie – Pro-Vice-Chancellor

Elected members of the

Professor Robert Massie – President of the Students’ Union

June

Ruth Jackson – Vice-President of the Students’ Union

Academic

If you need all or part of this publication in an accessible format (eg in Braille, in large print or on tape), please contact the Public Relations Office on 0117 928 8895.
This review of 2008/09, which complements our formal Annual Report and Financial Statements for that year, helps to account for the University of Bristol’s overwhelmingly positive reputation within and beyond the higher education sector. The achievements of the students and the range and quality of the work undertaken by academic and support staff are truly inspiring. Council, the governing body, is proud to play its part in ensuring that the University continues to be renowned for high standards and academic success, and to deliver invaluable benefits to individuals and to society at large.

Throughout 2009, the University has been celebrating the hundredth anniversary of the granting of its Royal Charter. What better year than the centenary to refresh the institution’s overarching Vision and Strategy? Doing so has been a stimulating exercise; the outcome, which you can see in full at www.bristol.ac.uk/university/vision/, is that the University is clearer about its future direction, its priorities and how best to pursue them.

It has been a year of challenge as well as celebration. The University’s outstanding performance in the 2008 Research Assessment Exercise has had favourable financial consequences, but the severe pressures on the public sector, combined with the global economic downturn, have created uncertainties that are likely to prove persistent. Bristol is at least as well placed as other leading universities to come through these difficult times in good shape, but there is no disguising the fact that Council – and, indeed, the whole University – will have to navigate some inhospitable waters.

The objective is to maintain the University’s academic trajectory and to keep investing in the estate, but to do so in a prudent and sustainable manner. That way, the University will not merely survive the current economic turbulence but continue to achieve national and international distinction as a leading centre for education, research and enterprise.
MISSION, VISION & VALUES

Through its Royal Charter granted in 1909, the University of Bristol is committed to ‘the promotion of Arts, Sciences and Learning’. In its centenary year, the University restated its mission, together with its vision and values. These are set out below. They also appear at the start of the University’s new Vision and Strategy for 2009-16. This Review of the Year, together with the associated Annual Report and Financial Statements, charts progress in 2008/09 against the Vision and Strategy.

MISSION

To pursue and share knowledge and understanding, both for their own sake and to help individuals and society fulfil their potential.

VISION

The University of Bristol is an international powerhouse of learning, discovery and enterprise. Its vision is of a university whose excellence is acknowledged locally, nationally and globally and that is:

- dedicated to academic achievement across a broad range of disciplines, and to continuous innovation and improvement
- research-intensive, supporting both individual scholarship and interdisciplinary or thematic research of the highest quality
- a centre for intellectually demanding, research-informed education that nurtures independence of mind and helps students achieve their personal goals and serve society’s needs, both during and after their time here
- engaged with society’s interests, concerns, priorities and aspirations
- a major contributor culturally, environmentally and economically to Bristol and the South West
- well led and responsibly run, with an emphasis on consultative decision-making and open communication as well as personal responsibility and accountability.

VALUES

Our mission and vision are underpinned by these values:

Truth
We seek and are inspired by truth, which we pursue for its own sake

Excellence
We strive for the highest quality in all we do

Innovation
We welcome the challenge of the new and value the creative and entrepreneurial

Ambition
We have high aspirations for the University and all its staff, students and alumni

Responsibility
We aim to make a positive difference to the wider world and the future

Independence
We encourage independent thinking and cherish academic and institutional autonomy

Collaboration
We are committed to teamwork and to partnership with others

Transparency
We want to be accountable for our decisions and actions

Diversity
We view the diversity of our staff, students and alumni as a great asset

Equity
We believe in the equitable treatment of all

Our mission and vision are underpinned by these values:
EDUCATION & THE STUDENT EXPERIENCE

The University recognises the academic potential of students as a resource precious to the individuals concerned, to their communities and to society at large. Its extensive investment in teaching and learning facilities, in training of staff, in widening participation and in technological innovation reflects the centrality to the University’s mission of helping every student to fulfil his or her potential.

The University’s priorities in this area are to:

- attract and retain academically gifted and highly motivated students from a wide range of backgrounds, creating a diverse and international University community;
- provide an education of the highest quality that is research-led and focused on the needs and expectations of our students;
- ensure students have a fulfilling, demanding and intellectually stimulating experience while at University, that prepares them for employment and worldwide opportunities when they leave;
- provide effective and enabling educational leadership and structures that support educational enhancement;
- ensure that learning takes place within a high-quality environment that enables both students and staff to achieve their full academic potential.

Audit and survey: grounds for confidence

The results of an institutional audit of the University by the Quality Assurance Agency for Higher Education in April 2009 expressed ‘confidence’ in Bristol’s academic standards and in the value of a Bristol degree.

It was also encouraging to note that some departments improved their National Student Survey scores over the past year. The Education Support Unit, along with other divisions of Support Services, is committed to working with academic departments and the Students’ Union to ensure that the student experience at Bristol is as good as it can be within the resources available.

Student residences

In 2008/09, the University continued to develop its residential strategy. This is aimed at ensuring that halls of residence and other University homes offer students a choice of high-quality, affordable places to live with good facilities for living and learning, better transport links and improved safety and security. The strategy is not only about prioritising further capital investments in the residential estate, necessary though these will be; it is also about how to achieve residential communities that work for students – communities that support students’ education as well as their social and welfare needs. Over the past year there has been widespread consultation and debate about these and related issues. The emerging strategy will be far stronger as a result.

Master’s degree in Deathhood Studies – another first for Bristol

The University’s Centre for Deaf Studies has launched the world’s first Master’s degree in Deathhood Studies, only five years after the Centre’s Dr Paddy Ladd and colleagues introduced the Deathhood concept (now adopted globally) to reflect the enormous changes in Deaf and hearing communities over the past 30 years. The course includes units on Deaf history, sign language literature and folklore, sign linguistics and Deaf culture.

Bristol to offer 75 new Humanities studentships

The Arts and Humanities Research Council (AHRC) has awarded the University £2.6 million to support postgraduate studentships in Arts and in Social Sciences and Law. The funds, which will come to Bristol under the AHRC’s new Block Grant Partnership scheme, will provide 75 studentships over the next five years.

Funding professionals to train at Bristol

Bristol is one of 12 UK universities to offer a new, three-year graduate trainee programme aimed at increasing the number of fundraising professionals working in higher education. The programme is funded by CASE (Council for Advancement and Support of Education) Europe and the Higher Education Funding Council for England.

Widening participation

Funding professionals to train at Bristol

The Widening Participation Office exists to encourage and support people who have the ability, motivation and potential to thrive at university, but who come from groups that are currently under-represented in higher education. These include people from certain minority ethnic groups, those with disabilities, ‘mature’ candidates (people over the age of 25) and those from families who have little or no history of going to university.

Pastoral care: Student Counselling Service and the Multifaith Chaplaincy

The moral, spiritual and personal welfare of students is a concern shared throughout the network of student support services, which includes the Student Counselling Service and the Multifaith Chaplaincy.

The Student Counselling Service is staffed by a team of professionally trained and widely experienced counsellors accustomed to helping people from many backgrounds and cultures. Counselling is available free to all students at the University, including on-site counselling at Langford. In response to an escalation in the number of students requesting counselling in 2008/09, the Service extended its evening opening hours and appointed a new receptionist. It also joined forces with the Staff Counselling Service and the Access Unit to provide workshops on managing students in distress and crisis, available to all sectors of the University.

The Multifaith Chaplaincy maintains an active role in the spiritual and social welfare of the University community. There are currently 17 University chaplains, all appointed by faith communities in Bristol, and the Multifaith Chaplaincy Centre offers a range of quiet rooms and social spaces. In 2008/09, events organised by the Multifaith Chaplaincy included a lecture by Mona Siddiqua, Professor of Islamic Studies and Public Understanding at Glasgow University, on Christian-Muslim relations (arranged as part of the University’s centenary lecture series) and the annual thanksgiving service for those who bequeath their bodies to the Department of Anatomy.
Teaching prizes
In January, the University held its annual Learning and Teaching Exhibition and awarded prizes to members of academic and support staff across the University in recognition of their efforts in supporting the student learning experience. The event, organised by the Education Support Unit, included an exhibition of innovative learning and teaching practice from across the faculties, short talks on recent developments in learning and teaching, and a keynote presentation by Dr Nick Harris, a British Council-appointed UK Bologna Expert, on the implications of the Bologna Process for higher education.

During the evening, the 2008 awards were presented to the following people:

**Teaching and Learning Prizes**
Awarded to members of staff who show the characteristics of an excellent teacher.

- Tricha Passes
  Department of History of Art
- Dr Martin Lings
  Department of Civil Engineering
- Dr Lynda Moore
  Department of Clinical Veterinary Science
- Dr Angela Hague
  Department of Oral and Dental Science
- Dr Andrew Blythe
  Community-based Medicine
- Dr Sean Collins
  Department of Mathematics
- Dr Tony Hoare
  School of Geographical Sciences
- Elisabeth Lazarus
  Graduate School of Education

**Rising Star Awards**
For staff who have been teaching in higher education for less than five years and who show excellent potential through the quality of analysis and practice in teaching.

- Dr Emma Hornby
  Department of Music
- Dr David Drury
  Electrical and Electronic Engineering
- Dr Emma Robinson
  Department of Physiology and Pharmacology
- Dr Andy Salmon
  Clinical Science at North Bristol
- Dr David Leslie
  Department of Mathematics
- Dr Jo Haynes
  Department of Sociology

**Awards Recognising Support for Teaching and Learning**
Recognising outstanding contributions to education by members of support staff.

- Paula Coonerty
  Arts Faculty Office
- Dr Evan Jones
  Department of Historical Studies
- Anne Thorpe, Gina Stuart, Martin Baker and Phil Wade
  Faculty of Engineering
- Ruth Batterham
  Department of Biochemistry
- Deborah Hawkins
  Department of Social Medicine
- Melanie Stodell
  Community-based Medicine
- Dr Tim Obeey and Dr Tom Podesta
  Chemistry
- Janet Woolway-Allen
  Department of Experimental Psychology
- Kes O’Donnell
  Social Sciences and Law Faculty Office

**Engagement Awards**
Recognising staff whose work in public engagement has been exceptional and/or innovative.

- Lois Bibbings
  (School of Law) and the Widening Participation Office
  Meriton Law Enrichment programme
- Professor Jon Keating, Chrysalis
  Cherniwichan and Azita Ghassemi
  (Department of Mathematics)
  Mathematical Ethnographies project
- Dr Caroline McKinnon
  (Department of Biochemistry)
  Science Alive! initiative in Biochemistry
- Dr Linda Sellou
  (School of Chemistry)
  Bristol ChemLabS outreach programme
- Tom Sperlinger
  (Department of English)
  BA in English Literature and Community Engagement programme

**e-Learning Awards**
Recognising innovative and effective use of e-learning in the delivery of programmes and the support of staff and students.

- Dr Martin Homer
  Department of Engineering Mathematics
- Dr Dominic O’Sullivan
  Department of Oral and Dental Science
- Dr Colin Western
  School of Chemistry
- Gervas Huxley
  Department of Economics
RESEARCH

Research at Bristol includes much that is of public benefit. The University’s activity is engaged in the fullest sense: engaged with urgent issues such as disease, climate change, energy, social justice, natural resources and the welfare of the individual; engaged with the cultural life and history of nations and communities across the world; engaged with the future of technology and science and the development of innovations in medicine, nanotechnology, quantum cryptography, composite materials, stem-cell engineering and other emerging fields.

The University’s priorities in this area are to:

- be recognised globally for the quality of our research;
- create a positive research environment and infrastructure that will attract and retain the highest quality researchers and postgraduate students worldwide;
- develop our portfolio of flagship and high-impact research, working across and between disciplines to answer important societal questions and contribute to the social, political, environmental and economic well-being of the region, the UK and the wider world;
- seek, manage and provide professional support for strategic relationships and alliances with key national and international partners – business and industry, the public sector, user communities, sponsors of research and policy-makers;
- play a leading intellectual role in enterprise, knowledge exchange and economic and social impact agendas, and continue to be a beacon of good practice and leader of innovation in the city and region;
- be recognised globally for the quality of our teaching;
- develop a sustainable portfolio of programmes that will attract and retain the highest quality students and graduates;
- ensure our students graduate with the full range of skills and attributes that will ensure they are ready for the workplace.

Strong showing for Bristol in Research Assessment Exercise

The results of the 2008 Research Assessment Exercise (RAE), an independent assessment of the quality of research in UK universities, confirmed the University of Bristol as a world leader in research. The RAE, a rigorous exercise carried out on behalf of the higher education funding bodies, helped the Higher Education Funding Council for England to determine how more than £1.5 billion in research funding would be allocated annually. Over 90 per cent of eligible staff at Bristol were included in the University’s RAE submission – thought to be one of the highest percentages in the sector.

Over 61 per cent of the research work assessed in 48 research fields at Bristol was awarded either the top 4* rating, defined as ‘world leading’, or the 3* rating, classed as ‘internationally excellent’. The quality of Bristol’s research in geography emerged as first equal with Cambridge in the UK.

Epidemiology and public health, health services research, chemistry, mathematics, drama, mechanical engineering, economics, accounting and finance, aeronautical engineering and sports-related studies are among other research areas in which the University achieved particular distinction.

Bristol’s faculties of Science and Engineering performed exceptionally well, but there were areas of outstanding research performance across all six faculties.

Taking into account the 2* rating – defined as ‘recognised internationally’ – as well as the 3* and 4* ones, nearly 93 per cent of research at Bristol was deemed to be of international standard.

Adapted from Bristol, an article in a university magazine.

Found: world’s earliest nuclear family

An international team including Dr Alistair Pike, Head of Archaeology at Bristol, and PhD student Hyke de Jong, has uncovered the earliest evidence of a nuclear family, dating back to the Stone Age. A 4,600-year-old grave excavated at Eucla in Germany contained a female, a male and two children, buried facing each other – an unusual practice in Neolithic culture.
RESEARCH CONTINUED

Using state-of-the-art genetics and isotope techniques, the researchers established that the group consisted of a mother, father and their two sons. This provides the oldest molecular genetic evidence in the world of a nuclear family and fills in an important gap in our knowledge of human social evolution.

Quantum cryptography sets new standard in ‘unbreakable’ encryption

A Bristol team led by John Rarity, Professor of Optical Communication Systems in the Department of Electrical and Electronic Engineering, is one of the partners in a Europe-wide project to establish a secure communications network using quantum cryptography. The network was demonstrated for the first time in October 2008 in Vienna. The encryption process uses quantum cryptography to generate and distribute keys that encrypt confidential communications with the highest level of security ever achieved. Potential users of this network include government agencies, financial institutions or companies with distributed subsidiaries.

Work transformed: new study earns plaudits

An acclaimed new book by Kevin Doogan, Jean Monnet Professor in the School for Interdisciplinarity, currently a buzzword in academia, has for some time been a major component of the University’s strategy, with many instances of collaboration across disciplines that have already yielded concrete, highly visible outcomes. His book includes a comprehensive analysis of developments in Europe and North America, and concludes that the precariousness of employment is not a natural consequence of the new global economy but is manufactured, emanating from neoliberal policy that advocated greater exposure of the economy to market forces and encouraged extraordinary levels of financial speculation, consumer debt and over-production.

Professor Doogan explains that the book, which has received huge critical acclaim around the world, ‘aims both to counter despair and to contribute to the restoration of rationality in the management of economic affairs’.

Breast cancer screening transformed by radio waves

A revolutionary new technique for breast cancer screening, which has been in development at the University for several years, began trials at North Bristol NHS Trust in November 2008.

Alan Preece, Emeritus Professor in Medical Physics at Clinical Science at South Bristol, has been collaborating with Professor Ian Craddock from the Department of Electrical and Electronic Engineering to develop a breast-imaging machine that uses radar. Their prototype adapts the pioneering work of Bristol’s Professor Ralph Benjamins on landmine detection. It produces a detailed, 3D image of the breast in less time – and with much greater comfort for the patient – than either a mammogram or an MRI scan.

It is hoped that the new technique, developed with funding from the Engineering and Physical Sciences Research Council and the trustees of University Hospitals Bristol, will prove successful enough to be commercialised via Microm Ltd, a University spin-out company.

Bristol chemists make liquid protein

Chemists at Bristol have created the first known example of a liquid protein, opening up the possibility of a number of medical and industrial applications.

Professor Stephen Mann and Dr Adam Perriman, along with Helmut Cölfen of the Max Planck Institute for Colloid and Interface Research in Germany, made a liquid form of the non-storage protein, ferritin, by modifying its surface. The resulting highly concentrated protein could pave the way for a new generation of protein-based pharmaceuticals, sensors, coolants and lubricants.

DVD sheds new, detailed light on Jacobean theatre

Professor Martin White and colleagues in the Department of Drama: Theatre, Film, Televison have made a major contribution to our understanding of theatre history, with a DVD reconstruction of a candlelit Jacobean playhouse. The Chamber of Demonstrations (an outcome of a project funded by the Arts and Humanities Research Council) features high-definition (HD), multi-angle footage of scenes from The Duchess of Malfi, The Changeling and other works, performed by classical actors in costumes from Shakespeare’s Globe. The DVD, produced by Ignition Films, includes a wealth of supporting material on 17th-century English drama practice and is one of the first HD DVDs to be created specifically as an academic research and teaching tool.

Virtual chemical labs bring safety, experiments, practise the techniques and make mistakes – all before they tackle the real thing.

Interdisciplinary work

Interdisciplinarity, currently a buzzword in academia, has for some time been a major component of the University’s research strategy, with many instances of collaboration across disciplines that have already yielded concrete, highly beneficial outcomes (see, for example, the work on breast cancer screening, p19). At the organisational level, the University has invested heavily in establishing a number of new centres and networks to make the walls between disciplines more permeable, and to create opportunities for imaginative collaboration between disparate researchers.

Here are just a couple of examples.

Institute for Advanced Studies

The University’s Institute for Advanced Studies (IAS) promotes and encourages interdisciplinary research at Bristol, facilitates visits by distinguished international scholars and creates conditions for collaboration and the generation of ideas that otherwise might not see the light of day. Its programme of fellowships, Benjamin Meaker Visiting Professorships, workshops and other events forms the framework for a vigorous and lively culture of discussion and exchange between individuals, disciplines and institutions.

A notable instance of the work of the IAS is its hosting of the Water and Health Research Centre (WHRC), an interdisciplinary partnership between all six University faculties that provides a research focus for over 30 academic staff in 12 different departments. The largest WHRC project is AQUATEST, an international programme (funded by the Bill & Melinda Gates Foundation) to develop and distribute an easy-to-use, low-cost device for testing water quality in developing countries.

In 2008/09, other WHRC projects making significant headway included a collaboration between Bronwen Morgan, Professor of Socio-legal Studies in the School of Law, and FRANK Water, a locally based social-enterprise company, to study and improve the delivery of FRANK’s support of community-managed water projects in India and Africa.

Bristol Neuroscience

Bristol Neuroscience (BN) is a focal point for the University’s neuroscience community. It enables neuroscientists working at separate sites to make full use of the expertise and facilities within the University and its partner hospitals and to create opportunities for collaboration across disciplines. BN’s co-ordinator, Dr Anne Cooke, also organises public lectures and other events.

BN is affiliated to the Institute for Advanced Studies, has close links with the local NHS Trusts and works in partnership with the Cardiff Neurosciences Centre via the Bristol-Cardiff Neuroscience Collaboration. This latter initiative has established ‘Young Neuroscientists’ Day, a hugely successful networking event for early-career UK neuroscientists. Autumn 2008 saw the second of these annual events, hosted by Cardiff University and featuring workshops, mini-symposia and a plenary lecture by Dr Sarah-Jayne Blakemore from University College London.

Among many illustrations of the fertile environment fostered by BN is a recent discovery by three scientists from different departments that suggests a new approach to the treatment of multiple sclerosis (MS). Professor David Wynnick in the Henry Wellcome Laboratories for Integrative Neuroscience and Endocrinology, who works on the function of a neuropeptide called galanin in the relief of neuropathic pain, wanted to investigate whether galanin might play a role in the treatment of MS. A BN symposium provided the opportunity to discuss his ideas and propose a collaboration with David Wrath, Professor of Experimental Pathology in the Department of Cellular and Molecular Medicine, and Neil Scolding, Burden Professor of Clinical Neurosciences in Clinical Science at North
Bristol. Their tests showed that mice bred to produce high levels of galanin were completely resistant to an MS-like disease called experimental autoimmune encephalomyelitis. This and other results provide powerful insights into how MS might be treated in humans.

AN EYE TO BRITAIN’S FUTURE

The University recognises its responsibility to help improve the future of the UK population – our health, our infrastructures, our preparedness for new challenges. In December 2008, as part of a £250-million initiative to create 44 training centres across the UK, the Engineering and Physical Sciences Research Council announced funding of over £24 million for four new centres at Bristol that will train the scientists and engineers needed for Britain’s future:

The Advanced Composites Centre for Innovation and Science (based in the Department of Aerospace Engineering)

The Doctoral Training Centre in Functional Nanomaterials (based in the new Centre for Nanoscience and Quantum Information)

The Holistic Doctoral Training Centre for Chemical Synthesis (based in the School of Chemistry)

The Industrial Doctorate Centre in Systems (based in the Faculty of Engineering)

Supporting research

Staff in Research and Enterprise Development (RED) work with University colleagues, students and external partners to support world-class research and enterprise, and to develop a sustainable portfolio of activities that strengthen and underpin the University’s research base. The RED team provides training and advice on entrepreneurship, knowledge transfer and the exploitation of research and expertise. RED also hosts the annual New Enterprise Competition, which is judged and sponsored by local government and national businesses.

SETsquared

RED manages the University’s SETsquared Business Acceleration Centre, part of the SETsquared Partnership, which also includes the universities of Bath, Southampton and Surrey and is now the UK’s largest enterprise collective, with some 6,500 researchers. The Centre draws on in-house expertise and a wide network of seasoned entrepreneurs, investment advisers, professional services firms and academics to provide support for emerging technology companies, accelerate growth and pre-empt the common pitfalls of technology businesses. The Centre was named ‘Established Business Incubator of the Year 2008’ by the UKBI, the professional body for the business incubation industry.

It was reported late in 2008 that 12 of the companies in the University’s SETsquared Business Incubator had between them raised over £23 million in the Centre’s busiest year since its inception in 2002. The Centre’s 37 early-stage, high-tech, high-growth businesses together increased turnover by 20 per cent to over £6 million and increased headcount by 66 per cent to 175 people.
RESEARCH CONTINUED

New Enterprise Competition

The winner of the 2009 New Enterprise Competition was Jennifer Griffiths, a fourth-year student in the Department of Computer Science, for Snap-Fashion, a new website that uses a number of image processing techniques to provide a ‘pictorial search engine’ for fashion items. The prize included £15,000 plus six months managed office space at the Bristol SETsquared Business Acceleration Centre and free legal advice from Bristol law firm Osborne Clarke.

The joint runners-up were:
- Shalakshi Sharma, a member of staff in the Department of Ophthalmology, for Selo, a low-cost device that increases the efficiency of eye injections to treat macular degeneration, a major cause of blindness, potentially saving the NHS some £50 million per year;
- Engineering Mathematics undergraduate Edward Matos for Shamba Technologies, a social enterprise that will distribute biodigester technology among the rural poor of developing countries, introducing a fuel source derived from livestock excrement – a cleaner alternative to the firewood that causes disease and death for thousands every year through smoke inhalation.

The 2009 competition entries were judged by a panel of experts from the sponsoring organisations, including Bristol City Council, Business Link, Deloitte, EADS, Edwards, Ginko Investments, IP Group, North Bristol NHS Trust, Osborne Clarke, Santander and Wyvern Seed Fund.

GRANTS

The University attracted a total of £102 million in grants during 2008/09. This included the following:
- £1.5 million in Doctoral Training Grants from the Biotechnology and Biological Sciences Research Council to the Faculty of Medical and Veterinary Sciences for the training of postgraduates.
- A European Research Council Advanced Grant of €2.4 million over five years to Professor Chris Saltmarsh in the Department of Earth Sciences for a study of volcanoes and their environmental and social impact.
- £1.1 million from the Medical Research Council for a study led by Chris Saltmarsh, Professor of Primary Health Care, to improve access to physiotherapy in the NHS.
- Over £2 million in the form of a five-year European Research Council Advanced Grant to Jeremy Henry, Professor of Molecular Neuroscience in the Department of Anatomy, for a study of brain proteins entitled ‘Mechanisms and consequences of synaptic SUMOylation in health and disease’.
- £1.2 million over three years from the Biotechnology and Biological Sciences Research Council to David Murphy, Professor of Experimental Medicine in the Henry Wellcome Laboratories for Integrative Neuroscience and Endocrinology, and Professor Julian Paton in the Department of Physiology and Pharmacology, for studies of gene expression and hypothalamic plasticity in response to dehydration.
- An ERC grant of nearly £11 million to an international consortium, including Paolo Madeddu, Professor of Experimental Cardiovascular Medicine at the Bristol Heart Institute, that seeks to understand the molecular mechanisms that impair wound-healing and organ repair in ageing or ill patients. The ultimate aim is to find ways of enhancing the body’s healing capacity and reducing chronic inflammation.
- £1 million from the European Space Agency to a team including members of the Department of Aerospace Engineering working on the design of a reusable space plane, the SKYLON, that can take off from a conventional aircraft runway, carry over 12 tonnes into orbit and return to land on the same runway.
- £0.6 million from the Economic and Social Research Council to Dr Maurizio Mannelli (Centre for East Asian Studies), Professor Robert Bickers (Department of Historical Studies) and Professor Nikhi Cooper (a former Bristol academic now at Swansea University) for a three-year research project on colonial Chinese history, focusing on the northern Chinese port city of Tianjin.
- £1.7 million from the Biotechnology and Biological Sciences Research Council to a team including Keith Edwards, Professor of Cereal Functional Genomics and Dr Gary Barker, Research Fellow in the School of Biological Sciences (along with researchers at the University of Liverpool and the John Innes Centre) to carry out an extensive genetic analysis of the wheat genome, with a view to increasing disease resistance, quality and yield.
- Funding of €1.0 million from the energy company E.ON to Dr Neil Fox from the School of Chemistry and the Department of Physics for a project to exploit solar heat to produce electricity using devices called thermoionic energy converters. Dr Fox is developing special electrodes for these converters using nanoparticles of industrial diamond powder, which is low-cost and readily available.

GRANTS

The University attracted a total of £102 million in grants during 2008/09. This included the following:
- £1.5 million in Doctoral Training Grants from the Biotechnology and Biological Sciences Research Council to the Faculty of Medical and Veterinary Sciences for the training of postgraduates.
- A European Research Council Advanced Grant of €2.4 million over five years to Professor Chris Saltmarsh in the Department of Earth Sciences for a study of volcanoes and their environmental and social impact.
- £1.1 million from the Medical Research Council for a study led by Chris Saltmarsh, Professor of Primary Health Care, to improve access to physiotherapy in the NHS.
- Over £2 million in the form of a five-year European Research Council Advanced Grant to Jeremy Henry, Professor of Molecular Neuroscience in the Department of Anatomy, for a study of brain proteins entitled ‘Mechanisms and consequences of synaptic SUMOylation in health and disease’.
- £1.2 million over three years from the Biotechnology and Biological Sciences Research Council to David Murphy, Professor of Experimental Medicine in the Henry Wellcome Laboratories for Integrative Neuroscience and Endocrinology, and Professor Julian Paton in the Department of Physiology and Pharmacology, for studies of gene expression and hypothalamic plasticity in response to dehydration.
- An ERC grant of nearly £11 million to an international consortium, including Paolo Madeddu, Professor of Experimental Cardiovascular Medicine at the Bristol Heart Institute, that seeks to understand the molecular mechanisms that impair wound-healing and organ repair in ageing or ill patients. The ultimate aim is to find ways of enhancing the body’s healing capacity and reducing chronic inflammation.
- £1 million from the European Space Agency to a team including members of the Department of Aerospace Engineering working on the design of a reusable space plane, the SKYLON, that can take off from a conventional aircraft runway, carry over 12 tonnes into orbit and return to land on the same runway.
- £0.6 million from the Economic and Social Research Council to Dr Maurizio Mannelli (Centre for East Asian Studies), Professor Robert Bickers (Department of Historical Studies) and Professor Nikhi Cooper (a former Bristol academic now at Swansea University) for a three-year research project on colonial Chinese history, focusing on the northern Chinese port city of Tianjin.
- £1.7 million from the Biotechnology and Biological Sciences Research Council to a team including Keith Edwards, Professor of Cereal Functional Genomics and Dr Gary Barker, Research Fellow in the School of Biological Sciences (along with researchers at the University of Liverpool and the John Innes Centre) to carry out an extensive genetic analysis of the wheat genome, with a view to increasing disease resistance, quality and yield.
- Funding of €1.0 million from the energy company E.ON to Dr Neil Fox from the School of Chemistry and the Department of Physics for a project to exploit solar heat to produce electricity using devices called thermoionic energy converters. Dr Fox is developing special electrodes for these converters using nanoparticles of industrial diamond powder, which is low-cost and readily available.

Students

Education is at the heart of the student experience, but university life should also offer outstanding opportunities for social, vocational, intellectual and personal development. The University is proud of its students and works tirelessly to provide an environment, a set of support structures and a range of opportunities that will enable students to excel in every aspect of their lives at Bristol and to make their university career a genuinely transformative experience.

The University’s priorities in this area are to:

- ensure a fair and transparent system of student representation that provides students with the opportunity to shape their educational and extra-curricular experience;
- provide a vibrant, active and democratic Students’ Union;
- ensure the provision of learning and skills opportunities that enhance students’ future employability;
- provide advice and support for students’ personal welfare and ensure effective integration into the University and local community.

Student Community Action and RAG

Student Community Action (SCA), a volunteering organisation in the Students’ Union with over 1,000 members, provides opportunities and training for student volunteers working in support of community projects. A Volunteer Development Coordinator, initially funded by the Higher Education Funding Council for England through its Teaching Quality and Enhancement Fund, organises and oversees training and development programmes for the students involved.

SCA ran 33 projects between August 2008 and July 2009. Each project is run by one or two student volunteer co-ordinators; regular volunteer numbers vary but 2008/09 saw a total of 2,365 volunteers working on SCA projects. The 29 training programmes for volunteers were attended by some 1,080 people.

SCA projects include:
- Greenforce, a conservation group that has recently begun working with bodies such as the British Trust for Conservation Volunteers and the Avon Wildlife Trust (via its School Grounds Project), and was involved in a project to build a green space for the Totterdown community in Bristol;
- The Big Give, which organises collections from left-over food and objects from halls of residence and student houses at the end of the academic year and donates them to local homeless shelters and charities (see p28);
- Breast Cancer Awareness, which provides workshops and presentations for students and members of the local community about breast health.

RAG activities in 2008/09 encountered an uncertain economic climate but still raised a total of £94,000. Over 5,000 student volunteers were involved in RAG fundraising events and activities, including regular street collections, an art exhibition, a ‘Massage-a-thon’ (in which the Massage Society provided ten volunteers to give massages for donations), a Soccathon (involving 15 football teams), a 10km race, and the annual RAG Ball, which raised over £38,000.
Britain Women’s Hockey Team that won gold medals in the 2009 Australian Youth Olympic Festival (AYOF). While neuroscience student Emily Cousins won the Gold Medal for Equestrian Dressage.

The part of the Great School represented England in the 5 Nations fencing tournament. Egro won both foil and sabre events, and Taylor won the épée event.

Medicine and Naomi Taylor from the Dental School also represented England in the 5 Nations fencing tournament. They both won gold medals.

Anthropology took top honours in the 2009 Garden History Society Essay Prize. Judith Preston won the prize for her essay on the history of gardening in England, while Janet Davidson Carter and Helen Lawrence were highly commended for their essays on Birkenhead Park and Thomas Archer respectively.

Future Olympians win gold

University students George Twigg and Philippa Newton won the AYOF gold medals in fencing.

Bristol engineers ride high as role models

Five engineering students were selected by the Royal Academy of Engineering as ‘inspirational role models to the next generation of engineers’. Graham Hinchly (Mechanical Engineering), Peter Levi and Tom Mynors (Civil Engineering), Edward Thompson (Aeronautical Engineering) and Richard van Arkel (Engineering Mathematics) competed against 150 students from other UK universities to win the national Royal Academy of Engineering Leadership Awards. These awards allow engineering undergraduates with aspirations to leadership roles to undertake an accelerated personal development programme.

Fulbright Award for Chemistry postgrad

Mike Shaw, a PhD student in the School of Chemistry, gained a prestigious Fulbright Commission Distinguished Scholarship Award in June to pursue his work on the synthesis of anti-cancer agents at the Scripps Research Institute in California, the world’s largest independent, non-profit biomedical research facility. It is hoped that his work, which attempts to synthesise a rare molecule found only in Japanese Sea Squirts, will lead to the development of powerful new clinical medicines to fight cancer.

Bristol’s genetic engineers beat the world’s best

An interdisciplinary team of Bristol students triumphed over 83 other teams, including some from the best universities in the world, in a prestigious competition to genetically engineer a machine. The Bristol Centre for Complexity Sciences team comprised nine students from departments including Biology, Biochemistry and Engineering Mathematics, working together on their entry for the competition at MIT, in which teams were given a set of ‘bio-bricks’ (or DNA parts) with which to engineer biological systems and test them in living cells.

The Bristol team designed microscopic ‘Bacto-builders’ that could perform tasks such as removing toxins from drinking water, and investigated the possibility of combining large numbers of these models to the next generation. Having his work accepted for publication in a major scientific journal while still an undergraduate, Felix Marx’s paper, ‘Marine mammals through time – when less is more in studying palaeodiversity’, was published in Proceedings of the Royal Society. His paper offers new insights into the fossil record of whales, seals and sea cows.

Rare publishing achievement for Earth Sciences undergraduate

A fourth-year student in the Department of Earth Sciences achieved the rare distinction of having his work accepted for publication in a major scientific journal while still an undergraduate. Felix Marx’s paper, ‘Marine mammals through time – when less is more in studying palaeodiversity’, was published in Proceedings of the Royal Society. His paper offers new insights into the fossil record of whales, seals and sea cows.

Bristol student wins 2009 GHS Essay Prize

Three undergraduate students in the Department of Archaeology and Anthropology took top honours in the 2009 Garden History Society (GHS) Essay Prize. Judith Preston won the prize for her essay ‘Thomas Wright: A polymath in Arcadia’, while Janet Davidson Carter and Helen Lawrence were highly commended for their essays on Birkenhead Park and Thomas Archer respectively.

Bristol engineers ride high as role models

Five engineering students were selected by the Royal Academy of Engineering as ‘inspirational role models to the next generation of engineers’. Graham Hinchly (Mechanical Engineering), Peter Levi and Tom Mynors (Civil Engineering), Edward Thompson (Aeronautical Engineering) and Richard van Arkel (Engineering Mathematics) competed against 150 students from other UK universities to win the national Royal Academy of Engineering Leadership Awards. These awards allow engineering undergraduates with aspirations to leadership roles to undertake an accelerated personal development programme.

Fulbright Award for Chemistry postgrad

Mike Shaw, a PhD student in the School of Chemistry, gained a prestigious Fulbright Commission Distinguished Scholarship Award in June to pursue his work on the synthesis of anti-cancer agents at the Scripps Research Institute in California, the world’s largest independent, non-profit biomedical research facility. It is hoped that his work, which attempts to synthesise a rare molecule found only in Japanese Sea Squirts, will lead to the development of powerful new clinical medicines to fight cancer.

Bristol’s genetic engineers beat the world’s best

An interdisciplinary team of Bristol students triumphed over 83 other teams, including some from the best universities in the world, in a prestigious competition to genetically engineer a machine. The Bristol Centre for Complexity Sciences team comprised nine students from departments including Biology, Biochemistry and Engineering Mathematics, working together on their entry for the competition at MIT, in which teams were given a set of ‘bio-bricks’ (or DNA parts) with which to engineer biological systems and test them in living cells.

The Bristol team designed microscopic ‘Bacto-builders’ that could perform tasks such as removing toxins from drinking water, and investigated the possibility of combining large numbers of these models to the next generation. Having his work accepted for publication in a major scientific journal while still an undergraduate, Felix Marx’s paper, ‘Marine mammals through time – when less is more in studying palaeodiversity’, was published in Proceedings of the Royal Society. His paper offers new insights into the fossil record of whales, seals and sea cows.

Rare publishing achievement for Earth Sciences undergraduate

A fourth-year student in the Department of Earth Sciences achieved the rare distinction of having his work accepted for publication in a major scientific journal while still an undergraduate. Felix Marx’s paper, ‘Marine mammals through time – when less is more in studying palaeodiversity’, was published in Proceedings of the Royal Society. His paper offers new insights into the fossil record of whales, seals and sea cows.

Bristol student wins 2009 GHS Essay Prize

Three undergraduate students in the Department of Archaeology and Anthropology took top honours in the 2009 Garden History Society (GHS) Essay Prize. Judith Preston won the prize for her essay ‘Thomas Wright: A polymath in Arcadia’, while Janet Davidson Carter and Helen Lawrence were highly commended for their essays on Birkenhead Park and Thomas Archer respectively.

Bristol engineers ride high as role models

Five engineering students were selected by the Royal Academy of Engineering as ‘inspirational role models to the next generation of engineers’. Graham Hinchly (Mechanical Engineering), Peter Levi and Tom Mynors (Civil Engineering), Edward Thompson (Aeronautical Engineering) and Richard van Arkel (Engineering Mathematics) competed against 150 students from other UK universities to win the national Royal Academy of Engineering Leadership Awards. These awards allow engineering undergraduates with aspirations to leadership roles to undertake an accelerated personal development programme.

Fulbright Award for Chemistry postgrad

Mike Shaw, a PhD student in the School of Chemistry, gained a prestigious Fulbright Commission Distinguished Scholarship Award in June to pursue his work on the synthesis of anti-cancer agents at the Scripps Research Institute in California, the world’s largest independent, non-profit biomedical research facility. It is hoped that his work, which attempts to synthesise a rare molecule found only in Japanese Sea Squirts, will lead to the development of powerful new clinical medicines to fight cancer.

Bristol’s genetic engineers beat the world’s best

An interdisciplinary team of Bristol students triumphed over 83 other teams, including some from the best universities in the world, in a prestigious competition to genetically engineer a machine. The Bristol Centre for Complexity Sciences team comprised nine students from departments including Biology, Biochemistry and Engineering Mathematics, working together on their entry for the competition at MIT, in which teams were given a set of ‘bio-bricks’ (or DNA parts) with which to engineer biological systems and test them in living cells.

The Bristol team designed microscopic ‘Bacto-builders’ that could perform tasks such as removing toxins from drinking water, and investigated the possibility of combining large numbers of these models to the next generation. Having his work accepted for publication in a major scientific journal while still an undergraduate, Felix Marx’s paper, ‘Marine mammals through time – when less is more in studying palaeodiversity’, was published in Proceedings of the Royal Society. His paper offers new insights into the fossil record of whales, seals and sea cows.
The University of Bristol is committed to ensuring that it has the right people in place to achieve its vision and mission within an increasingly competitive international market for the best academic talent. It also needs outstanding people across the broad range of support roles. Personnel activities in 2008/09 focused above all on the organisation’s aim of providing a stimulating, supportive working environment where staff can achieve their full potential, while individuals’ and departments’ achievements over the course of the year are evidence of their contribution to the success of the University.

**STAFF**

The University’s priorities in this area are to:
- recruit and retain first-class talent;
- foster a high-achieving workforce that is competent, committed, creative and capable of managing and responding positively to change;
- develop a culture and an environment that motivates and enables people to make an excellent contribution.

Integrated recruitment policy
The University recognises that staff recruitment is a strategically important activity that needs to be undertaken professionally with the full engagement of all those involved. In 2008/09, it agreed a fresh approach to the recruitment of academic staff, which will be implemented in the coming year. The new policy aims to provide an effective platform to face the challenges of the modern recruitment landscape while upholding the University’s commitment to ensuring equality, diversity and transparency throughout the organisation.

The emphasis is on robust selection criteria and effective decision-making as well as on proactively representing the University as an attractive destination for exceptionally talented people. Integral to the policy is a partnership approach in which Personnel Services works closely with the recruiting department or faculty to co-ordinate the recruitment and selection process and a smooth introduction for new staff.

Managing change
Continuous improvement and strategic change are a central part of life at the University. In order to maintain staff effectiveness during such changes, Personnel Services established a Change Team in 2008/09 that aims to:
- support change within individual projects and programmes;
- build change-management awareness, understanding and capacity within the organisation;
- establish an overview of where change is happening and how much impact it is having in order to minimise bottle-necks and encourage collaborative working.

Perhaps the most significant change programme initiated in 2008/09 was Support Process Review. A new vision for the University’s support services was adopted as the basis for an effort to transform the efficiency, consistency, resilience and cost-effectiveness of the structures and processes that underpin the academic endeavour. The cost pressures on the University (which have parallels across the higher education sector) have increased the urgency of this project, and of measures to boost income. An early retirement and voluntary severance scheme implemented in 2008/09 was helpful in controlling costs, as was a ‘salary exchange’ programme that should save about £1 million a year. However, further measures will be required in order to achieve financial sustainability and allow ongoing capital investment. The costs and risks associated with pension schemes are among the major factors that the University, in common with other organisations in every part of the economy, will have to address.

Excellence in human resources
Bristol University won the Outstanding Human Resource Initiative Award at the Times Higher Education Leadership and Management Awards 2009 ceremony. The award recognises the single initiative or innovation that has had the most positive impact in the field of higher education human resources. Bristol won for its exceptional Positive Working Environment (PWE) initiative, which aims to make working life productive, rewarding and enjoyable for all staff.

The PWE agenda, which encompasses staff counselling, career advice and healthy living opportunities, has led to a reduction in absenteeism and sick leave, increased institutional loyalty and improved staff well-being. Ann Mroz, editor of Times Higher Education, said: ‘This holistic approach to human resources management has produced brilliant results. The fact that other institutions have enlisted the services of the University of Bristol’s HR consultancy proves that this is an initiative that could have far-reaching effects.’

Bristol also won an award from City of Bristol College for its Modern Apprenticeship Scheme, provided by Personnel Services and Staff Development. In addition, two apprentices working at the University won Apprenticeship of the Year Awards: Charlotte Wyatt, working in the Department of Anatomy, was named Business Administration Apprentice of the Year and Steven Bush, an advanced fitter in Estates Services, won the Best Apprentice Engineer Award.

Equality and diversity high on the agenda
The University’s equality and diversity strategy supports the organisation’s efforts to attract the best employees from all walks of life and all parts of the world, improve motivation and productivity and reduce staff turnover. Activities undertaken in 2008/09 by the Equality and Diversity team to help create a stimulating and supportive working environment that values difference included:
- establishing a Work and Family Buddy Scheme, where staff with caring responsibilities share their experiences with others;
- setting up a Russell Group Equality Network, where equality and diversity practitioners from leading UK research-intensive universities meet to discuss and influence strategic and policy development, share best practice and respond to national issues relating to equality and diversity;
- developing networks for disabled staff and black and minority ethnic staff;
- expanding the successful Mentoring Circles model for women in the faculties of Science, Engineering, Medical and Veterinary Sciences, and Medicine and Dentistry;
- launching a process of equality risk assessment across the whole organisation, whereby decision-makers are encouraged to consider the impact of any existing or proposed policy on people from diverse backgrounds and circumstances in an effort to ensure that such policies are inclusive. More than 30 policies and 14 capital projects have been subject to this process so far;
- working with academic colleagues to better support Deaf and disabled students. An annex on disability equality was also developed for inclusion in the University’s Code of Practice for the Assessment of Students on Taught Programmes to encourage a consistent approach to this element of the student experience;
- supporting the University’s commitment to the Athena SWAN Charter, an initiative that recognises excellence in employment in science, engineering and technology. In particular, the Department of Physiology and Pharmacology won a silver SWAN award in recognition of its success in recruiting and retaining women and developing an innovative staff review and development programme designed to encourage more women to advance their careers; the University’s Equality and Diversity Manager was invited to sit on the national judging panel for the Athena SWAN Awards; and the University featured as an example of best practice in several sector-wide guides for its success in recruiting, supporting and retaining women in science.
Movers and shakers

Many Bristol academics achieve the distinction of being appointed to sit on the boards and decision-making committees of external organisations, which in many cases enables them to contribute to shaping national policy. Some examples from the year are as follows:

- Professor Tariq Modood of the Department of Sociology was appointed to the National Equality Panel, an independent panel of experts that will provide the government with an authoritative analysis of inequality in Britain by the end of 2009. The panel will provide a factual analysis of how equality trends have changed over the past ten years and map out where gaps have narrowed and widened in society; investigate how people’s life chances are affected by factors such as gender, race, disability and age; and show how these factors interrelate.

- Dr Jo-Anne Baird of the Graduate School of Education was appointed an independent adviser by the government’s Department for Children, Schools and Families to give advice to an expert group on future assessment and accountability systems for primary and secondary schools. Part of the group’s remit was to examine government proposals for the introduction of a new School Report Card, designed to give parents a new, simpler and more comprehensive way of understanding schools’ performance and achievements.

- Professor David Gordon of the School for Policy Studies and Director of the Townsend Centre for International Poverty Research was appointed to the Supervisory Board of the Union Modernisation Fund (UMF) by the Ministry of Business, Enterprise and Regulatory Reform. The UMF is a government grant scheme that provides financial assistance to trade unions to help them improve the services available to their members. The Supervisory Board of the UMF advises government ministers on the projects that should receive financial support in each bidding round. The current funding round aims to help unions improve the support they give to vulnerable workers, in partnership with voluntary and community organisations that have specific expertise in this area. This focus on vulnerable workers is particularly important at a time of rapidly rising unemployment and recession.

- Many others, such as Joe McGeehan, Professor of Communications Engineering, Director of the University’s Centre for Communications Research and Managing Director of Toshiba’s Telecommunications Research Laboratory in Bristol, play an active role in industry, helping to stimulate the economy and enable businesses to compete globally. Professor McGeehan, who is credited with pioneering many of the major developments in mobile communications, was appointed a member of the South West Science and Industry Council (SWSIC). SWSIC promotes greater understanding of science and technology to business, and raises awareness of the opportunities presented by science for the overall economic advantage of individual businesses and of the region.

- Fellowships and professional appointments

Many members of staff represent the University through prestigious Fellowships and membership of professional organisations as leaders in their field. 2008/09 saw the following influential appointments, among others:

- Mike Ashfield, Professor of Physical Chemistry, and Jon Keating, Professor of Mathematical Physics, achieved the rare distinction of being elected Fellows of the Royal Society for scientific excellence. The Fellowship of the Royal Society is composed of the most distinguished scientists from the UK, other Commonwealth countries and the Republic of Ireland. It is the highest accolade a scientist can receive, short of a Nobel Prize. These latest awards bring to 31 the number of current Bristol academics whose work in the fields of science, engineering, technology and medicine has been honoured in this way – a remarkable total for a relatively small institution.

- George Davey Smith, Scientific Director of the University’s Children of the 90s study and Professor of Clinical Epidemiology in the Department of Social Medicine, was elected a Foreign Associate of the Institute of Medicine of the National Academies in the US. Professor Davey Smith is one of around 80 foreign associates elected by the Institute on the basis of professional achievement and of demonstrated interest, concern and involvement with problems and critical issues that affect the health of the public. The Institute of Medicine is a non-profit organisation that provides unbiased, science-based advice and authoritative information on biomedical science, medicine and health to policy-makers, professionals and the public. Professor Davey Smith has pioneered the use of genetic studies to inform us about disease prevention and is a recognised international leader on research in this area and in social inequalities in health.

- Professor Jenny Donovan, Head of the Department of Social Medicine, was elected to the Fellowship of the Academy of Medical Sciences, which promotes advances in medical science and campaigns to ensure these are converted into healthcare benefits for society.

- Judith Squires, Professor of Political Theory and incoming Dean of the Faculty of Social Sciences and Law (from 1 August 2009), was elected an Academician of the Academy of Social Sciences and of the Academy of Medical Sciences, which promotes advances in medical science and campaigns to ensure these are converted into healthcare benefits for society.

- Dr David Langley, Director of the University’s Fry Research Centre, received an Early Career Research Award from the International Association for the Scientific Study of Intellectual Disabilities for her work with parents with learning disabilities.

- Professors Tariq Modood of the Department of Sociology was appointed an independent adviser by the government’s Department for Children, Schools and Families to give advice to an expert group on future assessment and accountability systems for primary and secondary schools. Part of the group’s remit was to examine government proposals for the introduction of a new School Report Card, designed to give parents a new, simpler and more comprehensive way of understanding schools’ performance and achievements.

- Staff continue to distinguish themselves through the receipt of awards and prizes. Accolades from the year include:

- Four Royal Society-Wolfson Research Merit Awards, to Professor Nigel Smart in the Department of Computer Science, Professor Peter Cullen in the Department of Biochemistry, Professor Richard Evershed in the School in Chemistry and Professor Jens Marklof in the Department of Mathematics. The awards recognise researchers of outstanding achievement.

- Two Leverhulme Prizes, to Dr Harald Helfgott and Professor Andreas Winter, both in the Department of Mathematics.

- Elsewhere, the University’s Quantum Photonics group won a global award for innovation in the Institution of Engineering and Technology’s annual Innovation Engineering Awards. The team, led by Professor Jeremy O’Brien, Professional Research Fellow in Physics and Electrical Engineering, and including Alberto Poli, Dr Martin Orry, Professor John Rarity and Dr Siyuan Yu, won the award for the development of silicon chips for optical quantum technologies.

- Beth Tarleton, a research fellow at the Norah Fry Research Centre, received an Early Career Research Award from the International Association for the Scientific Study of Intellectual Disabilities for her work with parents with learning disabilities.

- Subtext, the University’s magazine, won two medals in the 2009 Circle of Excellence Awards, an international programme run by the US-based Council for Advancement and Support of Education. Subtext, which was conceived as a magazine for staff but has developed a much wider readership, was selected for a gold medal in the Print Internal Audience Magazines category and a silver medal in the Periodical Staff Writing for Internal Audiences category.

- Many members of staff represent the University through prestigious Fellowships and membership of professional organisations as leaders in their field. 2008/09 saw the following influential appointments, among others:

- Mike Ashfield, Professor of Physical Chemistry, and Jon Keating, Professor of Mathematical Physics, achieved the rare distinction of being elected Fellows of the Royal Society for scientific excellence. The Fellowship of the Royal Society is composed of the most distinguished scientists from the UK, other Commonwealth countries and the Republic of Ireland. It is the highest accolade a scientist can receive, short of a Nobel Prize. These latest awards bring to 31 the number of current Bristol academics whose work in the fields of science, engineering, technology and medicine has been honoured in this way – a remarkable total for a relatively small institution.

- George Davey Smith, Scientific Director of the University’s Children of the 90s study and Professor of Clinical Epidemiology in the Department of Social Medicine, was elected a Foreign Associate of the Institute of Medicine of the National Academies in the US. Professor Davey Smith is one of around 80 foreign associates elected by the Institute on the basis of professional achievement and of demonstrated interest, concern and involvement with problems and critical issues that affect the health of the public. The Institute of Medicine is a non-profit organisation that provides unbiased, science-based advice and authoritative information on biomedical science, medicine and health to policy-makers, professionals and the public. Professor Davey Smith has pioneered the use of genetic studies to inform us about disease prevention and is a recognised international leader on research in this area and in social inequalities in health.

- Professor Jenny Donovan, Head of the Department of Social Medicine, was elected to the Fellowship of the Academy of Medical Sciences, which promotes advances in medical science and campaigns to ensure these are converted into healthcare benefits for society.

- Judith Squires, Professor of Political Theory and incoming Dean of the Faculty of Social Sciences and Law (from 1 August 2009), was elected an Academician of the Academy of Social Sciences and of the Academy of Medical Sciences, which promotes advances in medical science and campaigns to ensure these are converted into healthcare benefits for society.

- Dr David Langley, Director of the University’s Fry Research Centre, received an Early Career Research Award from the International Association for the Scientific Study of Intellectual Disabilities for her work with parents with learning disabilities.

- Professors Tariq Modood of the Department of Sociology was appointed an independent adviser by the government’s Department for Children, Schools and Families to give advice to an expert group on future assessment and accountability systems for primary and secondary schools. Part of the group’s remit was to examine government proposals for the introduction of a new School Report Card, designed to give parents a new, simpler and more comprehensive way of understanding schools’ performance and achievements.

- Staff continue to distinguish themselves through the receipt of awards and prizes. Accolades from the year include:

- Four Royal Society-Wolfson Research Merit Awards, to Professor Nigel Smart in the Department of Computer Science, Professor Peter Cullen in the Department of Biochemistry, Professor Richard Evershed in the School in Chemistry and Professor Jens Marklof in the Department of Mathematics. The awards recognise researchers of outstanding achievement.

- Two Leverhulme Prizes, to Dr Harald Helfgott and Professor Andreas Winter, both in the Department of Mathematics.

- Elsewhere, the University’s Quantum Photonics group won a global award for innovation in the Institution of Engineering and Technology’s annual Innovation Engineering Awards. The team, led by Professor Jeremy O’Brien, Professional Research Fellow in Physics and Electrical Engineering, and including Alberto Poli, Dr Martin Orry, Professor John Rarity and Dr Siyuan Yu, won the award for the development of silicon chips for optical quantum technologies.

- Beth Tarleton, a research fellow at the Norah Fry Research Centre, received an Early Career Research Award from the International Association for the Scientific Study of Intellectual Disabilities for her work with parents with learning disabilities.

- Subtext, the University’s magazine, won two medals in the 2009 Circle of Excellence Awards, an international programme run by the US-based Council for Advancement and Support of Education. Subtext, which was conceived as a magazine for staff but has developed a much wider readership, was selected for a gold medal in the Print Internal Audience Magazines category and a silver medal in the Periodical Staff Writing for Internal Audiences category.
THE ENGAGED UNIVERSITY

Public engagement at Bristol includes all the ways in which University staff and students interact with members of the public, encompassing talks, debates, festivals, performances, widening participation, research with, and driven by, communities, volunteering, lifelong learning, action research and engaged learning. The Centre for Public Engagement works alongside colleagues throughout the University to support, reward and celebrate engagement activity. Here we cover some of the vast array of such activity that took place in 2008/09, to the mutual benefit of the public and the University.

The University’s priorities in this area are to:
- support and promote dialogue between staff/students and the public;
- play a leading role in setting the national agenda on public engagement in higher education;
- respond positively to community needs;
- play a positive role in the affairs of the city, region and nation;
- nurture relationships with alumni and other friends of the University;
- behave responsibly as an institution.

Involving the public

The University is committed to sharing its teaching expertise and research findings with members of the public. One of the ways it does this is through organising or promoting an extensive programme of free public events. In 2008/09, these included:
- a series of lectures to celebrate the University’s centenary, featuring renowned speakers such as Jonathan Kestelman on innovation, Leonard Susskind on Darwin and the cosmic landscape and Will Hutton on the shifting global economy;
- a major exhibition of photographs of life in China at the Grant Bradley Gallery in Bedminster. The five-week Picturing China 1870–1970 exhibition was accompanied by a series of evening talks about China past and present and future.
- an outreach programme to primary and secondary schools involving more than 500 local children and a Chinese New Year celebration in conjunction with the City Museum;
- a series of ‘citizen science’ activities co-ordinated by researchers in the School of Biological Sciences (during National Science and Engineering Week and at the Festival of Nature) that involved hundreds of schoolchildren in the task of identifying and recording invasive moths and their pest-controlling parasites, bringing the issue of biodiversity alive for thousands of people;
- Brain Awareness Week, hosted by Bristol ChemLabS, one of the University’s two Centres for Excellence in Teaching and Learning, as part of the Avon Longitudinal Study of Parents and Children’s (ALSPAC) 20th anniversary. Bristol ChemLabS is involved in a wide variety of community projects. Among the year’s highlights was the Festival of School Sports and Culture. The three-day event, held at the Coombe Dingle Sports Complex and involving 18 Bristol secondary schools, aimed to celebrate sport participation and achievement and provide pupils with a positive experience of sport.
- a series of lectures to celebrate the University’s centenary, featuring renowned speakers such as Jonathan Kestelman on innovation, Leonard Susskind on Darwin and the cosmic landscape and Will Hutton on the shifting global economy;
- a major exhibition of photographs of life in China at the Grant Bradley Gallery in Bedminster. The five-week Picturing China 1870–1970 exhibition was accompanied by a series of evening talks about China past and present and future.
- an outreach programme to primary and secondary schools involving more than 500 local children and a Chinese New Year celebration in conjunction with the City Museum;
- a series of ‘citizen science’ activities co-ordinated by researchers in the School of Biological Sciences (during National Science and Engineering Week and at the Festival of Nature) that involved hundreds of schoolchildren in the task of identifying and recording invasive moths and their pest-controlling parasites, bringing the issue of biodiversity alive for thousands of people;
- Brain Awareness Week, hosted by Bristol ChemLabS, one of the University’s two Centres for Excellence in Teaching and Learning, as part of the Avon Longitudinal Study of Parents and Children’s (ALSPAC) 20th anniversary. Bristol ChemLabS is involved in a wide variety of community projects. Among the year’s highlights was the Festival of School Sports and Culture. The three-day event, held at the Coombe Dingle Sports Complex and involving 18 Bristol secondary schools, aimed to celebrate sport participation and achievement and provide pupils with a positive experience of sport.

Engaged University Forums

The Engaged University Steering Group, which oversees this area of the University’s work, has organised a series of forums to enable external organisations to play a part in setting the institution’s engagement strategy. Three key areas in which the city of Bristol excels – sustainability, creativity and ideas, and connectivity and digital media – have been identified as potential areas for further engagement work. In May 2008, the Engaged University Forum on Sustainability brought together representatives from the University (research staff, support staff and students) and from external organisations, including Bristol City Council and the Green Capital Momentum Group, Sustrans, Arnolfini, Bristol Zoo, Wildscreen and the University of the West of England, to identify areas where the University might add value to current work in the sustainability arena. Outcomes included proposals to develop multi-partner research bids, training for undergraduate and postgraduate students in sustainability-related skills and shared visions of Bristol as an eco-city.

Setting the national agenda

The University continues to play an active part in the activities of the National Co-ordinating Centre for Public Engagement (NCCPE). The Centre, which is funded by the Higher Education Funding Council for England, Research Councils UK and the Wellcome Trust, is working to embed public engagement across the higher education sector. Its steering group is chaired by the Vice-Chancellor. The University’s own Centre for Public Engagement represents Bristol on the NCCPE project group, which provides valuable opportunities to share learning, propose joint work and co-ordinate with counterparts at the University of the West of England. Joint work during 2008/09 focused on training for public engagement and on the research impact agenda, which asks academics to articulate the economic and societal impacts of their work. This learning will be shared across UK higher education with a view to securing the culture change sought by funding bodies.

Responding to community needs

The University continues to encourage members of staff to take part in volunteering activities in Bristol communities by awarding an extra day’s annual leave for the purpose. Students, too, have always made a huge investment in the well-being of the local area through volunteering and more details of their activities can be found on p15.

The Centre for Sport, Exercise and Health is involved in a wide variety of community projects. Among the year’s highlights was the Festival of School Sports and Culture. The three-day event, held at the Coombe Dingle Sports Complex and involving 18 Bristol secondary schools, aimed to celebrate sport participation and achievement and provide pupils with a positive experience of sport.

Excellence 2008. It was judged to be making a strikingly positive and sustained impact on the community through its strong schools outreach programme. This is the first Big Tick ever awarded to a university department for outreach activities and is also the first awarded to an educational programme in the chemical sciences.
The University’s priorities in this area are to:

- provide all parts of the University with flexible accommodation which is of a quality, size and functionality appropriate to the activities to be delivered and which supports the University’s vision;
- ensure the most efficient use of existing space and the development of capacity within the central precinct area wherever appropriate;
- continue to work to reduce carbon emissions and improve the sustainability of the physical estate;
- provide residential accommodation which is attractive to students in form, service and location;
- deliver an ambitious capital programme in support of the renewal of accommodation and the creation of adaptive capacity;
- provide an attractive, safe, accessible and welcoming setting for University buildings that is sympathetic to the wider urban context;
- produce a new Estate Strategy to inform future strategic decisions about the size, nature and direction of the University’s estate.

**Bumper year for new buildings**

Several new buildings were completed in 2008/09, boosting research and learning opportunities in a continually changing academic environment:

- The £4.1 million extension to Canynge Hall, home of the Department of Social Medicine, opened in September 2008. The extension, which includes clinical examination rooms, teaching rooms, a lecture theatre and office space, greatly enhances research and teaching capacities.
- The new £3.9 million Dobberry Building, housing the Animal Welfare and Behaviour Group at the Vet School in Langford, opened in April 2009. Its facilities will help the University build on its position as a world leader in animal welfare research.
- The Centre for Nanoscience and Quantum Information was finished in May 2009. The building is a unique, interdisciplinary centre, designed to keep Bristol at the forefront of research in science, engineering and medicine. It houses state-of-the-art laboratories where temperature, air movement, vibration and acoustic noise levels are strictly controlled to produce conditions suitable for working at the nanoscale.
- A new, £2 million Multimedia Centre for the Faculty of Arts was completed in July 2009. The two-storey extension greatly enhances modern language teaching facilities and provides access to live European media. The building comprises a teaching space, areas for open access learning, a substantial media resource store, a small recording studio and a screening room.

**Improving existing spaces**

Several refurbishment projects came to fruition, in keeping with the University’s aim of making the most of its current assets:

- The refurbishment of the Medical Library was completed in January at a cost of £2.1 million (for more details, see p27).
- The £2 million refurbishment of the ground floor of the Arts and Social Sciences Library was completed in February (for more details, see p27).
- The refurbishment of the fifth floor of Senate House was completed in March, creating additional office space and allowing for flexible use of the remaining accommodation while refurbishment continues as part of a wider project to transform the entire building.
- Following the external restoration and cleaning of the Wills Tower, further improvements included the internal restoration of the building fabric, upgrading of ventilation and heating services and the provision of an internal lighting scheme for the key public spaces within the tower.
- Improvements totalling £4 million were made to the Social Sciences and Law Faculty complex in Priory Road. The new facility links a number of disparate buildings into a coherent whole and provides a prominent, main entranceway with a cafe and social space for students.
- Work began on a High Voltage Network project designed to deliver an improved electrical services infrastructure with the necessary capacity to support the new and improved facilities. This includes the construction of a shared power distribution sub-station with University
Hospitals Bristol NHS Foundation Trust, a new switch room and two high-voltage ring mains in the precinct.

Go-ahead for new Biological Sciences and Maths buildings
Planning permission was granted in April for the first phase of an exciting development of the Royal Children’s Hospital site on the corner of St Michael’s Hill and Tyndall Avenue. This paves the way for the creation of new education and research facilities for the School of Biological Sciences and Department of Mathematics, aimed at keeping the University at the top of its game in key areas of science. The plans include a new route into Royal Fort Gardens, which would also improve the public realm at the heart of the precinct. Implementation of the planning consent will, of course, be subject to the achievement of financial sustainability.

Working towards a sustainable future
In planning new buildings and refurbishing existing ones, the Estates Office works closely with the Sustainability team to reduce the University’s carbon footprint and environmental impact.

The new Dolberry Building (see above) has a swimming pool cover that reduces the need for air and water heating and humidity control. A further combined heat and power unit was installed during 2008/09, this time at Langford, providing savings of £300,000 and 500 tonnes of carbon dioxide a year.

Building environmental awareness
The University encouraged students and staff to improve the environmental performance of their own departments with the introduction of the Green Impact Awards, an accreditation scheme for environmental best practice. Over 2,000 staff and 4,225 students representing 46 departments took part in the scheme to see which could be the greenest. Their combined efforts resulted in over 1,000 sustainability actions being taken across the University. Many other activities reflect a growing concern with sustainability: for example, Student Community Action, working with the Sustainability team, collected nearly two tonnes of unwanted domestic items from students during this year’s ‘Big Give’ project, passing them on to charities to sell or reuse.

Travelling light
The University’s commitment to promoting sustainable modes of transport was reflected in improvements to its travel plan in 2008/09, including new cycle-parking facilities at the School of Medical Sciences, Oakfield House, Barclays House, 8-10 Berkeley Square, the Centre for Nanoscience and Quantum Information and Langford; cycle maintenance and cycle training sessions; an improved staff car-sharing scheme; and a car club for students.

Bristol top of the class for security
The University’s efforts to provide a safe environment in which staff and students can work, study and live were recognised when Bristol became one of only two universities in the UK to win a police-approved Security Environments Award in January. Certification is awarded to organisations that have adopted six key principles of crime protection. The University demonstrated that it had invested in effective processes and management in order to reduce crime.

The University’s Information Services division provides information resources and library services, information and communications technology (ICT) and a robust ICT infrastructure to support University learning and teaching, research and enterprise. Some of the division’s achievements and developments, undertaken during 2008/09, are outlined below.

The University’s priorities in this area are to:
- provide IT and library facilities to support education, learning and teaching and to enhance the student experience;
- provide IT and library facilities to support research activities and enhance research impact;
- support the University’s business objectives by providing efficient and effective processes enabled by well-designed, integrated information systems;
- ensure that our IT Strategy is people-focused and that all members of the University are well supported, trained and equipped to fulfil their roles;
- provide excellent, responsive and resilient IT services for all members of the University;
- develop sustainable approaches to the provision of IT, in order to minimise the impact on the environment.

New-look libraries
The University is committed to ensuring that all students and staff have access to high-quality library and IT facilities appropriate to a leading institution. To this end, 2008/09 saw major refurbishments of both the Medical and Arts and Social Sciences Libraries. These projects, partially funded by the Wolfson Foundation, provide modern learning environments comprising a wider, improved range of study spaces and facilities.

Improvements to the Medical Library include more social learning space, using an innovative, flexible design to enable individual study, group problem-solving activities, presentation work and resource sharing, a coffee bar; improved IT facilities; contemporary furnishings and decoration; and improved learning technology equipment and self-service facilities. The refurbishment of the Arts and Social Sciences Library comprises a new glass wall and doors at the front of the building, increasing the natural light available. New refreshment facilities have been developed, and contemporary furnishings, newspapers and on-screen information systems introduced to create a space where visitors can relax after studying in quieter zones of the library. The issue, help and reception desks have been redesigned and relocated to maximise the use of space. The Short Loan Collection has been redesigned to create better accommodation and a new self-issue service improves the availability of loan items by allowing users to borrow books at any time while the library’s doors are open.

The library resources budget has risen by ten per cent a year over the past four years. In addition, a pilot project was launched to develop electronic study packs aimed at improving student access to materials in high demand.

Helping students to find and use information effectively and ethically has also been a key target. This year, in addition to offering library induction and training courses to all new students, and refresher sessions to returners, Library Services used 39,000 awarded from the University’s Annual Fund to develop an online resource bank. This new interactive tool consists of video tutorials and quizzes designed to help students improve their information literacy skills, including understanding and avoiding plagiarism.

Using IT to support learning
A major achievement in 2008/09 was the development and approval of the University’s new Information and Technology Strategy following consultation with staff and students during the previous year. The strategy includes a Development Plan, which identifies significant projects and activities. Many of these are currently under way, such as the development of timetabling and room-booking systems and a programme of learning support developments, including a system for summative assessment, a clinical-experience recorder and an electronic portfolio tool to support reflective learning.

Student-focused initiatives include the introduction of a student laptop clinic, and an out-of-hours IT help desk covering evenings, weekends and University closure days. There has also been a great demand for wireless network access points around the University. Following improvements to the underlying infrastructure, the number of points increased to 300 during the year, covering all study desks in the Arts and Social Sciences Library and including new access points in the Hawthorns refectory.
2008/09 also saw a dramatic increase in the usage of the University portal, My Bristol, with around 300 staff, 5,000 undergraduates and 2,000 postgraduates regularly using the facility since 1 October 2008. The portal is a gateway to web-based services within and beyond the University. By signing in, students and staff can access a range of tools and services in one place, such as email, course details, Blackboard, the Students’ Union and the Sports Centre.

Help for researchers in developing countries
The University’s Institute for Learning and Research Technology has developed a new website for an international project aimed at helping researchers in developing countries to publish their work and advance their research careers. AuthorAID (www.authoraid.info) is a free online community providing access to advice, mentoring, discussion forums and a range of material on best practice in writing and publication. It is based at the International Network for the Availability of Scientific Publications and supported by the Swedish International Development Cooperation Agency, the Norwegian Agency for Development Co-operation and the UK Department for International Development.

Boosting research
The University’s new High Performance Computing system, Blue Crystal, became fully operational, and now has more than 250 active users. The system supports research in disciplines such as aerospace engineering, molecular modelling, climatological change and social medicine, among others, with a combined project income to date of around £9.5 million. In November 2008, Blue Crystal was ranked as the 86th most powerful supercomputer in the world, helping to establish Bristol as a world-leading centre for research. The next stage of development will be the introduction of a large-scale (one petabyte) data-storage facility to complement Blue Crystal’s computational power.

Other significant activities during the year include work with Research and Enterprise Development (RED) on the creation of a research applications and contracts database for better visibility and management of contracts and awards from application through to completion. Work also began on a project with RED and Communications and Marketing Services to develop a new website through which to showcase the University’s research.

Community collaborations
As well as providing tools to enable communication between members of the University, Information Services facilitates projects with external collaborators. During 2008/09, the division worked with the National Co-ordinating Centre for Public Engagement to develop web-based resources to support its local and national activities. The Bristol-based Centre is a partnership between the University of Bristol and the University of the West of England and aims to co-ordinate UK universities’ best practice in public engagement and to deepen the social impact and relevance of their work.

Information Services also worked with the Department of Drama and Bristol’s Watershed Media Centre on the Semantic Tools for Screen Arts Research (STARS) project. This provides an innovative way of mapping and annotating connections between artists, video performances and other research centres on the web, supporting new collaborations and new perspectives on screen arts research.

Maintaining high-quality information systems
Underpinning all these developments, the division invested more than £1 million in core ICT infrastructure, such as the University’s data network, IT systems hardware and software and PC provision in Information Services sites. Such investment ensures that critical IT services are robust and resilient and that business continuity plans are established, tested and kept up to date.

2008/09 also saw a dramatic increase in the usage of the University portal, My Bristol, with around 300 staff, 5,000 undergraduates and 2,000 postgraduates regularly using the facility since 1 October 2008. The portal is a gateway to web-based services within and beyond the University. By signing in, students and staff can access a range of tools and services in one place, such as email, course details, Blackboard, the Students’ Union and the Sports Centre.

Help for researchers in developing countries
The University’s Institute for Learning and Research Technology has developed a new website for an international project aimed at helping researchers in developing countries to publish their work and advance their research careers. AuthorAID (www.authoraid.info) is a free online community providing access to advice, mentoring, discussion forums and a range of material on best practice in writing and publication. It is based at the International Network for the Availability of Scientific Publications and supported by the Swedish International Development Cooperation Agency, the Norwegian Agency for Development Co-operation and the UK Department for International Development.

Boosting research
The University’s new High Performance Computing system, Blue Crystal, became fully operational, and now has more than 250 active users. The system supports research in disciplines such as aerospace engineering, molecular modelling, climatological change and social medicine, among others, with a combined project income to date of around £9.5 million. In November 2008, Blue Crystal was ranked as the 86th most powerful supercomputer in the world, helping to establish Bristol as a world-leading centre for research. The next stage of development will be the introduction of a large-scale (one petabyte) data-storage facility to complement Blue Crystal’s computational power.

Other significant activities during the year include work with Research and Enterprise Development (RED) on the creation of a research applications and contracts database for better visibility and management of contracts and awards from application through to completion. Work also began on a project with RED and Communications and Marketing Services to develop a new website through which to showcase the University’s research.

Community collaborations
As well as providing tools to enable communication between members of the University, Information Services facilitates projects with external collaborators. During 2008/09, the division worked with the National Co-ordinating Centre for Public Engagement to develop web-based resources to support its local and national activities. The Bristol-based Centre is a partnership between the University of Bristol and the University of the West of England and aims to co-ordinate UK universities’ best practice in public engagement and to deepen the social impact and relevance of their work.

Information Services also worked with the Department of Drama and Bristol’s Watershed Media Centre on the Semantic Tools for Screen Arts Research (STARS) project. This provides an innovative way of mapping and annotating connections between artists, video performances and other research centres on the web, supporting new collaborations and new perspectives on screen arts research.

Maintaining high-quality information systems
Underpinning all these developments, the division invested more than £1 million in core ICT infrastructure, such as the University’s data network, IT systems hardware and software and PC provision in Information Services sites. Such investment ensures that critical IT services are robust and resilient and that business continuity plans are established, tested and kept up to date.
Four of the honorary degrees awarded in 2008/09 deserve special mention. As part of its centenary celebrations, the University conferred honorary Master of Arts degrees on four individuals who have made a significant contribution to the local community. The University teamed up with the Bristol Evening Post to find the four local heroes, with readers nominating 56 individuals in total. The recipients are featured below.

**ALUMNI DISTINCTIONS & HONORARY DEGREES CONTINUED**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Year</th>
<th>Convocation</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss Davinia Bulford-Cooper</td>
<td>BSc</td>
<td>2009</td>
<td>Bristol</td>
<td>At the age of 77, a 10,000-foot freefall parachute jump.</td>
</tr>
<tr>
<td>Mr Donald Bourgeois</td>
<td>Mrs Judith Bray</td>
<td>BSc</td>
<td>1959</td>
<td>Certificate in Social Work Education</td>
</tr>
<tr>
<td>Dr Harry Beckhough</td>
<td>BA</td>
<td>1935</td>
<td>Bristol</td>
<td>Honorary DSc 2003</td>
</tr>
<tr>
<td>Mrs Helen M Bennett</td>
<td>LLB</td>
<td>1973</td>
<td>Bristol</td>
<td>Over 1,500 alumni returned to campus for the centenary.</td>
</tr>
<tr>
<td>Mr John S M Beckwith-Smith</td>
<td>PhD</td>
<td>1985</td>
<td>Bristol</td>
<td>£25,000+</td>
</tr>
<tr>
<td>Dr Gerald Avison</td>
<td>BSc</td>
<td>1962</td>
<td>Bristol</td>
<td>Over 1,000 alumni returned to campus for the centenary.</td>
</tr>
</tbody>
</table>

**PHILANTHROPY**

Teaching and research at Bristol has always been enhanced by the generosity of alumni, friends, companies, charitable trusts, students and staff. In every aspect of life, from the creation of 3G mobile technology, to life-changing research that has saved thousands of babies from cot death, to finding the blueprint which enabled the accurate recreation of the Globe Theatre, the University makes an impact. Philanthropic support makes this great university – the extraordinary outcomes of its research and the successes of its graduates – even greater.

**2008/09 Bristol Pioneers**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Andrew J Burton</td>
<td>BSc</td>
<td>1969</td>
</tr>
<tr>
<td>Mr John D Davis</td>
<td>PhD</td>
<td>1989</td>
</tr>
<tr>
<td>Mrs Pamela Elliot</td>
<td>BSc</td>
<td>1969</td>
</tr>
<tr>
<td>Dr Paul Dingley</td>
<td>PhD</td>
<td>1989</td>
</tr>
<tr>
<td>Mrs Kate Holmes</td>
<td>BSc</td>
<td>1989</td>
</tr>
<tr>
<td>Mr Roger A Holmes</td>
<td>BSc</td>
<td>1989</td>
</tr>
<tr>
<td>Mrs Janet Homer</td>
<td>BSc</td>
<td>1989</td>
</tr>
<tr>
<td>Mr Philip W Homer</td>
<td>BSc</td>
<td>1989</td>
</tr>
<tr>
<td>Mrs Teresa C Morrison</td>
<td>BSc</td>
<td>1989</td>
</tr>
<tr>
<td>Mr David C O’Donnell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr John Rutley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr Trevor Smallwood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor J J Thomas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs Karian Thomas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**£5,000+**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr John M Andrews</td>
<td>BSc</td>
<td>1969</td>
</tr>
<tr>
<td>Mrs Jean A Andrews</td>
<td>BSc</td>
<td>1969</td>
</tr>
<tr>
<td>Mrs Carol Barrett</td>
<td>BSc</td>
<td>1973</td>
</tr>
<tr>
<td>Mr Stuart W Barrett</td>
<td>BSc</td>
<td>1973</td>
</tr>
<tr>
<td>Mrs Helen M Bennett</td>
<td>BSc</td>
<td>1973</td>
</tr>
<tr>
<td>Mr Richard T Bennet</td>
<td>BSc</td>
<td>1973</td>
</tr>
<tr>
<td>Mrs Alison Bernard</td>
<td>BSc</td>
<td>1973</td>
</tr>
<tr>
<td>Dr Graham H Bithell</td>
<td>BSc</td>
<td>1969</td>
</tr>
<tr>
<td>Dr Roger J R Brown</td>
<td>BSc</td>
<td>1971</td>
</tr>
<tr>
<td>Mr Charles J Caisley</td>
<td>BSc</td>
<td>1971</td>
</tr>
<tr>
<td>Mrs Jenny Doidge</td>
<td>BSc</td>
<td>1977</td>
</tr>
<tr>
<td>The 18 Hon Lord Chilver FRS</td>
<td>BSc</td>
<td>1994</td>
</tr>
<tr>
<td>Dr Gennaro R D’Avanzo</td>
<td>BSc</td>
<td>1984</td>
</tr>
<tr>
<td>Mrs Helen M D’Souza</td>
<td>BSc</td>
<td>1984</td>
</tr>
<tr>
<td>Mr Luke E Ellis</td>
<td>BSc</td>
<td>1980</td>
</tr>
<tr>
<td>Mr Stephen H Fang</td>
<td>BSc</td>
<td>1982</td>
</tr>
<tr>
<td>Mr Gerard F Fox</td>
<td>BSc</td>
<td>1980</td>
</tr>
<tr>
<td>Dr David J Frank</td>
<td>BSc</td>
<td>1980</td>
</tr>
<tr>
<td>Mrs Eliza Goldsmith</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr Stuart A Goldstein</td>
<td>BSc</td>
<td>1980</td>
</tr>
<tr>
<td>Dr David J Frank</td>
<td>BSc</td>
<td>1980</td>
</tr>
<tr>
<td>Mrs Eliza Goldsmith</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr David J Frank</td>
<td>BSc</td>
<td>1980</td>
</tr>
<tr>
<td>Mrs Eliza Goldsmith</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**£1,000,000+**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Gail A Jab Altern</td>
<td>BSc</td>
<td>1940</td>
</tr>
<tr>
<td>Dr Gerald Avison</td>
<td>BSc</td>
<td>1962</td>
</tr>
<tr>
<td>Dr Adebola O Bada</td>
<td>MB ChB</td>
<td>1969</td>
</tr>
<tr>
<td>Dr Harry Beckhough</td>
<td>BA</td>
<td>1935</td>
</tr>
<tr>
<td>Dr Michael W Bangalore</td>
<td>BSc</td>
<td>1973</td>
</tr>
<tr>
<td>Mr Nigel W Black</td>
<td>BSc</td>
<td>1973</td>
</tr>
<tr>
<td>Dr Charles A Wynn-Evans</td>
<td>BSc</td>
<td>1969</td>
</tr>
</tbody>
</table>

The Centenary Campaign, launched in anticipation of the University’s centenary this year, has now raised over £45 million towards its target of £100 million.

Bristol’s alumni and friends participated in greater numbers and with ever more generous donations in 2008/09:

- **Campaigns and Alumni Relations**, working with academic and other colleagues, raised £5.1 million.
- **Regular annual gifts totalled over £750,000 for more than 100 projects across the University.**
- **The number of Bristol Pioneers (donors giving £1,000-plus in an academic year) reached 268, with members contributing over £1.2 million.**
- **5,905 individuals, companies and trusts made gifts, 1,392 of whom made a donation to the University for the first time.**
- **Over 1,500 alumni returned to Bristol for the Centenary Alumni Weekend (3-5 July 2009).**

From left: John Wilkins, Caroline James, Susan McMullen and Batook Pandya.
REVIEW OF THE YEAR
2008/09

“A good education can have an incredible impact, both for the student as well as the country and potentially the world. Bristol’s current research into climate change is a shining example...the key to this pressing issue, which is a growing concern not only for our own generation but for generations to come.”

Simon Wathen (LLB 1972) and Julia Wathen (BSc 1972)
The Year in Pictures

August

Mr. James Waddsworth – Treasurer
Mr. Royston Griffin – Bristol City Council
Mr. Owen Bum – Society of University Members
Mr. Stuart Goldsmith – Convocation

Elected by Court
Mrs. Alison Bernays (Vice-Chairman)
Mr. John Birchall
Mr. Chris Curling
Mr. Colin Green
Mr. James Foulds (Chairman)
Mrs. Dinah Moore
Mr. Bob Morton
Mr. George Morton
Mr. David Rob
Mrs. Cindy Peck
Mr. Tim Ross
Mr. Mike Armstrong
Mr. Tim Shaweran
Mrs. Cathy Walmsley
Mr. James Wilt

University members
Professor Eric Thomas – Vice-Chancellor
Professor David Clarke – Deputy Vice-Chancellor
Professor Malcolm Anderson – Pro Vice-Chancellor
Professor Anit Waterman-Pearson – Pro Vice-Chancellor

Elected members of the academic staff
Professor Paula Booth
Professor Patricia King
Dr. Stephen Lyne
Dr. David Nevitt

Elected members of the non-academic staff
Mr. Robert Bassett
Mr. Tony Macdonald

Written and produced by Public Relations Office: Communications and Marketing Services Senate House, Tyndall Avenue Bristol BS8 1TH

Photography
Front cover: Jim Woodley

Other photographs supplied by members of University staff and students, and by Tamany Baker, Bristol Evening Post (p.30), Fothoue (p.25, p.26 bottom), Hospital Clinic of Barcelona (Year in pictures: December image), Jason Ingram, William King, Dave Pratt, Sheppard Robson Architects (p.8 top), Nick Smith

Design
www.pelotondesign.co.uk

Print and reproduction
Portsmouth Press. This publication is printed on Reuse Pure White Offset, a 100% recycled paper stock using vegetable/mineral oil-based, environmentally friendly inks.

Accessibility
If you need all or part of this publication in an accessible format (eg in Braille, in large print or on tape), please contact the Public Relations Office on 0117 928 8895.