




## Showcasing excellence

Spotlight on the Rector's Awards 2008  CENTRE PAGES



**EUROPEAN  
SUCCESS**  
Researchers  
bring in  
€13 million  
PAGE 3



**MINI PROFILE**  
Professor  
Mark Sephton  
searches for life  
on Mars  
PAGE 10



**GOING  
UNDERGROUND**  
Imperial Caving  
Club explore  
hidden depths  
PAGE 12



## editorial

Editor Emily Ross  
reporter@imperial.ac.uk

You've heard it in the headlines—'the crunch' is officially here. With the value of the pound dropping, household bills creeping up and property prices plummeting, the economic climate is likely to affect us all. Harvard announced recently that it was "not invulnerable to the seismic financial shocks in the larger world", and the impact of the economic situation was high on the agenda at the **Rector's Away Day** earlier this month. Chief Operating Officer Martin Knight warned that while the College is currently in a strong position, we should start preparing now for likely tougher times ahead. See page 4 to read some of the suggestions discussed at the Away Day.

► *If you have any ideas for how to help minimise the effects of the credit crunch on the College please add your comments beneath the reports of the Rector's Away Day, which you can read at: [www.imperial.ac.uk/commsblog/blogs](http://www.imperial.ac.uk/commsblog/blogs)*

## Drug discovery Centre

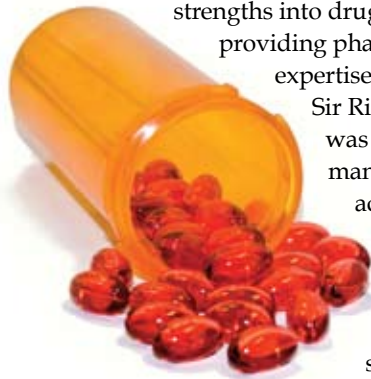
**Turning fundamental research into new medical therapies is the aim of the newly established cross-faculty Drug Discovery Centre at Imperial.**

The Centre translates the College's research strengths into drug discovery projects by providing pharmaceutical industry expertise. Pioneered by former Rector Sir Richard Sykes, the Centre was established to support and manage research projects from across the College.

It was set up to address the issue of the pharmaceutical industry lacking the breadth and diversity of expertise available at research intensive universities.

Dr Cathy Tralau-Stewart, Head of the Drug Discovery Programme at the Centre, says: "In the past drug discovery has been wholly undertaken within pharmaceutical companies, but now it is becoming more common for universities to participate as the size and attrition rate of pharmaceutical industry pipelines are disappointing. The Drug Discovery Centre is vital in coming up with novel, inventive, important medicines. We are here to support principal investigators at the College and help translate their research into future medicines."

—NAOMI WESTON, COMMUNICATIONS



For more information and to watch a video on the new centre visit: [www3.imperial.ac.uk/news/drugdiscovery](http://www3.imperial.ac.uk/news/drugdiscovery)

## NEWS update

# Graduate Schools win Times Higher award

Last month the Graduate Schools won a *Times Higher Education (THE) Award* for their scheme 'Your PhD: Finish Up and Move On' (FUMO) in the Outstanding Support for Early Careers Researchers category.

three-day residential course for first year PhD students.

Elaine Walsh, Course Director of FUMO, said: "After the first pilot in 2006 we worked closely with colleagues and alumni to develop the course to its current form. We are

grateful to the alumni of the College who attend part of the course giving students an insight into choices made by recent PhD graduates."

Professor Bernard Morley, Director of the Graduate School for Life Sciences and Medicine, said: "It is very much a team effort with substantial contributions

from both Graduate Schools. This national recognition for the quality and breadth of our transferable skills training programme consolidates the reputation of Imperial College at the forefront of developing our students."

—NAOMI WESTON, COMMUNICATIONS



(L-R): Head of RCUK, Ian Cameron, presents the *THE Award* to Professors Richard Kitney and Bernard Morley, Directors of the Graduate Schools

FUMO is a two-day non-residential interactive course, providing third year PhD students with guidance for successfully completing their PhD's. It is also designed to help them with the transition into their next step, be it further research, teaching, or working in industry.

This is the second time the Graduate Schools have won at the *THE Awards*. In 2006 they won in the same category for the development of an innovative

For more information on the Graduate Schools please see: [www.imperial.ac.uk/graduateschools](http://www.imperial.ac.uk/graduateschools)

## live jazz

Every Thursday night at Charing Cross. Everyone is welcome to come and listen, and musicians and singers are invited to turn up and collaborate with the core jazz band.

Free admission

Thursdays 20.00 Sports Club bar,  
Aspenlea Road entrance,  
Charing Cross Campus

For more information: 020 8846 1415 or [www.ccclub.co.uk](http://www.ccclub.co.uk)



## Imperial wins seven European Research Council Advanced Grants

Imperial has won seven awards in a prestigious and highly competitive Europe-wide funding round recognising exceptional research leaders, the highest number given to any UK university.

Imperial's European Research Council (ERC) Advanced Grants, worth over £13 million (around £10.5 million) altogether, will fund important and high quality research across the College.

Recipients of the new awards across the science, engineering and medical faculties of the College will tackle a range of problems, from the development of environmentally friendly solvents for the chemical industry to the advancement of new computer-based systems that can calculate the most

effective and safe dose of a drug or anaesthetic for patients.

The Imperial winners are:

- Professor Sebastian Johnston, who is finding new ways to treat asthma attacks.
- Professor Sergei Kazarian, who is developing new chemical analysis techniques.
- Professor Nicholas Mazarakis, who is researching more focused gene therapies for motor neurone diseases.
- Professor Stratos Pistikopoulos, who is advancing computer-based systems for drug delivery.
- Dr Vincent Savolainen, who is investigating how new plant species evolve on small, remote islands.
- Professor Michael Schneider, who is looking at ways to reverse the loss of muscle cells in damaged hearts.
- Professor Tom Welton, who is designing new environmentally friendly solvents for use in the chemical industry.

Welcoming the College's success, Rector

Sir Roy Anderson said: "The future of Europe depends on innovative research to drive knowledge and improve quality of life. By encouraging researchers to think creatively and take risks, this ERC funding stimulates the growth of really exciting and ground-breaking science."

—ABIGAIL SMITH, COMMUNICATIONS



## Inspire wins £500,000 from Foyle Foundation

Imperial's INSPIRE programme, which combines a Postgraduate Certificate in Education (PGCE) with specialised science communication training, has won £500,000 from the Foyle Foundation to help support the teacher training of 50 scientists over the next five years.

The places will be targeted at chemistry and physics postgraduates in particular, due to the shortage of teachers with a background in those subjects in London's state schools.

Director of INSPIRE

Dr Naheed Alizadeh says: "We hope that being taught by people with a love for their subject will overcome the fears that many pupils have about science — that it's too hard or boring — and draw out their natural thirst for discovering how the universe works."

As well as having highly qualified scientists in their classrooms, schools involved in the programme benefit from access to university-style training for A level students, school visits to the College's laboratories, science clubs, career advice for pupils and mini conferences for teachers on subjects such as climate change and stem cell research led by Imperial researchers.

Silas Krendel, Chairman of the Foyle Foundation, says: "I'm delighted that Foyle is working with Imperial College to help ensure that the next generation of scientific talent gets a top notch education. I hope together we will help many more young people to pursue their aptitude for science beyond school to A level and university."

—ABIGAIL SMITH, COMMUNICATIONS



To watch a video about the scheme visit:

[www3.imperial.ac.uk/news/foylefoundation](http://www3.imperial.ac.uk/news/foylefoundation)

For more information visit: [www3.imperial.ac.uk/news/ercgrants](http://www3.imperial.ac.uk/news/ercgrants)

### in brief

#### ► Debating tournament

The second Imperial College London Interschool Debate tournament was held on 1 November. 34 teams participated from Universities across the country, including Oxford, Cambridge and Kings College London. Named best speaker overall was Mr James Prior from Middle Temple. The winning team was Cambridge A, comprising Sam Block and Aliyah Akram. For more information on debating at Imperial, contact: [debate@imperial.ac.uk](mailto:debate@imperial.ac.uk)

#### ► New Pro Rector

Mr Edward Astle has been appointed Pro Rector (Commercial Development) with effect from 1 December 2008. His primary task will be to initiate, develop and deliver commercially exploitable collaborations nationally and internationally. An Oxford graduate and INSEAD MBA, Edward has been a director of National Grid for the past seven years, combining a divisional role with corporate business development.

#### ► Battle of ideas

On 1 November, Imperial hosted the reception for this year's Battle of Ideas — the annual debating festival at the Royal College of Arts. Guests were treated to live jazz from the Royal College of Music, a ballet performance, a cello recital, and lots of opportunity to continue debating on topics including arts, culture, health, science, environment, international relations and development.

#### ► Head of Department of Physics

Professor Joanna Haigh has accepted appointment as Head of the Department of Physics in succession to Professor Donal Bradley FRS, with effect from 1 January 2009. After taking a first degree and DPhil from Oxford, and an MSc from Imperial, Joanna Haigh joined the College as a Lecturer in 1984 becoming Professor of Atmospheric Physics in 2001. She is published widely on subjects including climate modelling.

## awards and honours

### Optics honour for Professor Dainty

Professor Chris Dainty (Physics) has been elected vice president of the Optical Society of America (OSA) for 2009. Following his term as vice president, Professor Dainty will automatically become president-elect in 2010 and then the society's president in 2011, followed by a one-year term as past president. His success follows that of Imperial's Senior Principal, Professor Sir Peter Knight, who was president of the OSA in 2004. Sir Peter now sits on the OSA Foundation Board of Directors and was awarded the Frederic Ives Medal earlier this year—the highest award given by the OSA in recognition of overall distinction in optics.

### iGEM competition

Nine Imperial undergraduates have won a gold medal and two additional top prizes at the 2008 International Genetically Engineered Machines (iGEM) competition held at the Massachusetts Institute of Technology in America.

The Imperial team, consisting of students from the Departments of Bioengineering and Life Sciences, won their prizes for a four-month project in which they designed and developed genetically engineered bacterial 'machines' which can produce self-assembling materials for use in clothing and medical applications.

The iGEM team has been working since July to develop a method of modifying small harmless soil bacteria called *Bacillus subtilis*, so that they can produce materials such as cellulose, an organic compound normally found in the cell walls of plants, on command. The team's idea is that once the cellulose has been produced by the bacteria it will 'self assemble' into a required shape, for use in a number of different applications such as making three dimensional scaffolds for tissue engineering.



Professors Freemont and Kitney, lead scientists at Imperial's synthetic biology laboratory, say that they plan to ensure the students' work is advanced, with more research being carried out into producing a biofabricator based on *Bacillus subtilis*.

—DANIELLE REEVES, COMMUNICATIONS



## Healthy Living Week

**In the first week of November, staff and students took part in Healthy Living Week, during which the community was encouraged to try a new sport, take a body health MOT and receive advice on making healthy choices in their everyday lives.**

The event was a collaboration between Sport Imperial, Imperial College Union and the Catering Department.

Staff from *Ethos*, the

sports centre on the South Kensington Campus, carried out basic health tests such as measuring BMI and blood pressure. Launched in 2007, the week is now an annual event. Neil Mosley, Head of Sport Imperial, said: "Working and studying in a dynamic environment like Imperial can be tough on the brain, so keep it fit and well nourished by eating a balanced and healthy diet."

In events run by Imperial College Union, clubs and societies offered free taster sessions including table tennis, capoeira and salsa. In

addition, the Union's vegetarian society handed out vegetarian snacks.

Managed by the Catering Department, a number of food outlets offered different healthy meals each day. College chefs also gave cooking demonstrations, teaching students new recipes.

Lindy Jamieson, Head of Catering Operations, said: "With people becoming more health conscious, there is a real need to offer healthy options, whether it be grab-and-go items or plated hot and cold meals."

—NAOMI WESTON, COMMUNICATIONS

## Strategy setting at Rector's Away Day



**Senior staff gathered in Windsor on 6-7 November to consider the College's strategic priorities. Opening his first Away Day as Rector, Sir Roy Anderson echoed US President-elect Barack Obama's acceptance speech. "I will listen to you, especially when we disagree," he said.**

Discussions focused both on high-level future initiatives, such as the development of Imperial's international activities, and issues that affect the day-to-day life of the College, such as the appropriate size of the student population.

Presenting on strategies to adapt to the current economic climate, Dr Martin Knight, Chief Operating Officer, said: "The best time to challenge assumptions is when you're on a roll; the worst time is when your back is

against the wall." Investing in the College's fundraising arm and increasing efforts to charge funders the full cost of research projects were among ideas to help maintain the College's strong financial position.

Other topics considered at the Away Day were the establishment of interdisciplinary institutes as authoritative voices on issues of global importance, the expansion of professional development activities and new methods to support recruitment of the best students.

Concluding discussions, the Rector urged everyone present to continue to express their views and to encourage that culture through the whole of the College. "We are a team," he concluded. "That is one of our key strengths."

—CAROLINE DAVIS AND ABIGAIL SMITH, COMMUNICATIONS

### Programme for the Rector's Away Day

- Introduction to strategic themes
- International strategy
- Adapting to the current economic climate
- Interdisciplinary institutes
- Business School update
- Athena SWAN Awards – going for gold
- Student recruitment
- Developing our educational portfolio

 Reports are available at: [www.imperial.ac.uk/commsblog/blogs](http://www.imperial.ac.uk/commsblog/blogs) Staff are encouraged to add their comments.

# media mentions

—DANIELLE REEVES, COMMUNICATIONS

THE DAILY TELEGRAPH ▶ 27 OCTOBER 2008

## Internet use leads to quicker decision-making but lack of empathy

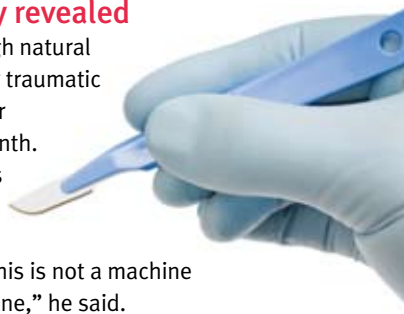
Scientists have found that internet use could improve brain function and speed up decision-making, but it comes at the expense of empathy and the ability to think in abstract terms, *The Daily Telegraph* reported in October. The authors of the new study suggested that it shows how our brains could evolve over the long term, with increased use of technology. Professor Igor Aleksander (Electrical and Electronic Engineering) urged caution, however, telling the *Telegraph*: “It may be that by using the internet you stimulate different parts of the brain. However, it would be difficult to show this could not be achieved through other situations.”



REUTERS ▶ 4 NOVEMBER 2008

## Robodoc: the future of robotic surgery revealed

A mechanical snake that can enter the body through natural orifices to perform operations without the need for traumatic incisions is one of the futuristic surgery tools under development at Imperial, *Reuters* reported this month. Explaining robotic surgery to patients is not always easy, but most are won over once the benefits are explained, Professor Lord Ara Darzi (SORA) told *Reuters*. “Patients need to be reassured that this is not a machine operating independently. This is an enabling machine,” he said.



THE TIMES ▶ 7 NOVEMBER 2008

## Pig transplants could save patients' bacon

Organs from pigs could be widely available for transplanting into human patients within a decade, Professor Lord Robert Winston (Humanities) told the media this month. A herd of as few as 50 pigs is expected to be kept as breeding stock to provide organs ‘to order’ and to slash waiting times for thousands of people needing transplants. Lord Winston and colleagues in California are attempting to breed pigs that have been genetically modified so that porcine organs are accepted by the human body instead of being immediately rejected. Professor Winston told *The Times* that “organs that might be transplantable” could be ready “within two to three years” and he expected the first “proof of principal” pigs to be bred next year.



## → Sign up for Imperial news

Join our mailing lists that bring regular Imperial news, information and website alerts to all subscribers. To sign up: [www.imperial.ac.uk/media/jointsignup](http://www.imperial.ac.uk/media/jointsignup)

Imperial College Healthcare **NHS**  
NHS Trust

### NEWS

## C. difficile rates fall by a third

The Trust is sustaining a more than 30 per cent reduction in cases of *C. difficile*, exceeding key national targets, according to the latest figures for cases of the healthcare associated infection (HCAI). The number of cases at the Trust went down to 74 from July to September compared to 111 in the same period last year. Similarly, from April to June there was a year-on-year reduction of 37 per cent.

The decrease has been attributed to a combination of approaches which involve prudent antibiotic prescribing, hand hygiene, appropriate use of isolation rooms, minimising ward moves and enhanced cleaning.

The Trust's Director of Infection Prevention and Control, Dr Alison Holmes, said: “This is a great improvement and highlights the enormous efforts being made by staff across the Trust to tackle infection. However, with winter coming and an increase in admissions of high risk patients such as the elderly, there is no room for complacency. All staff must be particularly vigilant about preventing infection and identifying potential cases early. Hand hygiene must be observed, there should be careful bed management, and above all we should be extremely careful when prescribing antibiotics.”

Reducing the amount of antibiotics which are prescribed is key in preventing the *C. difficile* bacterium, found in the large bowel. This is because antibiotics can destroy the bacteria which stop *C. difficile* from causing problems.

The Trust's success in combating HCAs was highlighted in the recent inspection by the Healthcare Commission (HCC). This praised Imperial College Healthcare for meeting national targets for reductions in MRSA and *C. difficile*. It also confirmed that the Trust is fully complying to standards of cleanliness, cleaning arrangements and has suitable hand washing facilities.

## St Mary's birth centre gets royal treatment

St Mary's birth centre was officially opened by Her Royal Highness The Countess of Wessex on 4 November.

The Countess, together with the Lord Mayor of Westminster, enjoyed a tour of the new facility and had an opportunity to talk to new mums about their experiences.

Pauline Cooke, consultant midwife and head of the centre, said: “The new centre is a great asset to local mums and staff. We've had lots of interest from expectant parents and we are excited about welcoming more and more families to the centre.”

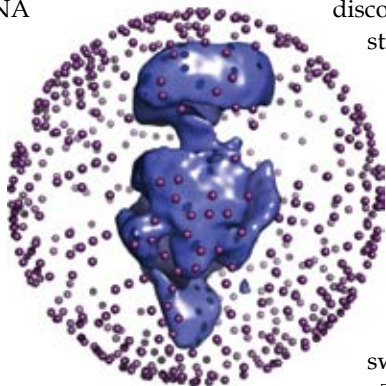
The birth centre cost £1.4 million and was part-funded by St Mary's Paddington Charitable Trust.

# How ‘molecular machines’ kick-start gene activation

How ‘molecular machines’ inside cells swing into action to activate genes at different times in a cell’s life has been revealed in new research published by Imperial researchers in the journal *Molecular Cell* on 6 November.

Genes are made of double-stranded DNA molecules containing the coded information an organism’s cells need to produce proteins. The DNA double strands need to be ‘melted out’ and separated in order for the code to be accessed. Once accessed, the genetic codes are converted to messenger RNAs (mRNA) which are used to make proteins. Cells need to produce particular proteins at different times in their lives, to help them respond and adapt to changes in their environment.

The new study outlines exactly how a molecular machine called RNA polymerase, which reads the DNA code and synthesises mRNA, is kick-started by specialised activator proteins. The scientists have



discovered that RNA polymerase uses a tightly regulated internal blocking system that prevents genes from being activated when they are not needed.

Using electron microscopy to look at the inner workings of bacterial cells, the researchers discovered that the DNA strand-separating process is kick-started when RNA polymerase is modified by an activator protein, which the cell sends to the site of the gene that needs to be switched on.

The lead author of the paper, Professor Xiaodong Zhang (Life Sciences), explained the significance of the team’s findings: “Understanding how the RNA polymerase gene transcription ‘machine’ is activated, and how it is stalled from working when it is not needed, gives us a better insight than ever before into the inner workings of cells, and the complex processes that occur to facilitate the carefully regulated production of proteins.”

— DANIELLE REEVES, COMMUNICATIONS

# Ethnic disparities in blood pressure management

People from black and south Asian communities in the UK are not benefiting as much as white people from doctors’ interventions to reduce their blood pressure, according to a new study published in the journal *Annals of Family Medicine*.

The study looked at the treatment of over 8,800 people with high blood pressure, visiting 16 family doctor practices across Wandsworth in south west London in 2005. It was carried out by researchers from Imperial and Wandsworth Primary Care Trust.

The study found that in spite of considerable efforts to improve the treatment of high blood pressure in the UK, including new performance-related pay measures for doctors, differences in management between white, black and south Asian patients have persisted.

It is known that black populations in the UK are more likely to suffer from high blood pressure than other groups. Managing patients with high blood pressure is important because they are at a high risk of developing a range of health problems including heart attacks, strokes and diabetes.

In the new study, black patients previously diagnosed with high blood pressure were significantly less likely to achieve an established target for their blood pressure than white or south Asian patients.

Dr Christopher Millett (Epidemiology, Public Health and Primary Care), the lead author of the study, said: “It is worrying that differences in blood pressure control between ethnic groups have persisted, particularly in high risk patients, in spite of doctors focusing a lot of effort on this area of patients’ health.”

— LAURA GALLAGHER, COMMUNICATIONS



# Super-secure quantum communications devices

A new detector device which can sense the presence of multiple individual photons, which are tiny particles of light, has been revealed in research published in *Nature Physics*.

Being able to sense the presence of individual photons is an important requirement for the development of future long-distance quantum communication devices and networks. One of the

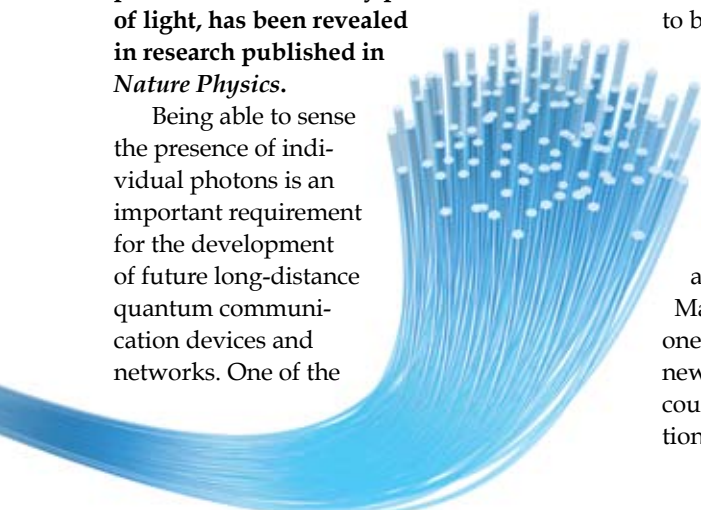
potential applications of this new detector is in devices for secret communications, which could allow information to be exchanged in total security guaranteed by the laws of physics, with no possibility of interception or eavesdropping.

Professor Martin Plenio (Physics and Institute for Mathematical Sciences), one of the team behind the research on this new device, explains how this development could lead to ultra-secure communications technologies in the future: “If you can

detect the presence of light at the individual photon level you make it impossible for any information being transmitted as light energy to go astray, unnoticed, en route from transmitter to detector. An exciting development in the future could be to use this fundamental science to ensure that information and messages are transported across long distances with absolute security, and reach their destination without being tampered with.”

— DANIELLE REEVES, COMMUNICATIONS

*“An exciting development in the future could be to use this fundamental science to ensure that information and messages are transported across long distances with absolute security”*





## Biofuels ‘manifesto’ creates a stir

An Imperial co-authored research paper mapping the way forward for sustainable biofuel production has been named one of the most influential studies of the last 10 years in its field.

The paper, entitled ‘The path forward for biofuels and biomaterials’, appeared in the journal *Science* in 2006, and has been cited in over 150 subsequent academic studies, according to Thomson ScienceWatch’s *Essential Science Indicators*, a resource which tracks research performance and trends in science.

Professor Richard Templer, Director of Imperial’s Porter Institute which conducts bioenergy and biomaterials research, who was one of the authors of the 2006 paper, explains that it was intended as a manifesto for the sustainable production of fuel, power, chemicals and materials in integrated biorefineries of the future.

One of the key points raised in the paper, Professor Templer says, is that the whole plant needs to be used, not just the parts from which it’s easy to extract sugar to make alcohol to burn as fuel: “Sugars, which can be used to produce alcohol as fuel, are found in many different parts of a plant,” he says. “They are the basic building blocks of cellulose and lignin, the long chain polymers which form cell walls, keep plants upright and constitute 80 per cent of the plant’s mass above ground.

“Getting sugars out of these parts of plants is not easy because cell walls are designed by nature to be tough to break down. But it’s vital that we find economic, environmentally friendly ways of doing so, to get the maximum value out of the plants we use for producing fuels and chemicals.”

Since this *Science* paper was published, the authors have been working on a technology which can release the sugars available in cell walls without using much energy.

—DANIELLE REEVES, COMMUNICATIONS

## A large waist can almost double your risk of premature death

Having a large waistline can almost double your risk of dying prematurely even if your body mass index is within the ‘normal’ range, according to a new study of over 350,000 people across Europe, published earlier this month in the *New England Journal of Medicine*.

The study provides strong evidence that storing excess fat around the waist poses a significant health risk, even in people not considered to be overweight or obese. It suggests that doctors should measure a patient’s waistline and their hips as well as their body mass index as part of standard health checks, according to the researchers from Imperial, the German Institute of Human Nutrition, and other research institutions across Europe.

“There aren’t many simple individual characteristics that can increase a person’s risk of premature death to this extent”

Comparing subjects with the same body mass index, the risk of premature death increased in a linear fashion as the waist circumference increased. The risk of premature death was around double for subjects with a larger waist (more than 120 centimetres or 47.2 inches for men and more than 100 centimetres or 39.4 inches for women) compared to subjects with a smaller waist (less than 80 centimetres or 31.5 inches for men and less than 65 centimetres or 25.6 inches for women). Body mass index is commonly used to assess if a person is of ‘normal’ weight.

Each 5cm increase in waist circumference increased the mortality risk by 17 per cent in men and 13 per cent in women.

The ratio of waist to hips was also revealed as an important indicator of health in the study. Lower waist-hip ratios indicate that the waist is comparatively

small in relation to the hips. The ratio is calculated by dividing the waist measurement by the hip measurement.

Waist to hip ratio varied quite widely in the European populations in the study. In 98 per cent of the study population, waist to hip ratio ranged between 0.78 and 1.10 in men and between 0.66 and 0.98 in women.

Within these ranges, each 0.1 unit higher waist-hip-ratio was related to a 34 per cent higher mortality risk in men and a 24 per cent higher risk in women.

An increased risk of mortality may be particularly related to storing fat around the waistline because fatty tissue in this area secretes cytokines, hormones and metabolically active compounds that can contribute to the development of chronic diseases, particularly cardiovascular diseases and cancers, suggest the authors.

Professor Elio Riboli (EPHPC), the European coordinator of the EPIC study, said: “Although smaller studies have suggested a link between mortality and waist size, we were surprised to see the waist size having such a powerful effect on people’s health and premature death. There aren’t many simple individual characteristics that can increase a person’s risk of premature death to this extent, independently from smoking and drinking.”

—LAURA GALLAGHER, COMMUNICATIONS



# Recognising commitment

On 28 October the College showed its appreciation of staff who have demonstrated excellence, commitment and talent at a ceremony hosted by the Rector, Sir Roy Anderson where a number of the 2008 Rector's Awards for Excellence were presented. *Reporter* spoke to the staff who won to find out what the awards mean to them.

## Leadership and management

There were two winners in the leadership and management category. The first, Jane Neary, Head of Catering and Conferencing, was nominated for the way she has led and managed her department through a period of restructuring and change.

Commenting on her award, Jane says: "It marked a very special moment in my career, an opportunity to reflect on the past two years and the many wonderful moments and achievements of our team."

The second winner was Professor Sandro Macchietto (Chemical Engineering and Chemical Technology) who was nominated for his leadership of the new interdisciplinary MSc in Sustainable Energy

Futures (see article on page 11).

Describing the development of the new course he says: "It involved the contribution of colleagues from 12 departments across Engineering, Natural Sciences and the Business School, so the award is also a tribute to their enthusiasm and hard work, and the strong support of the faculties and College."

## Equality excellence

The Equality Excellence Award recognises the commitment and efforts of staff who have worked particularly hard to promote equality

and diversity throughout the College.

The first of the winners was Althea Hartley-Forbes (Chemistry) who was nominated for her activities in relation to

Imperial as One, the College's Race Equality Advisory Group.

She says: "I felt very honoured to share the award with fellow colleagues for excellence in equality. We desire to see change here at Imperial, and with cooperation and support from the

College as a whole, we will continue to progress in the work that we do."

*"The most rewarding aspect of promoting equality and diversity is the feeling that you have played a part in helping to shape the future of others"*

The second winner was Betty Yue (Centre for Professional Development) who was nominated for her equality efforts within the College, which include setting up an annual event helping black and minority ethnic and Chinese students in their career advancement.

Betty says: "Receiving the award has made me feel very proud to work for Imperial, an institution which recognises the benefits and importance of having a multicultural workforce. I felt like a College celebrity on the day!"

The third prize-winner was Dr Mark Richards (Physics), who has made a significant impact on the race equality agenda. In particular he has been involved in initiatives to raise the aspirations of young people from black and minority ethnic backgrounds.

Dr Richards explains: "The most rewarding aspect of promoting equality and diversity is the feeling



Front row, from left to right: Dr Nick Sevdalis; Rector Sir Roy Anderson; Betty Yue; Althea Hartley Forbes; Joao Gomes. Middle row: Dr Darrel Francis; Monica Piercy; Professor Sandro Macchietto. Back row: Dr Mark Richards; Professor Nigel Brandon and Jane Neary.



that you have played a part in helping to shape the future of others and enabling them to fulfil their true potential.”

### Mentoring

The Mentoring Award recognises the importance of mentoring in helping staff to develop their careers.

Dr Darrel Francis (International Centre for Circulatory Health) was the first recipient of this award in recognition of his long track record of mentoring staff, and inspiring and encouraging others to become mentors as well.

Speaking about his mentees, he says: “The opportunity to see and support far more excellence in others than I could ever hope to achieve on my own, and thereby to gain lifelong friends, is the most rewarding aspect of being a mentor.”

The second mentoring award was won by Dr Nick Sevdalis (SORA). He was nominated for inspiring and supporting other staff as a mentor, creating networks for his mentees to ensure they also support each other.

He says: “To me, mentoring involves treating more junior colleagues the same way I was treated while I was doing my own doctoral work. When you’re junior in a highly competitive world class institution you need support and advice – you need to ‘find your feet’ and acquire confidence. I think this is what mentoring is about.”

### Customer service

There were two new Rector’s Awards presented at the ceremony. The first – the customer service award – was designed to underline the importance the College attaches to good customer service at all levels.

Joao Gomes, Deputy Events Manager (Commercial Services), won the customer service award, and is described as an “inspiration to his team” and an ever-present guarantee of quality.

He says: “To be nominated for this award came as a great surprise and recognises the Division’s continuous success and the efforts of all our team.”

The second winner of the customer service award was Monica Piercy, Manager of the Careers and Professional Development Service in the Business School, who was nominated for ensuring consistently high levels of recorded customer satisfaction. Describing the awards lunch she says: “It was lovely to talk to people who are involved with Imperial at a different level to me. That sort of conversation reminds you why Imperial is special.”

### Public engagement

The second of the new categories among the Rector’s Awards gives the College an opportunity to acknowledge staff who promote the public’s access to research and academia and inspire young people in science.

The winner of this award was Professor Nigel Brandon (Earth Science and Engineering) who was nominated for leading a programme to encourage individuals and groups to learn more about science as well as for his extensive experience of collaborative work with both schools and local communities.

He says: “The award recognises our work in engaging young people about the choices we face in how we generate and use energy. The team at the Energy Futures Lab have done a great job in developing an outreach

programme which engages young people in discussing the opportunities and challenges in the energy sector. The award is a great recognition of this effort.”

### Pastoral care

The Rector’s Awards for Excellence in Pastoral Care were awarded on Commemoration Day in October.

The first award went to Dr Bob Forsyth who was nominated because of his exceptional contributions during his time as Senior Tutor between 2002 and 2007. He says: “It was quite an honour to have my efforts during that period recognised in this way. I had the added bonus that my parents, both in their eighties, came down from Scotland to take advantage of the guest tickets for the Albert Hall.”


The second winner was Karen Makuch, specialist option convenor on the Environmental Technology MSc (Centre for Environmental Policy). She says: “It is great to see so many of our students go on to successful careers and fulfilling personal lives and I hope through my pastoral care role I have played a small part in shaping their futures.”

The final award in this category was awarded posthumously to Dr Gabrielle Sinnadurai, latterly Head of Teaching Associates within the Department of Computing.

Dr Sinnadurai became renowned for being constantly available and approachable, happy to help regardless of whether a request fell within official tutorial hours. Many students have said they genuinely doubt whether they would have succeeded on their course if it had not been for her help.

In recognition of her outstanding qualities it was announced that in future the Pastoral Care Awards will be named in her memory.

— JOHN-PAUL JONES, EMILY ROSS AND  
NAOMI WESTON, COMMUNICATIONS

 For a photo slideshow of the Rector’s Awards ceremony visit: [www3.imperial.ac.uk/news/awardsphotos](http://www3.imperial.ac.uk/news/awardsphotos)

“The ceremony is an opportunity to reflect more generally on how lucky we are to be home to dedicated talented and inspiring staff in every domain of the College.”

— Sir Roy Anderson

## mini profile

### Professor Mark Sephton

from the Department of Earth Science and Engineering



Professor Mark Sephton is currently involved in the next European Space Agency mission to search for life on Mars.

#### What do you do at Imperial?

"I am a Professor of Organic Geochemistry and Meteoritics, which means that I study the chemistry of organic molecules found in Earth rocks and asteroids. They can tell us a lot about the history of our planet and the solar system."

#### What have you discovered?

"Studying these tiny organic molecules has helped me to uncover past environmental changes which led to mass extinctions on Earth. I've also located organic matter on asteroids, which indicates that some of the building blocks of life on our planet may have originated from the solar system. Right now I am preparing to explore for life on another planet. I will be taking part in an unmanned 2016 European Space Agency mission to Mars."



#### What inspired you to become a scientist?

"As a young child I would sit in front of the TV and watch *Cosmos* [a science programme] presented by Carl Sagan. I always dreamed of doing this type of research but never imagined that I would actually get involved in the field."

#### What is the best thing about working in Earth Science and Engineering?

"The field gives scientists endless opportunities to break new ground. It contains rich pickings for an investigative scientist. You are only restricted by your own imagination and your ability to ask the right questions."

#### What would it mean for the human race if you did find life, no matter how small, on another planet?

"It would show that life is just a natural consequence of the right chemicals and conditions. Our existence would become just one example amongst the stars. A humbling and hopefully unifying thought for the human race."

—COLIN SMITH, COMMUNICATIONS

# science

from scratch



## Biofuel

"A biofuel is any type of fuel that is formed from dead plant or animal material. Although the word 'biofuel' originates from the early 1970s, simple biofuels such

as wood have been burned ever since the discovery of fire.

Biofuels have become increasingly popular in recent years, as they are a source of energy that can be replenished, and they do not contribute directly to global warming. This is because plants absorb as much carbon dioxide while growing as they give out when burned. However, growing crops for use as fuel may result in native plant species being removed from an area and the land available for food crops being reduced. An alternative option is to produce biofuel from plant and animal waste.

Examples of biofuel include bioethanol, formed by fermenting sugar, and biodiesel, formed by processing vegetable oil. These biofuels can be used in car engines."

—DR VALERIE NADEAU, SORA AND PHYSICS

✉ *Is there a phrase you would like us to explain? Email the editor: [reporter@imperial.ac.uk](mailto:reporter@imperial.ac.uk)*

## inventors corner

### The future of joint surgery

**Professor Justin Cobb is a practising surgeon and Chair of Orthopaedics at Imperial. Along with Brian Davies, Professor of Medical Robotics, Professor Cobb developed a robotic device to help surgeons carry out joint replacement surgery more precisely and non-invasively.**

The project began in 1991, and it took eight years to build a final product by creating and trialling a number of prototypes. In 1999 Professor Cobb co-founded spin-out company Acrobot Ltd, which was set up to develop this technology. It was started with a small team of four Imperial postdoctoral researchers.



Today surgeons from Imperial College Healthcare NHS Trust and other UK hospitals are using Acrobot's 'Navigator', a mechanical tracking navigation system, and 'Sculptor', a bone sculpting robot, in joint replacement surgery, and Professor Cobb uses them himself at Charing Cross Hospital.

Acrobot also offers a range of other products for orthopaedic surgery and now employs 26 staff. The company is backed by investment from Imperial Innovations, London Technology Fund and PUK Ventures.

Professor Cobb concentrates mainly on the clinical aspects of the technology as Clinical Director of Acrobot. Speaking about the company's future, he says: "I hope we can continue to develop products that become standard tools for surgeons—that improve the outcome and reduce the cost of surgery."

Professor Cobb believes that technology development projects grow by nurturing communication with colleagues from other

fields. He notes that the College is actively doing this and points to the Musculoskeletal Technology Network in the Institute of Biomedical Engineering, which promotes, facilitates and coordinates multi-disciplinary research programmes to generate technology that benefits patients, as a good example.

Professor Cobb is working with the network to develop next-generation devices for orthopaedic surgery. He explains: "Imperial engineers have created a platform technology in Acrobot that allows us to design an entirely new world of smaller, smarter devices. The future is really exciting."

—MICHELLE COTTERILL, IMPERIAL INNOVATIONS

► *Imperial Innovations has an established process for translating research into marketable products. If you have an idea with commercial potential visit: [www.imperialinnovations.co.uk](http://www.imperialinnovations.co.uk)*



The 2008 graduates at Stag Holt wind farm

## Energy MSc expands

Last month a new wave of students arrived at the College to begin the MSc in Sustainable Energy Futures. The MSc began as a pilot scheme in October 2007 for 24 students but it proved to be so popular that the course has expanded to 34 this academic year.

The MSc is geared towards people with industrial experience from a range of disciplines including engineering, physics and finance. It also brings together 11 departments in the Faculty of Engineering, the Faculty of Natural Sciences and the Business School.

Professor Sandro Macchietto, course director of the MSc, explained why there has

been such a good uptake: "Today people are aware that the solution is not going to come from simply switching off lights, or by economic moves. Fundamental changes are needed which involve the development of new technology and the process of fitting technology within existing and new systems. Students need to understand the entire picture."

### Format

The course not only focuses on market mechanism pricing, economics and carbon efficiency plans,

but also on how technologies can work together.

Throughout the course experts are brought in to give students an insight into real issues affecting industry and the market.

In addition, the MSc students get the chance to conduct a research project, supervised by staff from different departments. Academics from a range of disciplines are encouraged to support these projects.

One of the graduates from the course, Ali Al Qahtani, talked of his experience on the MSc: "Any professional working in the energy sector would love to better under-

stand the scientific and technological aspects of energy resources and systems, how energy markets operate, and how policymaking can affect these markets. My MSc project *Development of gasoline surrogate fuels for HCCI engines* has helped me gain the knowledge needed to select and test new fuel formulations for new engines. With this experience, I am currently responsible for the design and development of the next generation petroleum-based fuels for future internal combustion engines at the Saudi Aramco R&D Center."

—EMILY ROSS, COMMUNICATIONS

*"Any professional working in the energy sector would love to better understand the scientific and technological aspects of energy resources and systems"*

## Teaching science in Samar

This September five students from Imperial travelled to the island of Samar in the Philippines to teach science and mathematics to primary school pupils.

The group were chosen to participate in the project following a competition run by Steven Chambers, a third year mathematics student, along with his friend Lisa Carter from UCL, with support from the College and the Royal Commission for the Exhibition of 1851 (see *Reporter* 188).

As the levels of resources in Samar are incredibly basic the students were encouraged to think creatively and spent time preparing lessons before they went.

One of the winners, Neha Obhrai (Aeronautics), pictured left, relates: "I chose to teach magic tricks that would capture the children's attention and encourage them to engage with the science behind these tricks. My favourite lesson was explaining the physics behind the Levitron [a levitating toy], and giving students magnets and allowing them to feel the sensations of repulsion and attraction."

*"It is difficult to put what I learnt into words, but it was an experience that I will always carry with me."*



Adam Aziz (Civil and Environmental Engineering) also got the opportunity to go to Samar. He says: "I really enjoyed teaching the kids my rocket science course. This gave the kids a chance to make their own water rockets on the beach. They loved it and really enjoyed watching their rockets fly 30 feet into the air!"

Looking back at the experience, a third student on the scheme, Katrina Ostman (Physics), says: "It is difficult to put what I learnt into words, but it was an experience that I will always carry with me. The trip made me even more determined to work with issues related to development in the future, and made me more interested in teaching. It showed me that it really is possible to make an impact on people's lives, if you are just motivated and work hard to get there."

"I don't know how many times they mentioned that we came from one of the best universities in the world. They saw us coming as a big honour for them."

—EMILY ROSS, COMMUNICATIONS



### Caving club

Equipped to the nines with helmets, ropes, hammers and torches, members of the Imperial College Caving Club spend their weekends and summer holidays underground exploring new passages, crawling along narrow crevices and using single rope technique—a method for ascending and descending into caves.

Jana Carga (pictured right) is a trainee toxicologist at Charing Cross Hospital Campus, and an avid caver. She is originally from western Slovenia, one of the

key locations for caving in the world. She first encountered the IC Caving Club in Western Slovenia, at caves in the Tomina area, and since moving to the UK and to Imperial she has continued to pursue her hobby.

There are two key aims of expedition caving. The first is to look for new caving entrances and plot new locations using GPS. The second aim is discovering unknown passages, stream ways and waterfalls, and seeing impressive underground formations such as stalactites and stalagmites.

Jana says: “From a scientific point of view I’m really intrigued in the difference between the stalactites—some are really white and pure, others are curved and have abnormal shapes.”

Jana explains what keeps her coming back: “I’m often sent forward when we are caving in a group as I’m small. I love thinking that I’m entering somewhere no one’s ever been. There is a mix of anticipation and excitement about exploration—what’s going to be behind the corner, an exotic formation or a dead end?”

—EMILY ROSS, COMMUNICATIONS



“what’s going to be behind the corner, an exotic formation or a dead end?”

**Meeting times:** Every two weeks over the weekend as well as trips abroad in Easter and summer

**Society size:** 15

## Imperial staff golf society day

Last month 30 members of staff descended upon the Surrey National Golf Club to battle it out at the Imperial College Golf Society Day, organised by Sport Imperial. Simon Passey (Finance) said: “It was the first time I had gone to the Sport Imperial golf day and I had a great time despite the wet weather.” Simon, together with Grant Danskine (Sport Imperial) and John Anderson (Finance) went on to claim the team prize with 89 points, while Paddy Jackman (Commercial Services) achieved the winning individual score with 34 points. Neil Mosley (Sport Imperial) got the ball nearest the pin and, at 30 feet, Lorraine Brooks (Engineering) sunk the putt of the day.

—JOHN-PAUL JONES, COMMUNICATIONS

► For more information on the staff golf society please contact: [n.gore@imperial.ac.uk](mailto:n.gore@imperial.ac.uk)

## Transferable skills course success in Singapore

The first International Transferable Research Skills Development course for PhD students was held in Singapore at the beginning of term run by Imperial’s International Office and the Graduate Schools.

The aim of the programme was to deliver a course to help develop a group of early stage PhD students from Imperial, Nanyang Technological University (NTU), National University of Singapore (NUS) and A\*Star—a governmental organisation dedicated to raising the level of science and technology in Singapore. The programme was also designed to improve relations between the UK and Singapore.

The course, which was sponsored by the Graduate Schools Roberts fund,

was a version of the Graduate Schools Research Skills Development course, which is designed to equip students with all the transferable skills required to complete a PhD successfully. For some Imperial students this programme was part of a bigger development opportunity which involved spending three weeks on an Asian Business, Culture and Philosophy course in Thailand.

A ceremony was organised to mark the launch of the course in September which

was attended by Imperial’s Pro Rector for Postgraduate and International

Affairs, Professor Mary Ritter, and Professor Richard Kitney, Head of Imperial’s Graduate School for Engineering and Physical Sciences.

—JEN MARTIN, INTERNATIONAL OFFICE

► There are plans to run the course again next year in both Singapore and Hong Kong. All supervisors who have links with any of the institutions mentioned above or with Hong Kong University may like to encourage any new PhD students to apply to the Graduate Schools to join one of these courses. All enquiries should be emailed to: [graduate.schools@imperial.ac.uk](mailto:graduate.schools@imperial.ac.uk)



# Flying high over Imperial

Last month Martin Sayers (Communications) took a helicopter ride to film all of Imperial's campuses. The footage will feature in an induction DVD to be sent to all new staff, and was also shown to students during Freshers Week.



Martin flew in a Twin Engine Squirrel which had a video camera suspended below the helicopter, controlled by remote from inside. He says: "I was surprised that I was able to recognise the Imperial buildings from the air as it was a completely different view. I noticed details I'd never spotted before – for example, the Charing Cross building is in the shape of a cross, and the buildings behind St Mary's near the dock are built in shapes of ships."

Martin also has personal experience of flying planes. He flew for the first time 12 years ago and has continued ever since, even flying a jet fighter in 2001 with the Lithuanian aerobatic squad.

—WOOMI LEMONIOUS, COMMUNICATIONS

To see the film shown during Freshers Week, visit: [www.youtube.com/imperialcollegevideo](http://www.youtube.com/imperialcollegevideo)

## Course review

time management  
power workshop



Attendee: Denis Murphy, Support Services

### Why did you go on the course?

I attended the course as I found myself struggling to meet critical deadlines for reports and strategic documents.

### Can you describe the course format?

The workshop was an hour long so the course instructors got straight to the point and immediately targeted the core issues.

### What did you do?

We were encouraged to review our working environment (e.g. noisy, too hot, too cold, poor lighting) and identify those times and instances that impact on ability to concentrate on getting work done (busy open plan office, accessibility, interruptions by colleagues etc.) and look closely at how work is allocated in terms of priorities. We then critiqued each other's routines and offered advice on more efficient use of time.

### What did you learn?

The course allowed me to identify key tasks, to allocate time each day and to set targets for completion – I found it very worthwhile.

► For more information on power workshops visit: [www.imperial.ac.uk/staffdevelopment/workshops/prof\\_dev/timepw](http://www.imperial.ac.uk/staffdevelopment/workshops/prof_dev/timepw)

# Construction manager for Southside wins gold

Last month Jason Curtis, who was the Construction Manager in charge of the College's Southside student residences project, won Gold in the Chartered Institute of Building Construction Manager of the Year awards ceremony held at the Grosvenor Hotel in London. Jason, from construction company Laing O'Rourke, was nominated by Steve Howe (Estates) and Paddy Jackman (Commercial Services) who worked closely with him throughout the project.

Jason described the challenges of the project: "There was an immovable deadline – on 29 September 2007 students from all sides of the world were going to be arriving and we wanted to welcome them to hotel standard, high quality accommodation."

Paddy Jackman explained that Jason developed a relationship with the College and residents – even giving each resident his mobile number – to ensure there was minimal distur-

bance throughout the building work.

With the help of 350 workers, Jason deployed an array of modern, innovative construction techniques. These included offsite manufacturing of many elements, including precast concrete columns, walls and slabs, panellised sections of brickwork and limestone, and pre-fabricated bathroom pods.

Jason has been working in Abu Dhabi since finishing Southside and flew back for the awards. On winning the award he said: "It was fantastic to be recognised by the industry after 21 years of working in construction, and it was a great way to end such a successful project. But if it wasn't for the support of Steve and Paddy I wouldn't have achieved this award."

Following the success of Southside, over the last 16 months Laing O'Rourke has been developing the new Eastside Residences for the College. The buildings will open in the new academic year.

—EMILY ROSS, COMMUNICATIONS

*"There was an immovable deadline – on 29 September 2007 students from all sides of the world were going to be arriving"*



## Southside key facts

- 406 bed spaces
- 218 en suite single bedrooms
- 77 en suite twin bedrooms
- 24 kitchens
- 90 recycling bins
- 200 bike storage racks
- 3 common rooms
- 3 laundries
- 4 lifts
- 1 social space
- 4,000 keys

## celebrating long service



### 20 years

**Samantha Delamaine** • Research Group Administrator (Earth Science and Engineering)

**Stephen Durham** • Professor of Allergy and Respiratory Medicine (NHLI)

**Ian Hodkinson** • Professor of Logic and Computation (Computing)

**Irene Roberts** • Professor of Paediatrics Haematology (Investigative Science)

### 30 years

**Simon Bastians** • Senior Technician, Teaching (Chemistry)

**David Featherbe** • Chief Teaching Technician (Natural Sciences)

**Alan Jones** • Minor Works Coordinator (Estates)

*Staff featured celebrate anniversaries during the period of 7–10 November. Data is supplied by HR and is correct at the time of going to press.*



## Lost and found

'Overshadowed' by Lara Viana will be exhibited as part of the 'Lost and Found' exhibition showing from 26 November to 19 December in the Blyth Gallery, which is on level 5 of the Sherfield Building on the South Kensington Campus. Other artists to feature in the exhibition are Dominic Kennedy and Rachel Tharlby.

► For more information on arts events at Imperial please visit: [www.imperial.ac.uk/arts/events](http://www.imperial.ac.uk/arts/events)

## Capoeira on campus

Capoeira is an Afro-Brazilian dynamic and fluid art form which brings together martial arts and dance to the rhythm of the berimbau, a single-string percussion instrument from Brazil. During Healthy Living Week the Imperial College Union Capoeira Club ran an open session on Dalby Court for people to give it a go.

► [www.imperialcollegeunion.org/clubs-and-societies/a-to-z/c/capoeira](http://www.imperialcollegeunion.org/clubs-and-societies/a-to-z/c/capoeira)



## Letters to the editor

Dear Editor,

I did enjoy reading Anna Nyburg's spirited introduction to the Department of Humanities in the College newspaper for that sleepy lecturer. It is a little dispiriting to think that her splendid letter was needed 46 years after it all began. Constant vigilance!

With warmest best wishes,

**Professor Sinclair Goodlad**  
Electrical and Electronic Engineering

Dear Editor,

*Reporter* is indeed a voice to the community of Imperial. However, it would be good to have a section focusing on equality. *Reporter* can get involved by including articles on the progress of the College's Race Equality Advisory Group, Imperial as One. It could mention things like Black History Month, which is celebrated in October, and other festivals which are celebrated throughout the year. I'd like *Reporter* to speak to staff and students of black, minority and ethnic backgrounds and hear their views and any ideas they may have. This will not only be encouraging to the staff and students but it will also reinforce the commitment the College has made to make Imperial a good place to work.

Best regards,

**Althea Hartley-Forbes**  
PA/Secretary, Department of Chemistry  
Imperial as One Communications Officer

**Editor:** We welcome contributions from across the College. *Reporter* endeavours to illustrate the breadth of activity that takes place across the Imperial community. Please send your contributions and ideas to [reporter@imperial.ac.uk](mailto:reporter@imperial.ac.uk).

► If your letter is featured in *Reporter* you will win a cup of coffee and a sizeable piece of cake, courtesy of Catering Services:

[www.imperial.ac.uk/eatinganddrinking](http://www.imperial.ac.uk/eatinganddrinking)



Please note: the editor reserves the right to edit content for clarity and space.

## Welcome

### new starters

Miss Charlotte Allan, Chemistry  
Mr Saheed Ambali, Finance  
Ms Radhika Anand, NHLI  
Mr Adrien Angeli, Computing  
Dr Anne Aucher, Cell and Molecular Biology  
Ms Adenike Badekale, Faculty of Medicine  
Mr Mark Baker, NHLI  
Ms Ceri Ball, Investigative Science  
Dr Jonathan Baxter, Clinical Sciences  
Dr Jesse Berent, EEE  
Dr Frank Beyrau, Mechanical Engineering  
Ms Michelle Bonnelame, Human Resources  
Mr Themistoklis Bourdenas, Computing  
Mr Colin Campbell, Faculty of Natural Sciences  
Mr Adam Candy, ESE  
Miss Liz Carter, Human Resources  
Mr Stanford Chen, SORA  
Mr Daosheng Cheng, Mathematics  
Dr Antony Constantinou, Cell and Molecular Biology  
Mr Andrea Cortini, Medicine  
Mr Enrico Cristante, NMH  
Dr Gwyneth Davies, NHLI  
Mrs Jeewa De Alwis, Faculty of Natural Sciences  
Dr Hugues de Lavallade, Investigative Science  
Mrs Fani Deligianni, Clinical Sciences  
Mr Christopher Dolan, Faculty of Medicine  
Dr Lynsey Duffell, SORA  
Miss Juliet Edworthy, Humanities  
Dr Francesca Fiegna, Biology  
Dr Lucy Garvey, Medicine  
Dr Jan Gebauer, Cell and Molecular Biology  
Dr Jeremy Gow, Computing  
Mr Gerry Greyling, Faculty of Medicine  
Miss Caroline Grundy, Medicine  
Dr Michelle Heathcote, Faculty of Medicine  
Miss Victoria Heaton, Faculty of Medicine  
Mr Tony Hewitt, Business School  
Mr Andrew Huntbatch, Computing  
Dr Emaddin Kidher, SORA  
Mr Duncan King, Faculty of Medicine  
Mr Sameer Lakhani, Business School  
Mr Benjamin Latham, Development and Corporate Affairs  
Dr Wenhua Leng, Chemistry  
Dr Craig Lincoln, Molecular Biosciences  
Dr Karen Logan, Investigative Science  
Mrs Deirdre Long, Physics  
Ms Nadine Lossi, Cell and Molecular Biology  
Mr Walter Lucchesi, NMH  
Dr Karl Lyons, Physics  
Mr Jon Matthews, Finance Division  
Miss Jenny McCallen, ICT  
Miss Anat Melamed, Investigative Science  
Dr Helga Mikkelsen, Cell and Molecular Biology  
Ms Fatima Monaf, Sport and Leisure  
Dr Krzysztofa Nagorska, Investigative Science  
Miss Els Noorda, International Office  
Mrs Haseena Noushad, EYEC  
Mr Michael Nutley, Estates  
Mr Christopher Payne, Computing  
Ms Julie Pinhorne, Estates  
Dr Michele Pioppi, Physics  
Ms Michelle Quayle, Faculty of Medicine

Dr Lucio Raimondo, Aeronautics  
Mr Alfredo Ramos, Chemical Engineering  
Dr Daniela Riano Barros, Clinical Sciences  
Ms Fiona Richmond, Human Resources  
Dr Emilse Roncancio Diaz, Investigative Science  
Mr Vincent Rouilly, Molecular Biosciences  
Dr Christina Schumacher, EPHPC  
Dr Barry Seemungal, NMH  
Dr Wahid Shahrezaei, Mathematics  
Dr Zahra Sharif Khodaei, Aeronautics  
Mrs Lesley Shread, NHLI  
Ms Jennifer Siegel, NMH  
Mr Jan Silhan, Molecular Biosciences  
Miss Mary Spry, Estates  
Miss Joanna Stawikowska, Chemical Engineering  
Dr Lynne Sykes, SORA  
Dr Lionel Tan, Investigative Science  
Mr Neil Taylor, Humanities  
Mrs Catherine Taylor, EYEC  
Mr Thomas Thorne, Molecular Biosciences  
Ms Laura Tornatore, Investigative Science  
Dr Martin Towner, ESE  
Mr Robert Valentine, Investigative Science  
Dr Sanjay Vivekanandan, ICT  
Dr Nicholas Warner, ESE  
Dr Mark Wenman, Materials  
Mrs Shawnelle White, SORA  
Dr Susannah Wyles, SORA  
Dr Fang Xie, Materials  
Dr Yongming Zhang, Mathematics  
Dr Yingru Zhao, ESE  
Ms Min Zhao, Cell and Molecular Biology

## Farewell

### moving on


Miss Ceri Alabi, Student Residences  
Dr Elizabeth Asbury, NHLI (9 years)  
Mr Gary Ashwell, Faculty of Natural Sciences  
Dr Wiesiek Babik, Biology  
Miss Iryna Bezruka, Catering Services  
Dr Andreas Blum, Chemistry  
Dr Brian Bourke, Biology  
Mrs Carole Bullock, Conference Office (18 years)  
Miss Maryanne Burden, Conference Office (7 years)  
Mr Ling-Kang Chao, Student Residences  
Dr I-Ming Chung, Chemical Engineering  
Dr Sonya Clegg, Biology  
Dr Samantha Cooray, Investigative Sciences  
Dr Andrew Cope, Kennedy Institute (18 years)  
Mr Nigel Crane, Security Services (6 years)  
Dr Derek Crockford, SORA (5 years)  
Mr Samuel Day Weber, Medicine  
Mr Sridar Dhandapani, Mechanical Engineering  
Mr Benoit Disch, Centre for Environmental Policy  
Mr Leonard Farrell, Catering Services (27 years)  
Miss Natalie Fernandes, NMH  
Mrs Lente Gaanderse, Humanities  
Mr Norman Gariwa, Medicine  
Dr Heidi Gauci Grech, SORA  
Professor Vernon Gibson, Chemistry (13 years)  
Dr Ruth Graham, Faculty of Engineering (6 years)  
Professor Kym Jarvis, Centre for Environmental Policy

Dr Manuja Kaluarachchi, NMH (5 years)  
Dr Tulay Karasu, SORA  
Dr Harsha Kariyawasam, NHLI  
Miss Hyun-Jung Khang, SORA  
Ms Nadia Khorasani, NHLI  
Dr Paul Knight, Chemistry  
Dr Giolanta Kogianni, SORA  
Dr Siva Krishnadasan, Chemistry  
Dr Anthony Lemarie, Investigative Science  
Miss Mun Lim, NHLI  
Dr Anthony Maher, SORA  
Miss Gemma Marsh, NHLI  
Mr Tim McIlhinney, Faculty of Medicine  
Miss Emma Murray, Student Residences  
Mr Manu Nair, Student Residences  
Mr Rohan Nanda, Student Residences  
Mr Diogo Narciso, Chemical Engineering  
Dr Oliver Niemeier, Chemistry  
Dr Jan Obloj, Mathematics  
Dr Vinod Patel, Medicine  
Mrs Nirmala Patel, Estates (18 years)  
Ms Sarrah Peerbux, Library Services  
Dr Grisha Pirianov, SORA (7 years)  
Dr Mark Placzek, Chemical Engineering  
Mr Adam Pope, Student Residences  
Dr Carol Pridgeon, Cell and Molecular Biology  
Dr Alexander Pudney, Cell and Molecular Biology  
Dr Rob Pullar, Materials  
Mr Mohsin Ramzan, Business School  
Mrs Imelda Rand, Catering Services (14 years)  
Dr Thierry Rayna, Computing  
Dr Joanna Riddoch-Contreras, NHLI  
Mr Paulo Silva, Catering Services  
Dr Po-Wah So, Clinical Sciences (6 years)  
Ms Natsuko Suwaki, Cell and Molecular Biology  
Dr Pooja Takhar, NHLI  
Ms Tharsana Tharmalingam, Kennedy Institute  
Mr Efstathios Vassiliadis, Kennedy Institute  
Mr Ganesh Vigneswaran, Student Residences  
Mrs Natalija Vladi, Catering Services  
Dr Arsen Volkov, Investigative Science  
Mr Nick Watkins, Bioengineering (22 years)  
Dr Fiona Watt, Kennedy Institute  
Ms Sarah West, Investigative Science  
Miss Sabine Winkler, Medicine  
Dr Jessica Wray, NHLI

## retirements

Dr Andrew Forrest, Mechanical Engineering (30 years)  
Mr Simon Sarsfield, Kennedy Institute (8 years)

This data is supplied by HR and covers the period 19 October–8 November. 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 at [reporter@imperial.ac.uk](mailto:reporter@imperial.ac.uk). The Editor reserves the right to edit or amend these as necessary.

moving in. moving on.

### what's on

20 NOVEMBER 13.00–13.45

#### Lunchtime concert: Coull Quartet

Haydn Quartet in D minor, Op. 76 'Fifths'; Mozart Quartet in B flat, K458 'The Hunt'

Read Theatre, Level 5  
Sherfield Building

☒ First come, first served



26 NOVEMBER 12.45–18.00

#### Education Day 2008: from strategy to action

Hosted by the Strategic Education Committee and the Centre for Educational Development

Lecture Theatre 220, Mechanical Engineering Building

☒ Registration in advance:  
edudevsec@imperial.ac.uk

26 NOVEMBER 17.30–18.30

#### My date with density: making mountains out of molecules



Professor Stephen Curry, Division of Cell and Molecular Biology

Inaugural Lecture

Clore Lecture Theatre,  
Huxley Building

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

26 NOVEMBER 17.30–18.30

#### Artificial atoms: more useful than real?

Professor Raymond Murray,  
Department of Physics

Inaugural Lecture

Blackett Lecture Theatre, Blackett Building

☒ Registration in advance:  
l.brown@imperial.ac.uk

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

27 NOVEMBER 17.30–18.30

#### The molecular basis of eukaryotic transcription

Professor Roger Kornberg, Professor in Medicine at Stanford University

The 21st annual Schrödinger Lecture

Lecture Theatre G16, Sir Alexander Fleming Building

☒ Registration in advance: l.brown@imperial.ac.uk

3 DECEMBER 17.30–18.30

#### Simple concepts for complex structures



Professor Bassam Izzuddin,  
Professor of Computational Structural Mechanics

Inaugural Lecture

Lecture Theatre G34,  
Sir Alexander Fleming Building

☒ Registration in advance:  
l.brown@imperial.ac.uk

5 DECEMBER 17.30–18.30

#### How to become a millionaire – a description of the Hodge conjecture

Professor Thomas,  
Department of Mathematics

Inaugural Lecture

Clore Lecture Theatre, Huxley Building

☒ Registration in advance: l.brown@imperial.ac.uk

11 DECEMBER 18.30–19.30

#### Are we in a sixth mass extinction?

Professor Andy Purvis, Professor of Biodiversity



Annual Children's Christmas demonstration lecture

Lecture Theatre G16, Sir Alexander Fleming Building

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

### take note

#### Education Day 2008

To celebrate excellence in teaching and learning at Imperial, Professor Julia Buckingham (Pro Rector for Education) and the Centre for Educational Development are launching the first Imperial Education Day on 26 November from 12.45–18.00, open to all staff members with interests in teaching and related educational matters. The event will include an address from the Rector and a lecture from Professor Lord Robert Winston.

✉ For more information:  
edudevsec@imperial.ac.uk



### classifieds

#### Wanted: one-bedroom flat or flatshare

A one-bedroom flat or a room in a two-bedroom flat is needed, located with easy access to South Kensington and Paddington, for a long or short let, starting December 2008/January 2009. Ideally it would be in a purpose built block with the usual facilities. Please contact: ditaylor@imperial.ac.uk

**To place a classified** please submit no more than 50 words to the Editor, Emily Ross, by email at [reporter@imperial.ac.uk](mailto:reporter@imperial.ac.uk) for a chance for your advertisement to appear. The Editor reserves the right to amend advertisements as necessary.

### volunteering

#### Telephone buddy



Project: Phone friends  
Project ID: 2129  
Organisation: Thomas Pocklington Trust  
Location: SW12 (nearest tube Clapham South)

The Thomas Pocklington Trust is the leading provider of housing, care and support services for people with sight loss in the UK. Volunteers are needed to provide a befriending service from the Balham Resource Centre which offers support to visually impaired people who are unable to access centre-based or face-to-face services. The service does not provide formal counselling or advice, but it offers social support, information about services and basic emotional support, including – where appropriate – peer support. Volunteers are required to make a phone call of approximately 15 minutes duration to each individual user on a Wednesday every week. It is essential that they become familiar with the needs of the user and become their 'keyworker', offering general social contact, and practical and emotional support.

#### For more information

To take part in a scheme or to hear more about volunteering in general, contact Petronela Sasurova  
• 020 7594 8141  
• [volunteering@imperial.ac.uk](mailto:volunteering@imperial.ac.uk)

For full details of over 250 volunteering opportunities visit:  
[www.imperial.ac.uk/volunteering](http://www.imperial.ac.uk/volunteering)

Subscribe to the weekly newsletter by emailing  
[volunteering@imperial.ac.uk](mailto:volunteering@imperial.ac.uk)



First published in 1995, *Reporter* aims to share stories of Imperial's community and to highlight individual and College achievements. *Reporter* is published every three weeks during term time in print and online at [www.imperial.ac.uk/reporter](http://www.imperial.ac.uk/reporter).

The copy deadline for issue 199 is Wednesday 26 November. Publication day is 11 December. 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.

#### Editor

Emily Ross  
[reporter@imperial.ac.uk](mailto:reporter@imperial.ac.uk)  
+44 (0)20 7594 6715

#### Layout

Caroline Prew

#### Principal photography

Imperial College London

#### Additional photography

Chris Edwards, Richard Chatterton