Imperial College London

# reporter

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# Aspiring **scientists**

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# in brief

## High scores for teaching

The College has come sixth overall in *The Guardian's* interactive university guide, based on average teaching score. The subject by subject guide, when sorted by average teaching score, places the College first for civil engineering and electrical and electronic engineering; second for physics, general engineering, mechanical engineering, chemistry, and computer science and IT; fourth for biosciences, chemical engineering, and materials and mineral engineering; fifth for earth and marine sciences; sixth for medicine; and seventh for maths.

## New courses for postgraduates

The College has introduced seven new postgraduate taught courses which will start this October. They include MScs in Allergy, Physics, Preventative Cardiology, and Science, Technology and Medicine. Also new is a one-year full-time MRes in Cancer Biology, which is designed both for BSc graduates with a suitable first degree in life sciences or biomedical sciences, and clinicians in cancer-related fields who want to undertake a research degree to further their career in academic medicine. For more information, visit: **www.imperial.ac.uk/courses/newpgcourses**

## Marquee milestones

A marquee is to be erected on the Queen's Lawn in the centre of the South Kensington Campus for 28 days in 2008. The first of these periods was in April for the Charing Cross symposium, with the next scheduled from 12 May to cater for receptions following the postgraduate awards ceremonies. Later in the year the marquee will be used for the June summer ball and open day and then again in October for Commemoration Day and a careers fair.

## Podcast update

Professor William Perraudin of the Tanaka Business School discusses the economic crisis in an interview in the May edition of Imperial's magazine podcast, available now. "I think the most interesting question right now is just at what point the market will begin to snap back into a more normal state," he comments. "I do think that if sensible action is taken then the crisis will be contained. When a recovery begins to occur I think it will be rather sudden. That will be interesting in itself." Also in this month's edition, Professor David Clements of the Department of Physics talks about his involvement in the Herschel Space Observatory, due to be launched later this year, and Paul Chauncy of the Department of Humanities shows presenter Gareth Mitchell around his music technology lab. The podcast can be downloaded from iTunes or **www.imperial.ac.uk/media/podcasts**

# New links with top Korean university

Professor Chong Yang Kim and Professor Mary Ritter at the HITS opening ceremony

**Imperial College and Hanyang University (HYU) in Korea have recently established new links which will lead to research collaborations and exchange programmes for research staff and students.**

On Monday 21 April, Imperial signed a memorandum of understanding (MoU) with Hanyang. The MoU was signed as part of the opening ceremony of the HITS (Hanyang, Imperial, Tokyo and Shizuoka) Symposium. HITS is an annual closed symposium aimed at fostering closer collaboration and exchange of ideas in the research areas of bioanalysis, bionanotechnology and microfluidics.

The symposium was attended by over 50 delegates from Hanyang, the Tokyo Institute of Technology and Imperial.

Professor Mary Ritter, Pro-Rector for International Affairs, welcomed Professor Chong Yang Kim, president of Hanyang University, noting that the origins of HYU in many ways paralleled those of the College. HYU originated as an engineering school and has more recently incorporated a medical school. The visionary and ambitious HYU Project 2010, established in March 2004, set the goal of becoming a globally leading university by 2010. Central to this plan is establishing collaborative links with world-leading universities like Imperial.

In his address, Professor Kim expressed his hopes for the contribution that the MoU will make towards friendship between the two institutions. He emphasised the importance of cooperation in international science and technology, commenting that with cooperation "both sides can win".

—Danny O'Hare, Bioengineering

# Second Grantham climate change research centre for London

**Philanthropists Jeremy and Hannelore Grantham are creating a second climate change research centre in London, following their donation of £12 million to Imperial in 2007 to establish the Grantham Institute for Climate Change.**

The new research centre will be based at the London School of Economics and Political Science (LSE), and will be called the Grantham Research Institute on Climate Change and the Environment.

Researchers at the new LSE institute will collaborate with the engineering, scientific, medical and technological expertise of Imperial's Grantham Institute for Climate Change. Together, the two institutes will address the fundamental science and economics of climate change and its impacts on the natural environment and society, and help to develop the policy, technological and economic solutions needed.

Jeremy and Hannelore Grantham

The Granthams' total investment in both Imperial and LSE of over £24 million, made through the Grantham Foundation for the Protection of the Environment, is one of the largest private donations to climate change research in the UK.

Chaired by Lord Stern of Brentford, the new institute will bring together the LSE's expertise on economics, finance, geography, the environment, international development and political economy to focus on policy-relevant research, teaching and training in climate change and the environment.

*"This new institute at LSE opens the door for vital new collaborations between Imperial's science, engineering and healthcare experts and LSE's social and economic specialists"*

Welcoming the news of the Granthams' new donation, Professor Sir Brian Hoskins, Director of Imperial's Grantham Institute for Climate Change (pictured left), said: "This new institute at LSE opens the door for vital new collaborations between Imperial's science, engineering and healthcare experts and LSE's social and economic specialists to tackle some of the biggest issues facing our planet today."

—Danielle Reeves, Communications

▸ *Sir Brian Hoskins will present the Annual Grantham Institute for Climate Change Lecture on 22 May, entitled* Reflections on climate change and what we can do about it. *For details visit* **www.imperial.ac.uk/events**

# Top European award for drag research

**Research to improve motorcycle dynamics won an Imperial PhD student a prestigious European award last month.**

Amrit Sharma, from the Department of Electrical and Electronic Engineering, has won a gold medal for automotive design at the Young European Arena of Research Awards, announced at the Transport Research Arena conference in Slovenia on 23 April.

Mr Sharma won the award for mathematical models which show how air flowing over a bike can exert pressures on the vehicle, slowing it down and making it less efficient. This is known as aerodynamic drag.

> "There were a lot of good entrants from across Europe and coming first out of a very strong field is an achievement."

Mr Sharma and a team from the Control and Power research group, along with motorcycle manufacturer ECOSSE Spirit, are using the mathematical models to improve the design of the company's ES1 racing motorcycle.

In new designs tested by the model the front and rear suspension are rearranged, the body is constructed from fibreglass (a lighter material than the usual metal shell), and the chain drive is moved, altering the location of the rider's feet and upper body. The latter of these innovations creates a new shape for the vehicle, resembling a teardrop that, according to tests, reduces the dragging effects of air flowing over the vehicle by approximately 50 per cent.

Mr Sharma said he was: "extremely flattered to have taken home a gold medal. There were a lot of good entrants from across Europe and coming first out of a very strong field is an achievement."

The team believes it will have a working prototype of the new version ES1 by December 2008.

The Young European Arena of Research is an FP7-funded competition for scientists who are conducting their research in the field of road transport.

Framework Programme 7 (FP7) is the European Commission's latest framework programme and the umbrella under which the European Union supports scientific and medical research.

—Colin Smith, Communications

Amrit's teardrop motorcycle design

# media mentions

—Danielle Reeves, Communications

*BBC News Online* ▸ 15 April

## Moose on the loose

Paul Lister is a Scottish landowner on a mission. Speaking to *BBC News Online*, he outlined his plans to wind back the clock at his estate in the Highlands by repopulating an enclosed 50,000 acre area of land with a raft of animals that have not been seen in Britain for hundreds of years—including moose, brown bears and wolves. Professor Tim Coulson (Life Sciences) told the BBC: "I applaud him for investing the time and money to see if this will work. However, the proposed area for the reserve is too small to viably support, in the long run, an ecosystem containing large predators."

*New Scientist* ▸ 16 April

## Wrinkly skin to reduce drag on planes and subs

Scientists are taking inspiration from dolphins' skin to design an undulating 'skin' to cover aircraft to reduce friction and drag by up to 50 per cent. The proposed skin would be able to change its shape to impose order on the currents and vortices in the air to reduce the effects of drag. However, some scientists are doubtful about the complexities of designing a morphing skin, and are mindful of the consequences of such technology going wrong mid-flight. Jonathan Morrison (Aeronautics) told *New Scientist*: "It's a novel technique that has been demonstrated to work under lab conditions. But implementing this in something the size of an aircraft would be pretty daunting."

*The Observer* ▸ 20 April

## Biologists join the race to create synthetic life

Researchers gathered in London in April to discuss a controversial new area of science—synthetic biology. Pioneered and brought into the public eye by American genome pioneer Craig Venter, synthetic biology involves stripping microbes down to their basic genetic constituents so they can be reassembled and manipulated to create new life forms. One of the speakers at the meeting, Professor Richard Kitney (Bioengineering), spoke to *The Guardian* about this new science: "It has brought us to the cusp of a new industrial revolution in which new fuels, drugs, medical treatments and sensors can be created from biological materials."

### Sign up for Imperial news

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*The Independent* ▸ 24 April

## Giving up on an AIDS vaccine?

An unprecedented poll of AIDS scientists in Britain and the USA shows many of them think a vaccine for AIDS is further away than ever before, and some think immunisation against the virus will never be possible, according to *The Independent*. One of the biggest setbacks to hit researchers is the realisation that testing vaccines on monkeys before they are used on humans does not work. Professor Jonathan Weber (Medicine) told *The Independent*: "The reality of HIV vaccine research is painful, with little to show for 20 years of effort. Recent results drain confidence further."

## Imperial College Healthcare NHS

NHS Trust

### NEWS

### Right on target

The Trust has proved it can deliver the best in patient care by hitting its key performance targets over the past year.

The targets are set by the NHS and include a broad range of measures. Two of the key targets met by the Trust were to ensure that 98 per cent of patients were seen within four hours of arrival at A&E and that within 18 weeks of referral 85 per cent of admitted patients and 90 per cent of non-admitted patients had received treatment. The Trust's strong financial position also contributed to its healthy score card.

The achievements are significant, particularly having been delivered in the period of the Trust's creation through the merger of the former Hammersmith and St Mary's Trusts. Professor Stephen Smith, Chief Executive of the Trust and Principal of the Faculty of Medicine, said: "As the AHSC takes shape, we have given it the best possible performance platform from which to grow and begin to reach our aims to achieve world class quality and performance. We have also established our credibility as an organisation that doesn't simply have worthy objectives and vision, but one which delivers."

### England's first Maggie's Centre

The country's first Maggie's cancer care centre was opened by the Prime Minister's wife, Sarah Brown, and celebrity chef Nigella Lawson, on 29 April at the Trust's Charing Cross Hospital site. Along with the existing Maggie's Centres in Scotland, which are the legacy of Maggie Keswick Jencks who died of breast cancer in 1995, the centre will provide anyone affected by cancer with emotional and practical support, complementing the clinical treatment patients receive in hospital.

# New charity helps fund student medics in Africa

A campaign to help fund trainee doctors in Malawi has been launched this month by an Imperial medical graduate.


Dr Kate Mandeville, now a Senior House Officer at Imperial College Healthcare NHS Trust, is behind the Medic-to-Medic Programme, a new initiative that will see UK doctors and medical students directly sponsoring their counterparts in Malawi.

Dr Mandeville was born in Malawi, where her father was working as an engineer for the Malawian government, and developed the idea for the programme during a return visit last summer. She explains: "I had been thinking about the idea for a while, and went to visit the medical school in Blantyre. The Dean told me that many medical students have to spend much of their study time searching for extra funding, and I realised that a scheme like this could have a real impact."

The programme guarantees to pay the £90 per year tuition fee of 20 trainee doctors in Malawi, selected on the basis of financial need and academic potential, for a full year. Doctors and medical students in the UK will sponsor an individual student, and will receive regular updates from that student on their progress. The programme will be administered through the International Medical Education Trust (IMET2000).

The scheme will also offer teaching opportunities for Imperial medical students at the Malawi College of Medicine. The Malawi College finds it difficult to recruit enough teachers for its medical students in the early years of the medical course, which is mainly science-based. Imperial medical students in the final three years of their course will have the opportunity to go to Malawi for up to six weeks during the summer break to assist with teaching.

Malawi has only two doctors per 100,000 people, although it is estimated by the World Health Organisation that a country needs around 250 healthcare professionals per 100,000 people to provide basic healthcare.

Dr Mandeville hopes that the Medic-to-Medic programme will play a part in increasing the number of qualified doctors in the country. She says: "Malawi has just one medical school located in Blantyre, its largest city. Despite government subsidies, it still costs students £90 a year to study and many cannot afford this. I hope by setting up this programme we can increase the number of doctors graduating every year and make real improvements to the healthcare of ordinary Malawians."

*"I hope by setting up this programme we can increase the number of doctors graduating every year and make real improvements to the healthcare of ordinary Malawians."*

As for the future of the programme, Dr Mandeville wants to expand it to include other medical schools in the UK and Europe as well, to establish a similar scheme for postgraduate medics.

She explains: "A great problem for developing countries is retaining their staff once they have qualified, with many doctors emigrating to high income countries like the UK, Australia and the USA. I would like to set up a similar postgraduate scheme in which specialists sponsor trainees in the same speciality, supplementing local salaries in order to reduce the incentives for leaving their country."

—Abigail Smith, Communications

▸ *For more information visit:*
**www.imet2000.org/medictomedic**

# awards and honours

## Three new Medical Sciences Fellows for Imperial

Three Imperial professors were recognised this month for their exceptional contribution to medical science with election to the Fellowship of the Academy of Medical Sciences. Terence Cook (pictured), Jonathan Friedland and Anne Dell are amongst 40 leading academics who will be admitted to the Fellowship in a ceremony in June. The Academy promotes advances in medical science and campaigns to ensure these are translated as quickly as possible into healthcare benefits for society.

## Prestigious surgery accreditation for College department

Imperial's Department of Biosurgery and Surgical Technology has become one of the first centres outside north America to achieve accreditation by the American College of Surgeons. The Department, which provides surgical education for healthcare personnel, joins a network of 26 accredited institutes including the Department of Surgery Education at Stanford and the Surgical Education and Activities Lab at Duke University Medical Center.

## Professor to head RAC

Professor Stephen Glaister, professor of transport and infrastructure, has been appointed as the new chief of the Royal Automobile Club (RAC) Foundation, established to promote the environmental, economic, mobilty and safety issues relating to the use of motor vehicles. He has written on a wide range of transport subjects, including roads, railways and the London Underground, and is a member of a number of high-level transport boards and committees.

## French honour for Erol Gelenbe

Professor Erol Gelenbe, Head of the Intelligent Systems and Network Groups in the Department of Electrical and Electronic Engineering, has been elected to the Academie des Technologies, a French academy focused on developing and exploiting new technologies for public benefit and contributing to professional and technical education. Professor Gelenbe is one of only four non-French full members of the Academie and the only one working in the UK.

## European advisory group for health and science

Professor John Wood, Principal of the Faculty of Engineering, has been selected by the European Commission to become a member of the European Research Area Board (ERAB). He is one of the 22 people from the fields of science, academia and business who will make up the board. ERAB will provide independent and authoritative advice to the European Commission on research and science policy.

# Bird flu stalled by closing schools

**Closing schools in the event of a flu pandemic could slow the spread of the virus and prevent up to one in seven cases, according to a new study published in the journal *Nature*.**

Researchers from Imperial's MRC Centre for Outbreak Analysis and Modelling, working with colleagues in France, used computer modelling to explore how school closure would affect the spread of a theoretical pandemic H5N1 avian flu virus which had mutated to pass between humans.

The researchers extrapolated from data collected by French GPs, showing how school holidays alter the patterns of influenza transmission in France. The new study shows that shutting down schools for a prolonged period in the event of a pandemic could prevent up to one in seven cases.

> "school closures could be a useful measure in terms of slowing the spread of a flu pandemic"

School closures would also slow and flatten the pandemic, reducing the numbers becoming ill in the worst week of the outbreak by up to 40 per cent. The researchers suggest that this could be important in reducing pressures on healthcare services during this time so that hospitals and GP surgeries would be better able to cope.

Dr Simon Cauchemez (MRC Centre for Outbreak Analysis and Modelling), one of the authors of the study, said: "Our research shows that school closures could be a useful measure in terms of slowing the spread of a flu pandemic. However, its effectiveness would very much depend on what other measures, like vaccination or antiviral drugs, were put in place as well."

—Laura Gallagher, Communications

# Sleeping sickness finding could lead to earlier diagnosis

**Sleeping sickness creates a metabolic 'fingerprint' in blood and urine, which could enable a new test to be developed to diagnose the disease, according to new research published in the journal *Proceedings of the National Academy of Sciences*.**

Sleeping sickness, or human African *trypanosomiasis*, is usually fatal if it is not diagnosed and treated in time. The disease is newly detected in around 30,000 people in sub-Saharan Africa every year. Researchers estimate that the real number of cases is likely to be around 10 times this number, as so few patients are accurately diagnosed.

Sleeping sickness is typically passed on through a bite from an infected tsetse fly, which transmits a subspecies of a parasite known as *Trypanosoma brucei* into the bloodstream.

The new study shows that, in a mouse model, infection with the parasite creates distinct metabolic 'fingerprints' in the blood and urine and that these fingerprints are different at different stages of the disease. This fingerprint was visible in the blood as early as one day after infection.

Professor Elaine Holmes (Biomolecular Medicine), corresponding author of the research, said: "Sleeping sickness is a shattering disease and it is often not spotted until it is too late. Its initial symptoms can be quite mild and non- specific and doctors in sub-Saharan Africa don't usually have the time or money to carry out the tests to check if someone has it. This means a lot of people are dying and if there was a simpler way of testing people, doctors might be able to save many of them."

—Laura Gallagher, Communications

# Metabolic fingerprinting reveals all

**Your metabolic 'fingerprint' can reveal much about the possible causes of major diseases, according to the first 'metabolome-wide' association study ever carried out, published in the journal *Nature*.**

The study provides new insights into the possible causes of high blood pressure, a leading cause of heart disease and stroke, by analysing the metabolic fingerprints of 4,630 adults in the UK, USA, China and Japan, from their urine samples.

Metabolic fingerprinting looks at the relative levels of many different metabolites, which are the products of metabolism, in a person's blood or urine. Metabolites act as markers which can reveal a lot about how diet and lifestyle contribute to risks for certain diseases.

> *"Whereas a person can't alter their DNA, they can change their metabolic profile by changing their diet and lifestyle"*

The research shows that adults in the UK and USA, which have similar incidences of high blood pressure and cardiovascular problems, have similar metabolic fingerprints, reflecting similar lifestyles in spite of their geographical distance from one another.

In contrast, although adults in Japan and China have similar genetic profiles, they have very different metabolic fingerprints from one another and from adults in the UK and USA, and also have major differences in the incidence of many diseases.

The study provides new insights into the possible causes of high blood pressure. Professor Paul Elliott (Epidemiology and Public Health), a co-author of the research, said: "Whereas a person can't alter their DNA, they can change their metabolic profile by changing their diet and lifestyle. This means that as we figure out where the problems lie, we should also be able to show people ways to reduce their risk of certain diseases."

—Laura Gallagher, Communications

## Kidney gene discovery

**Researchers have identified a gene which controls the activity of a group of cells thought to be responsible for potentially severe inflammation of the kidney.**

The gene, revealed in a study in *Nature Genetics*, is known as Jund and the finding could offer a route for tackling the auto-immune destruction of kidney tissue which can occur in lupus patients, causing renal failure.

Jund regulates the activity of macrophages, cells which help us fight infection by eating up cellular debris and pathogens, and stimulating immune cells. The new research showed that when these cells are overactive, they can destroy healthy kidney tissue.

> *"We are hoping that this discovery will allow us to find a new and effective way of treating this potentially fatal form of kidney failure"*

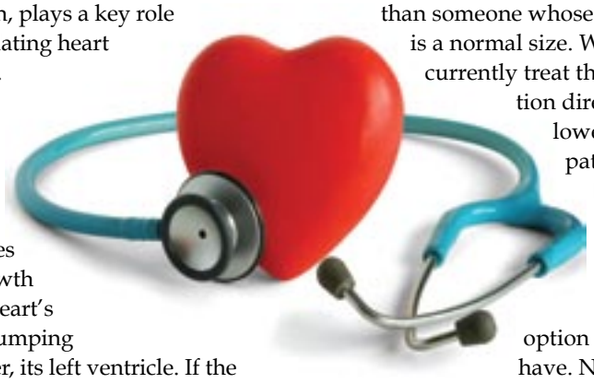
Professor Tim Aitman, a corresponding author of the study from the MRC Clinical Sciences Centre and Imperial College London, said: "We are hoping that this discovery will allow us to find a new and effective way of treating this potentially fatal form of kidney failure. By reducing the activity of the Jund gene, we were able to reduce activity of inflammatory cells that can become overactive in certain diseases of the kidney. Such a therapy would be of obvious benefit to patients suffering from auto-immune diseases such as lupus. This would allow them to avoid dialysis and maintain their quality of life."

—Laura Gallagher, Communications

## Understanding enlarged hearts

**A gene that can cause the heart to become enlarged, greatly increasing the risk of heart attacks and heart failure, has been identified in a new study by Imperial scientists.**

The research was published in the journal *Nature Genetics* and reveals how a gene called osteoglycin (Ogn), which had not previously been linked with heart function, plays a key role in regulating heart growth.



The study shows that Ogn regulates the growth of the heart's main pumping chamber, its left ventricle. If the left ventricle thickens, this creates a condition known as elevated left ventricular mass (LVM), a major contributing factor for common heart diseases. When the heart is enlarged it needs more oxygen and becomes stiff, which can cause shortness of breath or lead to a heart attack.

The researchers found that higher than normal levels of Ogn were associated with the heart becoming enlarged in rats and mice, and in humans. Dr Stuart Cook, one of the corresponding authors of the study from the MRC Clinical Sciences Centre and the National Heart and Lung Institute, said:

"Enlarged hearts are very common. A person whose heart is enlarged is more likely to suffer a heart attack or heart failure than someone whose heart is a normal size. We can't currently treat the condition directly, so lowering a patient's blood pressure is the only option we have. Now that we are unravelling how genes control heart growth, we can gain a better understanding of common forms of heart disease. This should lead to new and more effective ways of treating people."

The study was primarily funded by the British Heart Foundation and the UK Department of Health.

—Laura Gallagher, Communications

## 'Sudden oak death' tackled by researchers

**A deadly disease that kills trees by creating cankers that girdle the trunk and clog up their water-carrying 'veins', is being targeted by a major research project underway at the College.**

The research team, based in Imperial's Centre for Environmental Policy (CEP), is working on predicting and preventing future outbreaks of so-called 'sudden oak death' disease, which, despite its name, primarily affects beech trees.

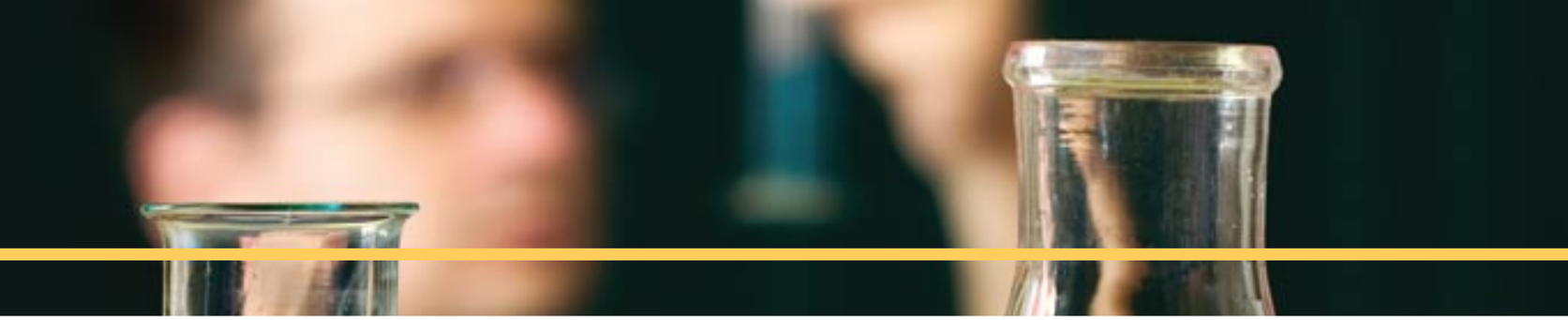
The disease, caused by a pathogen called Phytophthora ramorum, has already had a devastating effect on large forests in California, and now scientists are concerned at the impact it could have on the British landscape, if it were to spread rapidly here. Isolated cases of the disease have already been found in a small number of host species right across the UK, concentrated particularly in Cornwall.

> "We're finding a number of reasons why Dutch elm disease had such a dramatic impact on our countryside"

In order to assess the risk of a future epidemic of sudden oak death, the Imperial team are looking to the past to analyse experiences in the 1970s when an epidemic of Dutch elm disease claimed an estimated 30 million trees, changing the face of the British countryside forever.

Dr Clive Potter, one of the researchers leading the study, explained why learning lessons from the past is important. "We are looking back over archives, maps and reports from the 70s which haven't been studied before. We're finding a number of reasons why Dutch elm disease had such a dramatic impact on our countryside, from the sudden emergence of a new, highly virulent pathogen that the authorities weren't prepared for, to complications in deciding who was responsibility for containing it, and low public awareness of the disease in its early stages," he said.

—Danielle Reeves, Communications



# Propelling scientists into schools

*Reporter's* Emily Ross finds out how the College's redeveloped INSPIRE programme is breaking down barriers between schools and universities.

"The idea is to bring the excitement of science back into teaching."

**Encouraging more students to study science in higher education and leading more post-doctoral research scientists (postdocs) into a career in teaching have been the aims of the Innovative Scheme for Postdoctorals in Research and Education (INSPIRE), which has been running at the College since 2002.**

The scheme has enabled 12 postdocs to work towards qualified teacher status (PGCE) with their time split equally between laboratory research and school teaching over a three-year contract. The postdocs have also provided schools with extra-curricular INSPIRE activities such as science clubs, university-level training for sixth formers, careers advice, science conferences, and student visits to the College's research laboratories — all helping to renew the pupils' interest in science.

While the scheme has been successful, with half of the postdocs going on to teach after completing their training, there were some concerns over its format. For example, some postdocs felt their loyalties were divided as they could never spend more than 50 per cent of their time on either research or teaching and, because of the design of the scheme, it was expensive to run, which meant only a small number of trainees could apply.

In order to address these issues, over the last year the INSPIRE programme has been redeveloped and expanded.

## New direction

The College has worked closely with Canterbury Christ Church University to design an intensive nine-month PGCE, which includes two months of INSPIRE activities. The revamped INSPIRE scheme is now specifically geared towards post-docs who want to become secondary school physics and chemistry teachers.

The scheme has attracted £500,000 of funding from the Foyle Foundation, £40,000 in funding from the Royal Commission for the Exhibition of 1851, as well as support from the Training and Development Agency and participating schools.

Dr Naheed Alizadeh is the INSPIRE Project Director and has been integral to the redevelopment of the scheme, with the support of Pro Rector Mary Ritter. Dr Alizadeh explains particular aspects of the scheme: "It is not a normal PGCE, it is tailor-made for the needs of postdocs. It is unique as the postdocs are trained, not only in how to become teachers, but also in how to communicate scientific ideas to school children and how to motivate both children and teachers. The idea is to bring the excitement of science back into teaching."

The new programme starts with a month's training at Imperial College run by tutors from Canterbury Christ Church University. This is followed by two placements at different schools, lasting three-and-a-half months each. Some INSPIRE activities are integrated into the teacher training placements and some are delivered at the end of the placements with the postdocs working across all the schools involved in the programme.

## Support network

One of the key features of the INSPIRE programme is that the postdocs benefit from a large support network. Within each of their school placements, the postdocs are assigned a teacher who acts as a mentor and sits at the back of the classroom and provides feedback after each class.

The postdocs also have a tutor from Canterbury Christchurch University whom they can contact for help throughout the programme and the University runs short training courses during the school holidays at Imperial to support the postdocs' progression.

While the postdocs are on the INSPIRE programme they are encouraged to maintain their research links and to use the laboratory facilities at Imperial to prepare INSPIRE activities. To help support this aspect of the programme each postdoc is linked to a Principal Investigator, who is in charge of their research lab.

In addition to these support mechanisms, the College plans to hold workshops giving the postdocs the chance to brainstorm ideas and to share their experiences with others on the scheme. Dr Alizadeh explains the purpose of these new workshops: "The workshops won't just be for the postdocs, they will also be for their school mentors who will get the opportunity to visit Imperial and find out about cutting edge research. The project aims not only to bring first class, first hand research into teaching, but also teaching into research, and to strengthen links between universities and schools."

## Recruitment

This year the new funding means the College has the capacity to take on 10 new recruits for the INSPIRE programme. Postdocs have until 16 May to apply. Dr Alizadeh describes the type of recruit she is looking for. She says: "We want someone who is interested in teaching, has good communication skills and wants to do something for the community. It is a very dynamic, intensive programme and having the right attitude is absolutely essential."

- **INSPIRE** is available to current postdoctoral researchers and to PhD graduates in Physical Sciences and Engineering upon completion of their research degrees
- **16 May** is the recruitment deadline for the INSPIRE programme
- To find out more about INSPIRE, and to get an application form, visit: **www.imperial.ac.uk/inspire**

## An Insight into INSPIRE

***Over the past nine months, two postdocs, Dr Dimple Shah and Dr Joseph Gargiuli, have taken part in a pilot scheme for the newly developed INSPIRE programme. Find out more about their experiences below.***

### Dr Dimple Shah:

"After completing my Chemistry PhD I was involved in outreach work, bringing science workshops to schools. I really enjoyed my experience and knew I wanted to do a PGCE. What made INSPIRE stand out for me was that it is specifically designed for postdocs, and I've also had the chance to use my research skills—it is the best of both worlds.

I was placed in Ashmole School and Southgate School in Enfield. My favourite part has been working with the year sevens, they are so enthusiastic and fun to teach — they think science is all about blowing things up and they absolutely love it!

The thing most new teachers are scared of is being able to manage a new class and deal with bad behaviour. The trick is to always be on your toes, be focused and appear to be everywhere at the same time. You always have to be professional, the last thing you want your class to realise is that you are not a 'proper' teacher! When I started INSPIRE I thought since I was able to handle a PhD I could manage to handle this new challenge. However, teaching is a massive challenge and requires a totally new skill set. I'd recommend the scheme to anyone who is serious about teaching—it really is the best scheme for scientists."

### Dr Joseph Gargiuli:

"I've always been interested in teaching and when I heard about the INSPIRE PGCE, I thought it would be a fantastic way to fulfil this ambition. At the very beginning of the scheme, we were given the opportunity to visit the schools we would be working in. I was placed at Ealing College and Ellen Wilkinson School for girls. These initial visits made it slightly less daunting when the first formal teaching day came round.

That said, nothing can really prepare you for the pressure of being in a classroom. When my first placement started, I was spending too many hours preparing lessons. However, I soon realised that, if I was going to survive, I'd have to organise myself differently.

One of the biggest things I've learnt since I started INSPIRE is that as a scientist I was always trying to strive for perfection but, as a science teacher, I've learnt to accept slight imperfections. I've particularly enjoyed working with older students, with whom I've been able to communicate more complex concepts.

My favourite part of the INSPIRE scheme is the extracurricular activities, which provide me with the opportunity to use my expertise and teach children at the same time. The PGCE is very demanding and intensive and you need to be in top physical and mental condition to get through it; but it's worth it!"

Time Out

**Main Wushu practice:**
Sundays, 11.00–13.00,
Union Gym

**Society size:** 23

**Class size:** 8–10

**www.imperial.ac.uk/union/acc/wushu**

## *Wushu*

**Imperial College's Wushu club is in its fifth year and boasts a group of dedicated members, some attracted by the impressive Wushu moves premiered in the martial arts epic *Crouching Tiger, Hidden Dragon*, and others who are keen to learn a number of martial arts at the same time, including Tai Chi and Shaolin.**

Wushu is a blanket term covering all Chinese martial arts but over the years it has developed into a celebrated form in its own right, encompassing aerial cartwheels, gymnastics, sword fighting and self defence.

The classes run by the Wushu club start with stretching and kicking exercises to warm up. After this students learn 'external' or 'internal' routines—the former comprising anaerobic movement and flashy jumps—and the latter focusing on breath control techniques with slower movements to demonstrate skill, power and coordination.

> "The type of people who are attracted to Wushu are high achievers—your average Imperial student!"

Eugene Chang, a mathematics student, has been practising Wushu at Imperial since 2004. He explains why it is good exercise: "It is physically demanding so it helps to increase your fitness, flexibility and balance."

Many members of the Wushu club enter competitions showcasing either the forms they have learnt or choreographed fights (often with traditional weapons such as spears). Eugene says: "You get to learn lots of cool moves which look great on film. We put lots of our stuff on YouTube, particularly of our performances in competitions."

The College's Wushu club was recently recognised in the inaugural UK Inter-University Wushu Competition, held at Imperial in March, when it won the accolade of best performing university, competing against eight other universities.

Eugene comments: "The type of people who are attracted to Wushu are high achievers who are motivated to improve themselves and like a challenge—your average Imperial student!"

—Emily Ross, Communications

*A trailer clip of the Wushu society can be seen at:* **http://uk.youtube.com/watch?v=GxaC-HoSEaA**

# Hot off the press

**The brand new 2009 entry *Undergraduate Prospectus* has been unveiled, offering prospective students a mine of information about Imperial.**

Freshly designed in response to student feedback by Art Director, Beth Elzer, and edited by Publications Officer, Jon Ashton, the prospectus spotlights innovative departmental facilities, and uses bright, strong colours and vibrant photography to convey the College's exciting undergraduate atmosphere.

"The prospectus needs to be the lens through which the reader experiences the College", said Beth at the outset of the project. Over 7,000 new photographs were taken by specialist university campus photographers, FJ Gaylor, to capture current undergraduate life at Imperial.

The *Undergraduate Prospectus* is available on Imperial's website in a new complementary version featuring interactive slide shows to enhance the online experience. The printed publication also contains frequent links to podcasts and news, which aims to drive prospective students over to the web for more information about other aspects of life at the College.

Imperial's Admissions Tutor for Earth Science and Engineering, Dr Lorraine Craig, commented: "I do a number of recruitment trips for the College and this prospectus will be the most useful one yet."

—Saskia Daniel, Communications


- *See the new online prospectus:* **www.imperial.ac.uk/ugprospectus**
- *To order a copy of the prospectus visit:* **www.imperial.ac.uk/prospectivestudents/orderaprospectus**
- *The new photographs are now available for use in the digital image library:* **www.imperial.ac.uk/imagelibrary**

Postgrads learn in small groups on a transferable skills course (left) and guest lecturer Jared Diamond shares his knowledge with students.

# Step-by-step support

Over the last nine years, the Graduate Schools have developed into a multifaceted, award-winning initiative and have become an integral part of postgraduate life. *Reporter's* Emily Ross finds out more.

The College's two Graduate Schools—the Graduate School of Life Sciences and Medicine (GSLSM) and the Graduate School of Engineering and Physical Sciences (GSEPS) — are responsible for the regular review of PhD and Master's courses, best practice across the faculties, a variety of events and a programme of transferable skills courses. All postgraduates automatically become members of one of the Graduate Schools when they begin studying.

The first graduate school, GSLSM, was developed in 1999 by Pro Rector Mary Ritter, who wanted to enhance students' studies by providing a number of training courses.

In 2002, the government's *Roberts Report* highlighted the need for PhD students to receive an element of transferable skills training during their doctoral programme. In response to this, and as demand for additional training grew within the College, Imperial set up its second graduate school, GSEPS, to cater for students in engineering and physical science departments, Humanities and the Business School.

One of the key functions of the Graduate Schools is the development and delivery of transferable skills training for research students; a programme of short courses in research, professional and developmental skills. When the programme began, it offered just five courses for first year postgraduates but today there are over 80 courses, covering a range of subjects including communication, presentations, writing skills, business and personal effectiveness.

Haytham Elhawary is studying medical robotics in the Department of Mechanical Engineering and is a member of GSEPS. In 2005 he went on a three-day residential course that focused on developing research skills. He says: "It was brilliant — we did lots of team bonding activities. It was really fun working with other postgrads outside the lab, which allowed us to think about the research process in a different way."

Fatimah Jaafar, who is studying clinical cytotechnology at Hammersmith Campus, is part of GSLSM. She says: "The transferable skills courses I've been on have been really helpful in all aspects of my studies. For example, when I was preparing our report and oral presentation for PhD upgrade, I found that the Communication and Presentation Skills Workshop helped me build up my confidence by being able to practice and learn in an informal situation."

> "The transferable skills courses I've been on have been really helpful in all aspects of my studies."

Today, most first year postgraduates at Imperial are required to take a number of transferable skills courses in order to transfer from MPhil to PhD and many continue to attend courses after the compulsory element is finished. Haytham comments: "In the first year you go on the courses and you realise what a brilliant opportunity it is to get really good training for free. People know that the courses are practical and really useful so they continue to take them—I'd take more if I had time!

There are also a number of courses specifically designed for later stage PhD students, such as the two-day course, *Your PhD: Finish Up and Move On* (FUMO), which covers the writing-up process, the *viva*, career planning and leadership skills.

The courses are run by the College's transferable skills tutors, external trainers and where possible, departmental lecturers and professors, and in 2006 the value of the Graduate Schools' transferable skills programme was nationally recognised when it won the *Times Higher* Award for Outstanding Support for Early Careers Researchers.

The Graduate Schools also host a variety of events including guest lectures with eminent scientists such as British ethologist, Richard Dawkins, and American evolutionary biologist, Jared Diamond.

Social events are another aspect of the Graduate school's remit and they hold a number of events including research symposia with poster competitions and the annual Postgraduate Event with Chemistry Show and live band. Haytham adds: "Research students can often feel a bit isolated, working in the labs by themselves. The Graduate Schools events are good social and networking opportunities and get postgrads in touch with others doing the same type of work."

▸ *For more on Graduate Schools visit:*
**www.imperial.ac.uk/graduateschools**

(above) Postgrads getting involved in some team bonding exercises on a three day residential course.

# inventors corner

## Professor Yike Guo

*Commercialising Computing innovations*

***InforSense was founded in 1999 by Professor Guo to commercialise innovations from the Department of Computing in the fields of high performance computing and large scale data mining. Now, nearly 10 years later, it is an established global business employing over 100 staff in London, Boston and Shanghai.***

InforSense offers a range of integrative analytics software which enables companies to make better enterprise decisions and effective business predictions.

Professor Guo, who is InforSense's chief executive officer, describes how the company has developed: "It requires a lot of personal commitment to transfer technological success into commercial success," he says.

Despite its success, Professor Guo is not complacent about the company's achievements. "InforSense is a growing company and more challenges are ahead," he says. "We are looking to increase our applications in the life science and healthcare industries, which is a huge challenge."

Balancing academic research with being a chief executive officer has not been a problem for Professor Guo and he believes his research has benefited from his commercial experience. "There hasn't been a negative impact on my academic work at all," he adds.

Professor Guo is working on a number of projects within the College which have stemmed from InforSense. He says: "Many problems encountered in industry can be tackled with research and the results can be immediately translated into useful commercial applications.

"The success of InforSense also means that my name is recognised, which can be helpful when applying for research grants," he adds.

Professor Guo has recently been recruiting an experienced management team for the business. He explains: "Building a management team is a key process. It is important to continuously develop the people in the business and invest in employees as they are the main asset.

"Academics should not be afraid to introduce a management team to a company, especially in commercial areas such as sales, marketing and finance," he says. "On the other hand, they should also take on the challenge of providing leadership and responsibility, such as in technical development and product management, if the company is not ready to attract external people of the right calibre."

—Michelle Cotterill, Imperial Innovations

▸ *For further information about Imperial Innovations please visit:* **www.imperialinnovations.co.uk** *or contact the technology transfer team on 020 7581 4949.*

# The College's biggest fan

**The partnership between the College and Rolls-Royce was celebrated at a ceremony held on 22 April when Imperial's Vibration University Technology Centre (UTC) was presented with a fan assembly set—a component in the Rolls-Royce T500 engine—which is now housed in the foyer of the Department of Mechanical Engineering. The Vibration UTC was established in 1990 by the College and Rolls-Royce to conduct research in the field of aeroelasticity and structural dynamics.**

# Mixing crime with chemistry

**Earlier this month, 64 year eight pupils took part in a hands-on chemistry day at the College as part of the 2008 Salters' Festival of Chemistry.**

The 11–13-year-olds were split into teams of four and given the task of solving a 'whodunnit' mystery, in which they had to identify a chemical salt left behind at the scene of a crime.

Using Bunsen burners, the children endeavoured to identify the mystery salt by burning samples and using the colour of the flames to find out the metal part of the salt. The pupils then tested reactions in a test tube to identify the non-metal part of the salt.

> "We don't often get the chance to do big investigations like this in class at school."

The crime-solving exercise, entitled "Who Pinched the Salt?", was just one element of a day of hands-on science. In the afternoon, the pupils took part in a second science competition called "Cool It!" in which they became Star Trek engineers faced with the challenge of saving the ship by cooling down water to the precise temperature of 10.5 degrees centigrade, using only citric acid and sodium hydrogencarbonate.

Following the practical science challenges, the pupils were treated to a lecture on "Braving the Elements" by Chemistry Emeritus Professor, David Phillips. Professor Phillips' lively and interactive lecture introduced the pupils to the basics of chemistry, including a demonstration of how liquid nitrogen can freeze objects. He also illustrated how you can speed up chemical reactions using a catalyst, creating a couple of noisy explosions in the process to entertain the audience.

Speaking during the morning's 'whodunnit' challenge, Theodora De Jasay from Queen's College School, who was working with her friend, Jess Lotter, said: "This is really good fun, we're learning loads of things. We don't often get the chance to do big investigations like this in class at school."

Professor Tom Welton, Head of the Department of Chemistry, said: "It's great that so many young people got involved with the Salters' Festival at Imperial this year. Events like this give young people the opportunity to find out a bit more about science at a university level, whilst having fun and putting what they've learned at school into practice. I hope that coming here today will inspire some of them to consider studying chemistry at a higher level in the future."

—Danielle Reeves, Communications

# Figuring it out

Computers and other IT equipment play a huge part in College life. In the first of our number-crunching features, here are some figures provided by ICT showing the community's usage of IT facilities.


**1.6 million**

messages a day are processed by the MailMarshal spam filter, of which 88.1 per cent are identified as spam and automatically quarantined.

**57,000**

user accounts serve the College community (staff, visiting and honorary staff, students and others connected to Imperial)

**3.4 million**

internal calls and

**2.2 million**

external telephone calls are made every year by members of the College.

**10,500**

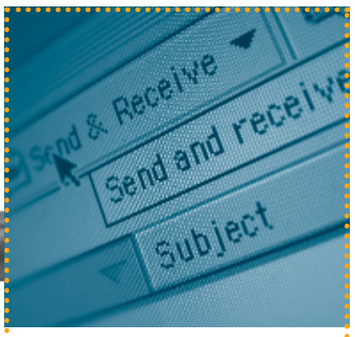
telephone extensions are used across the College (7,300 for staff and 2,700 in halls of residence)

**600,000**

unwanted attacks on the College's computers (viruses or hackers) are blocked on an average day by the central firewall.

**37,000**

email mailboxes are active, with 5.6TB of mail files.




**4.2 billion**

files were backed up by the College in just six months in 2007–08, to help protect data from viruses and to enable recovery in the case of hard drive failure.

**3,500**

km of copper wiring and 600km of fibre provide connections to the College's IT network, equivalent to 890 times the length of Exhibition Road

**500**

calls are received each day by the College's switchboard

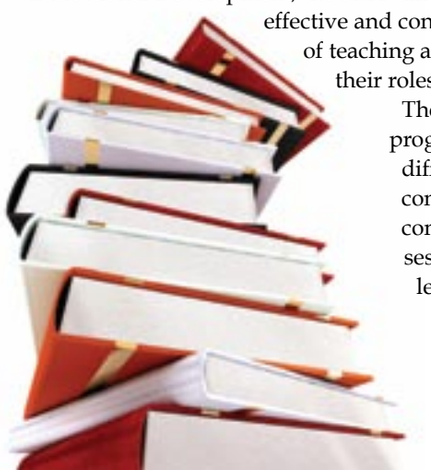
**266**

email messages flow in and out of the College every second, equating to 2.3 million emails on an average day.

▸ *If your department has some interesting statistics you'd like to share with the rest of the College, please forward them to Reporter at* **e.ross@imperial.ac.uk**

## Professional development

Recruitment is now open for the 2008-09 Supporting Learning and Teaching Programme (SLTP), an innovative scheme for staff who support learning but who are not full-time academics, such as technicians, librarians and part-time lecturers. Run by the Centre for Educational Development, the SLTP aims to help staff become more effective and confident by raising awareness of teaching and learning issues relevant to their roles at Imperial.



The SLTP is a flexible programme, responding to the different needs and working contexts of participants. It combines five face-to-face sessions, monthly online learning modules and attendance at a minimum of two of the range of workshops offered by the Centre for Educational Development.

The programme is free of charge for Imperial and NHS staff and runs from late September to early July.

Dr James Keirstead, Research Associate (Chemical Engineering and Chemical Technology) described his experience of last year's SLTP. He said: "I decided to take SLTP as I'm an early career researcher without much previous experience in teaching. My position requires that I help with teaching and supervision on two MSc programmes but these are often one-off efforts and prior to SLTP I wouldn't have known where to begin planning and delivering an effective lesson. But having now been introduced to a number of practical ideas and techniques, I can better design my contributions to fit with the course's overall goals. It makes one-off teaching much less intimidating! What's more, the tools I've gained through SLTP have also been helpful to improve my own learning and research."

▸ *For more information about SLTP visit:*
**www.imperial.ac.uk/edudev/professionaldevelopment/sltp**

# celebrating long service

## 20 years

**Mr Nick Sheahan** • Electrician (Estates)

### Gail Hallissey, Facilities Coordinator (Tanaka Business School)

Gail Hallissey started her career at Imperial College in 1988 working for three years in the Catering Department as the manager of a supermarket in Watts Way. She then moved to the Management School before it became the Tanaka Business School, where she continues to work as the Facilities Coordinator. Mrs Hallissey's role has a wide remit and involves anything from helping new academics to settle in, conducting inductions and setting up offices to organising phone lines, internal post and car parking. She comments: "No day is the same—every day a new problem comes up which needs to be solved." Mrs Hallissey loves her job and particularly enjoys working with her manager Afrey Edes who she has worked with for the last 15 years. Explaining why she continues to enjoy working at Imperial she says: "As big as Imperial is, it doesn't take long to get to know everyone—it is a really friendly place!"

### Colin Kerr, Departmental Administrator (Civil and Environmental Engineering)

Colin Kerr has been working as Departmental Administrator in Civil Engineering since he arrived at the College 20 years ago as a biochemistry graduate. Whilst his main aim is still to take the administrative burden away from academics, his role has changed as the College has expanded, from day-to-day admin to drafting policies and helping with planning, accreditation and research assessments. He is also involved in EUCEET, a European thematic network in civil engineering education, which involves benchmarking and sharing best practice across 80 European universities. The proudest moment in Colin's career was in 2003, when he was elected an Associate of Imperial College, an honour awarded to long-standing members of staff who have rendered exceptional service to the College. He explains why he continues to enjoy working at Imperial: "I find it very satisfying to be part of an organisation that matters in the world and makes a big impact in terms of the research."

### Professor Athanassios Manikas, Professor of Communications and Array Processing (Electrical and Electronic Engineering)

Professor Manikas joined Imperial in 1984 as a PhD student. He was subsequently appointed a Research Associate and then a Lecturer in 1988, promoted to Reader in Digital Communications in 1997 and now holds the Chair of Communications and Array Processing in the Department of Electrical and Electronic Engineering. Over the years he has shown great passion for research through his various publications. His obsession with space-time communications, mathematics and array signal processing led to a monograph book, *Differential Geometry in Array Processing*. He is equally committed to teaching and is very proud of his PhD students. Professor Manikas believes that Imperial has changed massively since he started. However, he says the 'soul' of Imperial remains the same: "Seeking academic excellence, understanding diversity, with students and staff committed to the highest standards of performance and to passing this tradition from one generation of staff and students to the next."

## 30 Years

### Professor Milija Pavlovic, Head of Concretes Structures (Civil and Environmental Engineering)

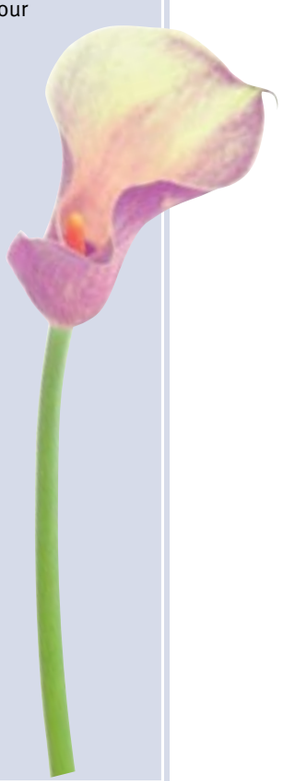
In 1978 Professor Pavlovic was appointed to a lectureship in the Concrete Structures Section. He ascended quickly in his career, moving from Course Director to Chair in Structural Engineering and Mechanics in 1996 and was promoted to his current role as Head of the Concrete Structures Section in 1998. He describes being named as a Teaching Fellow last year as a great honour and says supervising bright doctoral students is always an exciting experience. Professor Pavlovic explains why he has enjoyed the past 30 years so much: "The trust with which the College treats its academic staff, allowing them to follow their individual chosen research interests, has enabled me to engage in a variety of research areas that range from esoteric theory to very practical problems of direct relevance to industry. I believe our fierce loyalty to the College results from this trust."

*Staff featured celebrate anniversaries during the period of 7–27 April. Data is supplied by HR and is correct at the time of going to press.*

# Obituaries

### Dr Peter John Beevor •

Dr Peter Beevor, Department of Electrical and Electronic Engineering, died on 25 March 2008. Professor Peter Cheung, Deputy Head of the Department, shares his memories of his former colleague: "Peter graduated from the Department in 1968, after he was awarded every prize available at the time, including the Henrici and Siemens Medals and the IEE prize. He went on to complete his PhD in 1974 and, after a short spell at Trinity College Dublin, took up senior technical management roles in NatWest Bank and Cable and Wireless. I got to know Peter in 2002, after he retired from Cable and Wireless, when he wrote to me offering to contribute towards our undergraduate teaching. From then his responsibilities in the Department grew year by year. He created a lecture course on network security, he was our departmental industrial and career advisor, and he ran our personal mathematics tutorial programme, giving extra help in mathematics to first year students. Peter's caring nature came through most vividly in this latter role and I remember how he once showed me proudly a bottle of old whisky given to him by a very grateful mother, whose son he had voluntarily tutored all summer and who had gone on to pass his re-sit. He had great plans for the future and his untimely death is a great loss to us all."



## *Staff* development news

### Learning at Work 2008

Learning at Work Day began in 1999 as part of Adult Learners' Week, designed to draw attention to the importance of workplace learning. Every year, thousands of organisations take part and put on a wide variety of fun and business-related learning activities to encourage their staff to learn new skills. Last year an estimated 5,600 organisations took part, including large corporations, small businesses, public sector organisations and government departments.

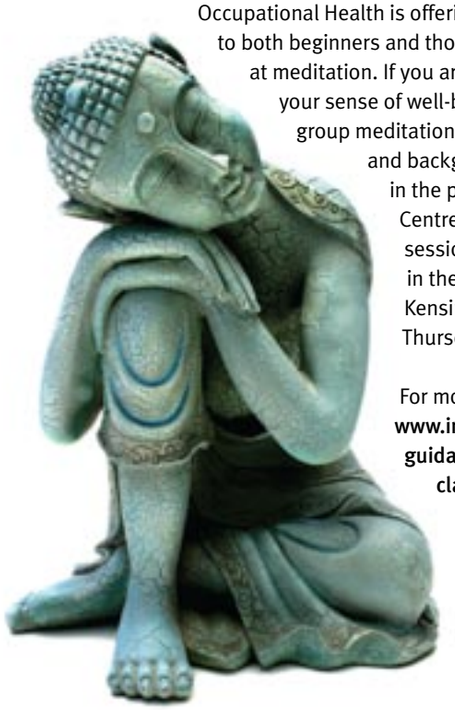
The Staff Development Unit at Imperial College has been holding Learning at Work Day for the last five years. Following the event's previous success, Learning at Work 2008 will take place over a week (19–23 May), in order to offer an even wider range of activities, and give more flexible options to participants in terms of time and availability.

The theme of this year's Learning at Work Week is 'sustainable work-places', with a focus on maintaining the wellbeing of individuals. In addition to running popular activities such as wine tasting, jewellery making and various sports, new features will be introduced including on-site massage treatments and introduction to photography workshops. There will also be contributions from the Health and Safety Department.

Bookings can be made via the Learning at Work web page which is clearly linked from the front page of the Staff Development Unit's website **www.imperial.ac.uk/staffdevelopment**

—Jean-David Rouah, Staff Development Coordinator

## Take note



Occupational Health is offering free mediation sessions to both beginners and those who are more experienced at meditation. If you are interested in enhancing your sense of well-being come to a half-hour group meditation session, with commentary and background music. Currently held in the prayer room of the Chaplaincy Centre, from 29 May the meditation sessions are moving to a new venue in the Whiteley Suite, RCS1, South Kensington Campus, every Thursday lunchtime at 13.15.

For more information, visit: **www.imperial.ac.uk/occhealth/guidanceandadvice/meditation classes**

## welcome
### new starters

Mrs Parvin Ahmed, Medicine
Dr Simon Armitage, Physics
Mr Gary Ashwell, Faculty of Natural Sciences
Ms Natalie Barry, Faculty of Medicine
Miss Laura Brown, Communications
Dr Nataliya Bulygina, Civil and Environmental Engineering
Mr Malcolm Burgess, Biology
Ms Sheila Carroll, SORA
Miss Azadeh Cheraghchi Bashi Astaneh, SORA
Dr Timothy Cockerill, CEP
Ms Emily Cook, Investigative Science
Mrs Nicola Crisp, NHLI
Miss Rebecca Davey, Faculty of Medicine
Miss Joanne Day, Computing
Mrs Nikki Elliott, Mathematics
Dr Heidi Gauci Grech, SORA
Miss Saumya Gupta, Medicine
Ms Donna Harris, NHLI
Mr Stephen Heeks, Reactor Centre
Dr Yonek Hleba, Chemistry
Mr Stephen Hughes, Estates
Dr Yusuke Iida, Mechanical Engineering
Dr Emanuele Instuli, Chemistry
Ms Terri Jacques, Humanities
Dr Maria Karatsa, Investigative Science
Ms Yildiz Kaya Forster, Finance
Mr Andrew Kirkpatrick, Development and Corporate Affairs
Mr Colin Love, Business School
Dr Annette Mahon, Educational Quality Office
Mr Stephen Maine, Physics
Miss Jessica Mani, Aeronautics
Mr Martin Mason, Finance
Dr Golo Maurer, Biology
Ms Ruth McCabe, Finance
Ms Miriam Menichelli, Cell and Molecular Biology
Ms Genoveva Mihaylova, Catering Services
Mr Robert Millwood, Faculty of Medicine
Ms Stephanie Newton, Kennedy Institute
Miss Alexia Nikas, Student Residences
Miss Cleoper Paule, SORA
Ms Carly Rogerson, Educational Quality Office
Dr Paula Salgado, Molecular Biosciences
Dr Yasuyuki Shitomi, Kennedy Institute
Dr Kedong Song, Chemical Engineering and Chemical Technology
Mr David Taylor, SORA
Ms Tharsana Tharmalingam, Kennedy Institute
Dr Chris Thompson, Faculty of Engineering
Dr Christopher Tomlinson, Molecular Biosciences
Mr Peter Trowell, Mechanical Engineering
Dr Surender Vashist, Investigative Science
Miss Carla Weekes, Faculty of Medicine
Dr Kit Wu, NMH
Dr Jinfei Zhang, Computing

## farewell
### moving on

Ms Dareskedar Admassu, Investigative Science (5 years)
Mrs Julia Alete, Clinical Sciences
Mr Kubilay Atasu, Computing
Mr Stephen Clark, Faculty of Medicine
Dr Maria Detsika, SORA
Dr Andreas Doering, Physics
Mrs Vanesca Dominguez, Catering
Ms Ruth Gibson, Sport and Leisure
Mr David Green, Cell and Molecular Biology
Mrs Penny Hale, Biology (8 years)
Mrs Dulcie Hassey, Faculty of Medicine (29 years)
Miss Joanne Heemskerk, Sport and Leisure
Dr Matt Hodges, NMH
Dr Andrew Hopkins, Mechanical Engineering
Mr Yu-Shik Hwang, Chemical Engineering
Dr Jalani Kanem, Physics
Mr George Kasolas, Catering
Dr Andy Khong, EEE
Dr Maria Koutantji, SORA
Mr David Lane, College Headquarters
Mr Marlon Lawrence, Imperial College Union
Mrs Catherine Leigh, Humanities
Mr Sherhan Lingham, Registry
Dr Charlotte Manisty, NHLI
Dr Nuria Martinez-Alier, Medicine
Miss Saiqah Munir, Medicine
Mr Anthony Murray, Registry (6 years)
Miss Pamela Pate, Faculty of Medicine (30 years)
Ms Mazie Paul, EEE (9 years)
Mr Alex Perkins, Registry
Mrs Kim Prior, Biology (7 years)
Dr Lucio Raimondo, Aeronautics
Miss Ranjit Rayat, Security
Miss Priscilla Sauramba, Investigative Science
Dr Chris Sinclair, Physics
Dr Amanda Tattersall, SORA
Ms Robyn Taylor-Wright, Cell and Molecular Biology
Mr Anil Thotakura, Investigative Science
Miss Simone Young, NMH

This data is supplied by HR and covers the period 6–26 April. 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.

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

**moving in. moving on.**

# what's on

8 MAY 17.30–18.30

## The cerebral signature for pain perception in health and disease: can neuroimaging tell us anything new?

*Professor Irene Tracey, Nuffield Professor of Anaesthetic Science and Director of the Oxford Centre for Magnetic Resonance Imaging for the Brain*

Annual Athena Lecture

**Lecture Theatre G16, Sir Alexander Fleming Building**

☒ **Registration in advance: events@imperial.ac.uk**

8 MAY 17.30–18.30

## Echoes of the future

*Professor Petros Nihoyannopoulos, Professor of Cardiology*

Inaugural lecture

**Paul Wood Lecture Theatre, Guy Scadding Building, Royal Brompton Campus**

☒ **Registration in advance: e.powell@imperial.ac.uk**

13 MAY 17.00–18.00

## New innovations in the control of neglected tropical diseases

*Professor Peter Hotez*

Almroth Wright Lectures

**Anthony de Rothschild Lecture Theatre, Second Floor, St Mary's Campus**

☒ **First come, first served**

16 MAY 18.00 –19.00

## An Explosive Odyssey: journey to the centre of the periodic table

*Led by chemist Dr Hal Sosabowski, University of Brighton*

Graduate Schools annual chemistry event

**Lecture Theatre G16, Sir Alexander Fleming Building**

**Drinks reception from 19.00 on the Queens Lawn**

☒ **A ticket is required: graduate.schools@imperial.ac.uk**

20 MAY 17.00–18.00

## Secretion at the immunological synapse

*Professor Gillian Griffiths, Department of Medicine, University of Cambridge*

Almroth Wright Lectures

**Anthony de Rothschild Lecture Theatre, Second Floor, St Mary's Campus**

☒ **First come, first served**

22 MAY 17.30–18.30

## Memories of the future: early developments in NMR imaging (MRI)

*Sir Peter Mansfield, Nobel laureate*

Nobel conversations: discovering the unexpected lecture series

**Lecture Theatre 220, Mechanical Engineering Building**

☒ **A ticket is required: events@imperial.ac.uk**

22 MAY 18.30–19.30

## Reflections on climate change and what we can do about it

*Sir Brian Hoskins, Director of the Grantham Institute for Climate Change*

Annual Grantham Institute for Climate Change Lecture

**Clore Lecture Theatre, Huxley Building**

☒ **A ticket is required: amy.thompson@imperial.ac.uk**

27 MAY 17.00–18.00

## The macrophage-Metchnikoff's legacy

*Professor Simon Gordon, University of Oxford*

Almroth Wright Lectures

**Anthony de Rothschild Lecture Theatre, Second Floor, St Mary's Campus**

☒ **First come, first served**

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

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

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email **e.ross@imperial.ac.uk**

**Photography**
Haytham Elhawary • Neville Miles • Tom Whipps

## classifieds

**Chelsea and Westminster Open Day**
Saturday 10 May • 11.00–16.00

Celebrate the 60th anniversary of the NHS with Chelsea and Westminster NHS Trust. All are welcome to attend the open day, which will include: health advice, behind-the-scenes tours, kids' zone, free food tasting and live music. For more information visit: **www.chelwest.nhs.uk/news/openDay2008.html**

**To place a classified** *Reporter* includes a regular classifieds section. Please submit no more than 50 words to the editor, Emily Ross, by email at **e.ross@imperial.ac.uk** for a chance for your advertisement to appear. The editor reserves the right to edit advertisements as necessary.

## volunteering

### Gain retail experience

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| **Project:** | **Shop Volunteers** |
| **Project ID:** | **2045** |
| **Organisation:** | **London's Air Ambulance** |
| **Date(s):** | **Ongoing** |
| **Time(s):** | **At least five hours per week** |
| **Location:** | **Whitechapel, E1** |

Volunteers are needed to assist with the general day-to-day running of London's Air Ambulance shop in the main reception of the Royal London Hospital. Tasks will include: keeping the merchandise tidy, serving the customers, handling money, and keeping track of purchases and money taken. No shop experience is necessary but you should be confident, have good communication skills and be enthusiastic about the work of London's Air Ambulance. The shop is open 11.00–16.00, Monday to Friday, but the aim is to increase the opening hours if enough volunteers come forward. London's Air Ambulance makes three to six missions per day, 365 days a year, allowing a senior trauma doctor and a paramedic to reach patients whose lives are in danger in the shortest possible time.

### For more information

To take part in a scheme or to hear more about volunteering in general, contact Lucy Mitchell
• **020 7594 8141**
• **volunteering@imperial.ac.uk**

For full details of over 250 volunteering opportunities visit: **www.imperial.ac.uk/volunteering**

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