## Imperial College London

# reporter

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# BENCH TO BEDSIDE NHS Trusts set to merge with Imperial in UK's first Academic Health Sciences Centre.

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## **TOP TEN SUCCESS**Imperial climbs four places in *THES* World University Rankings.

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## in brief

#### **New head for Population Biology**

Georgina Mace, FRS, has been appointed Professor of Conservation Science and Director of the Natural Environment Research Council's (NERC) Centre for Population Biology. Professor Mace joins Imperial from the Zoological Society of London, where she has been Director of Science since 2000. Her new role will see her leading a large team at Silwood Park Campus working on diverse research projects including biodiversity patterns, ecology and evolution.

#### **MRC** selects Kennard

Deputy Principal of the Faculty of Medicine, Professor Chris Kennard, has been selected for the Council of the Medical Research Council (MRC) by the Science and Innovation Minister, Lord Sainsbury, and will also chair the MRC's Neuroscience and Mental Health Board. The MRC, which is publicly funded, aims to improve human health by supporting research and training scientists to meet the needs of the health services, the pharmaceutical and other health-related industries and universities.

#### **Blunt named new Earth Science** and Engineering head

Professor Martin Blunt has become the new Head of the Department of Earth Science and Engineering. Professor Blunt, whose research interests include improved oil recovery, carbon dioxide capture and storage, and how to extract low carbon energy from fossil fuels, was previously head of the Petroleum Engineering and Rock Mechanics research group. See the next edition for our feature A word with...Professor Blunt.

#### New institute adds up

A new centre focusing on the use of mathematics to tackle a host of global challenges has opened at the College. The Institute for Mathematical Sciences is a multidisciplinary enterprise applying mathematical understanding and techniques to issues including climate change and control of infectious diseases. It was opened by Imperial physics alumnus David Potter, founder of Psion and inventor of the electronic personal organiser, who donated £1.25 million to the project.

#### **Higgins leaving for Durham**

Chris Higgins, Director of the Medical Research Council Clinical Sciences Centre, will leave the College next year to take up the post of Vice Chancellor at the University of Durham. Professor Higgins' move takes him back to his alma mater from where he graduated with a degree in botany in 1976 and completed his PhD in 1979. He held posts at the Universities of Dundee, Oxford and California, Berkeley, before coming to Imperial in 1998, where he took on the role of Director of the CSC and Head of the Division of Clinical Sciences.

### Historian gets fired up on the Queen's Lawn



A flaming kettle lit up the Queen's Lawn this summer when TV science historian Adam Hart-Davis dropped into the College for an afternoon's filming for his new show, How London Was Built. The renowned science broadcaster watched as Dr Jon Gibbins from Mechanical Engineering gave an impressive demonstration of the combustion of coal gas, in the shadow of the Queen's Tower. You can see this edition of How London Was Built on Thursday 2 November at 19.30 on ITV.

- Danielle Reeves, Communications

## Wye update

Imperial's Management Board has confirmed that the College will not proceed any further with its investigation into delivering a world class research centre, science hub and associated housing at its campus in Wye.

Since the announcement of the Concordat between Imperial, Ashford Borough Council and Kent County Council in December 2005, the College has been exploring its vision for sustaining and developing the campus in Wye that could have secured jobs locally and regionally, and led to scientific developments of global importance.

Having carefully considered all the issues involved, the project team has concluded that none of the scenarios for the vision would represent a wise, viable or desirable investment of public funds for Imperial and Wye.

Deputy Rector, Professor Borysiewicz, said: "I would personally like to thank the people in Wye and surrounding villages, particularly the Parish Council and other elected representatives, for their patience and cooperation over the last few months. As I said at the first public meeting in January, the views of local people would play a significant part in our decision-making process and I have appreciated the responses that have been received.

"The College remains committed to the high quality teaching that takes place at Wye and we will continue to support academic teaching activity there. This



The College remains committed to the high quality teaching that takes place at Wye

includes the highly successful Imperial College/University of Kent Applied Business Management undergraduate degree courses, Master's degrees and the Distance Learning Programmes. As we stated in December 2005, we will review the arrangements with University of Kent in 2011.

We have no current plans to expand research and development at Wye, and we will not be instigating a search for a replacement to the vision project. Any decisions on future activity at Wye campus will, of course, be shared with local residents at the earliest opportunity."

- Wendy Raeside, Communications

## Game SET and match to Imperial

Three students and a member of staff from Imperial trounced the competition at this year's national Science, Engineering and Technology (SET) Student of the Year awards.

Gabriel Keeble-Gagnere won Best Mathematics Student, whilst Marc Hull was given the award for Best Information Technology Student and Andreas Kyrtatos picked up the accolade for Best Mechanical Engineering Student. All three students beat off stiff competition from candidates from some of the UK's other top universities, with only one student from Oxford and two from Cambridge winning similar awards in other categories.

Best Mathematics Student winner, 2006 graduate Gabriel Keeble-Gagnere, also went on to win the top GKN Award for the 2006 Science, Engineering and Technology Student of the Year, and a lecturer from his department, Dr Lynda White, was pronounced Lecturer of the Year 2006.

Gabriel's personal tutor Dr Gerald Moore said: "I'm delighted that Gabriel has received these two national awards in recognition of all the hard work he put in as a student at Imperial, and in particular for his final year maths project on simple groups. He was a talented, conscientious student who worked extremely hard throughout his course. It's great to see his outstanding efforts rewarded at the SET awards."

Dr Lynda White added: "It's an honour and a privilege to be named Lecturer of the Year, and a real success story for mathematics at Imperial for both myself and Gabriel to have been singled out in this way. I've been lecturing in statistics at Imperial for 35 years now and I still really enjoy the challenge of working with some of the brightest young mathematicians in the country-it's wonderful to be recognised for the work that I love doing!"

- Danielle Reeves, Communications



Imperial's Gabriele Keeble-Gagnere is named Student of the Year

### Top ten hit in World University Rankings

Imperial is the ninth best university in the world, according to the latest *Times Higher Education Supplement* table.

The College is one of only three non-US institutions in the top 10 of last week's World University Rankings, jumping from thirteenth in last year's survey.

Welcoming the result, the Rector said: "Above all, this is a tribute to the world class staff we are able to attract, both academic and non-academic."

Harvard University is rated as the world's best university, with Cambridge and Oxford at number two and three in the rankings. MIT, which last year claimed second place, is pushed to number four.

The survey also rates Imperial third in the European top 50, behind Cambridge and Oxford in first and second place.

-ABIGAIL SMITH, COMMUNICATIONS

## Bench to bedside vision moves forward

Over the summer, the Boards of St Mary's and Hammersmith Hospitals NHS Trusts resolved to pursue a merger to become the UK's first Academic Health Sciences Centre (AHSC) in partnership with Imperial.

The goal would be to achieve a merger of the Trusts and their services, and closer working with Imperial's Faculty of Medicine through a new governance structure formally integrating clinical service delivery, teaching and research, by 1 April 2007. This 'bench to bedside' approach—the formal integration of hospitals with medical education and research institutes—is in place in other parts of the world and is yielding improvements and better clinical outcomes for patients.

The decision followed a fourmonth review period and discussions with staff, and Imperial's decision to endorse the move at its July Council meeting. The organisations believe the creation of the UK's first AHSC would enhance the services provided to patients and promote London's position as a key player in the global health market.

The merger would be subject to staff, patient and public consultation, plus NHS London and Department of Health approval.

- Tom Miller, Communications



Imperial and two NHS Trusts have resolved to pursue the opportunity to become the UK's first Academic Health Sciences Centre

## Independence by 2007

Imperial's formal request to withdraw from the University of London was accepted at last week's meeting of the University of London Council. The terms of the withdrawal were agreed by the Councils of both institutions during the summer.

Imperial expects to become wholly independent in July 2007, to coincide with its Centenary. It will now apply to the Privy Council to make the necessary changes to the Charter, Statutes and the Medical Act.

The first students to register for an Imperial degree will be postgraduates beginning their course in October 2007, with the first undergraduates enrolling for an Imperial degree in October 2008. All continuing students registered for a University of London degree at the time of withdrawal

will be able to choose whether to switch to an Imperial degree.

Sir Graeme Davies, Vice Chancellor of the University of London said: "Like any other institution, and in keeping with its own history, the University of London continues to evolve. After nearly 100 years as a member of the federation, Imperial has now considered it appropriate to withdraw, while only last year the Central School of Speech and Drama successfully sought membership".

Rector, Sir Richard Sykes, said: "This is a major step on our road to full independence and I'm particularly pleased that we are able to manage it in time for our 100th birthday. My thanks go to the University of London for their cooperation."

- ABIGAIL SMITH, COMMUNICATIONS

## media mentions

—ABIGAIL SMITH, COMMUNICATIONS

THE SCOTSMAN 11.08.06

#### Scary liquids can escape screening

The liquid explosives, thought to be at the centre of this summer's airline security scare, would be easy to make or obtain, according to Professor Hans Michels, Chemical Engineering and Chemical Technology. Explaining in *The Scotsman* 

why airlines were banning all liquids on board aeroplanes, he says of the explosive: "It can be colourless, pale yellow or brown, but you can add colour to make it resemble anything you like, such as fizzy drinks or even baby food. In a handbag under an X-ray machine, it would just appear that you were carrying a harmless liquid; there would be no way of picking it up."

THE GUARDIAN 09.08.06

#### Are you dancing? Barry's asking

Despite undergoing hip surgery, Barry Manilow should not think about hanging up his dancing shoes just yet. According to Professor Justin Cobb, Surgery, Oncology, Reproductive Biology and Anaesthetics, the 61-year-old showman could find that shaking his booty to hits such as Copacabana is the key to a healthy old age. Commenting in *The Guardian* that dancing is very good for the elderly because it keeps bones strong and the heart active, Professor Cobb says: "One should encourage dancing. Professional dancers are extraordinarily fit."

THE FINANCIAL TIMES 12.09.06

#### Space Station lift off was a let down

The scientific worth of the International Space Station was put under the microscope again this summer, when the space shuttle Atlantis

docked to deliver new equipment. Among critics disappointed by what the station has achieved is Professor Andre Balogh, Physics, who tells the *Financial Times*: "When it was first conceived in the 1990s, it



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was going to be much more ambitious, but it has had to be scaled down because of costs and is now a shadow of its former intention."

THE GUARDIAN 18.09.06

## The long and the short of penis transplantation

The world's first penis transplant has been hailed as a surgical success, despite being subsequently removed because its recipient, a man in China, experienced psychological difficulties in adjusting to it. Transplant expert Professor Andrew George, Medicine, is not surprised that the procedure succeeded. "Doing a penis transplant should be no more complex than anything else," he comments in *The Guardian*. "But it takes time for nerve sensations to kick in and it's not clear whether the patient would ever be able to have sex with it. The question is whether it's right to be doing a transplant for what may be seen as cosmetic reasons."

## Generating Genius in the community

An exciting new project aimed at raising aspiration and achievement among Afro-Caribbean teenage boys was launched at Imperial College in August adding to the College's sizeable summer school programme. The scheme aims to provide incentives for the teenagers, often from failing schools, to pursue their passion for science

Richard Palfrey the robotics course leader (right) lends his expertise to Generating Genius participants

and to nurture talent in the community.

A group of 25 boys aged 12 and 13, from London and the south, spent three action-packed weeks at the College under the *Generating Genius* scheme, gaining hands-on experience of science, engineering and medicine. This innovative scheme is supported by Imperial College, the charity *Generating* 

Genius and Exscitec.

Over the next five years the group will return to Imperial and other institutions every summer to build on their skills and, as they get older, receive help with preparing for university.

The summer school was divided up into three strands: chemistry, robotics and engineering, and life sciences. Activities included lectures and experiments. At the end of each week each group of boys presented their work

to a panel made up of Imperial academics and representatives from the funding bodies, the Learning Trust and the Sutton Trust.

Dr Tony Sewell, Chief Executive of the *Generating Genius* project explained: "The programme was started by myself in 2005, in response to the lack of black British students present in our top universities. I wanted to change this and also make a difference amongst boys who were clearly brilliant at science but were never chosen for special attention. Imperial should feel proud that they are partners in this innovative venture."

"The boys loved the competitive element and responded well to being stretched," added Dr Mark Richards, Physics, who was the academic coordinator for the project and is an active member of the *Imperial as One* BME group at the College, which raises the profile of equality issues and ensures equal representation.

Feedback from the group was very positive, one boy commented: "I have learnt more than I would learn in school in a whole year during this scheme."

— Naomi Weston, Communications

### **Innovative flotation**

Imperial Innovations, the technology commercialisation company majority owned by Imperial College, admitted its shares to trading on AIM on 31 July 2006.

The company raised £26 million at flotation, the first undertaken by a university-based technology transfer company in the UK. A public offer enabled staff to buy shares



at the same price as institutional investors and contributed £1 million towards the gross proceeds.

The proceeds will allow Imperial Innovations to invest to a greater level in more early stage spin-out companies from the College. The company will also have the flexibility to work with other external investment partners, companies and entrepreneurs.

Imperial Innovations was established by Imperial College in 1986 to realise the full commercial potential of its research. Since then, the company has concluded over 100 intellectual property agreements arising from the College's research activity and currently has equity holdings in 58 spin-out companies.

Sir Richard Sykes, Rector of the College, said:

"Our universities are powerhouses of innovation and it is vital for the UK's economy that we get our best ideas out of the laboratory and into the marketplace quickly. Imperial College is world renowned for carrying out leading edge research, and Imperial Innovations has a track record of making this research commercially viable. The flotation will provide Imperial Innovations with the capital to go on to develop its business further and that in turn will feed back into developing the College's intellectual property."

— CAROLINE GAULTER, COMMUNICATIONS



Sir Richard lays the final piece of concrete in Imperial's new student accommodation

## Southside halls a step closer

Imperial's new Southside halls of residence in Prince's Gardens took a further step to completion with the 'topping out' ceremony that took place last week.

The Rector laid the final piece of concrete and planted a sprig of yew to bring good fortune to those who use the building. Explaining that this event celebrates a milestone in the development of these new state-of-the-art halls he explained:

"These new halls of residence will reinforce Imperial's position as a leading residential university attracting high quality students and staff to whom access to good quality affordable accommodation is key, especially in central London. This project is the largest ever taken on by Imperial with College funds, and our project time scale is tight—we want students commencing their studies in the autumn of 2007, the College's Centenary year, to enjoy the benefits of this new accommodation."

The project forms part of a scheme to enhance the environment of Prince's Gardens, with the outdated accommodation replaced with two new buildings that are in keeping with the original sense of the area.

- Naomi Weston, Communications
- Visit http://ichelix1.cc.ic.ac.uk/ramgen/ mediaspool/events/southside\_topping\_out.rm to watch a video of the event.

## Fifty-year bond

Imperial has taken out a £50 million private placement to support its world class teaching and research.

The unsecured funding, borrowed on a 50year term, will support the College's academic mission, as well as providing capital for new student facilities and other estate projects.

With a highly competitive cost of funds (below five per cent), the private placement demonstrates the value placed on the College by the financial markets. It provides the College with a pool of freely disposable capital to invest at its discretion, and means the College is not wholly reactive to changes in the external funding environment.

The Rector said: "We are borrowing these funds from a position of financial strength.

Universities are not businesses, but they must still be managed according to a sound financial strategy. The fact that we have received this loan on such favourable terms is a good sign that at Imperial we are doing just that."

The College's total borrowing facilities now amount to £173 million, following financings arranged in 2003 and 2005.

- Abigail Smith, Communications

## A fresh outlook on accommodation



Last month saw busy scenes in Evelyn Gardens as Imperial freshers moved into their halls of residence. This year around 3,000 students will be living in Imperial or University accommodation.

## in brief

#### Tokyo collaboration

The President of the University of Tokyo, Professor Hiroshi Komiyama, visited Imperial at the end of September to seal an agreement for collaboration between the two universities in research, education and training. Professor Komiyama and the Rector signed an agreement that provides an opportunity for both institutions to work together leading to cooperation in a number of fields. The signing of



the agreement was followed by a joint two-day symposium on climate change, involving researchers from both institutions as well as speakers from industry.

#### A magnetic event

A world class, cross faculty centre for Nuclear Magnetic Resonance (NMR) spectroscopy and the complementary Waters Laboratory of Molecular Spectroscopy were both launched at Imperial last month. The new £5 million, SRIF-funded NMR facility features an extremely powerful shielded magnet. The Waters Laboratory contains highend equipment for mass spectroscopy, which will



complement NMR facility's work on defining the structure of molecules. The lab is named after the US Waters Corporation, which has funded \$1 million spectroscopy equipment for the lab.

#### Addressing animal testing

Two research teams from Imperial will develop new ways to reduce the use and suffering of animals in medical testing, thanks to new grants announced in July. The annual grant round of the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC<sub>3</sub>Rs) has made



awards totalling over £300,000 to Dr Michael Emerson from the Division of Biomedical Sciences, and Professor Sian Harding and Dr Nadire N. Ali of Imperial's National Heart and Lung Institute

#### Opening the gates for HIV vaccine

The Gates Foundation announced 16 grants totaling \$287 million over the summer to create an international network of highly collaborative research consortia focused on accelerating the pace of HIV vaccine development. The grants will bring together more than 165 investigators from 19 countries. Imperial's Dr Steven Patterson has received



\$9.2 million for his consortium which will work to address a potentially major shortcoming of the leading vaccine approach for eliciting cellular immunity to HIV. Dr Patterson's consortium will also focus on testing a system for delivering an HIV vaccine by skin patch.

## Imperial's rock stars

Asteroids in orbit between Mars and Jupiter have gained a new identity over the summer after being named after three Imperial meteorite experts. Drs Phil Bland, Matthew Genge and Mark Sephton are among around fifty scientists honoured by the International Astronomical Union (IAU) at the recent annual meeting of the Meteoritical Society.

The IAU bestows asteroid names on planetary scientists once every three years, in recognition of their contributions to the discipline.

The asteroids are all main belt asteroids, left over from the formation of the solar system. The designation of these bodies is now: 6580 Philbland, 6626 Mattgenge, and 7552 Sephton.

Dr Phil Bland, honoured for his work on the origins of the solar system and on impacts, said: "It's funny to think there's a four-kilometre-wide rock out there with my name on it. Having studied impacts, I somehow can't help but hope that it might collide with something — preferably Mars or the Moon rather than the Earth. It would make a big bang."

In contrast to Dr Bland, Dr Genge, honoured for his work on micrometeorites, is worried about collisions. He said: "6626 Mattgenge is already coming quite close to Mars. The orbits of asteroids change and in the future it will probably become an Amor, a Mars-crosser. Around 50 per cent of these collide with the red planet. My seven kilometres of prime asteroid real estate could turn into a hole in the Martian surface. Even worse it might survive to become an Earth-crosser in a few million years, and prompt an impact scare. Imagine the headline 'Mattgenge fails to make an impact' as an epitaph."

Dr Mark Sephton, whose work on the organic molecules within meteorites was honoured, said: "My kids are going to love this. With the name 'Sephton' that makes 7552 a family asteroid, although it's a bit far away to make a decent holiday home."

- Laura Gallagher, Communications



You can follow the orbits of your favourite researcher using the virtual orbit visualisation tool of NASA's Near Earth Object Programme at http://neo.jpl.nasa.gov/orbits/.

### **Energy Futures Lab links with Abu Dhabi**

Al Masdar (The Source) is an exciting new initiative that will see the development of world class research, teaching and commercialisation of sustainable energy technologies in Abu Dhabi. It will successfully build local capacity and meet regional strategic objectives for economic growth and environmental control, and the development of local human capital.

In a significant early step to launching *Al Masdar*, a delegation from Imperial representing the Energy Futures Lab has signed a Memo-



Tidu Maini meets His Highness Sheikh Suroor Bin Mohammed Al Navan

randum of Understanding (MoU) to develop the research network and to explore potential new research projects. The Imperial delegation included Dr Tidu Maini, Pro Rector for Corporate Development, Professor Nigel Brandon, Executive Director of the Energy Futures Lab, Dr Tariq Ali, Paul Docx and Omar Cheema. Imperial is joined in this process by RWTH Aachen, which together with Imperial forms part of the IDEA league.

Signing the MoU on behalf of Imperial, Dr Maini said "The College's research strategic mission has at its centre the three key areas of energy, environment and healthcare. We will bring to the project our deep technical skills and extensive experience in multidisciplinary sciences to tackle the important and ambitious challenge of solving the problem of carbon emission reduction that faces the world community."

The event in Abu Dhabi was presided over by the Crown Prince, his Highness Sheikh Mohammed and attended by senior representatives from many international energy companies.

- Abigail Smith, Communications

## Initiative to tackle neglected diseases

A new collaborative programme to reduce the impact of neglected tropical diseases in developing countries was launched in September. Imperial College is one of the partners in the programme funded by the US Agency for International Development (USAID). The scheme aims to treat more than 40 million people annually for five years.

The project is one of the first large scale efforts to integrate existing disease-specific treatment programmes that currently treat millions of the world's poorest people.

Under the terms of the cooperative agreement, worth \$100 million, US research organisation RTI will lead a team that includes the Schistosomiasis Control Initiative (SCI) at Imperial. the SCI, led by Professor Alan Fenwick, Department of Infectious Disease Epidemiology, aims to assist countries in sub-Saharan Africa to control the parasitic disease schistosomiasis and intestinal worm infections.

#### Ministry's highest honour

In addition, Professor Fenwick received a gold medal for services to health from Niger's Minister of Health on 29 September. The medal recognises Professor Fenwick's



Professor Fenwick presented the Minister of Health with keys to a Toyota Hilux and 17 motorcycles to support drug delivery to rural areas

work in improving the health of the poor in Niger.

Professor Fenwick received his medal, the Ministry's highest honour, at the opening of a new laboratory and office space for neglected tropical disease programmes in Niger.

At the event, Professor Fenwick presented the Minister of Health with keys to a new Toyota Hilux and 17 motorcycles for Niger's National Schistosomiasis and Soil Transmitted Helminth Control Programme (PNLBG), to support delivery of drugs to rural areas.

- Laura Gallagher, Communications

## Size doesn't matter

The evolution of miniature or 'dwarf' versions of animals like elephants and hippos on islands is caused by lack of competition for food and the absence of predators, and not just because they are too large for their habitats, new research has claimed.

The study, published in last month's issue of the journal *Evolution*, examines the phenomenon of the 'island rule', which states that large mammals on islands evolve to be significantly smaller than their counterparts living on large continental land masses.

The researchers examined the fossilised



Millions of years ago elephants living on islands evolved to be much smaller than their modern day cousins

remains of small elephants and other miniaturised mammals living on various sized Mediterranean islands in the Pleistocene and Holocene epochs, between 1.8 million and 4,500 years ago. Their findings suggest that this evolutionary tendency is caused by the specific way that predators, prey and competitors for food interact in island ecosystems. They also found evidence that miniaturisation occurs for distinctly different reasons in carnivores and herbivores, and that herbivores are more dramatically affected by the phenomenon.

Imperial's Dr Shai Meiri from the NERC Centre for Population Biology, one of the researchers, said: "Our study has shown that large mammals do not simply 'shrink' in response to the small size of their island homes. By comparing fossils of elephants from a number of islands of various sizes, we saw clearly that species' miniaturisation did not occur relative to the size of the island they inhabited. The complex interaction between mammals, their food and their competitors drives the evolutionary process, allowing mammals, particularly herbivores, to minimise their size whilst maximising their reproductive effort."

- Danielle Reeves, Communications

## At the heart of it

Two Imperial cardiology experts from the National Heart and Lung Institute were honoured at the World Congress of Cardiology in Barcelona in September.

Kim Fox, Professor of Clinical Cardiology, was elected President of the European Society of Cardiology (ESC), which represents more than 45,000 cardiologists across Europe and the Mediterranean. Its mission is to reduce the impact of cardiovascular disease in Europe.

Sir Magdi Yacoub (pictured), Professor of Cardiothoracic Surgery, was awarded the Gold Medal of the ESC for his contributions to cardiology. Just one such award is made every year.

Professor Sir Magdi said: "It is a great honour as well as a humbling experience



Professor Sir Magdi Yacoub has been awarded the Gold Medal of the ESC

for me to receive the Gold Medal of the European Society of Cardiology. I am conscious of the great privilege of being able to work for cardiac surgery, which entails being so close to the community both locally and globally as well as to science. For all that, I remain in awe. "

- Laura Gallagher, Communications



SERGEI KAZARIAN Professor of Physical Chemistry, Chemical Engineering and Chemical Technology



**IULIAN BOMMER** Professor of Earthquake Risk Assessment, Civil and **Environmental Engineering** 



BASSAM IZZUDDIN Professor of Computational Structural Mechanics. Civil and **Environmental Engineering** 



**IOHN COSGROVE** Professor of Structural Geology, **Earth Science and Engineering** 



ROBERT HILL Professor of Biomaterials, Materials



KAMRAN NIKRIN RAE/BE Professor of Structural Integrity, Mechanical Engineering



ALFRIED VOGLER Professor of Molecular Systematics, Biology



NIGEL GOODERHAM Professor of Molecular Toxicology, **Biomedical Sciences** 



FLAINE HOLMES Professor of Chemical Biology, **Biomedical Sciences** 



ANDREW DORWARD **Professor of Development** Economics, Centre for **Environmental Policy** 



JIMMY BELL Professor of Biochemistry, **Clinical Sciences** 



**NIALL DILLON** Professor of Molecular Genetics, Clinical Sciences



JOANNE WEBSTER Professor of Parasite Epidemiology, Epidemiology, **Public Health and Primary Care** 



**CHRISTOPH TANG** Professor of Infectious Diseases, **Investigative Science** 



Professor of Inflammatory Disease, Kennedy Institute of Rheumatology

## New professors take centre stage



RIFAT ATUN Professor of International Health Management. Tanaka Business School

"I first came to Imperial in 1999. Prior to that, I worked as a clinician in the NHS. I also held the position of Associate Dean for Postgraduate Medicine at the University of London and spent some time working at Health Systems Resource Centre of the UK Department for International Development with responsibility for Europe and Central Asia.

It's clearly a great privilege to be made a professor, especially by somewhere like Imperial and I'm looking forward to closer research collaboration with colleagues in with other departments.

The international focus of my research makes it very diverse and interesting and I very much enjoy the multidisciplinary aspect. The issues we explore, for example HIV and Tuberculosis, are of global importance and through our research findings we have the chance to engage with senior policy makers and make a real difference in the countries we work in. Being an ex-clinician in a business school environment means I can look at issues from a management perspective and hopefully offer a fresh approach to analysing and addressing problems.

In the future I would like to see further growth of our research themes. First, analysis of how health systems and contextual factors influence the uptake and diffusion of complex health innovations, and second how we can better use new technologies in different countries of the world to enhance delivery of healthcare services. I hope to expand my research team and strengthen my links with other centres of research excellence who work in my field, particularly in Europe, the US and Japan."



MURRAY SHANAHAN Professor of Cognitive Robotics, Computing

"I first came to Imperial when I was just 17, as a new undergraduate. I have managed to escape for two short periods since then—three years in Cambridge for my PhD in the 1980s, and a couple of years of postdoctoral work at Queen Mary College in the 1990s. But I have now given up trying to escape the pull of the long, invisible bungee by which I seem to be attached to the Queen's Tower.

I'm very pleased to become a professor, of course. But what really matters is the research you do, not the title people give you. I hope

we're not too far from the ideal world in which the title is a true reflection of the value of a person's research.

The best moments in research are when you get a flash of inspiration into something deep and important. In my field, this would be some sort of insight into the nature of human cognition. But there's a huge gap between thinking you've understood something and demonstrating that you're right. That's where the hard graft comes in, which for me is a matter of building computer and robot models. And often you turn out to be wrong after all, of course.

Our understanding of the biological basis of cognition and consciousness is slowly deepening. The computing power available to model and study these things continues to increase. And the robot hardware we can use as an experimental platform is becoming ever more sophisticated, with low-cost humanoids not far off. I think putting these three things together will make the next couple of decades very interesting indeed."



PETER TAYLOR Professor of Experimental Rheumatology, Kennedy Institute of Rheumatology



ROBERT ELKELES Professor of Diabetic Medicine, Medicine



Mark Thursz Professor of Hepatology, Medicine



**DAVID TAUBE** Professor of Transplant Medicine,



CLARE LLOYD Professor of Respiratory Immunology, National Heart and Lung Institute



PETROS NIHOYANNOPOULOS Professor of Cardiology, National **Heart and Lung Institute** 



SUSSAN NOURSHARGH Professor of Immunopharmacology, National Heart and Lung



FRIC AROAGYE Professor of Cancer Pharmacology and Molecular Imaging, Surgery, Oncology, Reproductive Biology and Anaesthetics



SIMAK ALI Professor of Molecular Endocrine Oncology, Surgery, Oncology, Repro- Chemistry, Chemistry ductive Biology and Anaesthetics



NICHOLAS LONG Professor of Applied Synthetic



PAUL DAUNCEY Professor of Physics, **Physics** 



SERGEY LEBEDEV Professor of Plasma Physics, **Physics** 



João Magueijo Professor of Physics, **Physics** 



DARREN CROWDY Professor of Applied Mathematics, Mathematics



**IENNY NELSON** Professor of Physics, **Physics** 

"I started as a postdoc in the Physics Department 17 years ago as the first 'Greenpeace Fellow', working with Professor Keith Barnham on a new type of solar cell. With a few breaks, I have been here, researching new materials for solar energy conversion, ever since.

Becoming a professor hasn't quite sunk in yet. I lost my boyfriend Thomas in a road accident over a year ago and, since then, everything that happens feels as though it is happening to somebody else. But when the news was announced publicly I was really moved by the nice messages from colleagues and friends. I owe special thanks to my collaborators Professor James

Durrant and Professor Donal Bradley. Also to my head of group Professor Gareth Parry and my cousin Sarah who persuaded me to apply for promotion. I can't get used to the title though; I still think Professor J. Nelson is my mum!

I work on the application of molecular electronic materials to solar energy conversion. The field is exciting because the conversion of sunlight into electricity has such enormous potential, whilst a lot of fundamental research remains to be done to understand these new materials. The combination of a compelling motivation and the potential for important scientific discoveries has attracted some really outstanding students and young researchers to the field. I have been privileged to work with them.

When I started at Imperial, no conventional funding agencies were interested in solar energy materials research in the UK. Nowadays, with the increasingly urgent need to find sustainable sources of energy, energy research has become a high priority. In the future I anticipate a much stronger focus on direct application of our materials to power generation."



Professor of Lung Cell Biology, **National Heart and Lung Institute** 

"I originally went to work in the Department of Respiratory Medicine at Charing Cross Hospital Medical School in 1980. Following the merger with Imperial College I moved to the National Heart and Lung Institute in 2000.

Obviously I'm pleased to be made a professor, not just for myself but for all the people I've worked for, and those who have worked with me, as they have contributed

to my success. My family are also delighted; they have supported me throughout. I feel a huge sense of achievement and it is gratifying that my research effort and teaching have been recognised in this way.

I have been very fortunate to work in a clinical setting, collaborating with clinicians and surgeons, with access to human material, to develop unique in vitro models to investigate the intricate mechanisms involved in pulmonary inflammation. The merger with Imperial has opened many other interesting, multidisciplinary opportunities and collaborations. In the future I would really like to dissect out the important cellular mechanisms involved in the inflammatory and immune responses of the lung to inhaled toxicants, e.g. tobacco smoke, nanoparticles, micro-organisms, so we can identify therapeutic targets."

## What does it mean to be a Dean?

Professor Jeff Kramer in the Department of Computing is the new Dean for the Faculty of Engineering and the Business School, taking over from Professor Dick Kitney in Bioengineering, who becomes the Senior Dean. Professor Jackie de Belleroche in the Department of Cellular and Molecular Neuroscience is the new Dean for the Faculty of Medicine (Non-Clinical).

The College has six Deans, who are Professors elected by senior academic members of the area which they represent. They act on behalf of their colleagues as spokespeople for academic opinion and they chair the appropriate Studies Committees in their area.

Laura Gallagher met Professors Kramer and de Belleroche to find out what their new role means to them.



## What are you hoping to bring to your new role?

JK-I have been at the College for over 30 years in almost every possible role, from student to Professor and from Director of Studies to Head of Department. I hope that this breadth of experience of academic life here, tempered by a sense of humour in dealing with everyone, will provide me with the right background for the job. I like new roles and interesting challenges, so enthusiasm is probably another characteristic that I would hope to contribute.

JdB—I come to this position with substantial experience and a strong commitment to teaching and research in medicine especially in the area of neuroscience. I have had the chance to engage in a number of international collaborations both in academia in Europe and the US and with industry in the UK and most recently in India and I think that this provides a valuable perspective of what can be achieved in research and potentially translated to treatment. In my new role as representative of the academic community, I hope to facilitate and support the success of the College as a world leader in scientific achievement.

## What, for you, will be the most interesting aspect of it?

JK – The main responsibility of a Dean is to maintain our high academic standards and to preserve our academic ethos across the College. What exactly this means and how it can be achieved is still a mystery to me. I look forward to discovering all the aspects that contribute to our standards and ethos, and in trying to formulate ways in which these may be improved.

**JdB** – This is a very active phase in strategic development within the Faculty of Medicine with the move towards the formation of an Academic Health Sciences

Belleroche (above) and Professor Kramer (right) take on new roles as College Deans

Professor de

Centre between St Mary's and Hammersmith Hospitals NHS Trusts and Imperial, the consolidation of research and teaching on the Hammersmith Campus with "state of the art" facilities and the ongoing development of new strategic initiatives in research and teaching taking place on all College campuses.

## What part of your new role do you expect to find the most challenging?

JK – A major challenge in Engineering is to encourage more students into our discipline, and to recognise the excitement that it offers. The quality of our academic staff is clearly critical. Appointments and promotions are key processes in finding and retaining good people. I look forward to gaining greater insight into the promotions and appointments process across the College, but recognise that a major challenge will be in dealing with subjects about which I know nothing.

JdB—I know that this will be an active and challenging time, which will include a highly significant period in the history of the College with the celebration of its Centenary, but that is also what is most appealing about the position and I look forward to meeting the challenges.

- Laura Gallagher, Communications

## MEP learns about MRSA

July saw John Bowis, Conservative MEP for London, visit Imperial as part of the Royal Society's MEP-Scientist Pairing Scheme.

John Bowis met with Dr Mark Enright, an expert in MRSA, to find out what scientists do. As part of the scheme, Dr Enright has also been to Brussels to gain a better understanding of the political process.

As well as discussing how scientists work and what they do day to day, Dr Enright also explained what MRSA is, and how he hopes to use his research at Imperial to tackle it. He said:

"Science and politics can often seem at opposite ends of the spectrum, with little in common. However because of the complicated nature of problems such as MRSA, a combined approach between policy makers and scientists will prove essential. Schemes such as this one... can make a huge difference in bridging this divide, and hopefully help provide better solutions."

John Bowis is the Conservative MEP for London and the party's spokesman on Health and Consumer Affairs in the European Parliament. He serves on the Parliament's Environment, Public Health and Food Safety Committee as well as the Development Committee.

The MEP-Scientist Pairing Scheme aims to give scientists better awareness of policymaking at the European level. It also helps parliamentarians understand the scientific process by facilitating access for MEPs to a network of young research scientists. It is hoped this will help to bring high quality scientific advice into EU policy discussions and contribute to wider public understanding of the EU and its institutions.

- Tony Stephenson, Communications



Imperial's Mark Enright (right) enlightens MEP John Bowis on all things MRSA

## Thumbs-up from students

Imperial scores highly with its students, according to a countrywide student feedback scheme published this summer.

The results of the National Student Survey show that the College has a strong overall satisfaction score with a result above the average for the sector.

Provision of learning resources, which includes library services, IT resources and specialised equipment, is a particular strength, with Imperial receiving the top score in the country. Organisation and management, covering issues such as the timetabling of courses, is also rated highly by students, with feedback placing it in the national top 10.



Good news for Imperial as the College fares well in this year's National Student Survey

Professor Rees Rawlings, Pro Rector, Educational Quality, said:

"We take student feedback very seriously so it's great to get this result, especially as we know Imperial students are rightly demanding about the quality of experience they get here."

In addition to taking part in the National Student Survey, Imperial carries out its own detailed online evaluation of students' experiences. This scheme, praised in recent Quality Assurance Agency reviews, allows departments to respond directly to specific feedback. External reviewers also carry out large scale reviews every five years in each department.

The National Student Survey, carried out for the second year running, is part of the Teaching Quality Information initiative and gathers student opinion on all aspects of university life including teaching, academic support and assessment and feedback.

- ABIGAIL SMITH, COMMUNICATIONS
- ► The full NSS results can be viewed on the Teaching Quality Information website at www.tgi.ac.uk

## Imperial adds six Royal Academy Fellows

Heads of Department and Division past and present were among six Imperial academics celebrating in July after being elected Fellows of the Royal Academy of Engineering.

Professors Mike Graham, former Head of the Department of Aeronautics; Morris Sloman, Deputy Head of the Department of Computing; Andrew Livingstone, Department of Chemical Engineering and Chemical Technology; Peter Cawley, Department of Mechanical Engineering; and Geoff Maitland, Department of Chemical Engineering and Chemical Engineering and Chemical Technology; were all elected.

They are joined by Professor Sir Ara Darzi, Head of the Division of Surgery, Oncology, Reproductive Biology and Anaesthetics in the Faculty of Medicine, who is awarded an Honorary Fellowship.

The Rector said: "I am extremely pleased and excited that of the 34 new Fellows of the Royal Academy of Engineering elected this year, six are from Imperial. This is a fantastic achievement and I would like to congratulate them all."

Laura Gallagher,
 Communications

For the full story, including quotes from the new fellows, visit http://www. imperial.ac.uk/P796o.htm

## **Awards and honours**

#### **Fellowship for Darzi**

Professor Sir Ara Darzi has been awarded a Fellowship *ad homimen* by the Royal College of Surgeons of Edinburgh for his pioneering work in surgery. Sir Ara, Head of the Division of Surgery, Oncology, Reproductive Biology and Anaesthetics at Imperial, is one of the UK's leading surgeons in the field of minimally invasive and robot assisted surgery, having pioneered many new techniques and technologies.



#### **Barber receives Wheland Medal**

Professor Jim Barber, FRS, of the Division of Molecular Biosciences, has received the prestigious Wheland Medal and Award from the University of Chicago. The medal, awarded every two years, recognises international outstanding contributions to chemistry. It is given to Professor Barber in acknowledgement of his 40-year career researching photosynthesis and the way that plants use sunlight to split water into its component parts: oxygen and hydrogen.

#### **EPSRC Research Fellowships**

Energy Futures Lab director and fuel cells expert, Professor Nigel Brandon, has been appointed as the Engineering and Physical Sciences Research Council's (EPSRC) Energy Senior Research Fellow. Professor Brandon will be providing advice and undertaking profile-raising activities for UK energy research, supported by the Research Councils' Energy Programme.



He will be dividing his time between these activities and his research at Imperial. In addition, Professors Jerome Gauntlett, Department of Physics, and Martin Bridson, Department of Mathematics, were awarded prestigious Senior Research Fellowships—of which the EPSRC only awards six nationally every year. And last but not least, Dr Andrew Ho, Physics, and Dr Lionel Rossi, Aeronautics, have been given Advanced Research Fellowships—awarded to outstanding researchers with between three and 10 years' postdoctoral experience.

#### **Degussa Business award for Cowburn**

Professor Russell Cowburn, who has shown that magnetic microchips can store hundreds of gigabytes of information, has been awarded the Degussa European Science-to-Business Award 2006. The award consists of a £100,000 cash prize and the opportunity to attend a business management course at INSEAD, a leading French business school. Professor Cowburn will also receive business planning consultancy services from INSEAD to help with his plan to commercialise the spintronic technology.

#### **Royal Medal for Pendry**

Professor Sir John Pendry, Department of Physics, has been awarded the prestigious Royal Medal by the Queen. The award was made in recognition of Sir John's seminal contributions in surface science, disordered systems, photonics and, most recently, in metamaterials and the concept of the perfect lens.



## Kitney recognised by Royal College of Surgeons

Professor of Biomedical Systems Engineering, Dick Kitney, has been awarded the prestigious Honorary Fellowship of the Royal College of Surgeons. He is the first engineer ever to receive an Honorary Fellowship of the Royal College, according to the College's President Bernard Ribeiro. Professor Kitney, has over 25 years' experience of biomedical signal and image processing, medical informatics and the application of computers to healthcare. He was Imperial's first Head of Bioengineering and has worked on areas including the study of arterial disease, cardiorespiratory control and three-dimensional visualisation techniques.

## student voice

Siobhán Kohli-Lynch is a second year Mechanical Engineering undergraduate. Siobhán kicks off this term's first edition of Student Voice by writing of her endeavour to find out why so few women choose to study engineering.

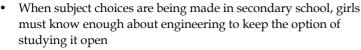
"I've often wondered why so few young women choose to study engineering. In summer 2005 I had the opportunity to travel to Canada to investigate just that; I undertook a travelling fellowship about 'Schemes Encouraging Young Women to Study Engineering'. I had already worked for a year in an engineering company and although I was aware that engineering is male dominated, I was surprised by the total lack of females. My Canada project was funded by the Winston Churchill Memorial Trust, an organisation which awards about 100 fellowships each year in a wide variety of fields.

This was a fantastic opportunity to travel another country whilst undertaking a relevant and useful project. Why Canada? The mixture of cultures makes it a great place to travel in and fascinating to study. I was particularly interested in how the proportion of female engineers varies between French and English-speaking Canada.

What makes engineering such an unattractive profession to young women? I found that girls often aren't even considering engineering at school, put off by its perception as being too difficult, too heavy and too trade-based. Therefore, it is important that girls consider studying the subject, and that they have enough information about it to make an informed decision about going into the field.

The trip lasted six weeks and was the opportunity of a lifetime. I visited numerous prestigious universities, and in talking to so many people, was able to make some recommendations about what we in Britain should do to encourage more young women to study engineering:

Gender stereotypes should be avoided, so that girls feel positive about



- Later in life, it is important for young female engineers to see someone ahead of them in a mentoring type role
- Networking and socialising with other female engineers is important in an industry dominated by men
- It is vital to see and encourage other women in engineering, who probably have the same difficulties and worries

The completion of the fellowship required the submission of a report within six months of returning from Canada. After this was accepted, I was invited for a presentation, so on 6 June this year, I went to Buckingham Palace to receive a medallion from the Queen! It was fascinating to talk to other fellows who have travelled all over the world to study such diverse subjects, from seventeenth century weaving in France to an expedition to the North Pole.

> The fellowship was an amazing experience, and I hope to be able to put what I learned into practice. The motto of the Winston Churchill Memorial Trust is 'With opportunity comes responsibility' - something to think about for all of us who are part of one of the most wellregarded universities in the world.

> > ► If you're a student who would like to air your views about a subject close to your heart, please contact Reporter's Editor, Alexandra Platt, via email at a.platt@imperial.ac.uk or telephone 020 7594 6715.

## **inventors** corner

This new regular column will focus on enterprising academics and students at the College, uncovering the secrets of their success and in this issue, the highs and lows of spinning out companies.



#### The Midaz Touch

This issue we highlight one of Imperial's newest spinout companies, Midaz Lasers Ltd, recently formed by Professor Mike Damzen from the Department of Physics.

Mike has created what is claimed to be the world's smallest, most efficient and highest quality diodepumped solid state (DPSS) laser. Just the size of a matchbox, this laser has proved to have a high output power and high beam quality suitable for micromachining applications. The laser's low manufacturing cost could make it a suitable replacement for industrial inkjets used in coding and marking products, removing the need for ink. Imperial Innovations helped Mike Damzen set up Midaz to develop this technology, investing £150k for its first funding round and providing £25k to create a prototype of the laser.

Mike Damzen works alongside Dr Ara Minassian, also in the Department of Physics, who is the company's Chief Scientific Officer.

Work on the technology that underpins the company started in 1999 and by 2000 the team had built one of the world's most efficient DPSS lasers. At first Mike was too focused on the academic side of the work to consider spinning-out a company, but he always realised the potential of the product. He said: "I had recognised the commercial potential at a very early stage-after all we'd made a leap in performance over laser companies who have been in the business for decades."

The road to forming the company however, was sometimes rocky. Mike explained: "In 2001 I explored a licensing deal with a laser company but that stalled and I had nearly given up any dreams of commercialisation by 2004."

Despite these setbacks things started again commercially in early 2005, when a high profile, multibillion dollar US company took a big interest in the technology. Mike said: "This was the personal push I needed to take the risk of starting a company. I could also see a quick route to market."

Mike strongly recommends getting in touch with Imperial Innovations if academics feel their invention may have commercial value. He said: "They played a vital role in the formation of the company, helping with the logistic and legal side but most importantly they introduced key individuals who now form Midaz's strong management team."

- CHARLOTTE STONE, IMPERIAL INNOVATIONS

### Age positive

Age is no barrier to making your mark at Imperial—and Professor Nicky Best can prove it.

Nicky, a member of the Department of Epidemiology and Public Health, was promoted to Professor last year at the age of just 37. As Professor

of Statistics and Epidemiology at St Mary's Campus, she leads a team of researchers investigating key health issues such as the impact of mobile phone masts and fertility trends.

Nicky joined Imperial in 1996 as Lecturer in Biostatistics, following a first class Honours degree in maths and sports science at the University of Wales, a Master's in medical statistics at Leicester and PhD in biostatistics at Cambridge University. During her PhD studies, she was based in the MRC Biostatistics Unit and helped develop the BUGS computer software for Bayesian analysis of complex statistical methods. BUGS is widely known and has more than 16,000 registered users around the world.

Once at Imperial, Nicky's career progression was impressive. She became Senior Lecturer in Biostatistics in 2000 and Reader in 2003 before her Professorship two years later. Nicky believes her involvement in the BUGS software played a key role in international recognition and her professorship.

She was also fortunate to join the College as it was developing the Small Area Health Statistics Unit (SAHSU), which receives government funding to assess environmental risks to public health and develop method-



ology for analysing geographical variations in health. She has also been involved in high profile investigations including the Shipman Inquiry.

Nicky is also kept busy supervising 11 research students and postdocs, teaching on the Master's degree in Modern Epidemiology

and undergraduate medical course, and contributing to national bodies including the Royal Statistical Society.

Nicky's own career was inspired largely by her PhD supervisor at Cambridge, Senior Scientist David Spiegelhalter, with whom she continues to collaborate on a number of research fronts. This inspiration has meant she places great importance on mentoring junior members of staff in her department.

Nicky believes her Professorship was also made possible by the support of her Head of Department, Professor Paul Elliott, and other senior colleagues.

"Imperial itself was

so encouraging and

did not feel I was too

a responsibility."

young to take on such

"Even so," she said, "I was very surprised to be awarded the Chair the first time I applied. I really appreciate both the support of my colleagues, and the fact that Imperial itself was so encouraging and did not feel I was too

young to take on such a responsibility."

As a Professor, Nicky finds her working hours are long and hard and admits to wishing occasionally that she had more leisure time. Until six years ago, she was

### Make sure you're in the know

New legislation that came into force on 1 October 2006 affects:

- Recruitment and selection
- Professional development
- Retirement
- Promotion and
- Occupational health Pensions
- bonus payments
- ► HR's webpages at www.imperial.ac.uk/ spectrum/hr/hr\_Info/equality/age give guidance on what the Employment Equality (Age) Regulations can mean for you.

a keen rower and rowed for the National Squad. However, long working hours and rowing practice were not a good combination, so Nicky has retired from rowing but still enjoys cheering others on.

Achieving such a young Professorship could, for some, put a limit on their career ambitions. For Nicky, however, it was a very welcome milestone but by no means the pinnacle of her career. "It is not what's motivated me in my work. I'm very proud of it, but at

> the end of the day I love my area of research."

As to the future, Nicky wants to get a few years as Professor under her belt, but would like to spend more time writing books and training materials in the longer term.

And the only downside to being a Professor at Imperial? - "I'm not able to do as much hands-on research as I used to do," said Nicky. "Delegation is something I have had to get used to."

- Wendy Raeside, Communications

## Alumni reunite in force

Nearly 300 alumni and guests from as far away as Venezuela and Australia came back to the College on Saturday 16 September, to enjoy an engaging lecture programme, tours of local museums and visits to their former departments.

Following a welcome from the Rector, the morning's lecture, entitled Can we trust the scientists? was given by Professor Lord Robert Winston to a lecture theatre filled with attendees of all generations.

The series of afternoon lectures, which were built around the reunion's theme of communicating science, proved just as popular with attendees. Speakers included alumnus Carlo Massarella, Professor Hans Michels, Drs Matt Genge and Phil Bland, and Stephen Webster.

Many alumni chose to bring their families

along to show them where they used to study. Children of all ages were kept busy at the Science Museum and explored the science of music, costume and light at an interactive session.

Dinner in the Senior Common Room concluded the day's events and provided the perfect opportunity for alumni

to catch up and reminisce about their own student days. Dr Tidu Maini, Pro Rector for Development and Corporate Affairs, who was celebrating his own fortieth reunion with fellow alumni from the Department of Civil Engineering, hosted the dinner.

- Zoë Perkins, Alumni and Development



Computing alumni from 1996 enjoy some Union hospitality at the 2006 Alumni Reunion

► More details about the day and photographs are available online at www.imperial.ac.uk/ alumni/reunions

Next year's reunion will take place on the weekend of 15-16 September 2007 and the Office of Alumni and Development will extend the invitation to all alumni as part of the College's Centenary celebrations.

## Research ethics focus of summer lectures

Imperial's Research Office welcomed Dr Edward Gabriele in August to deliver a series of lectures. In his lively talks Dr Gabriele looked in depth at the spirit and challenge of research ethics, examined what it means to be a research administrator and promoted the benefits of administrators learning more about the research they support.

Caroline Gaulter spoke to Dr Gabriele, Assistant Vice President for Research Integrity at MedStar Research Institute, USA, and a Professor at Georgetown University School of Medicine, about his work and philosophy.

#### What does your work at the MedStar **Research Institute entail?**

MedStar Research Institute is the research arm of MedStar Health, the largest healthcare delivery organisation in Washington, DC, with responsibility for the management and research outputs of seven major hospitals. My job is to ensure research integrity

and statutory compliance in all that we do, focusing in particular on education and training.



Dr Edward Gabriele spoke at a series of lectures over the summer

#### What does research integrity mean to you?

The advancement of medicine depends on human research and we have an ethical responsibility to protect the human subjects who are needed for this. Mitigating the risk lies far deeper than the clerical forms we produce and complete. Professionals must be educated in values to form the characters required for real, ethical healthcare.

#### Are you able to relay any experiences when the importance of your work particularly

A few years ago I spent time in a village in Egypt as part of a vaccine trial. On receiving

trial medication, villagers put signs above their doors saying in Arabic, 'This family has chosen life'. Many of the villagers were in abject poverty and their culture was very different from my own. Research ethics must surely be about protecting the vulnerable who put so much trust in our science that they see this as a route to life.

#### What have you hoped to achieve during your visit to Imperial?

A key part of my work is to promote relationships between institutions so that we can learn from each other, not only about the science we study but also about the ethics that go hand in hand. I've had a wonderful experience here at Imperial, an institution so richly resourced in people and intellectual capital. I hope I've helped research administrators to realise that their duties lie deeper than their clerical tasks, that their role is a critical part of research and that, as a result, we must strive to become even more professional in this crucial role. The values we hold are an integral part of our approach to the research we nurture.

- CAROLINE GAULTER, COMMUNICATIONS

## centenary update

#### Top tips and templates

With the Centenary year fast approaching, the events calendar is beginning to take shape. There is already an exciting line up of speakers, including Lord Browne, Chief Executive of BP, Roger Highfield, Science Editor, The Daily Telegraph and Boris Johnson, MP. All events taking place from now can use the Centenary logos, and faculties and Imperial College Union are developing their own event programme to form part of the College calendar.

#### Are you planning a Centenary event?

Top tips and key contacts for Centenary event planning, as well as invitation, flyer, name badge and table name plaque templates are available from the Centenary website at www.imperial.ac.uk/centenary.

There is also a comprehensive toolkit for using the special logo, including

downloadable logos and templates for letterheads, PowerPoint presentations and posters. You can also download a PowerPoint presentation giving information about the Cente-

You will notice changes to your stationery too, as from this month Centenary branded letterhead will begin to replace standard Imperial letterhead until the end of 2007 and a special postal frank will be introduced at all campuses.



New merchandise will be available from the Union shop and online at http://shop.union. imperial.ac.uk from December.

- CAROL MARSH, COMMUNICATIONS
- Visit www.imperial.ac.uk/centenary for more Centenary information.

### **Death notice**

#### **Emeritus Professor Eric Brown**

Eric H. Brown, formerly Professor of Structural Engineering in the Department of Civil and Environmental Engineering and Dean of Engineering, died in September 2006. In a long career at Imperial, he also made an enormous contribution to the College's musical life, having been a founder of the Imperial College Choir and contributing annually to concerts and Commemoration Day. Professor Brown was awarded a Fellowship of Imperial College in 1999.

#### Kevin Delanev

Imperial has heard with sadness of the death, last month, of Kevin Delaney, HR Assistant in the Human Resources Division. Kevin had been with HR since February 2000, most recently working in the Administrative Divisions Team, and had many friends who greatly enjoyed working with him.

#### Professor John Lever

Professor John Lever, Head of the Department of Bioengineering and a member of the College community since 1973, died last month. He is remembered by colleagues as an outstanding researcher and teacher, dedicated to the welfare of his students and meticulous about every aspect of running his Department. See www.imperial.ac.uk/news for a full appreciation.

#### **Emeritus Professor Charles Rees**

Last month Imperial learnt of the death of Charles Rees, Emeritus Professor of Chemistry. who first came to work in the Department of Chemistry as Hofmann Professor of Organic Chemistry in 1978. Although he took early retirement in 1993, Professor Rees continued work as an Emeritus, and was to be found in the Department on a daily basis until his death last week at the age of 78. See www. imperial.ac.uk/news for a full obituary.

#### **Emeritus Professor Iames H. Whitelaw**

Professor James H. Whitelaw, FRS, died on 16 August 2006 aged 70. He began his Imperial career in the Department of Mechanical Engineering as a lecturer in 1963 and was made a professor in 1974. From 1977 until his retirement in 1999, Whitelaw focused on the development of the Fluids and then the Thermofluids sections. After his retirement he continued his association with the Department part-time, assisting younger members of staff and doctoral candidates.

**▶** *The Editor is pleased to accept brief appreciations in remembrance of* colleagues, reserving the right to edit these before publication. Please email a.platt@imperial.ac.uk

## welcome

#### new starters

Miss Fariha Afgan, Faculty of Medicine Mrs Evanne Allister, SORA Miss Cherry Alyahya, Medicine Professor Erkko Autio, Business School Dr Daniel Balint, Mechanical Engineering Dr Konstantinos Beis, Molecular Biosciences Dr Cedric Berger, Cell and Molecular Biology Mr James Berry, Molecular Biosciences Mr Hafiz Bidmus, ICT Miss Ashly Black, EPHPC Dr Hugh Blackburn, Aeronautics Dr Gareth Brady, Investigative Science Mr Steve Buckle, Business School Mrs Olha Bystrykivska, Catering Services Dr Laura Canevari, NMH Dr Ashish Chaurasia, Chemical Engineering Dr Audrey Chavey, Medicine Miss Kathryn Chipperfield, SORA Mr Anderson Ciszewski, Catering Services Miss Camila Clemente, Catering Services Miss Keshia Collins, EYEC Mr Gianfilippo Coppola, Bioengineering Dr Richard Court, ESE Mrs Nadia Cruz, Catering Services Miss Aleksandra Czerniak, Faculty of Medicine Dr Gabriela Da Silva Xavier, Medicine Mr Manuel Da Silva, Catering Services Miss Claire Dady, Medicine Mr Coutinho De Figueiredo, Computing Ms Anna Demetriades, Human Resources Miss Angela Devlin-Jolliffe, Medicine Dr Zhiguo Ding, EEE Dr Walter Distaso, Business School Miss Sarah Dodman, Physics Mrs Magdalena Drezewska, Molecular Mr Paul Elliott, Faculty of Natural Sciences

Mr Guilherme Faioli, Catering Services Mr Richard Fearn, ICT Mr Nicholas Foin, Bioengineering Dr Howard Foster, Computing Ms Hongmei Fu, Medicine Dr David Garcia Alvarez, Physics Miss Lisa Gardner, Medicine Mr Zishaan Gatrad, EEE Mr Paresh Ghaghda, Computing Dr Ravin Ginige, Physics Dr Jelle Goeman, EPHPC Mr Joshua Golbert, Chemical Engineering Mr Fabian Gonzalez Jara, NHLI

Ms Crystal Grant, Registry Dr Alan Groves, Clinical Sciences Dr Hatice Gungor, Medicine Dr Ionathan Havs, Physics Dr William Heal, Chemistry Mr Anthony Heasman, Chemistry Dr Jerry Heng, Chemical Engineering Mr Richard Hey, ICT Ms Ulrike Hillemann, International Office

Miss Yun Hou. EFF Mr Kris Ilic, Estates

Mrs Svitlana Ishmakova, Catering Services Ms Liz Ivory, SORA Mr Janse van Rensburg, Medicine

Mrs Elizabeth Janz, SORA Dr Taiwen Jiang, Medicine

Dr Dimitrios Kalaitzopoulos, Computing Ms Jaspal Kaur-Griffin, SORA Ms Aneire Khan, EPHPC

Ms Sabrina Kiefer, Business School Dr Robert Kosowski, Business School Dr Miguel Laguna Bercero, Materials Miss Aimee Laing-Mendonca, EYEC

Ms Camilla Lake-Grondona, Conference Office Mr Adrien Laure, Finance

Mrs Jennifer Lawton, Medicine

Dr Isabelle Leclerc, Medicine Professor Michael Levin, Medicine Dr Meng Li, Clinical Sciences Miss Sandra Lock, Investigative Science Dr Merewyn Loder, Medicine Dr Alessio Lomuscio, Computing Miss Pei Lou, Catering Services Dr Le Luong, NHLI Mr John Mason, Medicine Dr Daliya Mathew, Chemical Engineering Professor Paul Matthews, NMH Miss Karis McKee, Faculty of Medicine Mrs Julie McKinley, Estates Miss Rhiannon Medhurst, Medicine Dr Simon Michaelis, Chemistry Miss Emma Miller, Finance Mr Adam Mills, ICT Mr Carlos Molto Ripoll, Chemistry Dr Stephen Myatt, SORA Mrs Jane Neary, Catering Services Dr Sandra Newton, Medicine

Dr Eiichi Mizohata, Molecular Biosciences Miss Magdelena Myc, Catering Services

Mr Andrew Norton, Biology

Dr Matthew O'Donnell, Materials Mr Toshio Ogawa, Business School

Mr Isaac Olarewaju, ICT Mr Kevin O'Leary, College Headquarters Mr Nicholas Oorloff, Medicine

Miss Eniola Osifodunrin, Medicine Dr Dirk Pattinson, Computing Dr Maciei Pedzisz, EEE

Miss Vilanda Petrauskaite, Catering Services Dr Andrew Phillips, Civil and Environmental Engineering

Mrs Melanie Phillips, Occupational Health Miss Winnie Phiri, Catering Services Dr Michael Pickles, EPHPC Miss Abbie Piper, Medicine

Mr Graeme Rae, Human Resources Mr Thomas Reddyhoff, Mechanical Engineering

Miss Maria Revelo Bados, Catering Services Dr Emma Rhodes, Clinical Sciences Ms Andrea Robins, Educational Quality Office Professor Guy Rutter, Medicine Mr Odwa Salama, Catering Services Dr Alexander Schekochihin, Physics Dr Francesca Semplici, Medicine

Mr Guillaume Sherlock, Registry Dr Kin Yee Shiu, Medicine Ms Bushra Siddiqui, Investigative Science

Dr Jennifer Siggers, Bioengineering Dr Rachel Simmonds, Kennedy Institute

Miss Laura Snowling, Faculty of Medicine Dr Duncan Spalding, SORA

Dr Sarah Sparrow, Physics Miss Louisa Spittles, Communications

Dr Asa Strom, Kennedy Institute Dr Liaquat Suleman-Verjee, Kennedy Institute

Dr Mengxing Tang, Bioengineering Ms Vivienne Taylor, Medicine

Dr Michael Templeton, Civil and Environmental Engineering

Mrs Dawn Tharpe, Medicine Dr Guy Thwaites, Investigative Science Mrs Sandra Turner, EYEC

Dr Maria Vigliotti, Computing Dr Maria Vila Grifoll, NMH Dr Shashank Virmani, Physics

Ms Lucy Wakefield, Occupational Health Service

Dr Yiqian Wang, Materials Professor John Warner, Medicine Miss Naomi Weston, Com Dr Ann Wheeler, BMS

Ms Saskia Wilming, Faculty of Medicine Dr Toby Wiseman, Physics

Dr Ke Xu, NHLI Miss Shoko Yashiro, Molecular Biosciences Mr Alexander Yip, ICT

Dr Pirre Yla-Maihaniemi, Chemical Engineering

Please send your images and/or brief comments about new starters, leavers and retirees to the Editor, a.platt@imperial.ac.uk who reserves the right to edit or amend these as necessary.

Miss Quan Yu, Molecular Biosciences Mr Irfan Zakiuddin, Computing

## farewell

#### moving on

Dr Michael Ala, ESE (27v) Dr Stephan Ankirchner, Mathematics Dr Mariela Araujo Fresky, ESE Mr Jerome Avis, Catering Services Dr Juhoon Back, EEE Dr Arosha Bandara, Computing Ms Adetoun Baruwa, BMS Dr Jon Beauchamp, Clinical Sciences Ms Anne Benjamin, Business School Dr Johann Boucle, Physics Ms Michelle Bovell, Investigative Science Mr Peter Broomfield, Faculty of Engineering Dr Matt Butler, Medicine Ms Isabel Casamayor, NHLI Ms Ruth Chapman, EPHPC Dr Kevin Clemitshaw, Agricultural Sciences Dr Charlotte Collins, Medicine Ms Faye Cooper, NMH Dr Suzy Cordell, Cell & Molecular Biology

Dr Stephanie Cremers, Bioengineering Mr Terrence Crombie, Chemical Engineering Dr Maurizio D'Arienzo, EEE Mrs Simonne Dawson, NHLI Dr Claire de Mazancourt, Biology (7y) Dr Zabala de Torres, Biology (5y)

Mr Remco de Vries, Molecular Biosciences Dr Maria Derkacs, NMH Dr Kamal Desai, EPHPC (5v) Dr Paramdeep Dhillon, NHLI

Dr Maralyn Druce\*, Investigative Science Mr Mathew Edenbrow, NHLI Dr Paul Edison\*, NMH Mrs Lakhnati El Alaoui, Mathematics

Dr Lee Faulkner, Investigative Science (5y) Miss Lucy Fawcett, Sport and Leisure Services Mr Paul Free, Chemistry Dr Mark Frogley, Physics Miss Rebecca Fuller, Biology

Dr Janos Gal, SORA Miss Elizabeth Garland, NHLI Mr Iyob Ghebrenegus, NMH Emeritus Professor Gillon\*, EPHPC Dr Pilar Gonzalez-Gomez, SORA

Dr Krisztian Gorog, EPHPC Mr Jamie Griffin, EPHPC Dr Andrew Harkins, Mathematics Dr Fauzia Hasnie, SORA

Dr Youssef Hassoun, Computing Dr David Herbert, Mathematics Dr Birger Herzog, SORA Mr Peter Holley, Student Residences

Professor John Hudson, ESE (7y)

Mr John Huggett, Library Services Dr Adrien Iamain, Computing Mr Roger Jones, Mechanical Engineering Dr Iussi Kalkkinen, Physics

Miss Thalia Kaprou, Human Resources Dr Harsha Kariyawasam, NHLI Dr Jennifer Kearley, NHLI

Miss Aysha Kent, Investigative Science Mr Junaid Khalid, Faculty of Medicine Ms Steffi Klier, Medicine

Mr Boon Koh, NHLI Dr Eduard Lindner-Lopez, Chemical Engineering

Ms Samantha Linton, Business School Mr Eugenio Macchiarulo, Investigative Science (5y) Mr Timothy Machin, ICT

Dr Harris Makatsoris\*, Chemical Engineering Mr Virgilijus Matuliunas, Catering Services Dr Rainer Mautz, Civil and Environmental Engineering

Mr Emmanuel Mazars, EEE Mr David McBride, Computing Miss Jane McCarthy, Faculty of Natural Sciences

Miss Aurelie Mejean, Faculty of Engineering Dr Daniel Melley, NHLI

Mr Robert Mowatt, Student Residences

Dr Timothy Munt, Chemistry Dr Roberto Navarrete, NMH Mrs Elizabeth Neary, SORA Mr Philip Nilson, Physics Dr Muna Noori, SORA Mr Dean Norgate, NHLI Dr Brown Okoko, NHLI Dr Paul O'Neill, Physics Miss Lulu Pan, Catering Services Mr Kamal Pandya, NHLI Mr Hugo Parker, BMS Mrs Hetal Patel, NHLI Mrs Magda Porter, Educational Quality Office Mr Robert Powell, CHOSTM Dr Roger Preston, Investigative Science Mr Paul Price, Computing Mr Andrew Pridmore, Faculty of Engineering Ms Jenny Quickfall, EEE Mr Dan Raishbrook, Faculty of Medicine Ms Liz Richards, EPHPC (7y) Dr Christophe Ringeval, Physics Professor Douglas Robinson, NHLI (11y) Dr Francesco Russo, Medicine Dr Jonathan Sapsed, Business School Ms Britta Seidemann, Medicine Ms Alison Shipton, NHLI Miss Katie Shirley, Physics Miss Nicki Smith, SORA Ms Natalie Steibelt, Business Schoo Miss Jade Sutherland, Estates Mr Steve Tauroza, Humanities Mr Carlos Tavares, Computing Miss Renay Taylor, NHLI Mr Andres Tello Gracia, Catering Services Dr Michael Themis, BMS Mr Ray Thompson, Faculty of Engineering Mr James Vallerine, Registry Dr Daniele Varacca, Computing Mr Miguel Vargas-Reus, EPHPC Miss Conchi Vera-Valderrama, EPHPC Dr Lisa Voigt, Physics Mr Glenn Wallington, Faculty of Engineering (17y) Miss Jemma Walsh, Faculty of Medicine Dr Xuhua Wang, Physics Mr Eliot Ward, Molecular Biosciences Miss Michelle Warren, CEP (7V) Miss Louisa Wilcock, NHLI Dr Jo Wilson, Physics Mr Aliaksandr Yarmishyn, Cell & Molecular Biology Dr Sherif Yusuf, Computing Dr Yongjun Zhang, Physics

#### retiring

Mrs Eileen Boden, Library Services (15y) Professor Jean Connerade\*, Physics (33y) Mrs Yvonne Doyle, Business School (12y) Professor Gordon James\*, Mathematics (20y) Dr Mike Keating, Mathematics (38y) Mr Frank Kriwaczek\*, Computing (22y) Professor John MacDermot, Faculty of Medicine (17v) Dr Raul Margara\*, SORA (20y) Professor Istvan Maros\*, Computing (10y) Professor William Meikle\*, Physics (30y) Dr Vivien Moore, Physics (23y) Professor Kim Parker\*, Bioengineering (24y) Mrs Sylvia Perry, Finance (14y) Professor David Phillips\*, Chemistry (17y) Mr David Price\*, Physics (41y) Miss Ainslee Rutledge, Educational Quality Office (28y) Professor Robert Schroter\*, Bioengineering (41y) Mr Robert Steed, Biological Sciences (7v) Mr Felix Stevens, Investigative Science (36y) Mr Vladimir Tsankov, Catering Services (5y) Mr Derek Willis, Mechanical Engineering (38y)

This data is supplied by HR and covers the period 1-30 September 2006. It was correct at the time of going to press. Years of service are given where an individual has been a member of College staff for over five years

Asterisk (\*) indicates where an individual will continue to play an active role in College life.

#### what's on

11 October 2006 ► 17.00–18.30

#### **New Windows into the Heart:** cardiovascular imaging from molecules to patients

PROFESSOR ROBERT BONOW, GOLDBERG DISTINGUISHED PROFESSOR OF CARDIOLOGY, NORTHWESTERN UNIVERSITY, USA

First Annual Paul Wood Cardiovascular Lecture

>> Paul Wood Lecture Theatre, Guy Scadding Building, National Heart and Lung Institute, Dovehouse Street, London SW<sub>3</sub> 6LY

11 October 2006 ► 17.30–18.30

#### From Rule Book to Risk Management: the development of safety management in Hong Kong MTR Corporation

PHIL GAFFNEY, FORMER MANAGING DIRECTOR, OPERATIONS AND BUSINESS DEVELOPMENT, HONG KONG MTR CORPORATION

Imperial College London/Lloyd's Register Annual Lecture in Transport Risk Management Lecture

>> Clore Lecture Theatre, Huxley Building

11 October 2006 ► 13.00–13.45

#### Lunch time concert

COLIN STONE (PIANO)

>> Read Theatre, Sherfield Building

13 October 2006 ► 18.00-19.00

#### **Repairing the Engine of Life:** how plants have solved their energy crisis

PROFESSOR PETER J. NIXON

Inaugural lecture

>> Clore Lecture Theatre, Huxley Building

19 October 2006 ► 13.00-13.45

#### **Lunch time concert**

NATALIE CLEIN (CELLO) AND CHARLES OWEN (PIANO)

>> Read Theatre, Sherfield Building

19 October 2006 ► 18.30-20.30

#### The best science books ever

DR ARMAND LEROI, MAGGIE MCDONALD, TIM

Panel Debate

>> Lecture Theatre G16, Sir Alexander Fleming Building

25 October 2006 ► 11.30-17.30

#### **Commemoration Day 2006**

UNDERGRADUATE GRADUATION CEREMONIES

>> Roval Albert Hall

25 October 2006 ► 13.00-13.45

#### **Lunch time concert**

THE CHAMBER PLAYERS

>> Read Theatre, Sherfield Building

31 October 2006 ► 17.30–18.30

#### Playing God? A lecture exploring the relationship between science and religion hosted by the Chaplaincy.

PROFESSOR LORD ROBERT WINSTON

>> Great Hall, Sherfield Building

All events are at the South Kensington Campus unless otherwise stated.

#### take note

This year's Postgraduate Prospectus is out now. Ask your Departmental Administrator for a copy or visit www.imperial.ac.uk/ pgprospectus for the extended online version.



Reporter is published every three weeks during term time in print and online at www.imperial.ac.uk/reporter.

The copy deadline for issue 169 is Friday 20 October. Publication date is 1 November. Contributions are welcome (no more than 300 words). Please note the editor reserves the right to cut or amend articles as necessary. Information correct at time of going to press.

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#### **Photography**

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#### classifieds

Reporter now includes a regular classifieds section. If you have a something for sale, property to let or are looking for someone to share a lift to work with, this is the perfect place to advertise. Please submit no more than 50 words to the Editor, Alexandra Platt, by email at a.platt@imperial.ac.uk for a chance for your advertisement to appear. The Editor reserves the right to edit these as

Tent Pack for Sale. Black's tent pack for sale including two-person tent, two sleeping bags, two camp mattresses and carry case. New this year and never been used. Retails for £70. Asking £40 ONO. Please email m.sanderson@ imperial.ac.uk if you are interested or require further

### volunteering

Employee Volunteering is a joint project between the Staff Development Unit and the Imperial Volunteer Centre. Staff members with six months' satisfactory service are eligible to participate in voluntary activity and receive some time off work in recognition of their contribution. Opportunities also exist for teams to use volunteering as the basis for team development and away days.

This regular *Reporter* column will outline an urgent project in each issue. Why not get involved?

#### This week's project...

#### **Volunteer Host**

Project ID: 83 for Contact the Elderly Sunday 15.00-17.30/once or twice a year Location: Your home, anywhere in London

Volunteers needed to host a group of elderly people in your home for afternoon tea once or twice a year. Groups of people between 10-16 people visit a different home every month and spend a few hours in the company of friends, old and new. This is an extremely rewarding opportunity to help to improve the lives of an escalating number of lonely elderly people, who are simply too frail to go out alone.

To take part in this scheme or to hear more about volunteering in general, contact Minna Ruohonen on 020 7594 8133 or email m.ruohonen@imperial.ac.uk.

Visit www.imperial.ac.uk/volunteering for full details of over 250 volunteering opportunities. You can also subscribe to the weekly newsletter by emailing volunteering@imperial.ac.uk.