STUDENTS

The student experience has always been characterised by transition, change and development – that's what higher education is for. But as the landscape of education itself undergoes radical change, Bristol's enterprising students continue to excel in their chosen fields and branch out into extra-curricular activities with energy and imagination.



Right: Key members of the Bristol/Havana team. Top, I-r: Robert Cottrell, Hayley Sharp Jose Ernesto Gonzalez Hugo Baker. Bottom, I-r: Ian Baggs, Alejandro Perez Malagon. Inset: Machinery inside a pump house.

Engineers without Borders

Four Bristol students flew out to Havana in July in a bid to improve the Cuban capital's water supplies. The Engineers Without Borders society at Bristol – which has more than 200 student members – has been working on a project called 'Optimisation and control of the urban Cuban water supplies'. The students obtained permission from the water company, Aguas de la Habana, to test a prototype system in the District Metered Area (DMA) of the Polytechnic University of Havana, which serves nearly 5,000 people.

Nearly 70 per cent of the water pumped into Havana is lost through leakages, often resulting in supply being cut off from some areas for days. The team met with their counterparts and with senior staff at Aguas de la Habana, and returned with enough information to begin optimising the water network within the DMA. The ultimate aim is to set up an efficient automated water network that not only detects leaks but also allows for optimal distribution throughout the Havana water system.

The project follows on from the University's prestigious 2005 Mondialogo Engineering Award-winning project, which researched into the optimisation of the Cuban electrical and water supplies.

Postgrads rally to Mongolia

Two Bristol postgraduates completed one of the most extreme car challenges in the world – the 8,000-mile Mongol Rally – in an old Volkswagen Polo. Dan Bailey (Department of Mathematics) and George Chapman (Department of Physics) covered a quarter of the Earth's surface in a car with a one-litre engine, driving on roads ranging from bad to almost non-existent, with no support vehicles and obstacles including two deserts and five mountain ranges.

The Mongol Rally raises funds for two charities: 'Send a Cow', which provides poor farmers in Africa with livestock, training and advice; and 'Save the Children in Mongolia'. Competitors' cars must have an engine no bigger than 1,000cc. After completing the rally in 27 days, Dan and George arrived in Ulaan Bataar, where they donated their car to Save the Children in Mongolia.



Left: Dan and George pose with their car in Ulaan Bataar



Undergrads go to Taiwan for IDEERS

Four Civil Engineering undergraduates (above) travelled to Taiwan in late 2005 with a group of sixth-formers from Gloucester and Stroud to compete in the fourth annual International IDEERS (Introducing and Demonstrating Earthquake Engineering Research in Schools) Earthquake Engineering Challenge. They joined more than 300 university and high school students from the USA and Asia.

The Challenge, inspired by the competition developed by Dr Wendy Daniell and Dr Adam Crewe at Bristol's Earthquake Engineering Research Centre, took place at Taiwan's National Centre for Research on Earthquake Engineering (NCREE). The teams designed an earthquake-resistant building, which they made using wood, string, paper and glue. The models were then tested on the earthquake simulator in the NCREE laboratory in the Taiwanese capital, Taipei.

The challenge is held on the anniversary of the 1999 Chi-Chi earthquake, which caused more than 2,400 deaths and left 100,000 homeless in Taiwan. The two UK teams, sponsored by the Institution of Structural Engineers and Lloyd's Register, both received prizes for the most creative design in their category. The undergraduate model made it down to the last three standing.

Batting for Purbeck

Jon Flanders, a postgraduate in the School of Biological Sciences, is leading the UK's largest landscape-scale study into rare bats. The Purbeck Bat Project is researching roosts, flight patterns, diets and habitats, as well as the influence of farming practices on the rare greater horseshoe bat and other bats in the Purbeck area. The project partners include the National Trust, Dorset County Council, Dorset Wildlife Trust, MoD, RSPB and other conservation bodies such as English Nature and the Dorset Bat Group.

The project is funded by SITA Trust, through the Landfill Tax Credit Scheme, and by the project partners. Jon will be tagging the bats and using radio receivers to record their flight patterns, which can extend as far as 30 miles in one night, to locate their night roosts and feeding areas.

Zoe is SET Chemistry Student of the Year

Chemistry student Zoe Schnepp was one of this year's SET (Science, Engineering and Technology) Student of the Year award winners. Zoe received the Royal Society of Chemistry Award for the Best Chemistry Student for her project on 'Supramolecular hydrogels for advanced tissue growth'. The SET Awards, supported by industry and leading scientific and technical institutions, are Britain's most prestigious awards for science and technology undergraduates.



Left: Zoe Schnepp with Dr Simon Campbell, President of the Royal Society of Chemistry.

Convocation Awards 2005

The Convocation Award winners for 2005 were Robert Harding (fourth-year Civil Engineering) and Tobin Webb (third-year Music).

Robert's contributions to University life include student mentoring, RAG (especially the recordbreaking RAG Barmy pub crawl), Student Community Action, and working for student media and the Students' Union.

Tobin organised an open-air production of Alan Bennett's Wind in the Willows at Goldney in 2005, involving many local school children with whom Tobin, as the SCA Roleplay Project Coordinator, had led workshops.

Champion rider is youngest ever

Laura Bechtolsheimer, a Philosophy and Politics undergraduate, became the youngest ever National Dressage Champion at the National Dressage Championships in September 2005. She was among 350 UK competitors and won both the Grand Prix and the Grand Prix Freestyle to Music. Laura is a member of the National Lottery-funded World Class Potential programme for riders between the ages of 14 and 30 who show the talent and dedication to ride and win at Olympic level.

Lissy wins Jewel of India

Lissy Kunnumpurath, a Masters student at the Centre for Deaf Studies, received the Jewel of India Award for outstanding achievements in Deaf Education. She received the award from the International Institute of Education and Management for 13 years' service in Deaf Education, including promoting awareness about deafness through seminars, camps and workshops, and working with families in remote areas of the northern Indian state of Bihar.



in New Delhi.



Left: Furquan receives his award from the Prime Minister, Tony Blair. at 10 Downing Street

International Student Award

Mohammad Furguan Ur Rehman Kidwai, an Electrical and Computer Engineering student at Bristol, received the 2006 Best International Student of the Year Award for South-West England from the British Council.

Furquan was a trustee of the Students' Union and sat on many Union and University committees. He was the first international student to sit on the University's Senate and Court.

Rugby players' victory March

Five Bristol students represented the University in international rugby matches in four different teams in March. First team captain James Lumby and James Greenwood represented England Universities against their Welsh counterparts at Imperial Medicals RFC, where England defeated Wales. In the England-Wales under-19 match at the Twickenham Stoop, Dave Attwood represented England while Rhys Priestland was selected for Wales, and Wayne Thompson represented England Students against France Students at Twickenham itself.

All four Bristol students played in the Lloyds TSB Varsity Rugby match against the University of the West of England later in the month, where Bristol won both the men's and women's games.



STUDENTS

RAG and Student Community Action

Student Community Action (SCA) expands its activities year by year. New projects launched since August 2005 include the following three.

Crossing Borders

This new student group set up a mentoring scheme to help refugee clinicians through the re-qualification process that will allow them to practice in the UK. Volunteers from Medicine and Dentistry meet regularly with a refugee clinician to provide a support network, help with the acquisition of language skills and discuss everything from cultural issues and aspects of their course to meeting people and integrating into the local community.

The Crossing Borders project brings great benefits to the volunteers, the refugee clinicians and the wider community through better healthcare provision. The project is popular among Medicine and Dentistry students and is a lifeline for many refugees.

Everyday Counts

This new government initiative, managed by Connexions, addresses secondary school attendance. Bristol has one of the worst attendance records in the country, and the aim is to help change this through student mentoring support and group work. There have already been improvements in the attendance of pupils involved in the scheme.

Hall Collection

This new project makes a virtue of an age-old student habit. At the end of each term, students in halls dispose of many useful or reusable items such as food, clothes and kitchenware – items in demand at Bristol's shelters and housing charities. The first hall collections took place in June, and the goods were delivered to the Julian Trust shelter for homeless people in St Paul's.

RAG and SCA 2005/06: the year in numbers

Student volunteers involved in RAG events	4,500
Amount raised by RAG activities	£124,000
Local community groups who received funding from RAG	19
New and existing SCA projects	34
Student volunteers involved in SCA projects	830
Community volunteers enrolled in training provided by the Students' Union	859
Total hours contributed by SCA volunteers	100,000



Left: Street collections, jailbreaks and bouncy castles – SCA and RAG activities during 2005/06.

STAFF

It may be a cliché, but staff really are the University's most important resource. Maintaining a positive working environment supported by progressive personnel policies therefore remains fundamental to the University's success.

The employment framework

In January, the University implemented a new statute governing the employment of academic staff. This modernises the employment framework, taking into account recent employment legislation and current good practice. A range of new ordinances, or employment procedures, provide the mechanisms by which matters such as discipline, grievance, ill health, redundancy and fixed-term contracts are managed.

The ordinances apply to all staff, and their introduction is a major step towards a single, modern framework of employment. The University also implemented harmonised terms and conditions of employment for all staff and assimilated all grades to a single pay spine as a first step towards a new pay and grade structure.

In February, the University offered a new pay and grade structure to the trade unions based on the outcomes from University-wide job evaluation. Following consultation with their members the unions rejected the offer, asking that the University review the job evaluation outcomes to test further for equity and fairness. The University is undertaking this review and will then re-enter negotiations on the pay and grade structure.



Positive steps



Work continued on delivering five 'commitments' made to staff in 2005. These involved 51 actions in Staff Support and Development, Leadership and Management, Communication, Physical Environment and Evaluation. By the end of 2005/06, 70 per cent of these had been achieved, including:

- appointment of a Staff Careers Adviser and International Staff Adviser;
- the first Positive Working Environment Week, with events attended by over 1,200 staff;
- research staff departmental representatives operating in 48 departments;
- greater Staff Counselling Service resources;
- one day's annual volunteering leave for staff;
- English language improvement classes for international staff;
- new forums for black and ethnic minority, disabled, and gay, lesbian, bi-sexual and transgender staff;
- research, technical and support staff conferences;
- a management development programme;
- tax-free computers, bikes and childcare vouchers promoted to all staff.

The second PWE staff survey in 2006/07 will assess the impact of these developments and identify action for the following period.

Developments for research staff

A team has been embedding a number of new developments for research staff, including:

- more staff development workshops;
- a 50 per cent decrease in the use of fixed-term employment contracts for research staff;
- the third annual research staff conference, attended by 180 delegates;
- one-to-one careers advice with the Research Staff Career and Development Manager;
- continued improvements in communication with research staff, via the Research Staff
 Representatives and a new website.

This work has attracted interest from the media and other universities.

AWARDS AND DISTINCTIONS

Bristol's academics receive hundreds of awards, prizes and distinctions every year. Here is a handful of examples.





Fleming in top ten

Professor Peter Fleming (Clinical Science at South Bristol) (above) was named as one of 'Ten Britons who shaped our world' by The Independent in July, as part of its coverage of a new book published by Universities UK. Eureka UK celebrates 50 years of lifechanging research, developments and interventions by UK academics. Professor Fleming's work on the possible causes of cot death isolated three potential factors: babies sleeping on their front, being wrapped in too many blankets, and exposure to cigarette smoke. The article described how, following a successful local campaign, 'Fleming persuaded an initially sceptical and reluctant Department of Health to launch the "Back to Sleep" campaign nationwide', resulting in a reduction in UK cot deaths of over two-thirds.

CASE Award and Honorary degree for VC

The University's Vice-Chancellor, **Professor Eric Thomas,** received the Chief Executive Leadership in Europe award from the Council for Advancement and Support of Education (CASE) at the CASE Europe Annual Conference in Edinburgh. The Awards recognise outstanding leaders who take exceptional initiative to promote and support education. Professor Thomas's report of the DfES Task Force on Voluntary Giving to Universities, published in 2004, had a galvanising effect on universities' relations with friends and alumni and on their commitment to establishing a professional basis for development operations.

Professor Thomas also received the Honorary degree of Doctor of Science from the University of Southampton in July.

Surface Analysis Award

Dr Michelle Dickinson (right, top), a Research Assistant at the Interface Analysis Centre, was named Young Surface Analysis forum. She received by the UK Surface Analysis Forum. She received the title during the Forum's July 2006 meeting in Ireland. In front of an audience of peers, Michelle gave an oral presentation and fielded questions in defence of her PhD study, 'A Cryo-SIMS Study of the Arsenic-Hyperaccumulator Pteris vittata'. Her work, supported by the EPSRC, has implications for the clean-up of land contaminated by arsenic and other heavy metals.

Andrew Lang awarded Mach Medal

Emeritus Professor Andrew R Lang, FRS (right, middle) in the Department of Physics was awarded the Ernst Mach Honorary Medal for Merit in the Physical Sciences (image at top of page), established by the Council of the Academy of Sciences of the Czech Republic.

Leverhulme Prizes

Two Bristol academics won a prestigious 2005 Philip Leverhulme Prize, awarded to outstanding scholars whose work has already been recognised at an international level: **Dr Tim Kendall** in the Department of English, for his work on poetry in English; **Dr James Ladyman** (right, bottom) in the Department of Philosophy, for his work on the philosophy of science.

Angelini's unit wins surgery award

Professor Gianni Angelini, British Heart Foundation Professor of Cardiac Surgery, and his team (right) at the Bristol Royal Infirmary have been voted Surgery Team of the Year by Hospital Doctor magazine in its Hospital Doctor Awards 2005. Professor Angelini's team won the award for its pioneering work in developing ways to perform operations on the beating heart, a procedure known as off-pump coronary bypass surgery. The new technique has been shown in trials to reduce the number of post-operative deaths, and to reduce the risk of stroke in certain patients after surgery. The judge commented: 'This outstanding unit has been at the forefront of developments in cardiac surgery and a model for research, audit and clinical practice at a very high level. It has a high throughput and extremely good relationships with the University. It is led by a world-recognised charismatic leader who has brought together an excellent team.'









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Royal Society Wolfson Research Merit Awards

Professor Peter Green (1) (Department of Mathematics), Professor John Rarity (2) (Department of Electrical and Electronic Engineering) and Professor Varinder Aggarwal (3) (School of Chemistry) have each been awarded a prestigious Royal Society Wolfson Research Merit Award, given 'to individuals of proven outstanding ability to undertake independent, original research'.

Professor Stephen Mann (4) has been awarded the Joseph Chatt Lectureship and Medal by the Royal Society of Chemistry for his 'leading contributions to the chemical synthesis, characterization and development of complex forms of matter'.

Professor Guy Orpen (5) in the School of Chemistry (now Dean of Science) has been awarded the Ronald Nyholm Lectureship and medal by the Royal Society of Chemistry for his 'extensive contributions to the structural chemistry of molecular inorganic compounds and structural systematics'.



Dr Mark Szczelkun (6) in the Department of Biochemistry has been awarded the Young Investigator Award by the British Biophysical Society. The award is made biannually to the individual considered to be the most outstanding biophysicist in the UK aged below 35. Dr Szczelkun's award recognises his groundbreaking work on the movement of motor proteins along DNA.

Distinctions

Professor Patricia Broadfoot (7), Pro Vice-Chancellor, was awarded a CBE in the New Year Honours List. She was also appointed to succeed Dame Janet Trotter as Vice-Chancellor of the University of Gloucestershire from September 2006.

New Fellows

Professor Roger Alder (8) in the School of Chemistry has been elected a Fellow of the Royal Society.

Professor George Davey Smith (9) in the Department of Social Medicine has been elected a Fellow of the Academy of Medical Sciences.

Professor Michael Crossley (10) in the Graduate School of Education has been made an Academician of the Academy of Learned Societies for the Social Sciences.

External appointments

Professor Andrew Whitelaw (11) in the Department of Clinical Science at North Bristol has been elected President of the Neonatal Society for the period 2006-08.

Professor Richard Buxton (12) in the Department of Classics and Ancient History has been named president of the steering committee for the *Thesaurus Cultus Rituumque Antiquorum*, or ThesCRA, one of the great reference works of classical scholarship. ThesCRA is an offshoot of the massive *Lexicon Iconographicum Mythologiae Classicae* (LIMC), which documents the ancient artistic representations of classical mythology. Professor Buxton is also President of the LIMC Foundation.



















NEW CHAIRS



Chair in Child and Family Welfare David Berridge, formerly Research Director at the National Children's Bureau and Research Fellow at the Dartington Social Research Unit.



Chair in Artifical Intelligence <u>Nello Cristianini, formerly Associate</u>

Professor in the Department of Statistics at the University of California, Davis.



Mark Duffield, formerly Professor of International Security, Department of Politics and International Studies, Lancaster University.

Chair in Paediatrics

University of Sheffield.





Chair in Systems Engineering Patrick Godfrey, Director of Strategic Relations Development at Halcrow Group.

Adam Finn, formerly Senior Lecturer in Paediatric Immunology and Infectious Diseases, Institute of Child Health,



Chair in Social Statistics Harvey Goldstein, formerly Professor of Statistical Methods, Institute of Education, University of London.



Heinrich Hoerber, formerly Professor of Physiology at Wayne State University School of Medicine, Michigan



Chair in the History and Cultures of Colonialism Stephen Howe, formerly Tutor in

Politics at Ruskin College, University of Oxford.



Chair in Medieval Studies Pamela King, formerly Professor of English at St Martin's College, Lancaster.



Chair in Physical Chemistry Anthony Legon, FRS, formerly Professor of Physical Chemistry at the University of Exeter.



Chair in Socio-Legal Studies Judith Masson, formerly Professor of Law at Warwick University.

Chair in Robotics and Autonomous Systems

Christopher Melhuish, also Professor of Intelligent Autonomous Systems at the University of the West of England.

Chair in Socio-Legal Studies

Bronwen Morgan, formerly Harold Woods Research Fellow in Law at the Centre for Socio-Legal Studies at Wadham College, University of Oxford.

Chair in Finance

Richard Payne, formerly Research Associate at the London School of Economics.

Chair in Economics

Fabien Postel-Vinay, also Visiting Professor at the University of Paris I Panthéon-Sorbonne.

Chair in History of Art

Elizabeth Prettejohn, formerly Professor of Modern Art at the University of Plymouth.

Chair in Ethics in Medicine

Ruud ter Meulen, formerly Senior Lecturer in the Department of Health Care Ethics and Director of the Institute of Bioethics, University of Maastricht.

Chair in Econometrics

Frank Windmeijer, formerly a senior research officer at the Institute for Fiscal Studies, London.

Chair in Chemistry and Biochemistry Dek Woolfson, formerly Professor of

Dek Woolfson, formerly Professor of Biochemistry at the University of Sussex.

Chair in Law and Policy Research

Richard Young, formerly Reader in Criminal Justice and Assistant Director of the Centre for Criminological Research, University of Oxford.

Chair in Cardiovascular Anaesthesia and Critical Care

Kai Zacharowski, formerly Consultant Anaesthetist, Cardiac Anaesthesia and Critical Care, University Hospital of Dusseldorf.





















