## Imperial College London



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The

# heat is on

New centre to develop some of the most heat-resistant materials on earth centre pages



STAFF INJECTION 30 profs to be recruited to Faculty of Medicine PAGE 3



ICT SECURITY Stay safe online PAGE 10



BEHIND THE SCENES How do you get your post? PAGE 13

## in brief

#### ArtsFest 2008 on its way

ArtsFest 2008 will celebrate the arts on the South Kensington Campus on 11–15 February. Events will include an array of singing, dancing and performing arts. The week will raise money for Theatre Cross-

roads, an educational charity which uses music, games, movement and drama to supplement teaching in maths and science. Highlights will



include a barn dance in the Union, Funkology and Drama Society workshops, the Big Band's Valentine Gig and the Grand Finale Concert. All events are free for students and staff to attend except the Finale Concert. For more information and a full programme visit: **www.icartsfest.com** 

## Olympic medallist to head Imperial rowers

Following Simon Cox's departure in December, Olympic gold medallist Steve Trapmore MBE has been appointed as Head of Rowing at Imperial. Steve started rowing at his local club in Walton-

on-Thames and quickly moved up the ranks in the rowing field, gathering wins both nationally and internationally. A gold, silver and bronze medallist at the World Championships, the pinnacle of his career was at the 2000 Sydney Olympics where he stroked the Men's Rowing Eight to victory. After winning



another gold medal at the 2002 World Rowing Championships he suffered an injury that forced him to retire from international rowing. Steve will head the College's rowing operations and will also act as Olympic ambassador, working with Sport Imperial and other departments in the run-up to the London 2012 Olympic and Paralympic Games.

#### League table leap for Tanaka

Tanaka Business School celebrated new year success last month when it leapt from 56 to 35 in the 2008 Financial Times Global MBA Rankings. The



16th in Europe and ninth in the UK, and was also rated the eighth best school for entrepreneurship, based on alumni recommendations. The full rankings are available online at www.ft.com/ businesseducation/ globalmba2008

School is now ranked

## Imperial College Healthcare NHS

**NHS Trust** 

### NEWS



## New MD for Imperial College Healthcare NHS Trust

Claire Perry, Chief Executive of University Hospital Lewisham, has

been appointed to the permanent position of Managing Director of Imperial College Healthcare NHS Trust. Announcing the appointment to staff across the Trust, Lord Tugendhat, Chairman of the Trust, said: "Claire is an outstanding Chief Executive who comes to us after six years leading Lewisham."

Claire, who spent eight years as Chief Executive of Bromley Health Authority before joining Lewisham, has an OBE for services to healthcare and will join the Trust on 1 April 2008.

Lord Tugndhat added: "I would also like to pay tribute to Mark Davies who will be stepping down from the position of Managing Director to return to his

#### flourishing consultancy businesses which we have kept him from. His contribution to making a success of the merger in its most vulnerable early days has been immense. The Board, Professor Smith and I are very grateful to him for the superb way he has fulfilled this unique role at this unique time in our history."

## Health minister pays a call

Earlier this month, Health minister Ann Keen visited the West London Renal and Transplant Centre to coincide with the national launch of the government's Organ Donation Task Force Report. Ms Keen, a former nurse, toured the centre meeting patients on dialysis waiting for a transplant and those who had undergone successful operations. The report sets out 14 recommendations, including a doubling of donor transplant coordinators in a bid to achieve a 50 per cent increase in organ donation in the next five years.

## Imperial College London

## Varsity 2008—the BIG clash

Imperial College Union RFC are once again going head to head with Imperial College School of Medicine RFC in the JPR Williams Rugby Varsity Match.

## Wednesday 27 February Kick-off at 19.30

**Location:** Richmond Athletic Association Ground

**Tickets:** £7.50 on the gate £6.50 advance: visit **www.imperialcollegeunion.org** 

## Calling world class medical researchers

we are seeking will

help to reinvigorate

the NHS on its

60th birthday

Imperial will recruit 30 new world classAcademprofessors to its Faculty of Medicine overthe envthe next three years, in a major recruitmentThe newdrive announced on 31 January, with anhelp toinvestment of over £4 million a yearbirthdaaimed at bringing fresh talentThe new professors

The drive underlines Imperial's commitment to improving healthcare through research in both the basic and clinical sciences, and demonstrates the advantages that the new relationship between uni-

versities and the NHS can bring to improving patient care. It comes as the NHS celebrates its 60th birthday.

The new recruitment forms part of the research strategy for the Imperial College Healthcare NHS Trust. The new professors will work in the Faculty of Medicine and in the new Trust, which is now the largest in the UK.

Professor Stephen Smith, Principal of the Faculty of Medicine and Chief Executive of Imperial College Healthcare NHS Trust, said: "There has never been a more exciting time for people to join Imperial, as our new Academic Health Science Centre is changing the environment for medical research. The new professors we are seeking will help to reinvigorate the NHS on its 60th birthday, bringing the dividend from

advances in research to patients much quicker than before."

Full page adverts announcing the first 10 posts have been placed in the international scientific and clinical journals

*Nature, Science, The Lancet* and the *British Medical Journal.* 

The first wave of chairs will be in areas where the College has or seeks to have a world class position, which include cardiovascular science and renal medicine; diabetes and obesity; musculo-skeletal disorders; genetics and genomics; and translational medicine.

Subsequent appointments will be made in areas including infectious diseases and epidemiology, public health, and primary care.

-LAURA GALLAGHER, COMMUNICATIONS

For the full story visit: www.imperial.ac.uk/news

## Far and away-quality counts

'Quality counts' was the theme of the Rector's Away Day for Heads of Department and senior staff held at the Selsdon Park Hotel in Croydon on 30–31 January 2008.

Rector Sir Richard Sykes opened discussions, stressing the importance of Imperial's reputation for excellence. He said this was instrumental for attracting the best staff and students from around the world.

Imperial is driving innovative approaches to research, and speakers highlighted the Grantham Institute for Climate Change, the Institute of Systems and Synthetic Biology, and the Academic Health Science Centre as exciting new initiatives. Ensuring that new methods for assessing research are effective in measuring quality was a key area of discussion. Michelle Coupland, Director of Planning, presented on the new Research Excellence Framework, currently being consulted on by the Higher Education Funding Council for England. She emphasised that the frame for Imperial's response to the proposals should be: "How can we shape the system to make sure it's right for us?"

Methods to attract and select the most able and motivated students were considered during a presentation by Professor Julia Buckingham, Pro Rector for Education. Suggestions for 'marketing' the College to encourage applicants to put Imperial as their first choice were discussed. Professor Buckingham said: "We want bright students, but motivation is also important and they should really want to be at Imperial, as opposed to any other institution."

Thanking staff for their contributions to the Away Day and summing up discussions, Sir Richard said: "Imperial is a fantastic place and that's because of what everyone involved does. We have to be proud of Imperial and we have to stay that way." – CAROLINE DAVIS, COMMUNICATIONS

## The full programme for the Rector's Away Day incorporated the following sessions:

- Grantham Institute for Climate Change
- Institute for Systems and Synthetic Biology
- Academic Health Science Centre
- Research Excellence Framework
- International Strategy
- Staff promotion policies within academic departments
- Recognition, respect and reward for teachers
- Attracting and selecting the most able students

- Entrance exams and interviews: the medical experience
- Complementing our research portfolio and developing our unique position
- International partnerships
- E-learning
- Educating students aged under 18 in the College
- Full reports from the Away Day will be available shortly on the Rector blog:
   www.imperial.ac.uk/rectorblog

## media mentions

-Naomi Weston, Communications

#### DAILY MAIL > 21 JANUARY

## Is MRSA spreading to gyms and schools?

Nurseries, classrooms and gyms could be harbouring a flesh-eating strain of the MRSA bug, reported the Daily Mail. GPs are being warned

and have been given detailed guidelines on how to spot and treat the potentially deadly bug, known as communityacquired MRSA. Professor Mark Enright (Epidemiology, Public Health and Primary Care) told the paper that cases of this strain were going undetected. He said: "Unless GPs

know what to look for, we won't know we have a community-acquired MRSA problem until it's a very big problem."

#### BBC News Online ► 27 IANUARY

## **Electricity shortfall may hit Olympics**

shortage in electricity, reports BBC News Online. Inenco, the energy and environment consultancy firm, says the number of nuclear and coal plants coming out of service over this period makes shortages likely, adding that these shortages could coincide with the London 2012 Olympics. However, Rob Gross (Centre for Environmental Policy) believes *Inenco* is presenting a worst case scenario. He told the BBC: "It's important to remember that during the 'dash for gas', between around 1992 and 2000, around 25GW of new capacity was built, so there is no reason to expect that new gas plants cannot be constructed quickly."

ondon 2012

TRANSMISSION

Olympics

#### THE SUNDAY TIMES ► 27 JANUARY

#### The creation of artificial life?

American biologist Craig Venter has constructed the world's first synthetic genome and is working on the next step of creating an entirely synthetic organism, reported The Sunday Times. His team have used laboratory chemicals to recreate an

almost exact copy of the genetic material found inside a tiny bacterium called Mycoplasma genitalium. This new research has sparked fierce debate, with some critics accusing Dr Venter of playing God and asking whether his technique be applied to create synthetic human genomes. Professor Paul Freemont (Molecular Biosciences) told The Sunday Times: "There are just 485 genes in Mycoplasma, while humans have 20,000. It is science fiction to think Venter's work could give scientists control of the human genome."

## THE TIMES ► 23 IANUARY **Business tuition gets technical**

Social networking sites, blogs and virtual worlds are increasingly being used by business schools as students become more and more technology minded, reports The Times.

The weekend MBA course at Tanaka Business School has been redesigned to incorporate this latest technology. Senior learning technologist at the School David Lefevre (Tanaka) told The Times: "Traditionally students came in once

a month, then were left to study at home. Now they learn in an online environment with interactive material, and access to an online tutor and their peer group. They get immediate feedback, and technology has streamlined the process of accessing course notes."

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## **Professor Prusiner** gives special lectures

Nobel Prize-winning neurologist Professor Stanley Prusiner has been visiting Imperial in January and February to talk about his pioneering career and research.

Professor Prusiner has delivered two of the three parts of a special Leverhulme lecture series, which began on 17 January with the lecture Looking for a way out of the fog (1972–78). The second lecture was entitled Searching for a virus and finding only protein (1978-87), and the third part, scheduled for 28 February, is The reality of prions (1988-2007).

Professor Prusiner's interest in prions started in 1972 whilst working at the University of California, San Francisco, when he admitted a patient suffering from Creutzfeldt-Jakob Disease (CJD), a rare and fatal neurodegenerative disease which was then thought to be a virus. He became fascinated by this and by other apparently related conditions, and in 1982 coined the term 'prion' to describe the proteins that appeared to be responsible for them. The assertion that a protein could be infectious was ground-breaking, and it took many years of work to convince his critics. Subsequent work has suggested that protein disorders are responsible not just for CJD but also for more common diseases such as Alzheimer's and Parkinson's. -Laura Gallagher. Communications

If you would like to attend the last of Professor Prusiner's special lectures, email: amy.thompson@imperial.ac.uk. For more information, visit: www. imperial.ac.uk/events

## Lancet recognises Imperial paper

A paper released by researchers from the Department of Infectious Disease Epidemiology has been selected by medical journal *The Lancet* as one of the "research papers published in the past year that make the greatest potential contribution to clinical research". To read the College news release on the paper, which suggests that people with medium levels of HIV in their blood are most likely to contribute most to the spread of the virus, visit: www3.imperial.ac.uk/newsandeventspggrp/ imperialcollege/newssummary/news

23-10-2007-13-57-9

## Within five to seven years we could be facing a

www.imperial.ac.uk/reporter reporter 7 February 2008 • Issue 187

## Science Challenge 2008 launched

The Royal College of Science Union at the College launched its annual Science Challenge on 22 January, promising it will be the biggest and most interactive yet.

Launched in 2006, the Science Challenge is an annual essay competition open to school children and students at Imperial, with the aim of promoting science communication and creative thinking amongst young people. Over 115 schools from around the UK

are involved and will join Imperial students in answering a choice of five essay questions on a range of sub-

jects, including climate change, energy, genetics and the future of technology. For the first time, the organisers of

the challenge have made it more interactive, planning a series of seminars for students and school pupils to follow live on the internet each week. This is already proving successful with 80 school children viewing the launch lecture, given by the Rector, live via an online stream.

The panel of judges includes the Rector; Lord Robert Winston, Professor of Science and Society; Dr Philip

Campbell, Editor-in-Chief of *Nature;* Sir Brian Hoskins, Director of the Grantham Institute for Climate Change; and Dr Paul Snaith, Vice

President of Shell Global Solutions. The judges have been responsible for devising the competition's

essay questions and each will deliver a seminar on their chosen topic.

Seminars will be both streamed live on the web and available to download as podcasts. For more information visit the Science Challenge 2008 website at: www.rcsu.org.uk/sciencechallenge or email: science.challenge@imperial.ac.uk. -NAOMI WESTON, COMMUNICATIONS

# Purple is the new blue!

In line with Imperial's status as an independent university, gained after its withdrawal from the University of London in July 2007, all research students submitting theses for the Imperial degrees of MPhil, PhD, MD(Res) and EngD are now required to bind them in purple, rather than blue, as previously.

Students who started their studies before Imperial's independence was awarded were able to choose whether they would receive their degree from Imperial or the University of London. Theses by those who have opted to receive an Imperial degree are now starting to be submitted.

Helen Buchanan (Central Library) said: "It's been exciting to receive the first purple theses, but many students who have opted to receive Imperial degrees are still submitting them bound in blue, which is the University of London's requirement. We're keen to ensure that all are aware of

the change." —Alexandra Platt, Communications

 For more information, visit: www.imperial. ac.uk/registry/ studentrecords/ information forresearch students

# awards and honours

## Al award for painting computer

Dr Simon Colton, Dr Maja Pantic and PhD student Michel Valstar (all from Computing) have brought home the Best Machine Intelligence Award from the British Computer Society's Specialist Group on Artificial Intelligence conference, held at Cambridge University. The award recognises the team's creative software technology, known as The Painting Fool, which can read the facial expressions of a human subject via video camera and create a portrait using different colours to represent the emotions it detects.

## Medal recognises outstanding contributions to space physics

The Royal Astronomical Society has awarded the 2008 Chapman Medal to Emeritus Professor Andre Balogh (Physics). The Medal recognises a long career of contributions to the field, including most recently his work on the magnetometer instruments for the European Space Agency's Cluster mission. He was also Principal Investigator for the magnometer instruments onboard NASA's *Ulysses* craft, which enabled him and his team to determine the three-dimensional structure of the solar system's heliosphere for the first time.

## **Double honour for Erol Gelenbe**

Professor Erol Gelenbe (Electrical and Electronic Engineering) has been elected to the Turkish Academy of Sciences in recognition of his contributions to the development of methods for modelling and performance evaluation of computer systems and networks. He is one of only six scholars elected as full members in 2008. Professor Gelenbe has also been appointed the Editorin-Chief of *The Computer Journal*, the research journal of the British Computer Society.

## DNA technique wins award for reducing animal research

Work by Dr Charlotte Gower (Infectious Disease Epidemiology), using DNA technology to study the parasites that cause schistosomiasis, has been awarded the NC3Rs prize for reducing the use of animals in research. The award recognises Dr Gower's novel application of DNA fingerprinting which removes the need to infect rodents with the parasites. She



received the prize from the Minister for Science and Innovation, Ian Pearson MP.

## RCoA honour for Head of Biophysics

Professor Nick Franks, Head of Biophysics in the Department of Life Sciences, has become the first basic scientist to be elected a Fellow of the Royal College of Anaesthetists. The Fellowship, which recognises outstanding services to the specialty, will be officially conferred at a ceremony in May.

# Pharmaceutical market failing pregnant women

The existing research and development and business model of the pharmaceutical industry is failing pregnant women, according to a policy paper published at the end of last month in *PLoS Medicine*. In their analysis of an industry database that tracks drugs under development since 1981, Imperial Professors Nick Fisk (SORA) and Rifat Atun (Tanaka Business School) show that pregnancy has become a 'pharma-free zone' with only 17 drugs under active development for maternal health conditions and only one new class of drug licensed in the last 20 years.

#### Push and pull mechanisms

The paper outlines how the pharmaceutical market's 'push' mechanisms (funding to encourage investment from universities and

companies) and 'pull' mechanisms (funding to purchase drugs once they are on the market), relevant to the United Nations Millennium Development Goal of providing affordable essential drugs in developing countries, have not been effective in the area of maternal health.

Professor Atun said: "One of the reasons that pharmaceutical companies are reluctant to test and develop drugs in pregnancy is to avoid the litigation costs that come with the risk of birth defects and disfigurements. This is despite the fact that these risks are of little relevance to drug development for conditions in later pregnancy."

Other reasons for market failure cited by the authors are the small market size for conditions affecting pregnant women, the limitations of a shareholder model (maternal health drugs have a greater potential for revenue shocks) and a regulatory system that allows endemic off-label use of drugs in pregnancy, discouraging pharmaceutical investment in the long term. —ELLIOTT WHITE, TANAKA BUSINESS SCHOOL

## 'Telepathic' genes recognise each other

Genes have the ability to recognise similarities in each other from a distance, without any proteins or other biological molecules aiding the process, according to new research published on the 23 January in the *Journal of Physical Chemistry B*. This discovery could explain how similar genes find each other and group together in order to perform key processes involved in the evolution of species.

> "Seeing these identical DNA molecules seeking each other out in a crowd, without any external help, is very exciting"

Scientists hope the finding could also shed new light on the causes of genetically determined diseases such as cancers and some forms of Alzheimer's. Professor Alexei Kornyshev (Life Sciences) said: "Seeing these identical DNA molecules seeking each other out in a crowd, without any external help, is very exciting indeed. This could provide a driving force for similar genes to begin the complex process of recombination without the help of proteins or other biological factors. Our team's experimental results seem to support these expectations."

The team is now working on a set of further experiments to determine exactly how these interactions work. In addition, further studies are needed to ascertain whether this interaction, discovered in a test tube, occurs in the highly complex environment

of a living cell. —Danielle Reeves, Communications

# Links between lupus and gene mutations found

Scientists have identified a number of genes involved in lupus, a devastating autoimmune disease that affects around 50,000 people in the UK, in new research published on 21 January in *Nature Genetics*.

In an international genetic study of more than 3,000 women, researchers found evidence of an association between lupus (systemic lupus erythematosus or SLE) and mutations in several different genes. The findings will enable researchers to investigate the specific pathways and precise molecular mechanisms involved in developing lupus, potentially opening up options for new therapies.

Professor Timothy Vyse (Medicine), one of the authors of the study, said: "Lupus is a complex disease, which is hard to diagnose, and it

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can cause many different and unpredictable problems for patients. Living with lupus can be really tough. We currently can treat the disease by suppressing the immune system, but we urgently need to understand in much more detail what goes wrong with the immune system so that we can design better treatments. This study represents a milestone in progress towards unravelling the secrets of the disease."

Lupus, which mostly affects women, frequently causes skin rash, joint pains and malaise, and can also lead to inflammation of the kidneys and other internal organs.

If you have lupus and would like to help the researchers by providing a blood sample, please call 020 8383 2337. —Laura Gallagher, Communications

► For the full versions of all these stories, visit: www.imperial.ac.uk/news

# Probiotics may affect metabolism

Probiotics, such as yoghurt drinks containing live bacteria, have a tangible effect on the metabolism, according to the results of a new study published in the journal *Molecular Systems Biology* on 15 January.

The research is the first to look in detail at how probiotics change the biochemistry of bugs known as gut microbes, which live in the gut and play an important part in a person's metabolic makeup. Different people have different types of gut microbes inside them and abnormalities in some types have recently been linked to diseases such as diabetes and obesity.

Professor Jeremy Nicholson (SORA), corresponding author on the study, explained: "Some argue that probiotics can't change your gut microflora – whilst there

# DNA barcode identified for plants

A 'barcode' gene that can be used to distinguish between the majority of plant species has been identified by scientists who published their findings in the *Proceedings of the National Academy of Sciences* on 4 February.

This gene, which can be used to identify plants using a small sample, could lead to new ways of easily cataloguing different types of plants in species-rich

areas like rainforests. It could also lead to accurate methods for identifying plant ingredients in powdered substances, such as in traditional Chinese medicines, and could help to monitor and prevent the illegal transportation of endangered plant species.

The team behind the discovery found that DNA sequences of the gene matK differ among plant species, but are nearly identical in plants of the same

"In the future we'd like to see this idea of reading plants' genetic barcodes translated into a portable device"

species. This means that the matK gene can provide scientists with an easy way of distinguishing between different plants, even closely related species that may look the same to the human eye.

Dr Vincent Savolainen (Life Sciences), who led the study, said: "In the future we'd like to see this idea of reading plants' genetic barcodes translated into a portable device that can be taken into any environment, which can quickly and easily analyse any plant sample's matK DNA and compare it to a vast database of information, allowing almost instantaneous identification."

The researchers made this discovery by analysing the DNA from different plant species. They found that when one plant species was closely related to another, differences were usually detected in the matK DNA.

-DANIELLE REEVES, COMMUNICATIONS

are at least a billion bacteria in a pot of yoghurt, there are a hundred trillion in the gut, so you're just whistling in the wind. Our study

shows that probiotics can have an effect and they interact with the local ecology and talk to other bacteria. We're still trying to understand what the changes they bring about might mean, in terms of overall health, but we have established that introducing 'friendly' bacteria can change the dynamics of the whole population of microbes in the gut."

For the study, researchers gave two types of probiotic drink to mice that had been transplanted with human gut microbes. Probiotics contain so-called 'friendly' bacteria and there is some evidence to suggest that adding these to the gut can help the digestive system.

> The researchers found that treatment with probiotics had a whole range of biochemical effects. Adding 'friendly' bacteria changed the make-up of the bugs in the gut, not only because this increased the number of such bacteria, but also because the

'friendly' bacteria worked with other bacteria in the gut, amplifying their effects.

-LAURA GALLAGHER, COMMUNICATIONS

## Cell connection gives HIV clue

String-like connections found between T-cells could be important to how HIV spreads between cells in the human immune system, according to new research published on 13 January in *Nature Cell Biology*. The newly-discovered strands, named 'membrane nanotubes' by scientists, could help to explain how the HIV virus infects human immune cells so quickly and effectively.

The new laboratory-based cellular study shows that when human T-cells bump into each other and then move apart again, a long string of membrane is sometimes formed, creating a connection between the two cells.

Scientists found that these membrane nanotubes can stretch out between the two cells as they move apart, sometimes several cell lengths away from each other. In lab tests mimicking the environment of the human body in three dimensions, the research team also found that the strings are flexible and can bend to keep cells connected.

One of the authors of the study, Professor Dan Davis (Life Sciences), explained: "Discovering that these membrane nanotube links exist between T cells indicates that there may be as-yet undiscovered ways that these types of cells communicate with each other inside the human body."

After discovering the T cell nanotubes, the researchers infected some of the T cells with HIV modified to include

a fluorescent protein. They observed that HIV proteins travelled down the nanotubes from infected cells to non-infected cells.

The scientists suggest that if this mechanism was proven to occur in the human body, as well as in the lab, it may help to explain why extra-cellular anti-

bodies are unable to fight HIV effectively. —DANIELLE REEVES, COMMUNICATIONS

# Strongest materials on earth to be developed at new Imperial centre

## Some of the strongest, most durable and heat resistant materials on earth are to be developed at Imperial, thanks to a new £6 million centre for structural ceramics.

The Imperial College Structural Ceramic Centre (ICSCC), funded over a five-year period by an Engineering and Physical Sciences Research Council (EPSRC) Science and Innovation Award, is a joint project between the Departments of Materials and Mechanical Engineering.

The new centre aims to dramatically improve the strength and durability of structural ceramics, made from inorganic materials like oxides, carbides and nitrides, to meet industrial demand for materials that can withstand extreme environments.

Welcoming the EPSRC award, Professor Bill Lee, Head of the

Department of Materials and new Director of the Centre, said: "This is a fantastic opportunity not just for the College but for the UK's structural ceramics community to make a big international impact. These materials underpin many key areas of the UK economy, from energy generation to healthcare, and I look forward to working with industry and academia on leading edge projects which will establish this facility as a world class leader."

"I look forward to working with industry and academia on leading edge projects which will establish this facility as a world class leader."

#### State of the art

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The new funding will support the construction of state-of-the-art laboratory facilities at the South Kensington Campus. Part of the development process will include the design and construction of new instruments capable of measuring properties in ceramics, like strength and toughness. In particular, the ICSCC will be working with industrial manufacturers on new equipment able to withstand scorching temperatures without melting during experiments.

New academic positions will also be created jointly between the two departments. Academics will be appointed in ceramic property measurement in extreme conditions, high temperature ceramic processing, and multiscale modelling of ceramic behaviour.

Each academic position will be supported by a research team made up of a postdoctoral researcher and two PhD students. The Centre will also employ a technical manager and full-time technician, plus three PhD students at other UK universities. —COLIN SMITH, COMMUNICATIONS

#### **About ceramics:**

Ceramics can be defined as inorganic, non-metallic materials. They make up one of three large classes of solid materials, the others being metals and polymers. Traditional ceramics include dinnerware, pottery, tiles, and bricks. Structural ceramics have a wide range of applications which can also be used in engine parts and components in computers and electronics.

## Applications of the new materials include:

- Collaboration with aerospace organisations such as NASA to develop the next generation of reusable spacecraft, which require new materials for tiles that can withstand both the freezing conditions of space and the scorching heat of take-off and re-entry.
- The improvement of composite layers of ceramics for body and vehicle armour for troops and security personnel that can absorb and deflect explosive high impact shells.
- Cleaner and greener energy alternatives, with potential applications in power generation including pebble bed nuclear reactors. This new form of technology encases uranium dioxide in ceramic pebbles, which heat water to create steam and generate electricity. More durable pebbles will be needed to withstand the extreme temperatures of future reactor designs.
- Use in a medical setting—for example, the development of ceramics that can be used to replace bone and withstand the extreme environment of the body. These ceramics will be developed to be porous, but with controlled mechanical property that would match that of bone.
- Use in industrial settings for example, glass and metal manufacturers, who want to operate at higher temperatures than they currently can.













Above: An artist's rendering of the air-breathing, hypersonic X-43C, part of NASA's Hyper-X series of flight demonstrators. NASA will develop, test and fly the Hyper-X series over the next two decades to support development of future-generation reusable launch vehicles and improved access to space.



To the left: Thermal protection system (TPS) material coupon undergoing test at 1000 W/cm2.





Gareth Mitchell (Humanities) is the presenter of Imperial's monthly magazine podcast. He interviewed Professor Bill Lee (left) for the February edition of the podcast to find out more about structural ceramics.

## GM: What is meant by structural ceramics?

Professor Lee: Structural ceramics are familiar to everybody: you wash your hands in them, you drink your tea out of them and your houses are built from them. But those are the traditional structural ceramics. What this centre will be working on is materials which are in extreme environments - ultra-high temperatures above 2,000°C. The highest temperature you'll get in your oven at home would be 350°C so you're talking eight or nine times that. These temperatures can be found in radiation environments in the nuclear industry or aerospace applications so we'll be working with big companies like Boeing and NASA in the States. The materials also have application in the human body as bone prostheses - that's a pretty severe environment too.

## GM: What's so special about these materials?

**Professor Lee:** For example, if we develop the thermal protection system for the next generation space shuttle, we'll be able to have vehicles that take off from the ground, go through the atmosphere, and then come back down through the atmosphere without having to piggyback on a rocket. This will be a vehicle that could operate repeatedly, so you'll have space tourism, I suspect, on the back of some of the things we're hoping to do with the centre.

#### GM: How do ceramics and structural ceramics, as we're talking about here, have advantages over materials that we are already aware of?

**Professor Lee:** What they don't do at high temperature is melt like a metal would. There are difficulties – for example, depending on the atmosphere, they may oxidise (react with the atmosphere in some way). But we're trying to develop materials that either don't react because they're thermodynamically stable at these very high temperatures or they react in a way that is benign and enables them to carry on functioning.

## GM: How complex is this work going to be?

**Professor Lee:** Well, the challenge is that currently many of these materials don't exist so we have to develop new materials and the equipment to be able to test them. Looking at the mechanical or thermal properties of materials at temperatures up to and over 2,000°C is in large part beyond our current capability and the facilities just don't exist. So we'll have to work with the manufacturers of those sort of facilities to develop the techniques to enable the measurements to be made.

To hear the full interview visit: www.imperial.ac.uk/ media/podcasts



# Protecting your data

How to stay safe when using the internet

IT security issues have featured prominently in the media over recent months. The loss or theft of data can have major implications for the individual concerned and, as in the case of the recent HM Revenue and Customs data loss, for their employer. For members of the College, the implications might be personal if irreplaceable research data are lost; they could be financial or commercial, for example, where online banking information is compromised, where valuable intellectual property is lost or where relationships with sponsors are

jeopardised; or they could be criminal if the loss relates to the way that the personal data of others has been mishandled.

The College's Information Systems Security Group is concerned with these issues and publishes policy and guidance to assist members of the College. This series of articles is to remind readers of some of the things that we can all do to protect our data, both on and offline, at home and at work. It also includes some useful pointers for parents who might be concerned about their children's online activities.

## The internet

There is a wealth of resources to help you use the internet safely, but here are some tips to get started:

## Keep up-to-date with security patches for your computer

Windows XP/Vista, Mac OS X and many versions of Linux include facilities to automatically download and apply the latest security patches. You must make sure that automatic updates are enabled to keep you safe from newly discovered security issues.

## Use passwords for all accounts on your PC

Whenever you create an account on your PC, make sure that you set a password for it. Windows XP Home Edition actually hides its Administrator account, so you need to take extra steps to set a password for it. Without a password, viruses can use these accounts to gain access to your computer.

#### Use secure passwords

You should always use 'strong' passwords. Don't use passwords based on names or dictionary

words and use combinations of lowercase, uppercase, numerals and punctuation characters in your passwords. They should also be at least eight characters long.

## Use anti-virus software and keep it up-to-date

It is essential that Windows and Mac users install anti-virus software. The College has a site licence for Symantec Antivirus, which includes the rights for staff and students to use the software at

home. See the ICT website for further information: www.imperial. ac.uk/ict. You should also regularly

check the virus definition date on your software once installed, to ensure it is automatically updating correctly.

## Use 'password safe' software

Given the number of internet sites we subscribe to, it can be hard to remember the passwords for them all. If you have trouble remembering, you should use 'password safe' software to store them securely, rather than write them down. A good example is KeePass: http://keepass.info. Don't store your passwords in your web browser. Many web browsers offer to 'remember' passwords for you, but store these passwords unsafely. — CHRIS ROBERTS, ICT

See the next edition of Reporter for tips on more secure online banking.

## Student Forum gives advice and inspiration

Encouraging students to market themselves creatively was the aim of the Imperial As One Student Forum, held on 30 January.

For the second year running black, minority ethnic and international students at Imperial were invited to a forum, hosted by Dr Mark Richards (Physics).

A number of speakers gave presentations at the event including Elspeth Farrar, Director of the Careers Advisory Service, who advised students on how to create a winning CV.

Professor Jaideep Prabhu (Tanaka Business School) gave a presentation entitled 'How I got to where I am'.

He advised students to network as much as possible and to keep their options open: "Don't just think about your career in the short term. It is vital to be flexible and open minded; sometimes

you fall into a job unexpectedly." In addition, Dr Kunle Onabolu, an alumnus of the College, gave a talk on his journey from student to company director.

-NAOMI WESTON, COMMUNICATIONS



One of the students who attended the forum was Christoph Aymanns (Physics), a first year undergraduate from

Germany. He is currently applying for internships and wanted to find out how to improve his CV. "In Germany things are very different—we set out CVs in a chronological order—and it is helpful to hear how to improve my chances of getting an interview," he said.



## Got a question about **Fairtrade?**

Imperial College Union's Fairtrade Society has launched a new campaign in the lead up to this year's Fairtrade Fortnight, which starts on 25 February. Leading with the theme 'Got a question about Fairtrade?' the campaign invites the College community to submit any queries they might have about Fairtrade, which will then be answered by the society, either through an article on their website or through one of the events during the fortnight. Members of Imperial also have the chance to enter a Fairtrade prize draw.

Imperial has recently been awarded Fairtrade University Status, which is a certification acknowledging the College's efforts to support Fairtrade. During the last year, 1.6 million Fairtrade beverages have been sold at the College, but many

people are still unaware what Fairtrade stands for. It is the Fairtrade Society's aim to educate the College community about what Fairtrade means to both the consumer and the producers.

Undergraduate Jonas Neubert (Medical Engineering) is Chair of the Fairtrade Society. He said: "With our campaign we want to give everyone a chance to ask any question they might have about Fairtrade.





Guarantees

a **better deal** 

for Third World

Producers



Hopefully, this will give students and staff the chance to make a conscious choice about buying Fairtrade goods and supporting those who produce the products that we consume every day."

Fairtrade Fortnight, which begins on the 25 February, is a UK-wide effort to promote Fairtrade. -Jonas Neubert, Imperial College Union

*For more information and a chance* to ask your questions, visit: www.imperialfairtrade.org.uk or email: fairtrade.society@ imperial.ac.uk

## Fight against drug resistance in cancer patients helped by new award

Developing therapies to stop cancer from becoming resistant to drugs is the aim of new research at Imperial, funded by a £2.5 million grant from Cancer Research UK announced in January.

Professor Charles Coombes (Medical Oncology) and Professor Anthony Barrett (Chemistry) are leading research looking at four different molecules believed to be involved in enabling cancerous cells to develop resistance to drugs.

The researchers aim to develop therapies that will target these molecules, in order to stop the cells becoming resistant.

Professor Coombes said of the award: "We are at a stage where there are drugs available that are really effective at fighting cancer. However, the problem

for some patients is that once they have been on these treatments for a while, they start to develop resistance to them, which is a major setback. We hope the new grant will allow us to work on new ways of addressing this issue, to give more cancer patients a better chance of a full recovery." The researchers' work is particularly focused on breast cancer. The majority of breast cancer cases are hormone-sensitive, meaning that the cancerous cells thrive on oestrogen. Cancer therapies

AIRTRADE

" We hope the new grant will...give more cancer patients a better chance of a full recovery"

aim to deprive these cells of oestrogen so that they die. However, during treatment, some of the cancerous cells can become resistant to the effects of the drug, so that the therapy ceases to be effective at fighting the disease. It is this issue which the researchers hope to tackle and they aim to be in a position to start trialling new therapies by 2011.

-Laura Gallagher, Communications



## inventors corner

#### **Eric Yeatman is**

a Professor of Microengineering and has been deputy head of the Optical and Semiconductor Devices Group since 1996. He is co-founder of Microsaic Systems Ltd, a microelectromechanical systems (MEMS) development



company, which he formed with Professor Richard Syms and Dr Andrew Holmes (Electrical and Electronic Engineering).

The company was originally set up in 2000 to build on the portfolio of MEMS technologies from the founders' research group. Professor Yeatman felt the university commercialisation climate was adapting to favour start-up opportunities at the time when Microsaic was founded.

The business has now evolved to focus primarily on developing and marketing mass spectrometers, which are used to identify compounds such as pharmaceuticals, explosives and narcotics. Other instruments currently in use are large and cumbersome, but Microsaic have developed miniaturised devices, using silicon micro-engineering technology, with the potential to transform the field of mass spectrometry.

Professor Yeatman is optimistic about the future of the company and would like to see it grow to become a major supplier. He said he is driven by the "satisfaction of seeing something you have researched getting out in the world and having impact.

"Engineers are motivated by the development of innovations which have valuable applications. We are aiming for our work to be in the marketplace," he added.

Since Microsaic was founded, Professor Yeatman has also been a member of one start-up company advisory board, and has served as a technical advisor to several venture capital funds. He enjoys assisting with the development of start-ups and considers company creation a positive way of commercialising research—although he warned that it should not be seen as a way to 'get rich quick'.

"I would encourage people to do it if they are genuinely interested in the commercialisation of research," he said. "It can be highly rewarding, but personal belief and perseverance are essential. To create something that is marketable is difficult and can take a long time.

"I would advise researchers, even at the early stages of development, to ask themselves 'Could this be commercialised?' and 'What can I do to enhance the chance of it being successful?'"

Professor Yeatman also co-invented the 'surface tension selfassembly method' which has assisted with the development of three-dimensional devices in silicon technology, and was licensed to Semefab Ltd. The main thing he would share from this experience is that it is important not to miss chances to commercialise inventions. He explained: "Publishing research is an imperative for academics but it is also important to ensure the invention is protected."

-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.

# Eastside update

Ground works for the new Eastside student accommodation began earlier this year following the successful demolition of the Linstead Hall student residential block, located to the east of Prince's Gardens. Piling, the process of driving steel and concrete columns into the ground to give support to the structure, began on 8 January and will conclude in early March. Two piling rigs are currently located on site and will provide the

foundations required to start constructing the superstructure. Substructure works are to be completed during the summer and the building superstructure should be erected by the end of the year.

## Eastside FACTS

- Southside and Eastside were both designed by Kohn Pedersen Fox
- Overall construction height will be two storeys less than Linstead Hall
- Eastside will complete the Prince's
  Gardens square development
- English Heritage feels that the developments "will enhance the setting of the adjacent listed terraces and the character and appearance of the Knightsbridge conservation area"



Occupation of Eastside is scheduled for October 2009 and will provide over 440 student bed places over nine levels. The design of Eastside has followed the principles adopted in the recently occupied Southside student accommodation. As well as offering *en suite* facilities and communal spaces, Eastside will also house a restaurant/bar and a convenience store.

 For updates on all the projects currently being undertaken at the College, visit: www.imperial.ac.uk/buildingprojects/currentprojects



Eastside student accommodation will be ready for occupation in October 2009.

## Behind the scenes with Imperial's Postal Service

#### When piles of letters turn up on our desks every morning, most of us give little thought to how they got there. In the first of a new regular 'behind the scenes' feature, Reporter's Wendy Raeside discovers how mail travels around Imperial.

The main hub of postal activity is at the South Kensington Campus where Chief Postal Officer Abdi Hussein heads a team of 14 staff. Their shifts begin at 7.30 when the mail is delivered to the Huxley Building basement by Royal Mail. All parcels and packages are X-rayed before being sorted by building, department and individual names.

Within two hours, post is being delivered around the campus, some via buildings' receptions, others to individuals' pigeonholes. A second incoming delivery is dealt with at similar speed during early afternoon.

As well as incoming mail, outgoing mail addressed to Imperial's various campuses and destinations all over the world forms a big chunk of Abdi and his team's work. At South Kensington, they collect from buildings three times a day — in November 2007 alone, nearly 40,000 items were posted out from South Kensington, weighing a total of more than 3,772 kilograms. The total postage cost for the campus during 2007 was over £209,000, including inland, airmail, special and recorded deliveries.



Abdi said: "Monday is usually the busiest day of the week for us, but obviously holidays such as Christmas can be pretty hectic too."

A large science university such as Imperial has some weird and wonderful deliveries, but Abdi and his team are fully trained in security risks associated with mail. "For example," says Abdi, "the writing or unusual marks on the envelope can be a telltale sign they have been tampered with."



Over the past year, there has been one occasion when the Bomb Squad had to be called to the South Kensington Campus, but that turned out to be a false alarm over an unexpected delivery of a water filter.

Abdi, who has been with Imperial for two years, was previously at TNT. He reports directly to Ceri Davies, Head of Security Services.

Ceri said: "We had a major review of postal services last year which we think has resulted in a much better service."

As well as Abdi's team at South Kensington, there are two postal workers at the Hammersmith Campus, one at Charing Cross and one at St Mary's. Security Services handle mail at the Silwood and Wye Campuses.

Together with their vital role of collecting and delivering mail, Postal Services can also advise on posting particular items.

Abdi explained: "We rely on the College's address book and directory to deliver mail with incomplete addresses, so it would be helpful if everyone could check their location details on College systems and update them regularly. Also, when sending internal mail, ensuring that full addresses (name, department, building and campus) are marked clearly on the envelope will result in a speedier delivery."

To find out more about Postal Services visit: www.imperial.ac.uk/ facilitiesmanagement/security/services/post

## Overseas scholarship winners gather for special reception

Over 50 postgraduate overseas students, who all came to Imperial thanks to funding from scholarships, gathered for a special reception on 28 January, organised by the International Office.

The reception was the first event of its kind and provided students with a networking opportunity and a chance to speak to staff from the International Office and Registry.

There are a wide range of scholarship programmes available to students. These include the

Deputy Rector's Award for overseas students of exceptional academic ability, the Dorothy Hodgkin Postgraduate Award, which is aimed at



assisting outstanding overseas students from developing countries,

and the College's Student Opportunities Fund (SOF). The SOF was set up in 2003 and aims to help academically gifted students with their finances.

> Ji Yi Khoo, a second year PhD student in Chemical Engineering from Malaysia, has been awarded two scholarships to study at Imperial. One of these was from the Overseas Research Student s (ORS) Awards scheme, which provide the difference between the home and overseas tuition fees for prospective postgraduate research students and current first year PhD students at the College. Her research focuses on testing drugs for epilepsy. She said: "It is really hard for overseas postgraduates to study in the UK. The ORS scheme is highly recognised and puts me in a great position. I really love studying in London – it's a great environment here, with great lecturers and professors, and

chances to attend conferences." —NAOMI WESTON, COMMUNICATIONS

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# Ambassadors reception

A thank you event for the College's International Ambassadors and their administrative support staff took place on 16 January, with 12 out of 23 Ambassadors attending.

The International Ambassadors scheme provides a dynamic and innovative service to Imperial's alumni around the world, keeping them connected and up-to-date with the life and work of the College, and organising visits and presentations by world-renowned Imperial academics.

Since launching the scheme in September 2006, there have been 25 International Ambassador events across 13 countries, involving 16 international alumni groups. Almost 2,000 alumni have attended an Ambassador event. These events have varied from gala dinners and weekend conferences to less formal social dinners and presentations.

The Rector and Fiona Kirk, Director of Development, expressed their thanks to the Ambassadors for their enthusiasm and energy in meeting with alumni globally, and for their role in helping to maintain a vibrant international alumni community. In some cases, they have even acted as a catalyst in re-energising dormant groups, such as in Argentina, Cyprus, India and Uganda.

Also invited to the evening event were the Ambassadors' PAs, who play a vital role in coordinating the everyday work and business trips of the Ambassadors, and a vote of thanks was made for their contributions. —ZEBA SALMAN, OFFICE OF ALUMNI AND DEVELOPMENT

For more information about the scheme, visit: www.imperial.ac.uk/ alumni/ambassadors



## Take note

#### Volunteers needed for body fat study

Healthy volunteers aged 19–27 are needed to take part in a research study measuring body fat. It will involve attending the Hammersmith Hospital for 2–3 hours on one occasion. Volunteers will have a full body Magnetic Resonance scan, which is safe, painless and does not involve exposure to X-rays. A blood and urine sample is also required. Researchers are particularly interested in people who were born prematurely.

For more information, contact Dr Anne Doolan, Clinical Research Fellow, at: **a.doolan@imperial.ac.uk** 



#### 30 years

Mrs Jean Mcleod • Cashier, Finance Mr Richard Sweeney • Senior Research Officer, Materials

#### 20 years



#### Mr Bill Baggott, Maintenance Supervisor, Support Services

Bill joined Imperial 20 years ago, and for the last eight years he has been a Charge Hand at the Hammersmith Campus. He said: "It is a role I love and I am happy here. My duties are mainly plumbing and steam fitting but I am in

early each morning to set out the work for the day and check that there are the correct clearance certificates in place. These indicate that various areas are safe to work in."

Bill worked on building sites as a labourer before joining Imperial. He said: "I began work in the Department of Zoology under Ann Lennox-Martin and Steve Fox; they gave me a job and sent me to college to learn my trade and I have never looked back."

During his years at the College, Bill has noticed many changes he said: "I have always been based at Hammersmith, but now there are a lot more rules, especially health and safety and bylaws, it is getting harder as there is now so much paper work!"

When asked what the highlights of his career have been, he said: "Reaching 20 years here is definitely a highlight; I have met so many people and it is great to get on well with those I work with."

Mrs Karen Clarke • Secretary/General Office Supervisor, Aeronautics Mr Joseph Meggyesi • Technician, Aeronautics

Staff featured will be celebrating anniversaries during the period of 8–27 February. Data is supplied by HR and is correct at the time of going to press.

#### **Farewell from the Editor**

After just over three years editing *Reporter*, I have made the decision to move on to a new challenge. I've thoroughly enjoyed my time as Editor and in particular having the chance to meet so many of those people that make up the diverse community of the College. It's been a real pleasure that I've never had to look very far for an interesting story



or motivation for a feature. Another high point for me was being part of the launch of the new look *Reporter* in October 2006.

I hope you will continue to enjoy reading the paper as much as the team enjoys producing it. Many thanks to all those that have contributed to *Reporter* during my time as Editor and special thanks to those with whom I have worked so closely in the Communications Division.

Until the new Editor is in post, please send all your news, views and story ideas to **reporter@imperial.ac.uk**.

-Alexandra Platt, Editor

## welcome

## new starters

Miss Hadeel Abdeen, NMH Mrs Nadja Ahmad, Kennedy Institute

- Miss Amy Allinson, Computing Dr David Angeli, EEE
- Mr Christos Apostolopoulos, SORA
- Ms Carolina Bachariou, Centre for Environmental Policy
- Miss Rebecca Baggaley, EPHPC
- Mr Ioannis Bakolis, NHLI
- Mr Peter Barry, Mechanical Engineering
- Miss Lucy Bean, Registry Miss Charlotte Beattie, Student
- Residences Mr Matthew Bell, NHLI
- Miss Claire Besserman, NMH Dr Piernicola Bettiol, EEE
- Miss Angela Bhattacharya, Faculty of Natural Sciences Miss Magda Bictash, EPHPC Miss Jane Bohannon, Medicine
- Mr Oleksandr Bolgar, Catering Services Mrs Stephanie Brown, NHLI
- Dr Simon Bühlmann, Physics
- Dr Evgeniy Burlutskiy, Mechanical Engineering
- Dr Beatriz Camara, Investigative Science
- Mr Robert Cameron, ICT
- Dr Jason Camp, Chemistry Miss Margaret Chambers, ICT
- Dr Dongbin Chen, SORA
- Ms Man Chung, Investigative Science
- Miss Lorna Clark, Investigative Science
- Mr Stephen Coe, Faculty of Natural Sciences Mr Jonathan Cole, Aeronautics
- Miss Jane Colvin, EPHPC Dr David Cordes, Chemistry
- Mr Michael Cox, Security Services
- Mr Stephen Craimer, Computing Ms Claire Culliford, Humanities
- Miss Renata Czaja, Student Residences Miss Joanna Dale, EYEC
- Dr Michel Della Negra, Physics
- Miss Sarah Dickens, NMH
- Mr Nicolas D'Ippolito, Computing Mr James Dodsworth, Student Residences
- Miss Anna Donaldson, Investigative Science
- Mr Michael Doube, Bioengineering
- Mr Stefan Drexler, Kennedy Institute
- Mrs Odile Dumont, NHLI Ms Audrey Dumont, Investigative
- Science Dr Bryn Edwards-Jones, Biology
- Miss Virginia Ellis, Faculty of Natural Sciences
- Miss Karine Enesa, Investigative Science
- Miss Claire Escaron, Cell and Molecular Biology
- Dr Sarah Farmer, Clinical Sciences
- Mrs Geraldine Farrell, Library Services
- Miss Amy Ford, SORA Mr Michalis Frangos, EEE
- Dr Lis Freeman, SORA
- Professor Gary Frost, Investigative Science
- Mrs Maureen Garland, Library Services
- Mr Alexandros Georgiadis, Physics Dr Elena Goicoechea De Jorge,
- Medicine Mrs Joanna Gower, Agricultural
- Sciences Mrs Mutsuko Grant, Molecular
- Biosciences Dr Heinner Guio Chunga,
- Investigative Science Dr Shalini Gupta, Materials
- Dr Djordje Gveric, NMH

- Miss Emily Gwyer, Kennedy Institute
- Mr Ian Hansen, Humanities

Mr Adaikalavan Ramasamy, NHLI

Dr Duncan Rand, Physics

Dr Cheryl Reeves, NMH

Dr lead Rezek, NMH

Dr Nicolas Riesco, ESE

Mr Karsten Seipp, Communications

Miss Amna Siddiq, NHLI

Mr Hubert Sienkiewicz, Sport

Miss Jana Sikorova, Centre for Environmental Policy

Dr Andrew Singleton, Physics

Miss Rachel Sinkins, International and External

Academic Affairs

Miss Nicole Stock, Student

Ms Natsuko Suwaki, Cell and Molecular Biology

Dr Mike Tennant, Centre for

Environmental Policy

Dr Raul Torres, Medicine

Dr Emma Toumi, Research Services

Mr John Travers, Physics

Dr Olga Tsigkou, Materials

Mr Kuen Tsoi, Computing

Mr Michael Tutt, Faculty of

Dr Jonathan Tyrrell-Price, Medicine

Mr Eugene Van Wyk, EEE

Mr Nikolaus Vlasopoulos, Civil and Environmental Engineering

Dr Kenneth Walaron, Physics

Miss Julie Voce, ICT

Humanities

Science

Ms Wei Xun, FPHPC

farewell

Institute

moving on

Dr Sergio Abanades, NMH

Dr Myles Barker, Biology

Biology (23 years) Ms Susan Beech, SORA

Mr Anthony Breen, ICT

Miss Sian Berry, Faculty of Medicine

Miss Rebecca Bird, Faculty of Medicine

Dr Oana Bretcanu, Materials

Miss Gemma Buckland, NHLL

Miss Karen Bunday, NMH

Mr Maurizio Caltagirone,

Ms Sandra Cantilena, NHLI

Miss Preeny Chacko, SORA

Dr Ron Chen, Investigative

Miss Jenny Cheung, Library

Science

Services

Services

Ms Kate Choy, NHLI

Mr Ian Claridge, Security

Dr Badri Chandrasekaran, NHLI

Mr Faeruque Choudhery, Faculty of Medicine

Catering Services

Professor John Beddington,

Dr Cristian Asensio, Kennedy

Miss Smaragda Angelidou, SORA

Ms Marion Weisz, NHLI

Professor Lord Winston.

Miss Yao Yu, Investigative

Dr Constanze Zeller, SORA

Mr Steve Zymler, Computing

Miss Saharnaz Vakhshouri,

Dr Fabrizio Vianello, Investigative

Medicine

Medicine

Science

Dr Veronica Tisato, Medicine

Dr David Soto, NMH

Residences

Dr Robby Tan, EEE

and Leisure Services

Mr Adrian Ratnapala, Physics

Miss Emeline Reeves, Registry

Dr Katy Rezvani, Investigative Science

Miss Amy Roberts, Medicine

Dr Matthew Santer, Aeronautics

Mr Edward Segal, Mathematics

Mr Alban Rochel, Physics

Mrs Patricia Coveney, SORA

Mr Simon Cox, Sport and Leisure

Miss Jeannette Davies, SORA

Miss Lisa Dewis, Investigative

Mr Dario Di Maio, Mechanical

Miss Nicola Donaldson, Health

Dr Astrid De Wijn, ESE

Engineering

Dr Arnaud Didierlaurent.

Kennedy Institute

and Safety Services

Miss Kylie Donges, Student Residences

Mrs Barbara Dore, Medicine

Miss Malin Drabik, Finance

(17 years) Mrs Valerie Elliott, Biology

Miss Jane Fellows, Biology

Mrs Jacqui Feld, SORA (16 years)

Professor Nicholas Fisk, SORA

Mrs Sandra Gee, NHLI (10 years)

Environmental Engineering

Dr Maxim Grigoryev, Institute for Mathematical Sciences

Dr Leanne Gardner, Cell and Molecular Biology

Ms Billie Goodman, Civil and

Mr Barney Grainger, Graduate

Dr Julia Gledhill, NMH

Dr Matthew Glyn, NHLI

Mrs Linda Drake, SORA

(18 years)

(16 years)

(15 years)

Schools

EEE

Miss Laura Griffin, Business School

Dr Naomi Hammond.

Mr Andrew Hazell, EEE

Investigative Science

Professor Christopher Harris

Miss Rebecca Harrison, Medicine

Mrs Clare Hemsley, Educational Quality Office

Dr Stephane Hess, Civil and Environmental Engineering

Dr Shazia Irshad, Investigative Science

Miss Sophie Jones, Medicine

Dr Julien Keller, Mathematics

Dr Yue Huang, Computing

Ms Jennifer Hunt, SORA (21 years)

Mrs Misako Ito, NHLI

Mrs Lisa Kain, Student

Ms Ayesha Khan, SORA

Mr Georgios Koumpouras, Chemical Engineering

Professor Chris Lawrence, Chemical Engineering (13 years)

Mr Duc Le, Computing

Dr Alison Lean, Biology

Dr Mark Levy, Materials

(6 years)

Miss Paula Lescott, Faculty of

Mrs Briony Little, Aeronautics

College Student Union (6 years)

Dr Jonathan Mangion, Clinical Sciences

Dr Fanshun Meng, Chemistry

Mrs Rebecca Mitchell, Finance

Dr Linda Moran, NMH (20 years)

Mrs Caffy Nolan, SORA (7 years)

Dr Kenji Mizutani, Molecular

Dr Michal Mielcarek,

Biosciences

Clinical Sciences

Dr Caro Minasian, NHLI

Ms Loren Moyse, EPHPC

Dr Marcello Niceta, NHLI

Mrs Aisha Osigwe, SORA (9 years)

Dr Demetri Panayi, SORA

Science

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Dr Adrian Park, Investigative

Dr Panaviotis Parpas, Computing

Dr Sarah Ngan, SORA

Mr Xavier Mulet, Chemistry

Mrs Caroline McLaren, Faculty of Engineering

Ms Christine Luckhurst, Imperial

Dr Rita Jabr, NHLI

Residences

(8 years)

Services

Mr Hoai Pham, NHLI

Dr Ellen Poon, SORA

Dr Panayiota Polydoratou, Library Services

Dr Keith Pullen, Mechanical Engineering (15 years)

Dr Susan Ross, Registry

Miss Alice Rothwell, NHLI

Mr Andrew Russell, Registry (7 years)

Miss Mona Sadeghian, NMH

Mr Peter Saraga, Institute of Biomedical Engineering

Miss Marie Scott, Faculty of Medicine (5 years)

Services

Miss Sandhya Seetah, Research

Dr Seema Shrivastava, Medicine

Dr Peter Skrandies, Humanities

Dr Caroline Small, Investigative

Miss Hannah Stevenson, SORA

Professor Stefan Szymanski, Business School (14 years)

Dr Rita Tewari, Cell and Molecular Biology (8 years)

Ms Pardip Thandi, Faculty of Medicine

Dr Jean-Luc Thiffeault, Mathematics

Professor Nizar Touzi, Business School

Miss Courtney Townsend, Faculty of Medicine

Miss Charlie Tyce, Development & Corporate Affairs

Professor Junia Vaz De Melo,

Miss Marianna Ventouratou,

Dr Douglas Vieira, Computing

Dr Yulan Wang, SORA (5 years)

Research Services

Ms Deeti Vyas, Centre for Environmental Policy

Mrs Vivian Wang, Chemical Engineering

Mr Paul Warren, Chemistry

Miss Stefania Xenariou, NHLI

Mr Damien Zaher, Chemistry

Mr Jose Zambrano Navarro, Faculty of Medicine

Dr Chaoping Zang, Mechanical Engineering

retirements

Ms Janet Budd, Registry

Professor Charles Coutelle, NHLI (15 years)\*

Professor Mike Robb, Chemistry\*

Mrs Anne Von Broen, EPHPC

Mr Michael Woolston, Security

This data is supplied by HR and

covers the period 30 December-26

January. It was correct at the time of

going to press. Years of service are

given where an individual has been

where an individual will continue to

••• Please send your images and/or

brief comments about new starters, leavers

and retirees to the Editor, reporter@impe-

rial.ac.uk who reserves the right to edit or

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a member of College staff for over

five years. Asterisk (\*) indicates

play an active role in College life.

amend these as necessary.

**reporter** www.imperial.ac.uk/reporter

Services (5 years)

Professor Peter Ellaway, NMH (19 years)\*

Mrs Enid Goodman, NHLI (13 years)

(16 years)

(15 years)

Dr Hui Xu, Investigative Science

Dr Mark Witkowski, EEE

(6 years)

Investigative Science

(14 years)\*

Mr Andrew Segerdahl, SORA

Dr Dongmin Shao, Cell and Molecular Biology

Dr Nicholas Simmonds, NHLI

Science (11 years)

(6 years)

Miss Anna Solarska, NMH

Ms Mercedes Rodriguez, Student Residences (17 years)

noving in. moving on

- Mr Ian Hansen, Humanities Dr Jeff Hardy, Faculty of Engineering
- Dr Ailsa Hart, Investigative Science
- Ms Mary Harvey, Mathematics
- Miss Anna Hikkerova, Catering Services
- Dr Ilana Hill. SORA
- Dr Toni Hoffmann, Investigative Science
- Mr Mark Holloway, Mechanical
- Engineering Mr Markus Horn, Physics
- Professor Sir Brian Hoskins, Climate Change Institute
- Ms Laura Hughes, NHLI
- Ms Kailyn Hui, Clinical Sciences
  - Mr John Ipe, Physics Miss Ana-Vanessa lausovec.
- Physics
- Mrs Jane John, EYEC
- Mr Jaewoo Joo, Physics
- Dr Panos Karamertzanis, Chemical Engineering
- Miss Chileya Kasuba, Imperial College Student Union
- Dr Eleanna Kazana, Division of Biology
- Mrs Jacqueline Kelly-Barrett, NHLI
- Miss Rachel King, Computing
- Dr Mauritius Kleijnen, Molecular Biosciences
- Dr Jakub Kopycinski, Investigative Science
- Dr Elizabeth Kyriakou, Computing
- Dr Derek Lavery, SORA
- Ms Misha Levi, Catering Services Mr Chung Lim, SORA
- Dr Rene Linka, Investigative
- Science Mr Sebastien Lleo, Mathematics
- Dr Warren Macdonald, Bioengineering
- Mrs Emma Mackenzie, EYEC
- Dr Pierluigi Mancarella, EEE Dr William Mathieson.
- Investigative Science
- Mrs Michaela Matrasova, Human Resources
- Mr Maciej Mazurek, Cell & Molecular Biology
- Miss Delia McKenzie, EYEC Dr Kian Mehravaran, Mechanical
- Engineering Miss Maya Mistry, Faculty of
- Medicine Dr Munera Molina, Biological
- Sciences Miss Hannah Moncrieff, Faculty of Natural Sciences
- Mr Miguel Monteagudo Moya,
- Humanities Mr Nicolas Moriceau, NHLI
- Ms Emily Moss, Catering
- Services Dr Ryo Murakami, Chemical
- Engineering Dr Maria Mycielska, Cell and Molecular Biology
- Dr Miguel Navascues, Institute for Mathematical Sciences Dr Kirsty Newman, Investigative
- Science
- Miss Mignone Ngum, Centre for Environmental Policy Mrs Sripriya Niranjan, Chemical
- Engineering Mr Lennon O Naraigh, Chemical

Miss Maria Papadomanolaki, Library Services

Ms Hetal Patel, Investigative

Ms Maria Peppes, Faculty of Natural Sciences

Ms Wanda Pilipkiewicz, Institute of Biomedical Engineering

Miss Marine Pomarede, Biology

Mr Sam Phillips, Catering Services

Dr Lee Potiphar, NMH

Miss Kasia Parfieniuk, Faculty of Medicine

Engineering

Science

Dr Mark O'Neill, NHLI

Dr Arpat Ozgul, Biology

## notice board

## 7 February 2008

## what's on

#### **12 FEBRUARY**

### 17.30-18.30

Spectacular growth of the Indian software service industry

Kees Nijenhuis, Senior Vice President, Wipro-Europe

Lower Ground Square Lecture Theatre, Tanaka Business School

🗵 Registration in advance: email tbs.event@imperial.ac.uk

#### **13 FEBRUARY**

17.30-18.30

18.00-19.00

Atoms at interfaces: theory and simulation from Gibbs to Gates

Professor Mike Finnis, Chair in Materials Theory and Simulation

Inaugural Lecture

Blackett Lecture Theatre, Blackett Building

🗵 Registration in advance: email amy.thompson@imperial.ac.uk

#### **13 FEBRUARY**

17.30-18.30

#### The public gets what the public wants but how do we value what society's got?

Professor Paul Dolan, Professor of Economics

Inaugural Lecture

Lower Ground Square Lecture Theatre, Tanaka Business School

Registration in advance: email louisa.lawrence@imperial.ac.uk

#### **18 FEBRUARY**

#### Leading changes at Academic **Health Centres**

Paul Levy, President and CEO of the Beth Israel Deaconess Medical Centre SORA Lecture

Lecture Theatre G16, Sir Alexander Fleming Building

- 🗵 Registration in advance: email amy.thompson@imperial.ac.uk
- All events are at the South Kensington Campus unless otherwise stated.

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The copy deadline for issue 188 is Friday 15 February. Publication date is 28 February. 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.

#### 20 FEBRUARY

#### Foam, froth and flotation or ... how bubbles buoy up the world economy

Professor Jan Cilliers, Rio Tinto Professor of Mineral Processing Inaugural Lecture

Clore Lecture Theatre, **Huxley Building** 



17.30-18.30

17.30-18.30

Registration in advance: email louisa.lawrence@imperial.ac.uk

#### **25 FEBRUARY**

#### Death and regeneration: cardiac muscle cell number as a therapeutic target

Professor Michael D. Schneider, Professor of Cardiology

Inaugural Lecture

Lecture Theatre G16, Sir Alexander Fleming Building

Registration in advance: email e.powell@imperial.ac.uk

#### 26 FEBRUARY 17.30 TO 18.30

### Diversity, equality and commonalitymutually exclusive?

- Yasmin Alibhai-Brown Annual Diversity Lecture Lecture Theatre G16, Sir Alexander Fleming Building
- 🗵 Registration in advance: email

#### **Leverhulme Lecture Series**

17.30-18.30

Discovering prionssome personal reflections Part C: The reality of prions The final part of this special three-part lecture by Professor Stanley B. Prusiner MD

Lecture Theatre G16. Sir Alexander Fleming Building

X Registration in advance: email amy.thompson@imperial.ac.uk



Photography Neville Miles



Fun Fact • The largest pancake ever flipped measured 15.01m wide, 2.5cm deep and weighed 3 tonnes. The pancake toss that set the record took place in Rochdale, Greater Manchester, in 1994.

## Take note

The College is inviting applications for the post of Warden of Fisher Hall, available from April. The Warden is responsible for the smooth running of the hall and will receive rentfree accommodation in the hall in return for pastoral and administrative duties. The post is open to all academic, academic-related and clinical staff. Closing date for applications is 10 February 2008. For further information and an application form contact Anna Thomas-Betts at: a.thomas-bts@imperial.ac.uk

## **Calling children's counsellors**

Project: Telephone Counselling Project ID: 1103 Organisation: ChildLine Date(s): Ongoing Time(s): Flexible Location: E1, nearest tube Liverpool St

Volunteers are needed as counsellors who genuinely care about children and who are open-minded and respectful. You do not need to have any experience or qualifications in counselling, as each successful applicant is awarded a place on a 40-hour training course which covers basic counselling skills, child protection and some of the key issues affecting children and young people. Volunteer counsellors are asked to give a regular weekly shift of at least two hours for a minimum of one year after training. The service needs volunteers from 7.30 to midnight. Once

you have been trained vou are given regular supervision, weekly debriefs and ongoing training, including



opportunities to train as a shift leader or interviewer.

## (i) For more information

To take part in a scheme or to hear more about volunteering in general, contact Minna Ruohonen

- 020 7594 8133
- m.ruohonen@imperial.ac.uk

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

Subscribe to the weekly newsletter by emailing: volunteering@imperial.ac.uk

1 ChildLine is a service provided by the NSPCC. Registered charity numbers 216401 and SC037717

louisa.lawrence@imperial.ac.uk

