Imperial College London

reporter

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It's a gem!

Imperial students engineer success at international competition **CENTRE PAGES**

GRADUATE SCHOOLS ARE *THES* WINNERS

Staff celebrate their win

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CAPITAL FUN

Students recreate London

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100 years of living science

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in brief

Fisk joins economic commission

Professor David Fisk, Imperial's BP/RAEng Chair in Engineering for Sustainable Development, is joining a new commission announced this month. The commission will look at how the UK can make the most of economic opportunities created by the fight against global warming. The Commission on Environmental Markets and Economic Performance, is due to report to government next spring, and will be chaired by Environment Secretary, David Miliband, and Trade and Industry Secretary, Alistair Darling. It will investigate how global markets in environmental goods and services are likely to grow over the next 20 years.

Blue cube is green

The Faculty Building on the South Kensington Campus has been awarded a commendation by the Civic Trust for its contribution to the environment. Officially opened in May 2004, the building has unique environmental aspects to the design, for example the timber and plastic used for the decking outside the entrance, is all recycled. In December 2005, the building also won a RIBA (Royal Institute of British Architects) award.

New head of undergraduate medicine

Jenny Higham, Reader in Obstetrics and Gynaecology, has become the new Head of Undergraduate Medicine, taking over from Professor John MacDermot last month. Miss Higham is now the lead academic for the undergraduate medicine programme and is responsible for developing and implementing the Faculty's strategy in this area. She will oversee areas such as the curriculum and its delivery, the selection of students, and the provision of student pastoral care and welfare support. She said of her appointment: "It is an exciting time to be appointed as Medicine celebrates a successful first 10 years."

NUS yes

In the biggest democratic exercise Imperial College Union has ever undertaken, record numbers of students voted in favour of joining the National Union of Students (NUS) it was revealed on 17 November. Over 4,000 votes were cast and the strong campaigning from both sides meant the result was extremely close. The referendum revealed 53.26 per cent of students wanted to join the NUS and 46.74 per cent voted against.

Chemistry goes green

A new one-year, full-time Master of Research (MRes) course in Green Chemistry was launched on 8 November. The course will allow postgraduate students to develop their skills in a rapidly growing field which aims to 'clean up' the chemical industry, making industrial processes cleaner, greener and more efficient for the benefit of the environment.

Green Chemistry is an emerging discipline, which is being propelled to the forefront of chemistry research by pressure on industry to reduce waste and pollution, and by consumers' increasing awareness of, and concern with, environmental issues.

The course will offer a multidisciplinary approach with both taught and research components. It will expose students to topics as diverse as biotechnology, renewable energy, and chemical synthesis and catalysis. They will be supported by the Sustainable Chemistry group in the Department of Chemistry, whose research looks for new ways of producing plastics using plants and other biological materials, rather than the petrochemicals currently used to make many of the plastics, such as carrier bags.

Green Chemistry aims to make the chemical industry cleaner

Chemistry's Professor Tom Welton, who will be leading the new course, said: "The stereotypical image of the energy-guzzling chemical industry, polluting the air and creating hazardous waste products is no longer compatible with governments' and consumers' concern for the environment. The chemicals industries have made a good start, but we need to develop the next generation of researchers so that chemical and pharmaceutical companies can continue to provide much needed products without putting such a strain on our environment."

– Danielle Reeves, Communications

Blogging the Rector's Away Day

Assembling for the annual Rector's Away Day on 9–10 November at the Richmond Hill Hotel, Heads of Department and senior staff considered the key challenges and opportunities facing Imperial today. Presentations were given on academic initiatives including the Academic Health Sciences Centre and the new Climate Change Research Centre, and discussion topics ranged from the College's Capital Strategy to the role of Humanities at Imperial College. The theme of building success recognised that, while Imperial is in a strong position, embracing the ever-growing number of scientific opportunities will make us stronger and it is vital to develop the infrastructure and financial stability to do so.

The Away Day also initiated the launch to the College community of a blog being piloted by the Rector to share his news and views with College members. Reports of the Away Day have been posted there and College members are encouraged to comment on entries.

– Caroline Gaulter, Communications

▸ *Visit* **www.imperial.ac.uk/rectorblog** *to access the Rector's blog.*

Times Higher award for Graduate Schools

Imperial has been recognised in the *Times Higher Education Supplement* Awards, for its innovative and integrated approach to the support of young academics in the Graduate Schools. Elaine Walsh, one of the Graduate Schools' senior lecturers in transferable skills, collected the prize, awarded for outstanding support for early-career researchers at the ceremony, on 15 November.

The two Graduate Schools are focused on ensuring excellence in both research and taught courses and on developing a high quality skills training programme. Since the establishment of the Graduate School of Life Sciences and Medicine (GSLSM) in 1999 and the Graduate School of Engineering and Physical Sciences (GSEPS) in 2002, over 70 workshops and courses have been set up. A significant achievement of the schools has been to implement this provision through the involvement of academic staff, integrating existing resources and expertise.

More recently they have launched an innovative three-day residential Research Skills Development (RSD) course. The RSD has been specifically designed for first year research students and addresses skills relating to research and personal effectiveness. Members of the postdoctoral staff are also trained to teach on the course, giving them the additional opportunity to use their RSD experience as part of a more formal teaching qualification.

Sir Gareth Roberts, one of the judges, praised the course: "The university has been innovative in using postdoctoral staff to tutor the postgraduate students and in awarding bursaries for research purposes."

Professor Bernie Morley, Director of GSLSM, explained further: "Integrated skills development programmes have arisen from the commitment and drive of the graduate schools' teams to promote that ethos. Efforts have led to fundamental changes in the College culture, whereby skills development is no longer viewed as something that is bought in or tagged on, but rather something that staff across the College work together to produce."

One RSD course involved research students from the Royal College of Art, with emphasis given on cross-subject communication and collaboration. Subsequently this has led to joint skills-development initiatives between the RCA and Imperial for the next academic year, fostering interdisciplinarity.

PhD students at the College also have the opportunity to take a two-day course on preparing for their thesis and examinations, which includes careers awareness advice to help them with the transition from PhD completion to full-time work.

Dame Julia Higgins, founder and past director of GSEPS and now Principal of the Faculty of Engineering said: "We are delighted to have won this award. When we set up the graduate schools, we aimed for something very different from most of the existing graduate schools where postgraduate admissions and examinations matters take precedence. The high quality provision of skills development has been a principal concern of the schools here and our major success."

– Naomi Weston, Communications

Imperial has been praised for its innovative three-day residential Research Skills Development course

Smart Bougie proves a winner

Imperial students fought off international competition to win the Idea to Product competition in Texas, on 11 November for the second time in four years.

The event was won by PhD students Omer Aziz, Faculty of Medicine, and Adam James, Faculty of Engineering, supervised by Professor Sir Ara Darzi, Division of Surgery, Oncology, Reproductive Biology and Anaesthetics, and Professor Guang-Zhong Yang, Institute of Biomedical Engineering.

Tim Meldrum, team coach and manager of the Entrepreneurship Centre at Tanaka Business School, explained that such events give students the chance to apply knowledge from their studies and, more importantly, gain business experience. He said: "The practical skills they have picked up from these competitions will stand them in good stead."

The idea of the 'Smart Bougie' was conceived two years ago by Professor Sir Ara. Since then his biomedical team has been developing it with support from the Helen Hamlyn Foundation and the Royal College of Art in creating the prototypes.

The invention, a sensor-enabled surgical dilator, would enable surgeons to safely open blockages in the oesophagus; currently done using passive devices similar to balloons. The Bougie is an 'active' dilator that gives feedback to the surgeon.

The team beat 18 other teams from around the world. They also won the European Idea to Product competition hosted by Tanaka Business School in June 2006.

The inaugural Idea to Product prize was won by Imperial medical students, Donna Winderbank-Scott, Vanh Dang, and Rachel Hames, in 2003 for their business plan to market Inhalit, a life-saving asthma monitoring device.

– Naomi Weston, Communications

▸ *Visit* **www.ideatoproduct.org/int/index.cfm** *for more information.*

media mentions

– Naomi Weston

The Sunday Telegraph ▸ 5 November

New pay as you drive scheme could cost families £3,000 a year

Families could pay up to £3,000 a year more under a new pay as you drive scheme aiming to cut congestion and help global warming, *The Sunday Telegraph* claims. Their investigation is based on research and road-pricing models prepared by Professor Stephen Glaister, from the Department of Civil and Environmental Engineering, who advises the Department for Transport on this issue. Professor Glaister tells *The Sunday Telegraph:* "The return on these charges is that motorists will be getting faster journeys and more reliable traffic. It will reduce congestion by changing people's habits." The proposals are to be put forward by ministers later this month.

Reuters ▸ 31 October

Music therapy helps sufferers of schizophrenia

The symptoms of schizophrenia may be eased by music, according to Imperial scientists, who found that encouraging patients to express themselves through music seemed to improve their symptoms. Dr Mike Crawford, from the Division of Neuroscience and Mental Health, and author of the study published in the *British Journal of Psychiatry,* explains: "We have known for some time that psychological treatments can help people with schizophrenia, but these have only been used when people are fairly stable." He adds: "This study shows that music therapy provides a way of working with people when they are acutely unwell."

BBC News Online ▸ 8 November

New emissions targets needed

The recent Stern Review's recommendations on climate change need a fresh set of global emissions targets according to Professor Michael Grubb, a visiting professor in the Faculty of Natural Sciences. Professor Grubb, who is also chief economist of the Carbon Trust, said that building a significant carbon market beyond Europe was unlikely to happen without new targets for reducing emissions. He tells BBC News Online: "You could envisage the EU scheme going on beyond the Kyoto targets, but it would be much weaker. In the longer term, spreading [carbon trading] further afield will depend on having further emissions targets spread beyond the countries which already have them."

The Times ▸ 3 November

Engineer solves mystery of strange happenings on the road

Something strange was happening on a quiet coastal road in Norfolk; cars were going haywire, engines were cutting out, electric windows were jamming and alarms were blaring. The road passes by a Second World War radar station near the village of Trimingham. Defence chiefs said that faulty, high-powered radar was shooting pulses of microwave radiation on to the road, which is used by thousands of commuters and holidaymakers each day. Dr Stepan Lucyszyn, from the Faculty of Engineering, and a reader in millimetre-wave electronics at the College, told The Times: "These megawatt radars have sufficient energy to cause significant electrical interference to nearby electronic systems, as found in passing cars, especially when all the energy is confined to a pencil-shaped beam. More serious could be the potential hazard to humans."

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ParisTech joins IDEA League

Heads of the IDEA League got together last week to celebrate ParisTech formally joining the elite group of European technical universities at the eighth IDEA League general assembly, held at Imperial on 15 and 16 November. ParisTech brings together 11 of the foremost French institutes of engineering education and research. Pictured: front row from left to right: Professor Burkhard Rauhut, RWTH Aachen, General Gabriel de Nomazy, ParisTech, Back row from left to right: the Rector, Sir Richard Sykes, Mr Hans van Luijk, TU Delft, and Dr Christoph Niedermann (representing Professor Konrad Osterwalder), ETH Zürich

Room booking made easy

Booking meeting rooms at South Kensington Campus has become simpler with the recent introduction of a new online system. Staff can now view availability and quickly book meeting rooms from anywhere and at any time.

Dr Suneel Khurmi, Project Manager, ICT, explained that the new system avoids the need to contact the Internal Bookings Office for routine day-to-day booking requests. He said: "It's now possible to get a real-time view of the existing bookings in a room and to narrow down appropriate rooms to fit the user's requirements, for example, the number of attendees and a particular building. Once a booking has been made, users receive a confirmation email and they can 'revisit' the booking at any time to add, amend or cancel."

Ordering catering for meetings is also far easier than before. Tea, coffee and sandwich platters can now be ordered up until 10.00 on the working day before a meeting, allowing more flexibility where numbers are not confirmed until the last minute. The system offers a wide selection of catering, which can be ordered for delivery to any room on the South Kensington Campus throughout the day from 08.00 to 20.00. The Internal Bookings team are still available to offer, guidance and book more complex internal meetings and events.

There are currently 31 rooms included on the system, with scope to add more and the system could, in the future, be rolled out to other campuses and configured to include a local catering provider.

Mark Vernon, Head of Conferences, said: "This is part of a wider College strategy to increase and make more effective use of space by showing usage and availability, incorporating different College systems and providing a quick and easy facility for staff to book the space".

Since its launch, over 80 per cent of room bookings have been made using the system.

– Caroline Gaulter, Communications

▸ *Visit* **www.imperial.ac.uk/roomsandcatering** *for a comprehensive set of FAQs and access to the system.*

Research Ethics Committee created

A new Research Ethics Committee will review non-medical research using human participants

The College has established a new Research Ethics Committee (ICREC) to review the ethics of research involving human participants that lies outside the remit of the NHS.

For investigators working with NHS patients, there has been a long-standing requirement to receive ethical approval for a proposed study through an NHS Research Ethics Committee (REC). Until recently, this route could also be used for researchers working with human participants outside the NHS, but questions of legal liability and workload mean these RECs are no longer willing to support this activity. The Economic and Social Research Council has stated that an institution's REC should carry out a full ethical review on research where appropriate; a move that is likely to be followed by other Research Councils. The ICREC will fulfil this role for Imperial research.

The ICREC is chaired by Mr Ram Gidoomal, CBE, an alumnus and currently a Governor of the College, who has wide experience of ethical and policy issues. He chaired the RSA forum for Ethics in the Workplace, and was an advisory committee member of the Institute of Business Ethics.

Mr Gidoomal is enthusiastic about his new role. He said: "The ICREC demonstrates Imperial's commitment to ensuring ethical integrity in its research." He explains that while safeguarding the welfare of participants should be the primary concern, "researchers shouldn't get caught up in red tape".

In order to accelerate the approval of research, Heads of Departments and Divisions will screen applications and grant ethical approval if a proposed study is uncontroversial. If a research proposal has significant ethical implications, it needs to be considered by the ICREC, which meets every two months and accepts applications up to a week before meetings.

Professor Chris Hankin, Deputy Principal of the Faculty of Engineering, is deputy chair and responsible for the day-to-day running of the ICREC.

– Sibe Mennema, Deputy Rector's Office

▸ *Visit* **www.imperial.ac.uk/research/researchethics or email s.mennema@imperial.ac.uk** *for further information.*

London on the lawn

From left to right, Francesco Zhou, Jonathan Watkins, Nicole Li, Gareth Hopkins and Mana Haghani, undergraduate Civil Engineering students

A sightseeing tour of London's most famous landmarks was made easy on 10 November, as civil engineering undergraduates recreated the capital on the Queen's Lawn at the South Kensington Campus.

Each year, the autumn term sees first and second year students collaborating as part of a 'buddy' scheme run by the Department of Civil and Environmental Engineering.

This was the first time that students had been asked to recreate part of London for the event. After an initial visit to their assigned structure, the groups of 10 students had five weeks to develop their scale models and submit a detailed plan outlining how the project would be managed. They only had basic materials from which to create their models, including paper, string and tape, together with a budget of £10 to buy further equipment.

Civil and Environmental Engineering first year coordinator, Catherine O'Sullivan, welcomed the project as a chance for students to develop team-building and modelling skills, and their understanding of how structures work. She said: "The models the students created surpassed my initial expectations. I was very impressed, too, with their ability to defend their decisions in front of a panel of judges."

The event is held in collaboration with the Civil Engineering Society.

– Alexandra Platt, Communications

Club Imperial will offer staff the chance to meet 'sports buddies' from the new year

Changes in Ethos membership

From the new year, *Ethos*, Imperial's sports centre, is implementing an £18 monthly membership fee. College staff, who have had the chance to enjoy free use of the gym, swimming pool and spa since *Ethos* opened in January, will be able to pay using a simple salary deduction scheme. This payment will cover unlimited use of the pool and gym and entitle staff to discounted rates for all other *Ethos* facilities. This fee is extremely low in comparison to other sports centres in the South Kensington area, where fees can be as high as £100 a month.

In addition, those members of staff who choose to take up the offer will have the chance to join Club Imperial, a unique sports and social scheme which goes live on 2 January 2007.

To encourage more people to keep fit, Club Imperial will offer staff the opportunity to meet like-minded colleagues to play sport and socialise with. Designed for those who would like to take up a new activity and meet new people whilst doing so, members will be offered the chance to be matched with potential 'sports buddies' who have similar interests and skills. The flexibility exists to match up a pair, a group or a whole team in a variety of different activities.

The activities will not just be limited to those available indoors at *Ethos*, but will include a running and fitness club, a weight loss service and other outdoor activities. Club Imperial also brings the chance to socialise with colleagues and peers though a calendar of organised events exclusive to members, from darts and a pub quiz at the local, to attending live sports matches and events.

Ethos remains free to students.

– Leena Bharadia, Sport Imperial

The art of communication

Two key online tools in the College's communications armoury have just been launched and are freely available to all staff — a new graphic identity website and a digital image library.

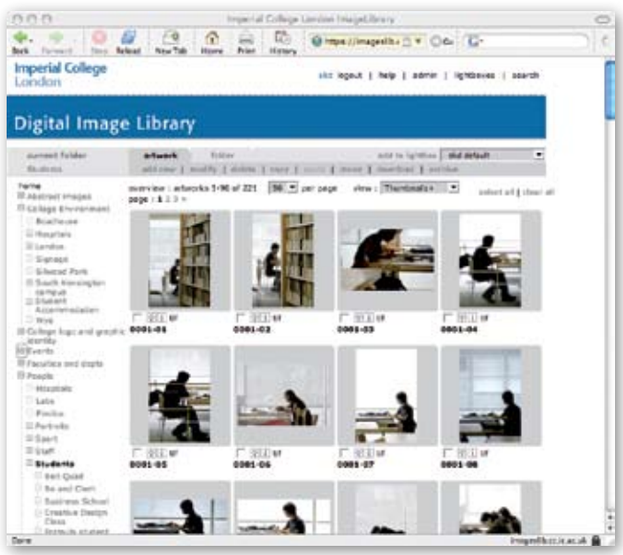
The new sites contain logos, images, templates and guidance to help you put together Imperial College communications materials ranging from PowerPoint presentations and posters, to booklets, leaflets and displays for events and fairs.

The digital image library contains almost 30,000 images of Imperial people, places and events. About 6,000 images were added last summer alone in preparation for the expected demand for Centenary-themed pieces in the run-up to 2007.

Our graphic identity, launched originally in 2003, is our 'ambassador' — when used consistently in all communications from emails to glossy booklets, it tells the world that Imperial College London is one community with a common mission. This does not mean that all publicity pieces have to look the same. The College style is flexible enough to allow for individual design requirements within a unified theme that tells your audience about Imperial and its reputation.

Using an established graphic identity also means that you don't have to reinvent the wheel every time you need to produce an agenda, document or publication, and saves you valuable time and money.

– Saskia Daniel, Communications



The new digital image library contains almost 30,000 Imperial related images

▸ *Visit* **www.imperial.ac.uk/graphicidentity** *and* **www.imperial.ac.uk/imagelibrary** *to find out more.*

Meet the sabs. From left to right: James Fok, John Collins, Shiv Chopra, Ben Harris, Jon Matthews, Shama Rahman, and Eric Lai

student voice

As the new Students' Union sabbatical officers settle into their roles, Wendy Raeside, Communications, went to meet them. Look out for the second part of this Student Voice in the next edition.

John Collins, President

John graduated this summer with an MEng in civil engineering from Imperial and holds the honour of being the seventh President in a row from engineering. He is also very much the students' choice – polling an amazing 900 out of 2,000 votes. He was President of the City and Guilds Union two years ago and Chair of the IC Union Council. His main aim this year is to promote the importance of renewable and sustainable emissions. He said "Imperial is one of the world's top science universities, so why isn't there a single windmill or solar panel on any of its campuses?" He is particularly excited by the prospect of next year's Centenary, which he believes is a brilliant opportunity to raise both Imperial's profile and money.

Ben Harris, Deputy President (Education and Welfare)

Ben, who completed a BSc in physics this summer, is one of the most visible student representatives to the College. Wearing his education and welfare hat, he is probably the officer—apart from the President—that Imperial staff are most likely to meet. Ben has a track record in Union affairs, having been involved in the Faculty of Physical Sciences and as an Academic Affairs Officer. His main aim this year is to run more campaigns on health and environmental issues. He will also be monitoring the issue of student debt and how the new fees will impact on the work/play balance.

Eric Lai, Deputy President (Clubs and Societies)

Eric is a graduate in computing and engineering and, almost a prerequisite for his post, a keen sportsman. His favourite sport is fencing—he is a member of Imperial's first team and has, in the past, fenced for the Great Britain squad. He was also Chair of the Athletics Clubs Committee last year. His main challenge this year will be to review all Imperial's clubs and societies: "how they fit into the union, whether they are run efficiently and how they can be improved." He will also be keeping a close watch on Imperial's performances in BUSA (British Universities Sports Association) competitions.

Jon Matthews, Deputy President (Finance and Services)

Jon has a first degree in biology and is taking a break from a PhD in biochemistry. From day one at Imperial he has been involved in the Union and has been a member of the Accommodation Committee and Union Councillor. "In the past, I have always been more of a backroom boy," he says, "this is my chance to do more and make a real difference to the student body." He thinks the combination of the Centenary year and major refurbishment work at Beit Quad will ensure the next year is "busy, but a lot of fun too."

Shama Rahman, Deputy President (Graduate Students)

Shama has completed an MSc in integrative neuroscience, following a first degree in molecular biology at UCL. At UCL, she was Head of Marketing for Student Internet Radio and, at Imperial, she has been involved with Photosoc and Stoic tv. Her main aims as Deputy President are to create "a more cohesive postgraduate community by, for example, getting other Imperial campuses, such as Hammersmith, Wye and Silwood, more involved." She will also be campaigning for a postgraduate common room, a PhD buddy scheme, the merit system for Master's degrees and a careers fair for postgraduates.

Andy Sykes, Editor of Felix

Andy is happy to admit he's the odd one out among sabbatical officers—although he's paid, the Union cannot directly tell him what to do and Felix continues to enjoy "some semblance of editorial freedom". Andy has been involved in Felix throughout his chemistry MSci, but only stood for the editorship once his studies were complete. Andy strongly believes that Felix is one of the very few independent student newspapers left in London. "I feel I must protect our right to hold the College and the Union to account, should the need arise, if not for my own legacy, then for the editors who'll come after me."

▸ *Look out for A Day in the Life of Jon Matthews coming soon in Reporter.*

Student success at international

A team of undergraduate students has successfully beaten off competition from Cambridge, MIT, Harvard, Princeton and other leading universities from America and around the world, in a competition to create genetically engineered machines.

The Imperial iGEM team had lunch at 170 Queen's Gate with the Rector to celebrate their success

The international Genetically Engineered Machines (iGEM) competition, organised by MIT, saw 37 student teams from around the world carrying out extended summer research projects in the emerging field of synthetic biology. This combines engineering techniques with biology, in order to use cells as manufacturing units to build engineering parts. Over 300 competitors attended the iGEM *Jamboree* at MIT earlier this month, where students presented the results of their work.

Imperial's iGEM competitors gained first prizes for best documentation for their project website, and best measurement and part characterisation. The Imperial team won second place overall with its design, above teams from all the leading American universities. The winners over all were Ljubljana from Slovenia.

Professor Richard Kitney, from the Department of Bioengineering, and one of the iGEM team organisers, commented: "To come second overall in our first year of entering the competition is a truly outstanding achievement by our undergraduate team."

Imperial's iGEM team of eight undergraduates made up of three biologists, three bioengineers, one biochemist and an electrical engineer, set out to modify bacterial DNA in order to create the world's first biologically-based stable oscillator within a population of bacterial cells. An oscillator is a fundamental building block in many different types of systems—both biological and manmade—where energy moves back and forth between two forms. The most common example of an oscillator is a clock pendulum, where energy alternates between movement energy when it is swinging, and potential energy when it is at the end of its travel and ready to fall.

> "Manipulating bacterial DNA to build an oscillator was an ambitious and challenging project"

The Imperial team planned to create their oscillator using two distinct cell populations, which form an oscillating system based on 'predator/prey' dynamics. In this sort of system, there are two distinct populations of cells, one of which produces 'predator' molecules and one of which produces molecular 'prey.' The concentration levels of these two molecules alternately rises and falls, and it is this repeating cycle that creates the oscillation.

Professor Paul Freemont, from the Division of Molecular Biosciences, also supervised the iGEM team, he said: "Manipulating bacterial DNA to build an oscillator that could be used in a variety of mechanical systems was an ambitious and challenging project taken on by our students. I'm excited by their results, which show that this kind of breakthrough technology is close to being realised."

– Danielle Reeves, Communications

▸ *Visit* **http://openwetware.org/wiki/IGEM:IMPERIAL/2006** *for more information*

synthetic biology competition

Reporter's Alexandra Platt met Bioengineering's Professor Richard Kitney, one of the iGEM team organisers and Molecular Biosciences' Professor Paul Freemont, iGEM team supervisor, to hear about their experiences of the competition.

What was the most rewarding aspect of supervising the iGEM competition?

RK – Taking a group of very bright undergraduates and introducing them to a research project for the first time. We had to start from scratch, but by the end of the competition we had 'welded' them into a very effective research group; they are now generating many new and interesting ideas—and they have all caught the research bug! The atmosphere at MIT during the Jamboree weekend was fantastic. Both of us sat watching many of the top students from 37 of the world's best universities presenting their projects in synthetic biology. All of the academics in that room knew that we were watching the birth of a new and important field of engineering and biology before our eyes. As Randy Rettberg of MIT put it: "Just imagine, in 10 years' time many of these guys will be the CEOs of important new engineering companies based on synthetic biology".

PF – It is also very important to acknowledge the other members of our research groups who made a major contribution supervising the students – Bioengineering's Vincent Rouilly, Chueh-Lo Poh and Matthieu Butelle, and Life Sciences' Kirsten Jensen. I would also like to acknowledge my colleague Dr David Mann, Life Sciences, who helped enormously in some of the biological aspects of the project.

What do you think the students gained from the experience?

PF – Apart from a crash course in research training, which they all came through with flying colours, the students learned how to develop new ideas and to test their validity. It was very interesting to observe the thought processes of the students from the two disciplines (engineering and life sciences). I think it's true to say that Dick and I became infected with the raw enthusiasm and excitement of the student teams reporting their ground-breaking work at the Jamboree. Science is exciting and highly creative, and when a new area is being established, very stimulating

RK – Interestingly, the engineers often worked from the big picture, whereas the life scientists immediately focused on the detail. However, as the project progressed, these differences became part of the strength of the team. They also developed a clear understanding of the standard they had to reach, not only in terms of the project itself, but also in terms of communication skills. The students also gained an enormous amount simply by being at MIT and interacting with the other students. One of the things we learned from the Jamboree is that top universities give students two key things: a clear understanding of the standards they must reach and an introduction to the important problems to address in any field.

What is so new and exciting about synthetic biology?

RK – Synthetic biology aims to design and manufacture biologically-based devices and systems that do not already exist in the natural world. This is done by creating an inventory of 'bioparts' by modifying DNA that can be placed in living cells or organisms. These standard parts are held by MIT for the whole genetically-engineered machines community.

PF – As life scientists begin to consider living organisms and individual cells as 'systems' (systems biology) and not as a collection of defined individual components, the synergy with the engineering sciences and engineering approach becomes even more apparent.

What are the possible future applications of synthetic biology and could any of them be considered controversial?

RK – Synthetic biology could revolutionise a number of fields of engineering and biotechnology. Biologically based electronics and computing is an important area. Biologically synthesised devices may be many thousands of times slower than their electronic equivalents, but this may be an advantage if such devices are to be used to monitor biological processes and derive their power from the surrounding environment. The synthesis of new materials is also an important area for synthetic biology. Synthetic biology will underpin the engineering and biotechnology industries of the future.

PF – I completely agree. It was less than 15 years ago that heated debates were had about whether we should sequence the human genome. Now we have the DNA sequences of many organisms and no one would now consider this research to inappropriate—genome sequencing is now almost considered passé. Another example of future applications would be in the use of 'designer' micro-organisms to produce renewable energy sources such as biofuels or even hydrogen as a way of satisfying the worlds future energy needs. Another example would be in the manufacture of complicated and difficult to synthesise therapeutic drugs by using genetically engineered organisms.

Professors Paul Freemont and Richard Kitney supported the iGEM team during the competition

Tiddlywinks champion retains his title

Professor Andy Purvis from the Division of Biology has fought off American challenger Larry Kahn to retain his world tiddlywinks champion crown. Professor Purvis, who has been playing the sport since he joined the tiddlywinks society at Cambridge University in the 1970s, also took the English singles title for the fourth consecutive time at Queen's College, Cambridge, last month. He explains that there's much more to the game than just flicking 'winks' into a cup: "It's a strategically complex game—like croquet or chess—with players trying to capture each other's winks by covering them with their own, and recapturing their own captured winks."

– Danielle Reeves, Communications

Eradicating polio in India

A simple change to the way people are vaccinated against polio could help achieve global eradication of the virus, according to research published this week in the journal *Science*.

The new study, by Imperial researchers and international partners, explains the persistence of the disease in northern India, one of the few remaining places in the world where endemic polio has not yet been eradicated.

Research found that the oral poliovirus vaccine worked significantly less well in Uttar Pradesh and Bihar, compared with the rest of India, meaning that children who receive multiple doses of vaccine may still become infected.

Poor sanitation and overcrowded living conditions in these areas were found to pose a dual challenge to the eradication effort. They encourage polio to spread because the virus passes through the faeces of infected people and spreads when people eat or drink contaminated food or water. They also encourage other infections and diarrhoea that interfere with the oral polio vaccine's efficacy.

The researchers argue that the simple measure of using a 'monovalent' form of the polio vaccine alongside the standard 'trivalent' form in these areas, could sufficiently increase the effectiveness of vaccination programmes.

Dr Nick Grassly, Department of Infectious Disease Epidemiology and lead author of the paper, said that the last remaining pockets of transmission are now the biggest challenge. He said: "The new monovalent vaccine has potential to significantly boost immunity to the dominant poliovirus in these areas."

– Laura Gallagher, Communications

Nominations open for 2006 Health and Safety Awards

Following the success of the last three years' Health and Safety Awards, this year's competition is again open to all staff below professorial level or the equivalent (Level E/7). The Award carries a prize of £2,000 and up to two commendation prizes of £500 each, and demonstrates the College's total commitment to Health and Safety.

The main criterion for the Award is that candidates must be able to demonstrate that they have made a major contribution to the management, development or practice of health and safety in the College during the previous academic year.

The closing date for awards for contributions made in the academic year 2005–06 (1 August 2005 – 31 July 2006) is 1 December. Nominations must be received by the Director of Human Resources, Room 3.17, Level 3 Faculty Building, South Kensington Campus, by the closing date.

▸ *Visit* **www.imperial.ac.uk/spectrum/hr/hr_Info/policies/rectoraward.htm** *for more information.*

Corrections and clarifications

The *Rewarding excellence in research* article on page 9 of *Reporter* 169, ascribed Dr Philip Leong and Dr Oskar Mencer to the wrong department. They are actually affiliates of the Department of Computing.

a day in the life of...

Jane Pooler

Jane Pooler joined Imperial in 2005 as one of the College's small team of Careers Advisors. She brought several years of experience to Imperial, having supported students at both the University of Surrey and the College of Law in the past. She explained her role: "Students and postdoc research staff come to us with a whole host of issues. We encourage our clients to think about what they want, explore options fully, and implement decisions about their next steps. This may involve helping them to promote themselves better in writing and in person, or to think laterally in planning their career. Often this process takes longer and isn't as straightforward as people might expect."

Reporter's Alexandra Platt went to meet her to see how she spends a typical day in her working life.

8.45
Jane arrives at the College and spends a few moments putting the finishing touches to the slides in a PowerPoint presentation that she will use later in an interactive session with second year biology undergraduates.

9.15
Coffee with Dr Weinzierl, Departmental Careers Advisor (DCA) for biochemistry. Jane explained: "Imperial is fairly unique among UK universities in having a DCA system in place. Having a Careers Advisor in each department, who is a member of academic staff, gives students interested in careers directly related to their degree, or in further study, an initial point of contact." This morning's meeting is to plan this year's programme of careers education for each year group, from first years to MSc students.

10.00
Jane and Drs Weinzierl and Murphy, DCA for Biology, co-deliver a careers presentation to second year biology and biochemistry students. Jane spends some time answering their questions about opportunities open to them when they graduate, how to apply for internships and how to make their CVs stand out.

11.00
Jane heads back to her office at 48 Prince's Gardens for an appointment with a PhD physicist, forced to consider a break from her course for health reasons. She explains: "In this situation I have to draw on my guidance skills to actively listen, show empathy, identify key issues and support this student at a difficult stage."

12.00
This is a chance for Jane to have a quick catch up of her emails. Today's include a six-page CV from a student, which is in definite need of pruning; she adds it to the pile of CVs to look at during a free hour tomorrow.

12.30
Lunch for Jane is usually a quick sandwich at her desk, and if she can possibly squeeze it in, a walk in Hyde Park.

13.30
Jane is now on 'duty' for the next three hours. She compares this to a GP's surgery, where she will see students in a series of 20-minute sessions, or 'quick queries'. She says: "For each of these I must quickly diagnose the key issues, which are not necessarily just those the student is presenting, and encourage the student to move forward in their thinking and develop their own career management skills." Today's session includes an anxious undergraduate who needs reassurance that she doesn't need to spend all summer on a computing course, despite her parent's suggestion, and an overly-dependent student who has booked to see a Careers Advisor every day this week!

14.30
The final session is with a member of staff, a postdoc who is now actively job hunting outside academia. The decision to spend an hour with her is simple. Jane says: "There's no way I could do justice to the complexity of the issues she hints at in 20 minutes."

15.45
Jane makes her way to the Flowers Building to give a seminar. The Career Service offers four late-afternoon sessions a week, every week of the year, on topics such as CVs, online applications, interviews and assessment centres.

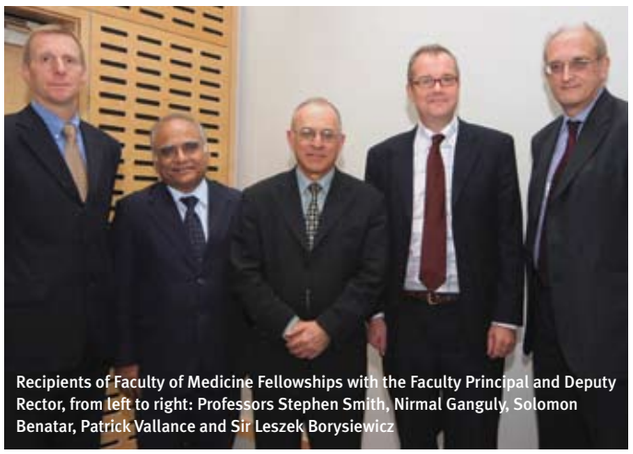
17.30
One last chance to check emails before heading home. Jane said: "The view from Hammersmith Bridge on my way to and from work is a highpoint of the day. Especially when the weather is fine and the river is busy with rowers."

▸ *For more information about the Careers Service visit www.imperial.ac.uk/careers, email careers@imperial.ac.uk or telephone 020 7594 8024.*

Is there someone you'd like to see *Reporter* have a word with?

Contact the editor Alexandra Platt. Email a.platt@imperial.ac.uk

Faculty of Medicine celebrates its successes



Recipients of Faculty of Medicine Fellowships with the Faculty Principal and Deputy Rector, from left to right: Professors Stephen Smith, Nirmal Ganguly, Solomon Benatar, Patrick Vallance and Sir Leszek Borysiewicz

Academics, clinicians and administrators from the Faculty of Medicine and associated NHS Trusts came together at the end of last month to celebrate the Faculty's successes at its annual awards ceremony.

The event, now in its sixth year, saw the award of three prestigious Faculty of Medicine Fellowships, 10 NHS Teaching Excellence Awards and 16 Faculty of Medicine Long Service Recognition Awards for 25 and 30 years' service.

It included a thought-provoking lecture on the need to address global inequalities, entitled Global health: diagnosis, prognosis and management, by distinguished guest speaker Solomon Benatar, Professor of Medicine at the University of Cape Town, who also collected his 2005 Fellowship of the Faculty of Medicine at the event.

Opening the ceremony, Professor Stephen Smith, Principal of the Faculty of Medicine, summarised the Faculty's many achievements in research and teaching over the past year.

He said: "2006 has been an exciting year for us. We have just been ranked by *The Times Higher* as fourth in the world for biomedicine and that's a major achievement of which we can be justly proud. It's only 10 years since the School of Medicine formed—to have achieved so much in 10 years is quite an extraordinary feat."

Professor Smith also congratulated the Faculty on its outstanding teaching record and on rising to third position in The Guardian newspaper's league table for undergraduate medicine courses.

Professor Smith presented Faculty of Medicine Fellowships to three people chosen for their outstanding distinction in their fields. The new fellows are Professor Nirmal Ganguly, Director General of the Indian Council of Medical Research, Professor Patrick Vallance, Senior Vice President of Drug Discovery at GlaxoSmithKline and Professor John Savill, Vice Principal and Head of the College of Medicine and Veterinary Medicine at the University of Edinburgh, who was unable to attend the event.

– Laura Gallagher, Communications

▸ *For a full list of winners visit:* **www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_27-10-2006-14-10-59**

archive corner

L.Th.J. Auzoux (1797–1880)

Louis Thomas Jérome Auzoux's anatomical models were used as teaching aids by staff of the Royal College of Science in the nineteenth century. Their main purpose was to make anatomical structures more easily accessible to study. They also reduced the need for dissections or attendance at post mortems, which was of particular importance to the Japanese who were forbidden to carry out research on a dead body. Auzoux's models were supplied with a tableau synoptique—directions for assembly.

In 1816, while a medical student in Paris, Auzoux began to experiment with building lifesize human anatomic models. Some of his models were displayed at the Great Exhibition of 1851.

He subsequently built smaller models of the ear and eye, and was later asked to diversify into models of animals and insects. Auzoux used papier maché because it was malleable enough for the construction of delicate structures and could also be coloured easily.

Today, examples of these models are held by the College Archives and you can see them if you visit the lift lobby of level 4 of the Sherfield Building. A leech, a snail, an epyornis egg, a snake's head and a hybrid fish are on display in a case donated by the Science Museum, following an exhibition of these creatures for the Huxley Centenary in 1995.

– Anne Barrett, Archives and Corporate Records

Paper maché models of animals and insects were used as teaching aids in the nineteenth century

Mechanical heart hope

Mechanical 'artificial' hearts can be used to return severely failing hearts to their normal function, potentially removing the need for heart transplantation, according to new research.

The mechanical devices, known as left ventricular assist devices (LVADs), are currently used in patients with very severe heart failure whilst they await transplantation. The new study, published in the *New England Journal of Medicine* this month, shows that using an LVAD combined with certain drug therapies can shrink the enlarged heart and enable it to function normally once the LVAD is removed.

For the study, researchers from Imperial and the Royal Brompton and Harefield NHS Trust gave the full combination therapy to 15 severely ill patients. Of these 15, 11 recovered. Of these, 88 per cent were free from recurrence of heart disease five years later. Their quality of life was measured as being at nearly normal.

Dr Emma Birks from Imperial's Heart Science Centre and the Royal Brompton and Harefield NHS Trust, lead author of the study, said: "Donor heart transplant has for many years been the gold standard in the treatment of those with severe heart failure. It has proven greatly successful but is not without its shortcomings—particularly the shortage of donor hearts and the risk of organ rejection.

"This therapy has the potential to ease the pressure on the waiting list while also offering patients a better alternative to a donor heart—their own healthy heart", she added.

– Laura Gallagher, Communications

▸ *Visit* **www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_2-11-2006-11-53-29?newsid=2883** *for the full story*

YES success for biomedical engineers

A team of young researchers from the College faced a *Dragon's Den* of judges to reach the final of this year's Biotechnology Young Entrepreneurs Scheme, to be held in London on 4 December.

The national competition aims to raise awareness of the commercialisation of bioscience ideas among postgraduate students and postdoctoral scientists.

Imperial's team of two PhD students and three postdoctoral researchers, all from the Institute of Biomedical Engineering, developed a business plan for a fictional company called Aptinostics. This was based on technology that uses short DNA sequences called aptamers to perform rapid microbial diagnostics. Their first product would be a home test kit for sexually transmitted infections, similar in principle to a pregnancy test.

The team from left to right: Katie Wood, Chris Johnson, Mei-An Sung, Nir Grossman and Leila Shepherd

Leila Shepherd, one of the competitors, said: "What distinguished us from the other teams was our interdisciplinary backgrounds. We had two biochemists, a chemist, a physicist and an electronic engineer, allowing us to come up with a technology that was truly unique and novel."

The team also benefited from a strong support network at the College with help from Tanaka Business School, including advice from Dr Tim Meldrum, and Dr Tim Knott at Imperial Innovations. They also approached a number of academics with commercial experience for feedback on the technology and their business strategy. The Institute of Biomedical Engineering's Professor Tony Cass, Dr Rob Fenton and Dr Sanjiv Sharma were happy to oblige.

Professor Chris Toumazou, Director of the Institute, said: "It is very satisfying to see the team demonstrating the principles on which the Institute was established; the application of knowledge and understanding from across science and engineering to develop devices and sensors to improve personalised healthcare."

– Naomi Weston, Communications

Awards and honours

Pendry named in Scientific American 50

The annual Scientific American 50 list, which recognises outstanding leadership in science research, business and policymaking, this year honours Professor Sir John Pendry of the Department of Physics among the technology leaders of 2006. Sir John, along with collaborators, is recognised for showing that it is theoretically possible to create materials that can redirect light around an object and make it invisible.

City and Guilds honour for Business School Principal

Professor David Begg, Principal of Tanaka Business School, has been made a Fellow of the City and Guilds Institute, the highest award that the body can confer. Fellowships recognise outstanding professional and personal achievement, and are awarded to those who have demonstrated excellence in their field, gained the respect of their peers and are considered role models for their profession.

Poole-Wilson honorary member of Heilmeyer Society

Professor Philip Poole-Wilson of the National Heart and Lung Institute has been elected an honorary member of the Heilmeyer Society, in acknowledgement of his "outstanding work in cardiovascular research, continuing international medical education and leading as well as strengthening the European Society of Cardiology".

centenary update

Student Centenary float joins Lord Mayor's Parade

Students from across Imperial took part in the 791st Lord Mayor's Parade on 11 November and chose to highlight the College's Centenary.

The theme of this year's event was the global learning curve. Engineering students, from the City and Guilds College Union, created a special Centenary float celebrating the College's heritage. The float was designed to represent the College's bright future and last century of achievement, and featured at its centrepiece a model of the Queen's Tower.

As the environment is one of Imperial's major strategic research themes, recycled wood and old copies of the student newspaper, Felix, were used in the construction of the float.

Students from all over the College dressed up for the event. Engineers, scientists and medics turned up in their hard hats, high visibility jackets, lab coats, scrubs and stethoscopes, and the musical theatre society provided period costumes.

Ashley Brown, Imperial's Lord Mayor's Show Coordinator explained: "The College's entry into the show was a great success. Organising an event such as this is both physically and mentally demanding, but the end result is certainly worth the effort. Everyone had a great time on the day."

The City and Guilds College Union President, James Fok, added: "This year's show was a tremendous success. It was particularly special because of the education theme and Imperial's Centenary. Not only did we welcome back many past students this year, but we also enjoyed a large amount of participation from friends outside the City and Guilds College Union. None of these would have been possible without the generous support from the Faculty of Engineering and the Centenary Board, and most important, the leadership from the show coordinator, Ashley Brown."

The Lord Mayor's Show winds through 800 years of London history to welcome the Lord Mayor, an annual appointment, to his position. This year, over 6,000 people took part, including 2,000 servicemen and women, 180 vehicles, 66 floats, 21 marching bands and 21 carriages.

– Naomi Weston, Communications

▸ *Visit* **www.imperial.ac.uk/centenary** *for more Centenary information*

Engineers, scientists and medics march together at this year's Lord Mayor's Parade

inventors corner

Incubating innovation

deltaDOT, one of Imperial's BioIncubator's tenants, shares the company's experience of the new facilities

A new facility, custom-built to promote and develop technology transfer, was opened this month at South Kensington Campus. The Imperial BioIncubator, jointly funded by £4 million from Imperial and £3 million from the London Development Agency, aims to accelerate the development of spin-out companies by providing a physical centre for their incubation. It provides office and laboratory space for up to 15 early-stage companies and currently houses almost 90 people from nine different companies. Imperial Innovations is responsible for the operation and management of the BioIncubator.

Dr Stuart Hassard is Head of Biology at deltaDOT, the largest company in the BioIncubator, which has 23 staff using the facilities. The company is an Imperial spin-out formed in 2000, to develop and commercialise highly innovative enabling technologies for the separation and analysis of biomolecules.

Located in the BioIncubator since July, deltaDOT currently has five offices and two laboratories. Dr Hassard welcomed the opportunity to move, as the company was growing quickly and running out of space. Previously located at five different sites, which he found frustrating, Dr Hassard described the new premises and labs as excellent compared with those used previously, adding that communications within the company have rapidly improved since the move.

The company also finds it helpful being close to Imperial. Dr Hassard explained: "We are easily able to draw on Imperial's resources, whether for help with computers or to find a specialist in materials science at short notice. It has also been very useful for recruiting qualified staff. Almost 75 per cent of our staff originated from the College".

Dr Hassard hopes to have more interaction with the other companies in the BioIncubator once the businesses have settled in. He predicts that deltaDOT will outgrow the premises within the next two years and his only regret is that the facility had not been built five years ago when the company had first started: "It would have made things a lot easier and we would have been able to grow much faster. It has been a good experience being here".

—Charlotte Stone, Imperial Innovations

▸ *Imperial Innovations may be able to help you find an alternative commercial application for your research. For further information, please visit* **www.imperialinnovations.co.uk** *or contact the technology transfer team on 020 7581 4949.*

welcome

new starters

Dr Abdul Ansari, Medicine
Miss Selina Bannoo, NHLI
Mrs Catherine Barrett, SORA
Mr Gregory Baudouin, Clinical Sciences
Dr Olaf Beckonert, SORA
Miss Dorin Benardout, SORA
Dr Elizabeth Boakes, Biology
Ms Gaynor Bovis, Research Services
Mrs Josephine Brackenbury, Educational Quality Office
Ms Nicola Bradbury, Medicine
Mr James Brotherston, Computing
Miss Karen Buckland, NHLI
Mr Daniele Carassiti, Medicine
Mr Thomas Carruthers, Biology
Mr Frederic Cegla, Mechanical Engineering
Mr Daniel Charnock, Investigative Science
Miss Hannah Cheeseman, Investigative Science
Dr Graham Clarke, NHLI
Mr John Cooper, Faculty of Medicine
Miss Rebecca Cope, College Headquarters

Rebecca Cope joins the Deputy Rector's office as the new Projects Officer. She has come straight from finishing her Master's in Biodiversity, Conservation and Management at the University of Oxford.

Dr Luc Vandeperre joined the Department of Materials in the Faculty of Engineering in early November. He came from the University of Cambridge where he spent six years as a post-doctoral researcher. His area of interest is focused on the relation between processing and the mechanical behaviour of materials.

Miss Sandra Coulstaock, Security Services
Miss Valentina Covarelli, Investigative Science
Mr Gareth Davies, Reactor Centre
Dr Jean-Charles Delvenne, Institute for Mathematical Sciences
Ms Caroline Dudley, NHLI
Dr Asmaa Fritah, SORA
Ms Ashley Frize, EPHPC
Dr Daniel Gale, Medicine
Dr Thomas Galliford, Medicine
Dr David Game, Medicine
Miss Leah Glass, ESE
Dr Fui Goh, Kennedy Institute
Miss Arantzazu Gonzalez Campo, Chemistry
Mr Ross Goold, NHLI
Dr Rong Guo, Humanities Programme
Mr Gareth Hall, Physics
Dr Thorsten Hamann, Biology
Mr Loui Hesse, Cell and Molecular Biology
Miss Amy Hey, Business School
Dr Markus Hilty, NHLI
Ms Marjorie Hylton, Finance Division
Dr Virginie Jacquemin, SORA
Miss Min Jen, EPHPC
Miss Vasiliki Katsardi, Civil and Environmental Engineering
Mr Jeremy Kimberley, Faculty of Medicine
Miss Mitaben Lad, Chemical Engineering
Dr Sylvain Laizet, Aeronautics
Mr Christos Lampris, Civil and Environmental Engineering
Mr Simon Lee, Registry
Mr Wei-Chao Lee, Molecular Biosciences
Professor Nick Lench, Development and Corporate Affairs
Miss Denise Leonard, Human Resources
Miss Paula Lescott, Faculty of Medicine
Dr Phang Lim, NHLI
Mr Jayson Lim, Student Residences
Dr Alexandra Lo, Kennedy Institute
Dr Huma Lodhi, Computing
Mrs Yan Lu, Medicine
Mr Jaime Luna-Ortiz, Chemical Engineering
Miss Christina Lundy, Faculty of Natural Sciences
Professor Georgina Mace, Biology
Mr Francisco Mesquita, Investigative Science
Dr Nikica Mise, Medicine
Mr Jarlath Molloy, Civil and Environmental Engineering
Dr James Morris, Investigative Science
Mr Allan Morris, Estates
Mr Petros Mouratidis, Medicine
Dr Aurelie Mousnier, Cell and Molecular Biology
Dr Olive Murphy, Institute of Biomedical Engineering
Miss Sobiya Nadaraja, Medicine
Mr Robin North, Civil and Environmental Engineering
Dr Hirohisa Nose, Investigative Science
Mr David O'Rorke, Biology
Dr Leyla Osman, NHLI
Mr James Parkinson, Investigative Science
Ms Katarzyna Parzych, Cell and Molecular Biology
Mr James Percival, Mathematics
Miss Milena Peric, Civil and Environmental Engineering
Dr Peter Pietzuch, Computing
Dr Simon Podmore, Educational Quality Office
Ms Chandra Ramakrishnan, Cell and Molecular Biology
Dr Selena Richards, SORA
Miss Lemady Rochard, Registry
Mr Christophe Rouxel, Estates Division
Miss Gina Sanchez Canon, Clinical Sciences
Mr Richard Seoud, Aeronautics
Miss Emma Smith, Cell and Molecular Biology
Miss Bhavana Solanky, Clinical Sciences
Mr Robert Steed, Molecular Biosciences
Dr Milena Stevanovic, Cell and Molecular Biology
Mr Daniel Symes, Physics
Dr Marta Szajna-Zych, Medicine
Mr Ricardo Torres La Porte, Physics
Miss Helen Turner, Faculty of Medicine
Dr Evangelos Vaitsis, Chemical Engineering
Dr Luc Vandeperre, Materials
Dr Xuhua Wang, Physics
Mr Leonard Wanigasooriya, Mechanical Engineering
Dr Sasala Wickramasinghe, Chemistry
Dr Long Wu, Chemical Engineering

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

farewell

moving on

Dr Rohit Arora, EEE
Dr Martin Arundell, Institute of Biomedical Engineering
Ms Christine Baldwin, Medicine
Professor Margaret Callan, Medicine
Dr Rakesh Chaudhary, Medicine
Dr Benjamin Clark, Biological Sciences
Miss Helen Coldbeck, Strategy and Planning
Miss Lucy Cropper, Conference Office
Dr Lorna Crowhurst, Chemistry
Mr Adam Davis, ICT
Dr Victoria Franke, Bioengineering
Dr Neil Galletly, Investigative Science
Miss Stamatia Giannarou, EEE
Professor Charles Godfray, Biology (19 years)
Dr Jelle Goeman, EPHPC
Dr David Guiliano, Cell & Molecular Biology
Dr Diana Hernandez, NMH
Dr Patrick Howe, Physics
Mrs Andrea Hunt, NMH
Mr Colin Hutchinson, Student Residences
Professor William Jones, International Office
Mr Sal Khan, Conference Office
Mrs Janet King, Educational Quality Office (9 years)
Professor Julia King, Faculty of Engineering
Mr Guillaume Lafforgue, Biology
Mr Scott Lamond, SORA
Miss Tracy Lord, Finance (8 years)
Mr Johnathan Mair, Security Services
Mr Allan Martin, Security Services
Mr Gerardo Martinez Ortiz, Security Services
Mr Christopher Mela, Investigative Science
Dr Steve Mitchell*, BMS (26 years)
Miss Jessica Muir, Faculty of Medicine
Dr David Murrell, Biology (5 years)
Mr Alex North, Security Services
Mr Cabral Oku-Watton, Security Services
Ms Leda Parker, NMH
Mrs Kelly Patel, Biological Sciences
Dr Emmanuel Polycarpe, SORA
Dr Paul Potter, Medicine (6 years)
Dr Sasa Rakovic, EEE
Mr Paul Ralfs, Security Services
Miss Gurwinder Rayat, Security Services
Ms Hollie Richmond, College Headquarters
Dr Jesus Rogel-Salazar, Chemistry
Ms Jennifer Rowland, Library Services (6 years)
Miss Eleanor Simon, Conference Office
Mr Oleksandr Starodub, Catering Services
Miss Tamora Stoneham, Security Services
Mr Kirill Stryuchenko, Investigative Science
Miss Rowan Swinhoe, Medicine
Dr Yen Tai, NMH
Mrs Ksenija Topolovec Miklozic, Mechanical Engineering
Mr Joseph Trakalo, Biology
Dr Suzanne Traves, NHLI
Mrs Margaret Turtell, Finance (17 years)
Dr Katharina Wallis, Division of Medicine
Mr Steven White, Catering Services (6 years)
Mrs Ruth Wild, Biology
Mrs Samantha Wiltshire, Faculty of Engineering
Mr Glen Wotherspoon, Kennedy Institute
Dr Alexandre Zabi, Physics
Mrs Maya Zaharieva, Sport and Leisure
Mrs Xiaoqing Zhang, Catering Services
Mrs Chunhua Zhao, Catering Services

Retirements

Mr Mike Lowery, Mechanical Engineering (9 years)
Dr Ian Mathews, Aeronautics (20 years)
Mr Brian Murphy, Security Services (22 years)
Mr Sean Murphy, Faculty of Medicine (13 years)
Mr Robert Seymour, Security Services (16 years)

This data is supplied by HR and covers the period 22 October–11 November 2006. It was correct at the time of going to press. Years of service are given when an individual has been a member of College staff for over five years.

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

moving in. moving on.

what's on

22 November 2006 17.30–18.30

The Global Challenges of the 21st Century

Professor Sir David King, ScD, FRS, Chief Scientific Advisor to HM Government, presents the 2006 Dennis Gabor Lecture.

Lecture Theatre G16, Sir Alexander Fleming Building

23 November 2006 17.30–18.30

A Revolution in Medicine: the role of information technology in the future of medicine

Professor Richard Kitney presents the Graduate School Graduate School of Engineering and Physical Sciences Lecture

Lecture Theatre G16, Sir Alexander Fleming Building

27 November 2006 09.00–17.00

The Fifth Annual Imperial Proteomics Day and the First BSPR London Regional Meeting

One-day conference chaired by Dr Judit Nagy, Division of Cell and Molecular Biology, Faculty of Natural Sciences.

Lecture Theatre G16, Sir Alexander Fleming Building

30 November 2006 18.00–19.00

An Audience with the Crew of NASA Space Shuttle Discovery Flight STS-121

Professor David Phillips, OBE, Senior Science Ambassador for Schools, hosts a question and answer session.

Lecture Theatre 220, Mechanical Engineering Building

5 December 2006 20.00–22.00

Sinfonietta Concert

Great Hall, Sherfield Building

7 December 2006 17.30–18.30

Inventory and Flow Control in Complex Networks

Professor Erik Ydstie, Carnegie Mellon University, presents the thirteenth Professor Roger W.H. Sargent Lecture.

Lecture Theatre 1 (Room 250), Ace Extension Building

13 December 2006 17.30–18.30

Big Magnets and Big Molecules: seeing through the spin

Professor Steve Matthews, Professor of Chemistry and Structural Biology.

INAUGURAL LECTURE

Clore Lecture Theatre, Huxley Building

13 December 2006 18.30–19.30

The Changing Face of Robotics

Professor Guang Zhong Yang, Department of Computing, presents this year's Annual Christmas Demonstration Lecture.

Lecture Theatre G16, Sir Alexander Fleming Building.

14 December 2006 17.30-18.30

Schrodinger Lecture: 'Architecture in NanoSpace'

Professor Sir Harold Kroto, winner of the 1996 Nobel Prize in Chemistry, presents the nineteenth Schrodinger Lecture

Lecture Theatre 220, Mechanical Engineer Building

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

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

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100

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Naomi Weston
Tom Whipps

take note

Sherfield refurbishment—relocations

Occupational Health has relocated to temporary accommodation at the rear of the ACE extension on the South Kensington Campus. Visit www3.imperial.ac.uk/occhealth/contacts/ohlocationmap/temporarymap for a map of how to find it.

All Finance Division staff who were based on level 4, Sherfield Building have been moved to 52 Princes Gate, where access to the front door is swipecard controlled. All employees and students will be able to enter during normal office hours. Staff telephone numbers and email addresses are unchanged.

volunteering

This week's project...

Hosts for international students

Project ID: 1032
HOST UK
Ongoing
Location: Home-based, anywhere in London

Volunteers needed to occasionally open their homes to international students. You should be willing to offer a visit for an international student for a day or a weekend. You can host once a year or several times. HOST works with a wide variety of international students, from undergraduates to mature students studying at higher levels, and the diversity of its students is increasing. This opportunity would also suit a group of friends or workmates seeking a voluntary activity that gives you the opportunity to learn more about wider international issues while having fun.

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

Visit **www.imperial.ac.uk/volunteering** *for full details of over 250 volunteering opportunities. Email* **volunteering@imperial.ac.uk** *to subscribe to the weekly newsletter.*