

Creating an icon

Plans revealed for the new
face of Imperial

 CENTRE PAGES



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editorial

Editor Emily Ross
reporter@imperial.ac.uk

The spring term brings about a wave of themed weeks from Raising And

Giving to Fairtrade and Green Week—which see students and staff taking action on issues they care about. These events certainly have to compete for our attention—the internet serves up a reason for us to celebrate every day of the year. March, for example, kicks off with **National Pig Day** and other highlights include Peanut Butter Lovers day, a day to reflect on the invention of rubber bands and not to forget Mother’s Day on 22 March. While cynics may regard these ‘celebrations’ as manufactured simply to benefit card companies, they do provide a focus that can lead to impressive results. Take, for example, the **£58,000 raised by the medical students during RAG week** (see page 12). There’s definitely something to be said for making every day count.

Fire at Northwick Park

A fire broke out at Northwick Park Hospital on Wednesday 11 February causing major disruption at the site, but no injuries.

Around 40 fire-fighters rushed to the scene following reports of a blaze in the basement at around 14.20. College staff and students were evacuated and the research laboratories and undergraduate medical education centre were temporarily closed. The

“Most of the facilities are now operational and it is hoped that full mains power will be restored before Easter.”

Hospital’s A&E department and other clinical services were also severely affected with patients being transferred to other hospitals.

Imperial laboratories on the site have been connected to the Hospital’s emergency generators but frequent power interruptions are causing problems, particularly for researchers using sensitive equipment. Campus Administrator Paul Purcell said: “Most of the facilities are now operational and it is hoped that full mains power will be restored before Easter. The cause of the fire is thought to be an electrical fault but this is still being investigated by the fire service.”

— EMILY ROSS,
COMMUNICATIONS



NEWS update

Research reserve launched

Making the most of university libraries, while safeguarding access to information, is the aim of a new scheme launched at the College last month.

Imperial is leading the UK Research Reserve (UKRR) programme, which will see low-use research journals stored and maintained by the British Library, freeing up university library space to be used more creatively.

Access to the journals will be through an ordering and delivery service at the British Library.

“We want to use the space in our libraries in a more creative way whilst securing knowledge for the future,” explains Frances Boyle, manager of the UK Research Reserve programme at the College.

Imperial has recently completed an 18-month pilot project to see how the UKRR programme would work in practice. The library



The UKRR programme allows more space for creativity

on Imperial’s Hammersmith Campus played a key role in the pilot with over 1,100 metres of space being released.

Deborah Shorley, Director of Library Services, adds: “Libraries are being transformed before our eyes, with IT giving us opportunities for innovation as never before. We are determined to provide all our library users with the full range of services they need, either on campus in new exciting spaces like level one of the Central Library on the South Kensington campus, or remotely.”

The UKRR programme will be implemented across all of the other campuses at Imperial. It is a five-year programme funded through a £9.84 million grant from the Higher Education Funding Council for England.

— NAOMI WESTON, COMMUNICATIONS

► For more information visit: www.ukrr.ac.uk

Imperial College London

Ask the Rector

Q&A Wednesday 11 March • 12.30

The Great Hall, South Kensington Campus

Submit your questions at:
www.imperial.ac.uk/rector/yourquestions



► Attendance will be on a first come, first served basis. The event will be streamed live online and available as a podcast afterwards. Visit the above website for details.

100 women, 100 visions

One hundred portraits of female staff and students – scientists and engineers from all disciplines and levels of academic work – will be on display in the Main Entrance on the South Kensington Campus during the week following International Women's Day on 8 March.



"We wanted to illustrate the real diversity of individuals who study and work here."

The portraits have been taken by Jackie King, recipient of the British Professional Photographer of the Year Award, and aim to capture a sense of the growing community

Above: a postgraduate student from the Department of Chemical Engineering and Chemical Technology. Right: an undergraduate student from the Department of Physics holding up a drawing of a star constellation

of women scientists and engineers across the College.

The exhibition was designed and commissioned by the Student Society for Women in Science, Engineering and Technology (SET).

Ellin Saunders, PhD student in the Department of Electrical and Electronic Engineering and co-organiser of the event, says: "We wanted to illustrate the real diversity of individuals who study and work here.

There is an excitement about the future among us and a commitment to change across College which we felt was important to capture and communicate."

— NAOMI WESTON, COMMUNICATIONS



Creation of National Transport Research Centre



A new £7.25 million research centre aimed at tackling the UK's transport policy issues was announced by the Minister of State for Transport, Lord Andrew Adonis, during a visit to Imperial on 5 March.

The UK Transport Research Centre (UKTRC) will be jointly run by Imperial, the University of Leeds and University College London (UCL).



Research will be carried out by leading academics at universities from across the country. The College's Centre for Transport Studies (CTS), based in the Department of Civil and Environmental Engineering, will be one of the major contributors to the UKTRC, providing academic and administrative input. Professor John Polak, Director of the CTS (pictured above), explains: "The UKTRC will

formalise the already strong relationship we have with our colleagues at Leeds and UCL, and more widely throughout the transport research community. It will also provide new funds, an administrative infrastructure, and an academic focal point for transport research in this country.

Imperial is set to benefit by being at the very hub of all this activity."

One of the principal objectives of the UKTRC is to enhance multi-disciplinary working between transport researchers and social scientists to generate new evidence and insights into key transport problems.

One of its first projects will involve researchers from Imperial and the LSE investigating the long-term effects of major transport projects on the development of London, the impact they have on the city's economy and labour market, and their success in easing commuter congestion. These may include the Crossrail project, a major rail network that will link Essex to the City, Heathrow and Maidenhead by 2017. The research outcomes will be used to guide future investment in major transport infrastructure projects.

— COLIN SMITH, COMMUNICATIONS

in brief

▶ Imperial makes a difference with One water

Imperial has taken a small step in helping to provide clean free water to those who really need it by raising money through the sale of approximately 150,000 bottles of One water over the last 18 months. Thanks to students and staff who bought the water, the College has been able to donate a One water play pump to Ngabeni Primary School in Maxesibeni, South Africa.

▶ Diversity lecture

On 17 February Ram Gidoomal CBE presented the 2009 Diversity Lecture entitled *Multicultural societies under pressure: sustaining dialogue*. During the event Mr Gidoomal—a Crown appointee on Imperial's Court and Council—discussed ways of improving the dialogue between different ethnic and cultural groups and reviewed progress that Imperial has made in terms of equality and diversity.

▶ www.imperial.ac.uk/media/onlinelectures

▶ EPSRC Doctoral Training Grants

In February, Imperial received its Doctoral Training Grant (DTG) of £7 million from the Engineering and Physical Sciences Research Council (EPSRC). The grant will enable the College to recruit and provide industry training for the next generation of engineers and scientists. This year, DTG funds were awarded to 45 universities and higher education institutions in the UK with Imperial among the top three grant recipients.

▶ Director of Development

Judy Beard has been appointed as Director of Development in succession to Fiona Kirk. Ms Beard will join Imperial from The Management Centre, a not-for-profit training and consultancy organisation, where she has been Principal Management Consultant since October 2007. Prior to this appointment she worked for 30 years in the charity sector, most recently at Macmillan Cancer Support. Ms Beard will take up her post in early May.

awards and honours

Professor Holden's new fellowship

Professor David Holden (Investigative Science) is one of 73 microbiologists elected to become Fellows of the American Academy of Microbiology. Fellows are elected annually through a highly selective, peer review process, based on their records of scientific achievement and original contributions that have advanced microbiology. There are now over 2,000 Fellows representing all subspecialties of microbiology, including basic and applied research, teaching, public health, industry and government service.

Professor Nethercot OBE wins 2009 Gold Medal

Professor David Nethercot, Head of the Department of Civil and Environmental Engineering, will be presented with the Institution of Structural Engineers' highest accolade, the Gold Medal, this April. The award recognises his contribution to raising the profile of structural engineering.

Global surgery honour for Professor Hakim

Professor Nadey Hakim (SORA) has been appointed the first Max Thorek Professor of Surgery by the International College of Surgeons. The International College of Surgeons is a global organisation with active, practising members in over 100 countries. The honour was officially awarded to Professor Hakim at the International College of Surgeons World Congress in Vienna, Austria, on 4 December 2008.

Female engineer wins top award

Hanna Sykulska, a postgraduate in Electrical and Electronic Engineering, has been elected Young Woman Engineer of the Year for 2008 by the Institution of Engineering and Technology. She is the first candidate from academia to have achieved this honour in its 30-year history.

Feldmann wins Curtin Medal

Professor Marc Feldmann (Kennedy Institute of Rheumatology) was awarded the 2007 Curtin Medal last November. The award is given annually to Australians who have made an outstanding contribution to medical science. Professor Feldmann was awarded the medal for his work on autoimmune disease, in particular for his discovery of the role of cytokines and for developing treatments for rheumatoid arthritis.

Another Varsity win for the medics



With 42 teams, 21 matches and nine different sports including rugby, football, lacrosse, squash and water-polo, the day was packed with fierce competition.

Following a tight game this year's J.P.R. Williams Cup match between the 1st XV's of the Imperial College Union and Imperial Medicals rugby teams was 7-7 at full time. During extra time the Medicals seized the initiative taking three points from a penalty and then scoring a try to win 15-7, making

This year's annual Varsity day took place on 25 February with matches between Imperial College and Imperial Medicals at Harlington sports ground, *Ethos* and Wilson House during the day. In the evening, the J.P.R. Williams Cup match was played at the Richmond Athletic Association ground.

them the J.P.R. Williams Cup champions for the seventh time.

It wasn't all misery for the Imperial College teams, as they were the clear overall winners in the Varsity competition, beating their medical counterparts by 13.5 to 7.5.

—LEENA BARRETT (COMMERCIAL SERVICES)

New induction materials to inspire new staff

New staff will be welcomed to Imperial with a new suite of induction materials available from the end of March. The outputs of the College's Induction Project, which has been underway since early 2008, the resources aim to give new staff a professional, relevant and inspiring introduction to Imperial.

From later this month offers of employment will be sent out with key contract information and a DVD providing insight into Imperial's activities. All other important documentation and guidance previously issued to new staff in hard copy has been placed on the 'new staff' web pages and in an induction folder that they will receive on their

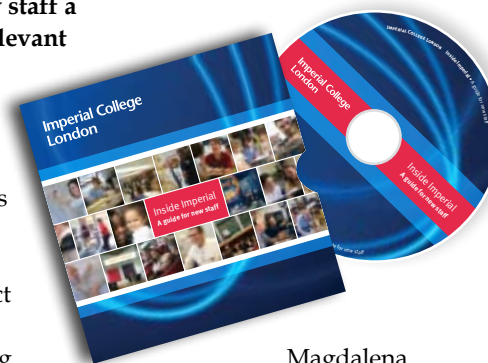
first day. The Imperial Insights course (formerly Introduction to Imperial) run by the Learning and Development Centre has also been revamped, offering new staff a chance to network, as well as to learn about the College.

personally value: teamwork, innovation, energy, ideas, effectiveness, collaborations and dreams becoming a reality. It is why I came here and I imagine other new staff will be inspired to be part of it too."

Louise Lindsay, Director of HR Operations and Induction Project Director, said, "The review of induction materials included representation from all areas of the College. I would like to thank all those who contributed time and effort to ensure that the final products give a professional and welcoming impression to our new starters".

—CAROLINE DAVIS, COMMUNICATIONS

► Every department will receive a copy of the new DVD in the next month. Visit the website for new staff at: www.imperial.ac.uk/newstaff



Magdalena Bak-Maier, Learning and Development Consultant, who describes the development opportunities available at Imperial on the DVD, said of the 12-minute film: "There are many key messages that come through about Imperial which I

media mentions

—DANIELLE REEVES, COMMUNICATIONS

BBC NEWS ONLINE ▶ 11 FEBRUARY

Pregnancy heart deaths 'warning'

New research suggests doctors should be more vigilant about the threat of heart disease during pregnancy, warns BBC News Online.



The number of maternal deaths related to heart disease in England, Wales and Northern Ireland has doubled since 1990 to 2.27 per 100,000. The Imperial research team behind the new study told the BBC that the rise was due to unhealthy lifestyles. Dr Emily Gelson (SORA) said: "We must be more aware of this problem, diagnose it and then manage it to help halt the worrying rise in deaths."

THE SUN ▶ 13 FEBRUARY

Doctor nose best

Michael Jackson's nose has been infected by a superbug, and may collapse, reports *The Sun*. The paper revealed that Michael Jackson was seen with painfully inflamed skin on his hands and face, as he visited a Beverly Hills clinic. MRSA expert Professor Mark Enright (Epidemiology, Public Health and Primary care) told *The Sun* that it was important the pop legend received swift treatment if he is suffering from a severe infection that is resistant to antibiotics. He said: "A wound infection like MRSA on a delicate area like the nose could cause the tissue to collapse."



THE SUNDAY TIMES ▶ 14 FEBRUARY

La geek, c'est chic

A new generation of women scientists have taken their geek status and made it something to be proud of, claims *The Sunday Times*. According to journalist Alice Fordham, these researchers are blazing a trail through the traditionally male-dominated areas of maths and physics, seeing no discrepancy between what they call "hardcore science" and a penchant for Topshop. Hanna Sykulska (Electrical and Electronic Engineering) describes the excitement of helping design a microscope that landed on Mars: "It's hugely exciting and very challenging... We are really explorers, making discoveries, going to places where nobody has gone before."



THE DAILY TELEGRAPH ▶ 17 FEBRUARY

Star Trek-style gadget checks patient suitability for medicines

A Star Trek-style medical device the size of a BlackBerry could soon be used by doctors to check patients' genetic suitability to different medicines, reports *The Daily Telegraph*. A prototype of the



handheld device has been developed by Imperial engineers. From a drop of saliva or cheek swab it can analyse DNA to tell if a patient has the right genetic fit for a particular drug. Researcher Professor Chris Toumazou (Institute of Biomedical Engineering) told *The Daily Telegraph*: "The

Snip Doctor could provide another layer in the treatment process that could help GPs to personalise treatments according to the genetic requirements of each patient." [See page 6 for the full story].



The science of sleep

A new centre to help children who have problems with breathing when they sleep has opened at St Mary's Hospital, bringing together researchers, doctors and nurses from Imperial College London and Imperial College Healthcare NHS Trust. The centre will offer a special sleep diagnostic service for children, and it will also enable researchers from the College to conduct studies into sleep disorders.

The centre will help diagnose and plan treatment for children whose breathing slows down or stops when they sleep because of conditions like autism, asthma, allergies and neuromuscular disease. Children will spend the night in one of two specially designed bedrooms where their breathing pattern, vital signs and brain wave patterns will be monitored during the different stages of sleep. Using state-of-the-art equipment, children will be assessed to pinpoint abnormalities, with the results compiled to suggest how each child can best be treated.

"Children have very different sleep patterns to adults and sleep medicine is a relatively new area in children's care"

Dr Parviz Habibi, Clinical Reader in the Division of Medicine and Consultant Respiratory Paediatrician for Imperial College Healthcare NHS Trust, said: "Children have very different sleep patterns to adults and sleep medicine is a relatively new area in children's care. We are really excited about the new facility, which is one of a few dedicated purely to diagnostic research."

Professor John Warner, Head of the Department of Paediatrics, added: "Sleep serves an incredibly important function for a child's health, growth and development. Many, many diseases can disturb sleep and breathing, and have a knock-on effect on a child's behaviour and performance at school. In some respects sleep disturbance can actually exacerbate disease so understanding the interaction between different diseases and sleep is very important."

—CAROLINE WELLER, IMPERIAL COLLEGE HEALTHCARE NHS TRUST PRESS OFFICE

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On-the-spot testing for drugs tolerance

A handheld device to predict whether patients will respond adversely to medication could be on the market soon.

Imperial and its spin-out company DNA Electronics have developed a prototype healthcare device that assesses whether patients are genetically predisposed to suffering adverse reactions to prescription drugs. They are now carrying out trials to test its effectiveness, thanks to a new partnership with the pharmaceutical company Pfizer.

The device undergoing trials is the Single Nucleotide Polymorphism Doctor, or SNP Dr (pronounced 'snip doctor'). The SNP Dr analyses genetic variations found in DNA called single nucleotide polymorphisms (SNPs), the parts of human DNA that make us all respond differently to disease, bacteria, viruses, toxins or medication. The SNP Dr may be able to detect genetic sequences linked with metabolism—a slow metabolism can make drugs stay in the body longer, causing adverse side effects, while a fast metabolism can process medication too quickly for it to have any effect.

Principal investigator Professor Chris Toumazou (Institute of Biomedical Engineering) says: "The SNP Dr could provide another layer in the treatment process that could help GPs to personalise treatments according to the genetic requirements of each patient."

Dr Leila Shepherd, Chief Technology Officer of DNA Electronics, adds that the SNP Dr could also pave the way for new types of drugs to reach patients. "At the moment, some cancer fighting drugs are deemed uneconomical because they only work for a certain subset of patients. If doctors had a method of screening patients to see whether these drugs work, then suddenly these therapies would be more cost-effective to use."

—COLIN SMITH, COMMUNICATIONS

HIV treatment test on the horizon

A rapid and inexpensive test to analyse the immune system of people living with HIV/AIDS is closer to manufacture, thanks to a \$7.3 million grant from the Bill and Melinda Gates Foundation to Imperial's CD4 Initiative.

The initiative was established in 2007 to develop an easy to use point-of-care test, costing around \$2, which can rapidly measure the numbers of CD4+ T-cells in a person's blood.

Healthcare workers rely on a CD4 count to make decisions on how HIV-positive patients should be treated. The new test would enable patients to find out within

minutes if they should begin antiretroviral treatment.

CD4+ T-cells are critical for a healthy functioning immune system and are slowly destroyed during the course of HIV infection. When the numbers of CD4+ T-cells



"Our new test will have a huge positive impact for people living with HIV across the world."

in a person's blood drop, this makes them increasingly vulnerable to illness.

Imperial's academic and industrial partners in the CD4 Initiative have been developing three prototypes

for the new test. One of these will be chosen for manufacture and mass-production in 2010.

"There has been a lot of progress increasing access to life-saving HIV drugs in the developing world, but the lack of access to essential diagnostic tests like a CD4 test is a major barrier to providing the best possible care," said Dr Hans-Georg Batz (Medicine), Director of the CD4 Initiative.

"Research shows that if you wait until you're sick to start treatment, you have a much poorer outcome than if you start based on CD4 count. Our new test will have a huge positive impact for people living with HIV across the world."

—LAURA GALLAGHER, COMMUNICATIONS

'Wildlife knowledge in decline' reveals study

Our ability to conserve and protect wildlife is at risk because we are unable to accurately gauge how our environment is changing over time, says a new study, published in *Conservation Letters* on 13 February. The study shows that people may not realise species are declining around them, or

that their local environment may have changed dramatically since their parents' and grandparents' days.

This could be bad news for conservation projects because if people do not perceive any degradation of the world around them, they may be less willing to sign up to protecting their environment.

The new study provides the first evidence of so-called 'shifting baseline syndrome'—a conservation theory stating that people's perception of the environment is determined by what they see now. To test the theory, scientists surveyed villagers in Cherry Burton, Yorkshire, on changes in the local bird populations over the last two decades. Older residents could more accurately name the three most common species in the past, whereas young and old residents were equally accurate in naming the current common species.

"In the course of a generation, changes in bird populations have been collectively 'forgotten' by the community"



A starling, one of Britain's most common birds

Sarah Papworth, lead author of the paper and a PhD student in the Department of Life Sciences, comments: "In the course of a generation, changes in bird populations have been collectively 'forgotten' by the community. If this trend continues, this knowledge will be lost altogether in a couple more generations, and people will have little idea that their local wildlife was ever any different to what they see today with their own eyes."

—DANIELLE REEVES, COMMUNICATIONS

Search narrows for genes linked to ‘seeing’ sounds

A new study has identified specific chromosomal regions linked to auditory visual synaesthesia, a neurological condition characterised by seeing colours in response to sounds.

The research, published by Cell Press in the *American Journal of Human Genetics* (5 February), makes major strides towards identifying the genes underlying synaesthesia together with an improved understanding of typical and atypical cognitive development.

In synaesthesia, which affects less than one per cent of the population, stimulation of one sensory pathway results in experiences in another pathway (e.g. hearing sounds triggers colours) or a different facet of the same pathway (e.g. reading black text triggers colours).



Lead study author, Dr Julian Asher (Medicine), designed a study to look for genes linked to auditory-visual synaesthesia. Researchers identified four candidate regions linked with susceptibility to synaesthesia, but found no support for an earlier theory of linkage to the X-chromosome. They did, however, identify a number of interesting genes.

“The region on chromosome 2 with the strongest linkage is particularly interesting as it has been linked to autism,” says Dr Asher, who carried out the work as part of his PhD at the University of Oxford. “Sensory and perceptual abnormalities are common in autism spectrum conditions, and synaesthesia is sometimes reported as a symptom.”

The findings reveal the complexity of the genetic basis of auditory-visual synaesthesia.

Dr Asher explains: “This study comprises a significant step towards identifying the genetic substrates underlying synaesthesia, with important implications for our understanding of the role of genes in human cognition and perception.”

—PRESS OFFICE, CELL PRESS

Paving the way for new superbug drugs and vaccines

The detailed structure of a protective ‘jacket’ that surrounds cells of the *Clostridium difficile* superbug, and which helps the dangerous pathogen stick to human host cells and tissues, has been revealed in part in the 1 March issue of *Molecular Microbiology*.

Imperial scientists working on the research hope that unravelling the secrets of this protective layer’s molecular structure might reveal possible targets for new drugs to treat *C. difficile* infections.

The S-layer is believed to help *C. difficile* cells colonise the human gut, where they release sickness-causing toxins.

The researchers used X-ray crystallography techniques to produce the first ever high-resolution images of the structure of LMW-SLP, one of the



C. difficile bacteria

two proteins that make up *C. difficile*’s S-layer. The team also produced lower resolution images of the two S-layer proteins linked together to form the ‘building block’ which makes up the layer.

Understanding exactly how the S-layer is formed, and how it works, could reveal new ways of fighting *C. difficile* infections, because without the S-layer, the pathogen cells cannot function, and die.

The team behind the new study say that the long term aim is to use this structural knowledge to design a drug that will target the S-layer, leading to cell death, and the defeat of infection.

“We’re confident that continuing this work will reveal new targets for effective drugs to beat this dangerous pathogen”

Professor Neil Fairweather (Life Sciences) comments: “We’re confident that continuing this work to better understand the formation of this protective coat and its exact function

will reveal new targets for effective drugs to beat this dangerous pathogen, and could even lead to an effective vaccine.”

—DANIELLE REEVES, COMMUNICATIONS

Meningitis bacteria mimic human cells

The way in which bacteria that cause bacterial meningitis mimic human cells to evade the body’s innate immune system has been revealed in new research.

The study, published in *Nature*, could lead to the development of new vaccines that give better protection against meningitis B, the strain which accounts for the vast majority of cases of the disease in the UK.

Bacterial meningitis mainly affects infants and young children, but is also often found in teenagers and young adults, and approximately five per cent of cases of bacterial meningitis result in death.

The research team looked at a protein called ‘factor H binding protein’ on the outside coat of bacteria called *Neisseria*

meningitides, which is the most common cause of bacterial meningitis. They explored how this protein stops *Neisseria meningitides* being attacked by a part of the immune system called the complement system.

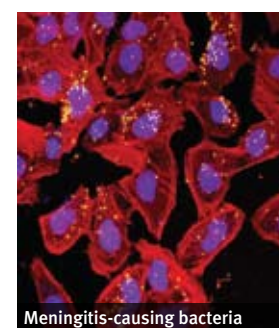
The researchers found that factor H binding protein mimics a type of sugar molecule that the body uses on its own cells to ensure that its own

immune system does not attack them. This disguise means that the *Neisseria meningitides* bacteria can avoid being detected and destroyed by the complement system.

“Meningitis B can be a devastating

disease and there is an urgent need to create an effective vaccine against it,” said Professor Christoph Tang (Investigative Science), co-lead author on the Imperial study.

“Our study gives us a clearer understanding of how meningococcal bacteria shield



Meningitis-causing bacteria

themselves from the immune system and it suggests that we could tailor new vaccines to fight this important human pathogen.”

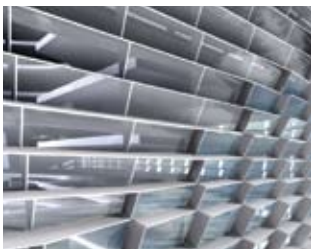
—LAURA GALLAGHER, COMMUNICATIONS



An artist's visualisation of the new-look front entrance on Exhibition Road

Introducing the South East Quadrant

Last month Imperial embarked on a major programme to transform the 'South East Quadrant' (SEQ) of the South Kensington Campus.



Top to bottom: a plan of the new Exhibition Road Building with a view of the Queen's Tower; architectural detail from the new building

The eight-year project will radically change the face of Imperial's main campus and lead to new ways of working for the Faculty of Engineering by co-locating the Departments of Aeronautics, Civil and Environmental Engineering, Computing, and Mechanical Engineering in close proximity to the Business School.

Professor Stephen Richardson, Principal of the Faculty of Engineering, says:

"Physical proximity really does enable people to collaborate more – and do so more productively. The SEQ programme will make the Faculty of Engineering better able to tackle some of the world's major problems, such as global water provision, green or sustainable aviation and global resource management. The Faculty desperately needs to update its facilities and the new programme will provide the teaching and research infrastructure to enable it to continue to be world-class."

The SEQ project is being undertaken by top architects Foster + Partners, who are famous for the design of the gherkin-shaped skyscraper in the heart of the City, and closer to home, buildings on the South Kensington Campus including the Main Entrance and Sir Alexander Fleming Building.

The project will lead to the four

engineering departments and the Business School sharing all their teaching spaces. Most of these will be newly developed state-of-the-art facilities in the Skempton Building, Mechanical Engineering and the new Exhibition Road Buildings.

In addition to the shared teaching spaces, the development will include new laboratories in the Mechanical Engineering Building and new lecture theatre space in Skempton.

Break-out study spaces for the four engineering departments will replace reading rooms, common rooms and computing rooms. All the new spaces will be designed with flexibility in mind to accommodate current and evolving teaching methods, and will be fitted with advanced audio-visual technology.

Another major element of the SEQ programme is the development of a new façade for the South Kensington Campus. The design concept is a series of interlocking bay windows that will run along Exhibition Road and turn the corner to continue down Imperial College Road.

In addition, a lower ground concourse suitable for exhibitions and displays will be created which will be visible from the street. This will provide an opportunity for Imperial to promote its world-class activities on Exhibition Road.

Staff from across the College have been involved in the development of the project, in particular the four departments in Engineering, the Business School and Building Projects.

David Begg, Principal of the Business School, comments: "The Business School is rapidly growing its activities in executive education, research and teaching. The building of the SEQ is essential for the School in realising its ambitions for these areas. In particular, I am very excited about the prospect of a dedicated executive education suite, tailor-made to allow us to teach professionals, which will impact on the business of today."

Given the current economic climate Professor Richardson says: "The College has to do things like this if it is going to remain a great institution. It has to have a vision beyond the next few years and it is a splendid act of faith in the future of engineering."

— EMILY ROSS, COMMUNICATIONS

"It is a splendid act of faith in the future of engineering."



Building the SEQ

Stephen Reid, Project Programme Director for the development of the South East Quadrant, talks to *Reporter* about the biggest project the College has seen in over 40 years.

What does the SEQ project mean for the College?

SEQ will provide the College with a dramatic and inspirational new building, an improved entrance, and the Mechanical Engineering Building and part of the Skempton Building will be transformed. It will create an outstanding addition to London's architecture. For staff and students within the affected departments it will provide additional lecture theatres, new shared teaching spaces, new offices, new research facilities and new break-out spaces for students. The creation of a concourse-type space at lower ground floor level, visible from Exhibition Road, will provide a unique opportunity to display and share our activities.

Where has the money for the project come from?

The project is being funded by Higher Education Funding Council for England (HEFCE), College money and through fundraising. So far the College council has approved spend of approximately £75 million for the first phase of the project.

How long will the building work last?

There will be three phases. The first, mainly focusing on Skempton and Mech Eng levels 0 and 1, will be completed by early 2011. The next, involving demolition work and the building of the Exhibition Road Building and refurbishing Mech Eng levels 2 and 3, will be completed in early 2014, while the last, involving refurbishment of Mech Eng levels 4 to 8, will be completed in early 2016.

What stage is the College at now?

As part of the first phase, we have started work on Skempton, constructing a mezzanine floor and moving and building technical laboratories—all set to be completed by the middle of this year, after which work will start on the construction of a large lecture theatre and additional teaching space. The new facilities will help house students unable to use Mech Eng teaching spaces during future phases. We are also applying for planning permission for the Exhibition Road Building.

How many people are involved in the project?

There is a team of about 100 designers, engineers, planners, specialist consultants and project managers contributing to the programme of work. Large numbers of Imperial staff are also actively participating in user groups, programme management, planning applications and decant work.

How have staff been represented in the process?

Staff from all over the College are directly feeding into the design brief through a number of different user groups. For example, there is a Teaching User Group, headed up by Anthony Bull [Bioengineering], which is looking into the future and identifying what teaching and learning will look like after 2015 and what facilities are required to support these activities. There is also a very strong governance structure in place.

How much of the South Kensington Campus will be affected?

Over the life of the programme there will be a significant impact on all occupants of the Mech Eng Building and on some parts of the Business School, and residents of Skempton are already being affected. We are carefully addressing issues of noise, dust, decanting and the provision of teaching spaces.

When will be the main period of disruption for the College?

When we demolish the black tower, the building above the College Main Entrance, we shall need to shut the Main Entrance. This may inconvenience anyone using the site though we shall try to keep the period it is shut to a minimum.

What is being done to minimise the disruption to staff and students?

We are carefully scrutinising the construction logistics to ensure we demolish and build at the most convenient time in the academic cycle. We've a top quality team working on the programme and we're carefully scheduling when and how we can move staff and students in the quickest and least disruptive way.

If staff have any comments or questions about the project where should they go?

The main hub of information will be the SEQ website [see below, right] where you will find an overview of the project, the most up-to-date SEQ developments and a list of contacts who will help to answer your queries.

Development zone

PHASE ONE

(completion by early 2011)

Phase one will see the construction of space for lecture theatres in the Skempton Building and the relocation of some laboratories. While the building work takes place these laboratories will be partially replicated within space freed up elsewhere in the same buildings.

Levels 0 and 1 of the Mechanical Engineering Building will be refurbished. The undergraduate thermofluids teaching labs will have new equipment, such as a small jet engine, thermodynamic benches and flow visualisation rigs. Similarly the applied mechanics undergraduate laboratories will have new testing machinery and automatic data-logging through advanced instrumentation.

The Department's general testing facilities and its specialist research laboratories on levels 0 and 1 are also to be redeveloped. In total three undergraduate teaching laboratories will be fully renovated, as will four major research laboratories.

PHASE TWO

(completion by early 2014)

Phase two will see the demolition of the annex and the black tower (the building standing above the College Main Entrance) and the construction of the Exhibition Road Building, which will include shared teaching spaces.

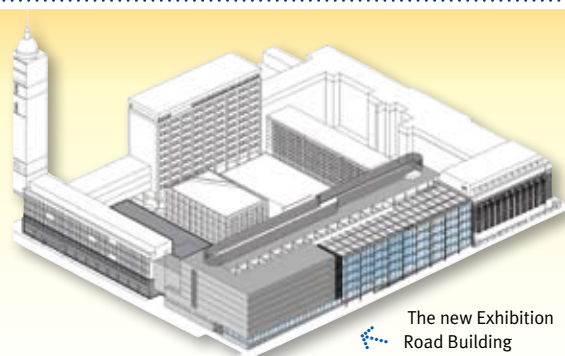
PHASE THREE

(completion by early 2016)

The final phase will see the refurbishment of floors 4–8 of the Mechanical Engineering Building which will provide additional flexible office and research space. The final floors of the Mechanical Engineering Building will also be completed in this phase.

Foster and Imperial

Foster + Partners has been working with the College since the 1990s to create some of the state-of-the-art buildings on the South Kensington Campus. These include: the Sir Alexander Fleming Building (finished in 1998), the multidisciplinary Flowers Building (completed in 2001) and the Faculty Building (completed in 2004). F+P also completed the refurbishment of the Main Entrance in 2004 as well as the creation of the Business School's new facilities, which include a six-storey drum containing six circular lecture theatres.



The new Exhibition Road Building

► For more information on the SEQ, see: www.imperial.ac.uk/seq

mini profile



Professor Hugh Spikes

Professor Hugh Spikes reveals the secret of smooth tasting yoghurts, reliable engines and replacement hip joints.

You work in the Tribology Group, what is tribology?

The word tribology was invented in the mid 1960s to describe the science of friction, lubrication and wear. Of course research in these areas took place long before the 1960s but we hoped the new name would help us escape from the idea of oil cans and worn out engines.

People tend to think of machines when they think of tribology—bearings, gears, lubricants—but this is only one part of tribology. Biotribology, for example, focuses on friction and lubrication in biological systems, such as artificial hips and contact lenses.

How does it apply to the real world?

There are so many applications in the real world that you might not realise involve tribology. For example, we're working with Unilever at the moment



on low-fat yoghurts. It's not so much the taste that people don't like in these, but the sensation in the mouth. Using tribology we analyse tongue-palette friction and make sure the

lower fat content doesn't affect how the yoghurt feels. We've also researched hair conditioners, skin creams and the redesign of engine oils to comply with emissions controls. The nice thing is that it doesn't matter where the friction occurs in the body or in a machine, the underlying process is still the same.

How do you see the future of tribology?

Tribology tends not to produce step changes—rather, steady improvements over time: lower friction, silkier hair, more reliable engines and replacement hip

joints. I think the future will be the same. Reducing friction is very big at the moment since it improves efficiency and thus lowers CO₂ emissions.

What inspired you to go into science?

Well I almost went into English! But I decided to study chemistry in the end and I'm glad I did. I like the definitiveness of science—you act on knowledge and feedback and can leave a legacy that you know will last.

I was born at St Mary's Hospital, so working late, I sometimes think it could well be the cradle to the grave at Imperial for me!

Who inspires you as a scientist?

It would have to be Professor David Tabor, who died in 2005. He was the greatest tribologist of this generation; as well as a kind and gentle scientist.

—KATIE WEEKS, IMPERIAL CONSULTANTS

science

from scratch

Altruism



Animals display altruism if their behaviour benefits another individual at a cost to

themselves. The cost is measured in the number of young the animal would have produced in the future if it had survived. However, many seemingly selfless acts in nature are entirely selfish.

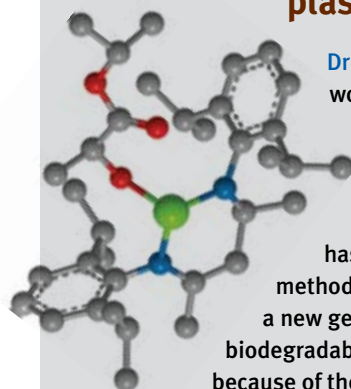
One such act occurs when vervet monkeys put themselves in danger by emitting alarm calls if predators are close. They warn their relatives, but attract attention and reduce their own chance of survival. However, as the ultimate aim is to pass on their genes, the probability of this is improved because other members of the group also carry them. Another example is the way vampire bats will regurgitate blood to feed unrelated individuals if they fail to feed. Once again, though, no altruism here, just an expectation that the favour will be returned.

Controversially, some scientists suggest that human altruism can also be accounted for. One possibility is that altruism is actually used to 'show off' to potential mates.

—GEMMA CHAPMAN, MSc SCIENCE COMMUNICATION

inventors corner

Producing biodegradable plastics



Dr Ed Marshall has worked at Imperial for almost 10 years and is a lecturer in Chemistry. He has developed new methods for producing a new generation of biodegradable plastics which, because of their enhanced physical properties and low cost of manufacture, could see them overtake existing oil-based materials.

Poly lactic acid (PLA), is a long-established, rapidly biodegradable transparent plastic, mainly used for medical products but is an expensive product to create.

In conjunction with Professor Vernon Gibson (Chemistry), Dr Marshall combined research from his PhD in polymer chemistry and postdoctoral research in inorganic chemistry to develop more cost-effective ways of producing polymers through chemical synthesis. His methods, when applied to producing PLA, not only enhance the physical properties such as higher operating temperatures and durability, but also reduce the production costs.

In 2007 Geoff Gaywood (Chief Operating Officer of Saffropol, a South African based producer of polymers) became aware of Dr Marshall's work and provided the commercial rationale for PLA. Six months ago John Hamlin (Entrepreneur in Residence at Imperial Innovations) and Philip Holbeche (formerly Chairman of Ceres Power—an alternative fuel company and Imperial spin-out) joined forces with Dr Marshall to form Plaxica, one of Imperial's latest spin-out companies. Dr Marshall

says: "If it had been left up to us as academics we would have been still there in our lab coats! John gave us access to great information. Without his industry insight we had no way of knowing how much this process was needed."

Realising his idea had such recognised potential was surprising to Dr Marshall. He says: "After getting into an area of study that excites you in your twenties, you kind of go where the research is and can feel closed off from the views of the outside world. To have a project like this come out of your work is the most exciting thing!"

The next step for Dr Marshall and Plaxica is to show that the technology is economically feasible. In the next few months Plaxica will be moving into its first home in laboratories in the Imperial Bioincubator, where Dr Marshall can continue his research whilst continuing his journey into the industrial world.

—ANOUSHKA WARDEN, IMPERIAL INNOVATIONS

► www.imperialinnovations.co.uk

A big deal

In December 2008 Thiakis, an Imperial spin-out company headed by Professor Steve Bloom (Investigative Science), was sold to US pharmaceutical company Wyeth for over £100 million. Wyeth plans to develop Thiakis' lead product candidate, TKS1225, for the treatment of obesity.

Reporter speaks to Steve Bloom and Susan Searle, CEO of Imperial Innovations, to get the inside story on Thiakis.

The origin of Thiakis dates back to the 1970s in Sweden when Steve first helped discover a number of new peptide hormones in the gut. However it wasn't until 20 years later, when the worldwide pandemic of obesity hit the public consciousness, that funding was received to take forward the obesity research.

In the late 1990s Steve re-tested some of the hormones from the gut and found they had a powerful effect inhibiting appetite. He had previously shown that these hormones are naturally released by the body after a meal, but now found they were telling the brain you are no longer hungry. He says: "It was amazing when the hormones we had been tinkering with for 20 years suddenly revealed this powerful effect."

Steve knew that obesity was a key issue for medical research to tackle. He says: "Every day 80 people die from obesity in the UK and there are only two licensed anti-obesity drugs on the UK market, both with undesirable side-effects and limited effectiveness. That said, the surgical bypass operation really does cause weight loss but it is associated with a one-in-30 death rate and sometimes nasty side-effects."

He describes what the team found when they did some

further research into the bypass operation, which was originally designed to make patients absorb less food: "We found that patients don't actually malabsorb food, as had been predicted, but instead they lose their appetite. A long-term effect of the operation is that patients have greatly reduced heart attack and stroke rates, half the cancer risk and are frequently cured of diabetes. We decided to test for the gut hormones in patients who had had the surgery and found that they were significantly elevated. It was at this stage we realised we could have the key to an effective anti-obesity drug."



But there were still two major obstacles which needed to be overcome. Firstly, peptide hormones could not be swallowed as they are destroyed by the digestive system. They therefore needed to be injected into the patient. Secondly, the effect of the injected hormones only lasted 10 minutes (when occurring naturally in the body, they are released continuously).

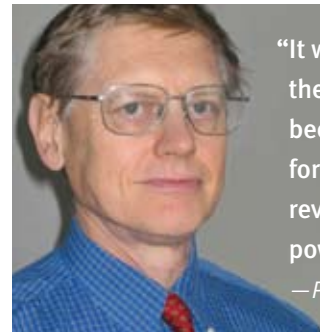
Over the next few months, Steve and his team at Imperial worked to re-engineer the peptide hormones so they were long-lasting and able to be administered by a small painless injection.

In 2004 Imperial Innovations was approached about the commercial potential of Steve's idea and Thiakis was established. Chief Executive of Imperial Innovations, Susan Searle, says: "We had obesity on our radar as being a significant unmet need in the industry and were keen to get into this area. Drug development is an expensive process so the plan was to set up a company, develop a therapeutic agent and show it was valuable enough to be developed into a full-scale drug by a large pharmaceutical company."

Imperial Innovations patented Steve's field of work in both the UK and international markets and was able to attract substantial investment by putting down £1.5 million of its own money. Two venture capitalist firms, Advent and Novo, led a £10 million funding round into the company together with a small investment from the Royal Society and investment company Esperante. Steve says: "If Innovations hadn't had faith in us, putting money down themselves and thereby encouraging others to invest, we never would have got started."

Thiakis moved to the Imperial Incubator and outsourced a number of pre-clinical trials and toxicology tests focusing on the hormone oxyntomodulin and its variations. Steve's expertise guided the teams on which would be the best combination to develop.

The chosen drug successfully passed a number of tests and the initial volunteers had no serious side-effects. As a result, it was clear the drug itself didn't need further changes. Innovations



"It was amazing when the hormones we had been tinkering with for 20 years suddenly revealed this powerful effect."

—Professor Steve Bloom

and Thiakis decided that if the price was right they would sell the company.

Susan says: "We shopped around for the right investor and walked away from a number of companies that didn't share Steve's vision. When US firm Wyeth approached the company we knew they were right. Now they will fund its development and if it gets to market the revenue will be shared with the College. Since the credit crunch hit, more large pharmaceuticals are cutting back on their own research and are looking to universities for new ideas. This success story shows that the College is benefiting from the current climate."

Steve comments on how he felt when the company was sold: "It really makes you feel your research must have been worthwhile if other people are prepared to invest in it to such a very large extent. If the drug does get to market it has the potential to do a massive amount of good."

—EMILY ROSS, COMMUNICATIONS

🔊 Hear Steve Bloom in February's edition of the podcast: www3.imperial.ac.uk/media/podcasts



"We are happy to talk to anyone in the College about the potential commercialisation of their research—even at the earliest stages. It's all about finding the right plan for the opportunity."

—Susan Searle, CEO of Imperial Innovations

Imperial Innovations has an established process for translating research into marketable products. If you have an idea with commercial potential please visit: www.imperialinnovations.co.uk

Would you spend more for Fairtrade goods?



Esmé McKernan,
MSc in Translation,
Humanities

“I would, but generally only if I was comparing products and I thought

the product was the best quality, especially with food. There are some things I'd tend to buy more than others, such as tea and fruit. Fairtrade chocolate is always nice too.”



Mark Lethby,
second year,
Medicine

“Yes definitely, but it frustrates me that Fairtrade is always

associated with higher prices. The key difference with Fairtrade is where the profits go and I'd rather they go directly to the most deserving people”



Pilar Gonzalez,
MSc in Translation,
Humanities

“When I can

afford it I certainly would because it's a matter I care about, though at times like these I would tend to go for cheaper options.”



Kristina Ostman,
third year, Physics

“Yes I would, the more we buy, the more large companies realise there's a market for Fairtrade and start

supporting it too—keeping prices down. People are often surprised by the range of stuff you can get that's Fairtrade—the clothes I'm wearing today for instance.”

Imperial RAG week



Imperial College School of Medicine RAG week kicked off on 23 February with students out and about collecting money. Suzanne Rayner, an undergraduate in the Faculty of Medicine, comments on the week and how

the Imperial Medics raise a staggering £58,000. She says: “RAG Week has shown the true spirit of the medical school in a way that only RAG can. From freshers getting up at 5.00 to go collecting, to starting the Circle Line pub crawl at 10.00 even with a Varsity hangover, dedication has been

shown by all. The Circle Line was the highlight of the week with 500+ people turning out to take the crawl. I would just like to say a particular thank you to the freshers this year, they have been spectacular and raised so much for the Winnicott Foundation—it wouldn't have been the same without them!”



Imperial medics dress to impress during RAG week



Imperial College Union students were also out and about for RAG week and raised £6,500.

To watch a video of their experiences visit: www3.imperial.ac.uk/news/ragweekog

time out



Leonardo Fine Arts Society

The Imperial College Leonardo Fine Arts Society is full of staff and students looking for a break from the norm. The classes are run by a teacher from the Royal College of Art and members get the chance to try a range of techniques – from water colours, to life drawing and sculpture.

“People always assume scientists aren't creative but that really isn't the

case”, comments Dr Peter Spencer, a research associate in the Department of Physics, who has been a member of the society for over eight years and enjoys taking time out from the lab. He says: “Sometimes it is a relief to look at the world from a different point of view. In the scientific world you could

“It is an opportunity to take a risk and see what happens.”

never get funding for something which would simply be aesthetically pleasing!”

He explains: “That said, the two disciplines aren't so far removed. As an artist you have to produce something abstract that says something about the world; in science everyone knows a graph represents figures but in reality it is also a made-up concept—an abstract.”

The level of expertise in the class varies; some have artistic experience, others just enjoy trying new things. Peter says: “Once you stop worrying about trying to do everything well, you realise it is

an opportunity to take a risk and see what happens. You might end up with something which didn't work out but it's about giving it a try.”

—EMILY ROSS, COMMUNICATIONS

Members in society: **60**
Average number per class: **20**

Society meeting time:
19.00 every Monday
Location: **Room 407, Electrical Engineering Building**

Members also have access to a studio in the west basement of Beit on the South Kensington Campus which has a turntable, easels, and a number of art materials.

Membership fee: £8 + £1 per session



To see some artwork produced by the Society visit the Blyth Gallery, Level 5 Sherfield Building, from 4–13 March.



A winning tale

PhD student Toby Wood (Computing) and member of the Graduate School of Engineering and Physical Sciences (GSEPS) describes his experience of the Graduate School's University Challenge competition which took place last month. He says:

"For 12 weeks of the year when I was growing up, Monday night dinner conversation was banned as my parents insisted on criticising Jeremy Paxman's pronunciation on *University Challenge*. So when the

Graduate Schools announced their own version I immediately volunteered.

"Confident in my incredible knowledge of, well, my PhD subject area and very little else, I proceeded to do no preparation. Of course, on the day things seemed rather different. Walking into the venue I was impressed by the lengths the Grad School team had gone to: buzzers, a BBC journalist to ask the questions, even a scoreboard of sorts! Suddenly nerves kicked in—I was going to sit in front of an audience, including people who actually knew me, and demonstrate precisely how little I knew about the world.

"The competition started and things only got worse. My buzzer didn't seem to work and I had no idea how many steps were in the Queen's Tower. I knew one of my team-mates had been on the real thing—surely his experi-

ence would propel us into the lead? The minutes ticked away and the scores inched upwards evenly for both the teams. In the dying moments I pressed my buzzer and proudly admitted

"I was going to sit in front of an audience, including people who actually knew me, and demonstrate precisely how little I knew about the world."

to all present that I knew who had a top 10 hit with *Heart of Glass*, even though it was released before I was born. And then we won! As our brave captain stood up

to collect the shield, I sat back to savour the glory and felt content that my previously pointless knowledge of 1970s pop music had finally been useful for something."

—TOBY WOOD, PHD STUDENT (COMPUTING)



Victory salute

From left to right: George Wang, Andy Turner, Toby Wood and Heather Jackson



University Challenge first appeared on our television screens in 1962 and in the 38 series to date, famous contestants have included Stephen Fry and Clive James. Imperial won the contest in 1996 and came second in 2002.

The Varsity experience



Steve Aldous (Finance) shares his experiences of being in the crowd at the J.P.R. Williams Varsity Match on 25 February.

"After the tightest of finishes in last year's Varsity rugby match, I looked forward to the 2009 event, hoping to watch Imperial College gain revenge against the medicals but more importantly to enjoy a similar evening. A huge number of staff and students travelled to Richmond to support the teams and spend a night together doing something different. Some staff had never been to a rugby match before so it was a great place to start. The place looked very professional—floodlights, press box, scoreboard, pre-match music

"We were treated to another game of quality rugby and a tight finish involving extra time."



and there were even official pre-match handshakes with the guests of honour, including J.P.R. Williams himself, former St Mary's Hospital Medical School student and Welsh rugby legend! The atmosphere was great and we were treated to another game of quality rugby and a tight finish involving extra time before the medicals again lifted the cup. Overall, a fantastic evening—the organisers should feel proud of a top event!"

—STEVE ALDOUS (FINANCE)

Long servers party like it's 1988

Staff who passed the milestone of 20 years' service to Imperial in 2008 celebrated at a reception hosted by the Rector on 16 February. Observing that nearly 700 years of experience and knowledge could be found in the heads of those present, Sir Roy

Anderson, Rector, said: "You are the keepers of our traditions, the source of all sorts of arcane facts, from why the Queen's Tower bells ring on certain days to where the best coffee and cake on campus is served." He thanked guests for all they had invested in the College over the past two decades.

John Grover, who joined Imperial as Stores Manager for the Department of Electrical and Electronic Engineering and is now Building Manager for buildings across the South Kensington Campus, was among the guests. He said: "It was extremely nice to have my twentieth anniversary of working at Imperial recognised by the Rector and senior management team and I enjoyed the evening very much."

—CAROLINE DAVIS, COMMUNICATIONS



celebrating long service



20 years



Tom Sensky, Professor of Psychological Medicine (Medicine)

Tom Sensky joined Charing Cross and Westminster Medical School as a Lecturer in 1985, and later took a year off to work as a consultant psychiatrist, before rejoining as Senior Lecturer in 1989. He was appointed Professor in Psychological Medicine within the Division of Neurosciences and Mental Health in 2003, a role which combines teaching – he leads on year five of the undergraduate medicine course – and research, predominantly into the psychological effects of chronic illness such as schizophrenia and rheumatoid arthritis. He also has a clinical role within the West London Mental Health Trust. “I have been very privileged,” says Professor Sensky, “to be able to combine three things – interesting research, teaching which I’ve always been very enthusiastic about, and working with patients – into one very stimulating job.” Outside work, Tom enjoys photography and music and, time permitting, plans to resume playing the French horn sometime soon.



Eric Yeatman, Professor of Microengineering (Electrical and Electronic Engineering)

Eric Yeatman travelled from Canada to study for a PhD at Imperial in the 1980s and liked it so much that he’s stayed ever since. Following his PhD, which was supervised by former Rector Sir Eric Ash, Professor Yeatman joined Electrical and Electronic Engineering as a Research Fellow. Within a year, he was promoted to Lecturer, becoming Senior Lecturer in 1996 and Professor of Microengineering in 2005. His work in the Optical and Semiconductor Devices research group is divided between teaching courses, such as optical communications, and his research into micro-machined devices. He is also Chairman of Microsaic Systems, a spin-out company specialising in miniaturised mass spectrometers for chemical analysis. He says: “When I moved to England, I didn’t intend to stay, but I was offered a good job and things just developed.” He adds: “It’s great to work for a prestigious university, surrounded by very able colleagues in many disciplines.”

Donaval Bishop • Senior Library Assistant: Faculty Support Services (Library Services)

Alan Finch • Technician (Physics)

30 years

William Bobinski • Technician (Civil and Environmental Engineering)

Michael Staite • Advanced Fitter (Estates)

Staff featured celebrate anniversaries during the period 1 February–20 March. Data is supplied by HR and is correct at the time of going to press.



An eggcellent effort

On 18 February the Great Egg Race returned to Imperial with 18 teams fighting it out to see whose egg could travel the furthest from the balcony of the Queen’s Tower without breaking. This year three teams from local schools were invited to take part.

Teams were given three and a half hours to build a device to help them launch their egg and were awarded 25 points if their egg survived, and a further 50 marks for the distance travelled. The team which scored the most points was the Eggonautics whose egg survived 20.2 metres.

Dr Shaun Crofton (Mechanical Engineering) kicked off the afternoon with a short introduction to the principles of flight and sat on this year’s judging panel alongside Professor Stephen Richardson, Principal of the Faculty of Engineering, and Mark Mearing Smith from City and Guilds College Union.

Obituaries



Rosalie Jane Strong, Pavilion Supervisor at Imperial’s Teddington Sports Ground •

Jane Strong died of cancer on 7 January 2009. Her colleagues Neil Mosley (Sport Imperial) and Brian Lee (Grounds Manager at Teddington) pay tribute: “Jane had been employed in the Department for 23 years, starting in October 1985. She was a tremendously loyal and hardworking employee and did an exceptional job at Teddington looking after the pavilion, the sports teams and users of the ground. In 1995 she was awarded first prize in the Outstanding Service category of the Rector’s Award for Excellence and continued to provide this exceptional level of service throughout her employment. Jane’s catering was legendary and her chilli con carne was a particular favourite amongst football and rugby teams alike. Her attention to detail and honed gardening skills were among her many strengths and she always adorned the pavilion with hanging baskets and pots full of fragrant flowers.

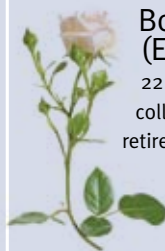
Following her husband’s death from cancer in 2004, Jane raised considerable sums for the Macmillan Cancer Trust. Jane will be missed by all and the Commercial Services team are committed to raising money throughout 2009 for the charity as a tribute to her.”



Oliver Priestland, IT Support Specialist (ICT) •

Oliver Priestland died from cancer on 23 December 2008, aged 51. His colleagues from the Faculty of Natural Sciences pay tribute: “Oliver joined the Department of Biology in January 2001 as an IT and AV support technician under Peter Mueller. He quickly became a valued member of the Department for his technical skills and expertise with specialised applications. Oliver transferred to ICT in a similar

role in December 2003 and was based in SAF and for the past year in Chemistry. Before coming to Imperial he led quite a varied life. The son of BBC foreign correspondent Gerald Priestland, he was brought up in the US, Middle East and India. Before coming to Imperial he built up a business repairing Citroen 2CVs, another as a cabaret impresario and he also returned to India to own and run a hotel in Varanasi. Oliver was a great friend, colleague and mentor, always willing to share his vast experience of everything and anything, always there if you were stuck and needed a hand. He leaves a wife and daughter, to whom we extend our deepest sympathies.”



Bożena Chawkwala, Archives Assistant (Estates) •

Bożena Chawkwala, who worked at Imperial for 22 years, died in November following a neurological illness. Her colleagues, Mark Fisher and Janice Bailey, pay tribute to Bożena, who retired in 2005.

“Bożena’s career started in the Department of Chemistry in 1984, where she was PA to Professor Albery. In January 1987 she moved to the Lyon Playfair Library [now the Central Library] where she stayed for 15 years, as PA to the Director, Magda Czigany. In her final role, Bożena was responsible for the upkeep of the Estates Archive.

Bożena was a warm and generous person and a pleasure to work with. Nothing was too much trouble for her and she was well known for her organisational skills and meticulous attention to detail—these being most apparent at the many library staff parties, formal receptions and functions that she arranged.

Bożena was very family orientated, and was proud that her late brother, George, was an Imperial alumnus. Bożena married Hasan in 1976 and he was always a huge support to her, especially in the difficult last few years.”

From Burns to belly dancing in Artsfest finale

The week-long celebration of arts at Imperial culminated in the Artsfest Finale on Friday 20 February, with a diverse line-up including martial art wushu, belly dancing and funkology, a form of hip hop dance. Throughout the week, events had taken place across the College, including ensemble concerts in the South Kensington Main Entrance, talks, exhibitions, and informal busking.



Violinist Ben Chisnall (Planning) describes stepping out into a packed Great Hall, as part of the College's Sinfonietta orchestra, to open the Finale:

"We were playing Malcolm Arnold's *Scottish Dances*, a short piece for orchestra in four movements inspired by traditional Celtic melodies. Rehearsals had been brief, and our conductor, Dan Capps, alarmed by some liberal interpretations of the score, had done his best to polish the work for performance.

The mood was set by a Robert Burns poem, read in a thick Scottish accent, before we launched into the performance.



Fortunately the playing was smooth, crisp and lively, and the dances were carried off with gusto and a healthy portion of Scots grit by the orchestra. The winds coped well with the tricky second movement, the strings excelled in the slower third, and the audience could not contain their applause. With a triumphant sigh of relief, the Finale was underway!"

Welcome

new starters

Dr Tiziano Agostinelli, Physics
 Ms Maria Angelopoulou, EEE
 Mr Kevin Balbi, Biology
 Mr David Beales, Library Services
 Dr Francesco Belardinelli, Computing
 Mr Ivano Benedetti, Aeronautics
 Dr Clare Bishop, Materials
 Mr Douglas Blackie, Physics
 Mr Alessandro Borghi, Biomedical Engineering
 Dr Matthieu Boulesteix, Biology
 Ms Frances Boyle, Library Services
 Mr Dean Brown, Library Services
 Dr Monica Burriel, Materials
 Miss Hollie Cancro, Sport and Leisure
 Miss Charlotte Chaney, Faculty of Medicine
 Ms Margarita Chli, Computing
 Ms Pamela Clarke, NHLI
 Ms Valerie Clayton, NHLI
 Mr Juan Correa Valle, Estates
 Mr Matthew Cowan, Library Services
 Mr Daniel Credginton, Chemistry
 Mr Eike Cser-Tarnai, Library Services
 Miss Sonia Da Silva, Catering Services
 Ms Nav Dogra, Human Resources
 Mr Olivier Dubois, Faculty of Medicine
 Dr Marc Dumas, SORA
 Dr Gavin Elliott, ESE
 Ms Sarah Farr, EYEC
 Dr Sonia Gandhi, NMH
 Ms Marilyn Garraway, Educational Quality
 Dr Renee Germack, NHLI
 Mr Omair Ghafur, Physics
 Ms Susanne Gifford, Library Services
 Ms Yasmin Gopaul, EYEC
 Mr David Granger, SORA
 Dr Emanuel Habets, EEE
 Miss Maria Hawkins, Library Services
 Ms Kerry Hedley, Library Services
 Dr Andrew Homer, Registry
 Dr Catriona Houston, Cell and Molecular Biology
 Miss Nur Incedal, EYEC
 Dr Agnes Jenes, SORA
 Dr Andy Jones, Biology
 Dr Chahrazade Kantari, Medicine
 Ms Rachel Keen, Faculty of Medicine
 Mr Sunil Kumar, Physics
 Mr Duncan Law, Library Services
 Professor Anne Lingford-Hughes, NMH
 Mr Andrea Listorti, Chemistry
 Dr Asad Luqmani, Investigative Science
 Ms Laura Maher, SORA
 Mr Hassan Masood, Humanities
 Mrs Melissa Matthias, NMH
 Mr Eamonn McEvoy, Registry
 Dr Edward McGowan, Medicine
 Dr Christopher McLeod, Biomedical Engineering
 Miss Joanna Murray, EPHPC
 Dr Jonathan Myles, EPHPC
 Mr Daniel O'Dea, Physics
 Miss Adriana Paluszny Rodriguez, ESE
 Ms Georgia Papacleovoulou, SORA
 Mr Markos Papadonikolakis, EEE
 Mrs Anna Phillips, EPHPC
 Mr Robin Pitman, Faculty of Natural Sciences
 Mr Sandeep Potnis, ICT
 Mr Mark Potter, Aeronautics
 Mrs Manasi Ramanna, Biomedical Engineering
 Mrs Maria Ramil, Estates
 Mr Jens Roehrich, Business School
 Ms Michaela Ruhmann, Kennedy Institute
 Dr Corinna Schnoeller, NHLI

Dr Zarrin Shaikh, NHLI
 Dr Brian Slafer, Chemistry
 Mr Roy Smith, Faculty of Medicine
 Dr Kirsten Sugden, EPHPC
 Mr Tri Tat, SORA
 Mrs Kimberley Trim, NHLI
 Miss Maria-Belen Trujillo-Torralbo, NHLI
 Dr Wing Tsoi, Physics
 Mr Junsheng Wang, Materials
 Miss Sarah Watson, Business School
 Dr Silene Wavre, NHLI
 Ms Elizabeth Webb, EPHPC
 Dr Paul White, Business School
 Mrs Marie Wilcox-Perks, Faculty of Medicine
 Professor Bill Wisden, Cell and Molecular Biology
 Mrs Jing Yang, EYEC
 Mr Zacharias-Ioannis Zachariadis, Mechanical Engineering
 Dr Amelle Zair, Physics
 Dr Fapei Zhang, Physics

Dr Andrew McGough, Computing (9 years)
 Dr Iona Millwood, EPHPC
 Dr Hiroyuki Nakamura, Kennedy Institute (5 years)
 Mrs Toyoko Nakamura, Kennedy Institute (5 years)
 Dr Matthew Noy, Physics (5 years)
 Mr Alexandre Patrice, Molecular Biosciences
 Dr Lee Potiphar, NMH
 Mrs Veronica Russell, Business School
 Mrs Louise Turner, Accommodation Services (9 years)
 Miss Ruth Vieira, Biomedical Engineering
 Dr Sanjay Vijendran, EEE

Farewell

moving on

Dr Alessio Ceroni, Molecular Biosciences
 Miss Wendy Collidge, College Headquarters (5 years)
 Mr Tony Coppen, Finance (5 years)
 Mr Glynn Cunin, Computing (5 years)
 Miss Anna Donaldson, Investigative Science
 Mr Robert Finnis, Physics
 Dr Anthe George, Chemical Engineering
 Mr Kin Ho, Aeronautics
 Ms Amanda Jones, Health and Safety
 Dr Deepak Julka, Medicine
 Dr Jaime Luna-Ortiz, Chemical Engineering
 Ms Emma Massie, NHLI

This data is supplied by HR and covers the period 1-21 February 2009. 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. The Editor reserves the right to edit or amend these as necessary.

moving in. moving on.

what's on

5 MARCH 18.00–19.30



Darwin and human society

Professor Paul Seabright,
Professor of Economics,
University of Toulouse, France

Darwin Lecture Series

Lower Ground Square Lecture Theatre, Tanaka Building

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

9 MARCH 17.30–18.30

Spectrum of partial differential equations: from Weyl asymptotics to Lieb-Thirring inequalities

Professor Ari Laptev, Head of the
Department of Mathematics

Inaugural Lecture

Clore Lecture Theatre, Huxley Building

Registration in advance:
amanda.cerny@imperial.ac.uk

11 MARCH 17.30–18.30

Plasma physics using pulsed power



Professor Sergey Lebedev,
Professor of Plasma Physics,
Natural Sciences

Inaugural Lecture

Blackett Lecture Theatre 1, Blackett
Laboratory

Registration in advance:
amanda.cerny@imperial.ac.uk

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

11 MARCH 17.30–18.30

Targeting dendritic cells to better understand and treat allergic asthma

Professor Bart Lambrecht,
Professor of Finance, Lancaster University
Management School

4th Annual Margaret
Turner-Warwick Lecture

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

Registration in advance: e.watson@imperial.ac.uk

12 MARCH 18.00 – 19.30

2009 Ig Nobel Tour of the UK

Celebrating research that makes
people laugh and then think

Great Hall, Sheffield Building

Registration in advance:
events@imperial.ac.uk



18 MARCH 17.30–18.30

Metal forming technologies: evolution and mutation

Professor Jianguo Lin, Chair in Mechanics of
Materials and Head of Materials Division

Inaugural lecture

Lecture theatre G34, Sir Alexander Fleming Building

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

25 MARCH 17.30–18.30

High-power lasers and the extraordinary conditions they can produce

Professor Steven Rose, Head
of the Plasma Physics Group
and Director of the Institute of Shock Physics

Inaugural Lecture

Blackett Lecture Theatre 1, Blackett Laboratory

Registration in advance:
amanda.cerny@imperial.ac.uk

take note

March podcast

Bring some colour into your life with the March edition of Imperial's monthly magazine podcast. In the latest



podcast, Paul Dolan (Business School) discusses the economics of wellbeing and why experience rather than fear should be the deciding factor when it comes to healthcare funding. Plus Murray

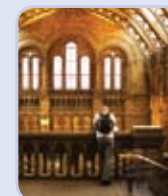
Shanahan (Computing) tells all about the light that cognitive robotics can shed on fundamental and ancient philosophical questions about what it means to be human, and Julian Asher (Medicine) explores the mysteries of synaesthesia, a condition that can make you see sounds as colours.

Download podcasts at:
www3.imperial.ac.uk/media/podcasts

volunteering

Learning volunteer programme

Project ID: 1596
Organisation: Natural
History Museum
Dates: Ongoing
Times: once a week for four
and a half hours
(Tuesdays, Wednesdays,
Thursdays, Saturdays or
Sundays)
LOCATION: SW7 (nearest
tube South Kensington)



The Natural History Museum's Department of Learning is looking for volunteers with good communication skills and a passion for nature. Volunteers will get involved in face-to-face learning programmes, making learning more accessible and memorable for museum visitors. The role involves encouraging visitors to interact with the exhibits and generally being on standby to answer questions or assist. During term-time, learning volunteers will be involved in meeting school groups and kick-starting their museum learning experience. With the Darwin Centre opening in September 2009, new roles are currently in development. The Department is committed to providing rewarding experiences for its volunteers. Previous experience is not essential, as full training is provided (March–May). Out-of-pocket travel and lunch expenses are available up to a maximum limit on production of valid receipts.

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

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



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.

The copy deadline for issue 203 is Wednesday 11 March. Publication day is 26 March. Contributions are welcome (no more than 300 words). Please note the editor reserves the right to cut or amend articles as necessary. Information correct at time of going to press.

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