

First impressions

What the College is doing to help new students find their feet

... CENTRE PAGES



GREEN DRIVE
Imperial part of £3.5 million consortium to create greener electric vehicles
PAGE 3



FOOD DIARY
Is it possible to give up non-recyclable packaging for one week?
PAGE 12



CROSS CULTURE
Computing's Marina Hall remembers her childhood in Russia
PAGE 12



EDITOR'S CORNER

Balancing act

Last week as I made my way towards the Main Entrance at the end of the day I was distracted by a number of **mysterious objects hurtling through the sky**. I wasn't seeing things, nor had Dalby Court been graced with an influx of UFOs, instead I encountered three students from **Imperial's Juggling Society** who were practising their skills in the open space on campus. Impressed by their ability to keep so many balls in the air, I began thinking about the juggling each of us does on a daily basis in our **varied roles at Imperial**. For any of you searching for a clear path through competing priorities as the start of the academic term rapidly approaches, Dr Magdalena Bak-Maier (Learning and Development Centre) recommends taking a step back and asking yourself **"what is it I'm trying to achieve here?"** and only proceeding once you have the answer. To find out about the many activities College staff have been busy juggling to prepare for the **new starters** see pages 8–9.

EMILY ROSS-JOANNOU, EDITOR

Reporter is published every three weeks during term time in print and online. The next publication day is 13 October.

Contact Emily Ross-Joannou: reporter@imperial.ac.uk

Imperial staff celebrate promotions

Over 100 academics at Imperial will begin the Autumn term with new positions, after this year's promotions exercise recognised their dedication to research and teaching.

Across the College, 103 staff have been promoted to positions of senior lecturer, teaching fellow, senior research fellow, reader or professor. The 2011 promotions round sees 34 academics receive professorships, acknowledging their international standing and leadership in their subject or profession.

Staff are nominated for promotion by their department at the start

of each academic year. They can also nominate themselves. Nominations are then considered by the Faculty or the Academic Promotions Committee.

Deputy Rector Professor Stephen Richardson, who chairs the Academic Promotions Committee, said: "Once again this year, the field was extremely strong, with many outstanding and well-rounded applications. My sincere congratulations to all who have been promoted – without exception on their own merits."

—LAURA GALLAGHER, COMMUNICATIONS AND DEVELOPMENT

For the full list of the academic promotions 2011 visit: <http://bit.ly/acpromotions>



Lorenzo Iannucci (Aeronautics) has been promoted to Professor of Advanced Structural Design. He is pictured standing next to a gas gun which he uses to model impacts in aircraft.

Life Sciences recognised for equality success

The Department of Life Sciences received a bronze Athena SWAN award at the end of August, for its activities supporting female academics and ensuring equality in the workplace.

The Athena SWAN awards acknowledge the commitment by an institution or a department to recruit, retain and advance female academics. The Department was one of 10 institutions or departments to receive awards this year.

The activities that were recognised by the award include a staff survey and an evaluation of departmental policies and practices, to help establish what works well and where improvements can be made. The Department has also been developing an action plan that includes monitoring data related to student and staff recruitment, career progression and retention, as well as mentoring and other forms of career support.

The submission was coordinated by Dr Sally Power (pictured), who said:



"Winning is a recognition, both internally and externally, of the many efforts which have already been made to ensure that the Department is a productive, equitable and enjoyable place to work in." Taking part in the Athena nominations had, she said, been beneficial to the community as a whole as "...a way of making sure that we are working towards a system which ensures a level playing field for all staff and creating a strongly supportive work environment."

Professor Maggie Dallman, Principal of the Faculty of Natural Sciences, congratulated the Department, she said:

"I'm delighted by Life Sciences' success in this year's Athena SWAN awards. It's a fitting tribute to the commitment that staff in the Department have shown to supporting female staff, and is a great encouragement for the whole College."

—JOHN-PAUL JONES, COMMUNICATIONS AND DEVELOPMENT

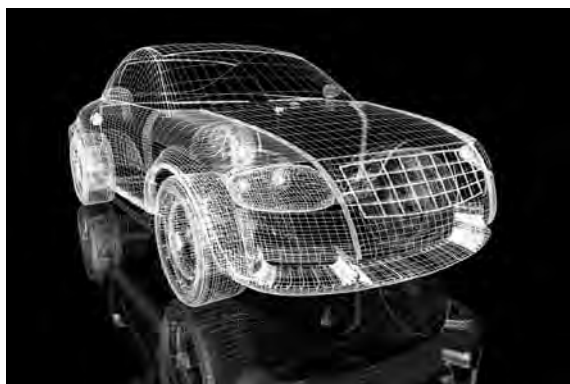
Imperial College London



The College is calling on academic staff to take part in The Original Academic Staff Time Survey (TOAST). Track the time you spend on activities during three weeks in 2011–12 and inform calculations of the College's rates for research grant applications.

For more information visit: www.imperial.ac.uk/planning/toast

Aiming for cleaner greener cars



Creating the tools to help the UK automotive industry develop the next generation of low emission vehicles will be the focus of a new £3.5 million academic consortium that includes engineers from Imperial and starts work this month.

The consortium aims to devise new computer models to test the components and systems that power zero emission electric and hybrid vehicles. They hope their findings lead to more affordable and better designed vehicles.

Dr Gregory Offer (Earth Science and Engineering) will lead

Imperial's project, which is part of the Energy Futures Lab's Electric and Hybrid Vehicle Network. He said: "Approximately 70 million cars are produced each year and only a fraction of them are low emission vehicles. We are still a long way from developing low emission vehicles that can compete with their combustion engine cousins on performance and price. This project aims to provide much needed support to the UK's automotive industry so that in 50 years' time our motorways will be cleaner and greener."

Low emission vehicles use electric

motors, controlled by power electronics and powered by a combination of different technologies including batteries, fuel cells and super-capacitors. One of the current problems with low emission vehicles is their limited range. This is because they need many batteries and these can be very heavy, creating drag, which in turn means the cars use more energy.

The Imperial team, including Drs David Howey and Ricardo Martinez-Botas (both Mechanical Engineering), will create computer models to improve the performance of batteries, fuel cells and super-capacitors, to reduce the number needed to run a vehicle. The models should allow engineers and designers to experiment with the configuration of various components to improve the performance of low emission vehicles.

—COLIN SMITH, COMMUNICATIONS AND DEVELOPMENT

Pro Rector (Research) and Chief Financial Officer

Two new appointments to Imperial's Management Board were announced over the summer. Professor Donal Bradley FRS was named as the next Pro Rector (Research), with effect from 1 October 2011, and Mr Muir Sanderson will become the College's new Chief Financial Officer on 1 November 2011.



Professor Donal Bradley

Professor Bradley, currently Deputy Principal of the Faculty of Natural Sciences, is one of the most highly cited scientists in the fields of physics and materials science, and is a co-inventor of conjugated polymer electroluminescence, an innovation that launched the field of plastic electronics.

In his new appointment, Professor Bradley will take over from the Acting Pro Rector (Research), Professor David Begg, who continues as Principal of the Business School. He will be responsible for strategic research issues across the College, determining priorities for strategic research investment and coordinating and developing the College's research relationships externally.

Commenting on his appointment, Professor Bradley said: "I am delighted to be continuing my long relationship with the College in a new role. Imperial's interdisciplinary approach, with an emphasis on translation, distinguishes it among other world-leading research institutions."



Mr Muir Sanderson

Mr Sanderson will be responsible for defining and delivering the College's financial strategy, which includes investment management and fund development. He will join Imperial from Booz and Company, a global management consulting firm, where he has spent more than 17 years working across a range of industries, notably financial services, the public sector and consumer goods.

Speaking about his appointment, Mr Sanderson said: "I am delighted to be joining Imperial. It has an outstanding reputation for teaching and research, and is leading the way with some exciting financial and strategic innovations."

—SIMON WATTS, COMMUNICATIONS AND DEVELOPMENT

in brief



Election of Deans

Professor Richard Thompson (pictured left), Professor of Experimental Physics and Head of the Quantum Optics and the Laser Science Research Group in the Department of Physics, has been elected to succeed Professor Chris Phillips as one of the Deans for the

Faculty of Natural Sciences from 1 September 2011 to 31 August 2014. Professor Jeff Kramer, Professor of Distributed Computing in the Department of Computing and the current Senior Dean, has been re-elected to serve as Senior Dean for a further year.

For the full list of Faculty Deans for 2011–12 please visit: <http://bit.ly/newdeans>

Head of the Department of Mathematics

Professor Richard Craster, Professor of Applied Mathematics, has been appointed Head of the Department of Mathematics with effect from 1 October 2011. He succeeds Dr Emma McCoy, who has been interim Head of Department since July 2010. Professor Craster joined the College in 1988 as a lecturer holding an EPSRC Advanced Fellowship and was promoted to Professor in 2004.

Head of the Department of Life Sciences

Professor Murray Selkirk, Professor of Biochemical Parasitology, has accepted appointment as Head of the Department of Life Sciences with effect from 1 October 2011. He will succeed Professor Ian Owens, who is leaving the College to become Director of Science at the Natural History Museum. Professor Selkirk joined the College in 1984 as a Research Fellow and, after a series of promotions, served as Head of the Division of Cell and Molecular Biology from 2005–08. An interview with Murray will be published on *Reporter online* this month.

Latest league tables

Imperial was ranked sixth in the 2011 *QS World University Rankings*, published in early September, improving on its seventh place position in last year's league table. In the recent *Sunday Times University Guide* Imperial was top for graduate salary and for the rate of student employment in graduate-level jobs. The College was ranked 14th overall in the table following a change to the methodology this year, which placed significantly more weight on certain measures, including the outcomes of the *National Student Survey*.



Alumni support the next generation of scholars

More Imperial students will benefit from scholarships supported by alumni in the next academic year than ever before, thanks to fundraising that culminated in £274,080 of donations to the Rector's Scholarship Fund through the summer direct mail appeal.

The generosity of 3,500 alumni during 2010-11 has enabled scholarships to be awarded to 61 undergraduates, 20 Master's students and four PhD students in the 2011-12 academic session. Compared to 2010, this represents a trebling of the number of undergraduate scholarships, while five times as many Master's students and double the number of PhD students will also benefit from scholarships.

The Rector, Sir Keith O'Nions, said, "We can now make Imperial accessible to a greater number of outstanding

students who, without a scholarship, would have been unable to afford the cost of taking an Imperial degree. I am delighted that so many supporters responded – thank you to everyone who contributed."

The Rector's Scholarship Fund was launched with a direct mail appeal in June from the Rector personally. It called on alumni to help undergraduate and postgraduate students who merit a place at Imperial but may not be able to accept one for financial reasons. Undergraduate scholarships awarded from 2011-12 will be for £1,000 per year, Master's scholarships will provide £10,000 per year and PhD scholars will receive £15,000 per year.

—ZOE PERKINS, COMMUNICATIONS AND DEVELOPMENT

More on the Rector's Scholarship Fund: www.imperial.ac.uk/alumni/rsfund

Huge funding boost for biomedical research



Two NHS Trusts in partnership with Imperial have received multi-million pound awards to boost research and enable the development of more effective medicines, treatments and care for patients, it was announced at the end of August. The funding forms part of the UK's largest ever investment in early-stage health research, which has given an £800 million funding boost to 31 university and NHS partnerships.

Imperial College Healthcare NHS Trust and the College have been given £112 million by the National Institute for Health Research (NIHR), to fund their Biomedical Research Centre (BRC). The award, which will cover five years from April 2012, renews the funding granted to the Trust and the College by the NIHR in 2006 to establish the BRC.

The funding will enable the BRC to continue to carry out research in areas including cancer, diabetes, heart disease, neuroscience, renal medicine and

transplantation, paediatrics and women's health.

Two biomedical research units (BRUs) run jointly by Royal Brompton and Harefield NHS Foundation Trust and Imperial College London were also recognised with a grant of almost £20 million. These two units are at the forefront of international research into the most challenging lung and heart conditions affecting patients around the world.

Sir Keith O'Nions said: "Our partnerships with Imperial College Healthcare NHS Trust and with Royal Brompton and Harefield NHS Trust are hugely important for delivering the outcomes of our medical research to patients, and the scale of these new awards recognises just how successful these partnerships have been."

—LAURA GALLAGHER, COMMUNICATIONS AND DEVELOPMENT

Major consortium paves way for oil refining improvements



A \$US10 million international partnership was announced on 12 September between Imperial, the Boreskov Institute of Catalysis and the Skolkovo Foundation, both based in Russia, with

the aim of improving the energy efficiency and environmental impact of the oil industry.

The partners announced the signing of a Letter of Intent, which could lead to an international research consortium for reducing heat loss in oil refining by up to 15 per cent. The work will aim to improve refining operations, enhancing oil production processes, increasing safety in plants, and reducing CO₂ emissions.

Imperial will play a key role in the consortium, carrying out research in the Department of Chemical Engineering and Chemical Technology to find ways of reducing heat loss by improving the design of heat exchange equipment and energy recovery networks within refiner-

ies. The three-year project will also see the College's knowledge transfer consultancy, Imperial Consultants, facilitating academic and industrial partnerships to ensure that the research carried out by the consortium will be translated into benefits for society and industry.

Rector Sir Keith O'Nions said: "The ongoing development of Russia's oil industry is a major part of the country's efforts to modernise its economy and infrastructure. Imperial has worked on projects for oil companies around the world and we look forward to ensuring that the research from this collaboration translates into real energy savings and environmental improvements."

—COLIN SMITH, COMMUNICATIONS AND DEVELOPMENT

media mentions


—COLIN SMITH, COMMUNICATIONS AND DEVELOPMENT



✉ **JOIN OUR MAILING LIST** for regular news, information and website alerts: www.imperial.ac.uk/media/jointsignup

DAILY MAIL ▶ 13.7.2011

Debate over cost of energy plan

 Families could face increases in energy bills of up to £1,000 a year to fund a switch to green energy and build new nuclear power stations, reported the *Daily Mail*. The government has outlined a new regime that will encourage firms to build thousands of wind turbines, tidal power stations and nuclear plants. However, there is a dispute between the government, green campaigners, academics and industry analysts over the true cost of the programme. Dr Robert Gross (Centre for Environmental Policy) rejected the warnings of the rise in energy bills: “I haven’t seen any credible analysis that suggests bills will double unless a complete mess is made of the financing.”

FINANCIAL TIMES ▶ 26.7.2011

Digital city

London could become home to a new research centre looking at ‘smart cities’ technology, following a £5.9 million grant to Imperial’s ‘digital city exchange’ programme, reported the *Financial Times*. The scheme plans to pull in data from transport, government, businesses and consumers, as well as academia, to use the cities as laboratories to investigate how technology could transform the way they are run. “London, with all its economic and social diversity, will be a very good place to launch some of these capabilities into new cities around the world and create new jobs and growth,” said Professor David Gann (Business School).

NEW SCIENTIST ▶ 19.8.2011

Ancient fungi explosion could happen again

 Researchers say a worldwide outbreak of fungi could occur if climate change weakens trees too much, reported *New Scientist*. The assessment is based on research about Earth’s biggest mass extinction 250 million years ago, called the Permian extinction, which wiped out 95 per cent of species. According to the study, a knock-on effect of the vast volcanic eruptions that triggered the Permian extinction was a global plague of fungi, which fed on plants after they died. Explaining that climate change could lead to the same natural phenomenon, Professor Mark Sephton (Earth Science and Engineering), one of the authors of the study, said: “Dramatic changes can occur when you stress an ecosystem too far”.

NEW SCIENTIST ▶ 30.8.2011

Fukushima media coverage

Alarmist predictions that the long-term health effects of the Fukushima nuclear accident in Japan will be worse than those following Chernobyl in 1986 are likely to aggravate harmful psychological effects of the incident, reported *New Scientist*. “We’ve got to stop these sorts of reports coming out, because they are really upsetting the Japanese population,” said Professor Gerry Thomas (Surgery and Cancer). “The media has a hell of a lot of responsibility here, because the worst post-Chernobyl effects were the psychological consequences, and this shouldn’t happen again,” she added. Japan’s nuclear and industrial safety agency has reported that radioactivity

from Fukushima is about 10 per cent of that caused by Chernobyl.



awards and honours

ENGINEERING

Leading engineer recognised by IET



The Institution of Engineering and Technology (IET) has announced that Professor Chris Toumazou, Chief Scientist of the Institute of Biomedical Engineering, will be awarded the J.J. Thompson Medal for Achievement in Electronics this year. Professor Toumazou was recognised for his contribution to the development of technologies such as the ‘digital

plaster’, which checks vital signs including blood pressure.

LIFE SCIENCES

Balzan Prize

Professor Russell Lande (Life Sciences) was awarded the International Balzan Prize on 5 September in recognition of his research in theoretical biology. The prize is awarded by the Balzan Foundation for “outstanding initiatives of peace and brotherhood among peoples to foster their growth in the scientific and cultural world”. In Professor Lande’s early career, he pioneered the use of genetics to study the evolution of continuous traits, such as height and weight. He later contributed to the statistical analysis of populations and is influential in the field of conservation biology.



ENGINEERING

Royal Society recognition

Molly Stevens, Professor of Biomedical Materials and Regenerative Medicine (Materials), was awarded the Clifford Paterson Lecture 2012 Prize in July by the Royal Society. The prize is part of the Society’s annual award round, which celebrates scientists, excellence in research and the profound impact that research will have on science and society.

OUTREACH

Volunteers win gold

Three Imperial students, Maurice Rose (Biochemistry), Wayne Yeang (Electrical and Electronic Engineering) and Harish Santhanam (Bioengineering), who have been volunteering through the Outreach Office, have been recognised by Volunteering England. The students have all been involved in the IntoUniversity programme, which provides mentoring and academic support for young people from disadvantaged backgrounds, to help them either attain a university place or pursue their aspirations.

Reporter will be covering further news of IntoUniversity later in the year.



Genetic study of south Asians finds diabetes clues

Research led by Imperial academics has identified six new genetic variants associated with type 2 diabetes in south Asians, in a study published in the journal *Nature Genetics* in late August. The findings give new leads in the search for diagnostic markers and drug targets to prevent and treat this major disease.

People of south Asian ancestry are up to four times more likely than Europeans to develop type 2 diabetes, which is a major risk factor for heart disease and stroke.

The new study is the first to focus on genes underlying diabetes amongst people originating from the south Asian region (India, Pakistan, Sri Lanka and Bangladesh). The researchers examined the DNA of 18,731 people with type 2 diabetes and 39,856 healthy controls. The genomes of the participants were analysed to look for locations where variations were more common in those with diabetes. The results identified six positions, where differences of a single letter in the genetic code were associated with type 2 diabetes, suggesting that nearby genes have a role in the disease.

Dr John Chambers (Public Health) said: "Type 2 diabetes is more common in south Asian populations than any other ethnic group, but the reason for this increased risk is unclear. Although lifestyle factors such as unhealthy diet, physical inactivity and obesity are important causes of diabetes in south Asians, these are only part of the explanation. Genetic factors have been widely considered to play a role in the increased risk of type 2 diabetes in Asians, but to date have not been systematically explored in this population."

—SAM WONG, COMMUNICATIONS AND DEVELOPMENT

Mosquitoes can't spot a spermless mate

Research authored by Imperial scientists, and published in August in the *Proceedings of the National Academy of Sciences*, has shown that a female mosquito cannot tell if the male that she has mated with is fertile or 'spermless' and unable to fertilise her eggs. This finding could help scientists in their mission to prevent the spread of malaria by interfering with the mosquitoes' ability to reproduce.

Malaria is a debilitating disease that affects more than 300 million people, and kills nearly 800,000 every year. This new study focuses on the species of mosquito primarily responsible for the transmission of malaria in Africa, *Anopheles gambiae*.

The results lend support to the idea that in the future it will be possible to control the size of the malaria-carrying mosquito population by introducing a genetic change that makes the males sterile. Such a method would rely on females mating unknowingly with such modified males and failing to produce any offspring.

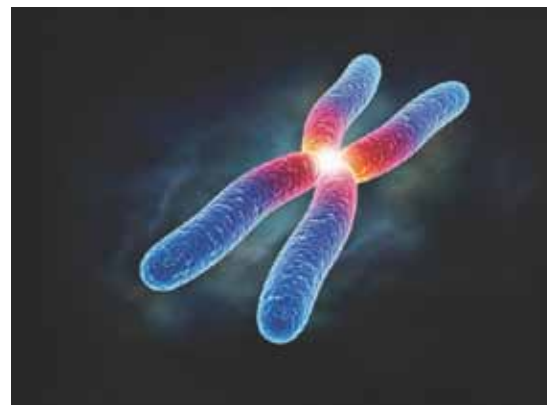
Lead author of the study, Dr Flaminia Catteruccia (Life Sciences), said: "In the fight against malaria, many hope that the ability to genetically control



the mosquito vector will one day be a key part of our armoury. In order for these currently theoretical control strategies to work, we need to make sure that the insects continue to mate as normal, unaware that we have interfered with their sexual mechanisms. This study strongly suggests that they cannot tell the difference between a fertile and a spermless mate."

—SIMON LEVEY, COMMUNICATIONS AND DEVELOPMENT

'Gene overdose' causes extreme thinness



An international team of scientists led by Imperial has discovered the first genetic cause of extreme thinness, in a study published on 1 September in the journal *Nature*.

The research shows that people with extra copies of certain genes are much more likely to be very skinny. In one in 2,000 people, part of chromosome 16 is duplicated, making men 23 times and women five times more likely to be underweight.

Each person normally has two copies of each gene, one chromosome from each parent, but sometimes sections of a chromosome can be duplicated or deleted, resulting in an abnormal number of genes. In a study examining the DNA of over 95,000 people, researchers identified that duplication of a part of chromosome 16 is associated with being underweight, defined as a body mass index below 18.5. Half of all children with the duplication in the study have been diagnosed with a 'failure to thrive', meaning that their rate of weight gain is significantly lower than normal. A quarter of people with the duplication have microcephaly, a condition in which the head and brain are abnormally small, which is associated with neurological defects and shorter life expectancy.

“This is the first genetic cause of extreme thinness that has been identified”

Professor Philippe Froguel (Public Health) said: "So far, we have discovered a large number of genetic changes that lead to obesity. It seems that we have plenty of systems that increase appetite since eating is so important – you can [even] suppress one and nothing happens. This is the first genetic cause of extreme thinness

that has been identified."

—SAM WONG, COMMUNICATIONS AND DEVELOPMENT

Trial follow-up reveals unexpected benefits of statins



Research led by scientists at Imperial and published in the *European Heart Journal* in August has revealed that cholesterol-lowering drugs called statins reduce deaths from infection and respiratory illness.

Over 10,000 patients with high blood pressure in the UK, Ireland and Scandinavia were randomly allocated either atorvastatin or placebo in the Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT) between 1998 and 2000. The trial ended early in 2003, because the statin was so effective at preventing heart attacks and strokes. Even though most participants in both groups have been taking statins ever since the trial ended, a new study has now shown that the death rate among patients prescribed a statin at the outset of the trial is still lower than in those given a placebo.

The new analysis looked at the number and cause of deaths among the 4,605 participants in the ASCOT trial based in the UK. After 11 years' follow-up, overall mortality was shown to be 14 per cent lower in the group originally assigned atorvastatin, due largely to fewer deaths from infection and respiratory illness.

Professor Peter Sever (NHLI) said: "This result is very unexpected. The benefits of statins for preventing heart attacks and strokes are well-established, but after long-term follow-up the most significant effects seem to be on deaths from other causes. It's quite remarkable that there is still this difference between the two groups, eight years after the trial finished. More research is needed to explain how these drugs might have unforeseen actions that prevent deaths from other illnesses."

—SAM WONG, COMMUNICATIONS AND DEVELOPMENT

“More research is needed to explain how these drugs might have unforeseen actions that prevent deaths from other illnesses”

How sticky eggs capture sperm



Imperial scientists were part of an international team whose research, published in the journal *Science* in August, uncovered exactly how a human egg captures an incoming sperm to begin the fertilisation process.

The research identifies the sugar molecule that makes the outer coat of the egg 'sticky', which is vital for enabling the sperm and egg to bind together. Researchers across the world have been trying to understand what performs this task for over 30 years.

The team discovered that the sugar chain known as the sialyl-lewis-x sequence (SLeX) is highly abundant on the surface of the human egg. After experimenting with a range of synthesised sugars in the laboratory, they went on to show that SLeX specifically binds sperm to an egg, and tested their findings using the outer coats of unfertilised 'non-living' human eggs.

The scientists behind this study believe their work could help address some of the previously unexplained causes of human infertility and sub-fertility, and be very useful for diagnosing this problem in couples who are unable to have children. It could also provide a new target for the development of natural contraceptive agents.

Professor Anne Dell (Life Sciences), said: "Unravelling the composition of the sugar coat that shrouds the human egg is the culmination of many years of painstaking work. This exciting research is providing the first insights into the molecular events occurring at the very beginning of human life. The details we've discovered here fill in a huge gap in our knowledge of fertility, and we hope they will ultimately help many of those people who currently cannot conceive."

—SIMON LEVEY, COMMUNICATIONS AND DEVELOPMENT

Ancient daddy long legs revealed

An international team led by researchers at Imperial has developed new three-dimensional, virtual fossil models, revealing two ancient types of harvestmen or 'daddy long legs', which skittered around forests more than 300 million years ago.

The research, published on 23 August in the journal *Nature Communications*, showed the team's 3D models of the two fossilised species of harvestmen from the Dyspnoi and Eupnoi suborders. It uncovered how the ancient creatures survived in the



3D models of harvestmen from the Dyspnoi and Eupnoi suborders.

Earth's early forests and how harvestmen as a group have evolved. Other scientists have

previously suggested that harvestmen were among the first groups on land, whose bodies evolved into their modern-day form at a time when other land animals, such as spiders and scorpions, were still at an early stage in their evolution. The researchers say that comparing the 3D fossils of the Dyspnoi and Eupnoi species to modern members of these harvestmen groups provides further proof that ancient and modern species were very similar in appearance, suggesting little change over millions of years.

Dr Russell Garwood (Earth Science and Engineering), currently

based in the computed tomography lab at the Natural History Museum in London, said:

"It is absolutely remarkable how little harvestmen have changed in appearance since before the dinosaurs. We can't yet be sure why they appear so modern when most land animals, including 'cousins' such as scorpions, were in such a primitive form at the time. It may be because they evolved early to be good at what they do, and their bodies did not need to change any further."

—COLIN SMITH, COMMUNICATIONS AND DEVELOPMENT



Warm welcome

Every October over 2,500 new undergraduates, and over 2,500 new postgraduate students arrive at Imperial lugging boxes of soon to be read books, sparkling crockery and mountains of freshly washed clothes, to begin their life at the College. As Imperial gets set for the start of a new academic year, *Reporter* discovers how important those first seven days are to the students' experience and their views of the College.

All hands on deck

Moving-in weekend, taking place over 1–2 October this year, is one of the busiest times in the College calendar and getting everyone welcomed, unpacked and settled into their halls, is the priority for an army of staff and student volunteers, hall wardens and their teams. The Dean of Students, Professor Denis Wright, tried to visit as many halls as possible last year and will do the same this year. "Students are more likely to decide to leave in the first few weeks at College than any other time in the academic year – often due to social reasons, such as home sickness and being worried about not fitting in, rather than academic pressures. We have to try to make sure

students feel at home from the very start," he says.

Last year's annual student satisfaction survey, the Student Barometer, showed that the top motivations for students coming to Imperial are its quality of teaching and the reputation of the College and its degrees. New students tend to be less aware of the wealth of non-academic activities which Imperial offers.

Imperial College Union's role at the beginning of term is to highlight the social side of life at Imperial. Alex Mckee, Central Services Manager at the Union, organises a number of 'getting to know you' activities during Welcome Week to help students to strike up friendships, including

'mingles' for undergraduate and postgraduate students. Even before term starts, new students have a chance to meet the sabbatical team and each other at one of the sports days coordinated by the Imperial Freshers Facebook group and held in Hyde Park. Alex explains that these events make starting university less daunting, as new students will already know some faces and have had their questions answered. "Some of these 18-year-olds aren't just coming to university but to a new city and a new country – they understandably have lots of questions," he says.

University skills

Connecting with international students before they settle in to the academic term is a particular priority for Dr Sharon Bolton, Head of International Student Support. She organises 'early bird' orientation workshops for international students in the run up to the week before moving-in day. The work-

shops include sessions on finding accommodation in London, and a number of representatives from local banks are invited to the international welcome event on 2 October to speak directly to students about their finances. Sharon explains that international students tend to arrive in London a bit earlier than home students, so workshops are a good way of making them feel welcome and equipping them with the information they need from the start. "We want them to hit the ground running and ensure that during those first, all-important weeks they aren't distracted trying to get the documents they need to open a bank account, or sorting out health insurance when they should be studying," she says.



4

1. Student Wardening teams welcome new students at Selkirk Hall at Welcome Week 2010
2. Staff at the Student Hub give advice to new students
3. Student helpers prepare thousands of Freshers' welcome packs
4. A new resident checks into Eastside Hall on Moving-in weekend 2010.

Help and advice

Scott Heath, this year's Union President, remembers how he felt in his first week at Imperial: "Everything was so new. It was really difficult to stay focused, with the excitement of finally being in London, but the introduction sessions were very beneficial and helped me gauge what life at Imperial was going to be like." Scott emphasises the importance of the Welcome Week talks given by the Rector, senior staff and the sabbatical officers and departments. "University is a big contrast to most students' prior education," he notes. "It's vital to inform the new intake about all the support mechanisms available to them and where they can go for more information."

Since opening in 2007, the Student Hub, based in the Sheffield Building on the South Kensington Campus, has provided students with face-to-face help and advice. During an average week in the spring and summer terms, the Student Hub deals with approximately 500 enquiries, but the volume increases to 1,100 per week during the autumn term, with

“All staff and returning students have an important role in making new students feel part of the College”

the vast number coming from new arrivals during the first few days of term. Charles Gallagher, Head of Commercial Business and Student Support, says: "The Student Hub not only helps students settle

in quickly, offering documents and solutions in one place, but also helps make the students' first experiences at Imperial as positive as possible, by providing a professional

and efficient service. We hope students are reassured that they can come to the Hub with all their questions and can expect the right answers."

Social support

Clubs and societies play a key social function for Imperial students – providing students with the opportunity to develop new skills, pursue a new passion and, most importantly, help them achieve a good work/life balance.

Union Deputy President (Clubs and Societies), Monya Zard, is organising this year's Freshers' Fair on the Tuesday of Welcome Week, where Imperial's 300-plus clubs and societies

showcase their activities.

"If you've just moved away from home for the first time, life can be pretty daunting, but by joining a club or society, you can find a group of like-minded people who can really help you to feel at home," explains Monya.

Jason Parmar, this year's Deputy President (Education), says that getting involved with clubs and societies is one of the best ways to make friends in the first year: "We have so many clubs and societies at Imperial – if you can think of an activity, you can do it. I joined up to do poker, squash and parkour in my first year, plus a few other clubs which I had to let go, but it was brilliant being able to try so many things – Imperial has so much more to it than the academic side."

Right foot

Over the next couple of weeks as the new starters pour onto campus, everyone can help them get off on the right foot, Denis notes. "First impressions matter. All staff and returning students have an important role in making new students feel part of the College and their department, whether it's giving them directions or a friendly smile," he says.

—EMILY ROSS-JOANNOU, COMMUNICATIONS AND DEVELOPMENT



To support the new starters, ICT, Communications and Development and Imperial College Union have developed a personalised mobile app to provide Imperial students with key information on their iPhone, BlackBerry, Android or iPad. The app will allow students to:

- Search for a building on the South Kensington Campus
- Search for a free PC in the Central Library
- Catch up on the latest news and events from the main Imperial website, the Imperial College Union website and *Reporter*
- Download a pocket guide of key information including points of interest such as how to set up your computer, what to do if you want to play an instrument and the all important Freshers' Fair timetable.

For more information about the Imperial phone app and how to download it, visit: www.imperial.ac.uk/imperialmobile

E A S Y A C C E S S



Team spirit

Completing major building projects, generating record levels of income and collecting a trophy cabinet of awards are some of the successes achieved by the Commercial Services team over the past five years. It has been a year since Jane Neary took over the helm as Director. Here she speaks to *Reporter* about the highlights and the importance of exceeding student expectations.

What kind of projects have your team been involved in over the last five years?

Major projects have included demolishing and rebuilding both Southside and Eastside halls of residence, relaunching the Main Dining Hall as the Queen's Tower Rooms, refurbishing the main kitchen, and opening the Student Hub. The most recent developments have been the transformation of the *Ethos* gym, which is now interactive and state-of-the-art, as well as the full refurbishment of Beit Hall on the South Kensington Campus.

What motivates you in your work?

The student experience is top of our agenda and, with the increase in student fees, student expectations are going to be even higher. For us that means listening to the students, reacting as quickly as we can to what they are telling us and ensuring our services are good value for money. We are continually benchmarking and asking for feedback via surgeries, questionnaires, online surveys, Facebook, Twitter and email.

Can you give me an example of a project that was particularly influenced by students?

When we opened Eastside, many people were sceptical about having a grocery shop on site. To ensure we were catering for everyone's needs, we asked students to put their shopping receipts in boxes in every hall for a month. Then we took all that information, correlated it with the top 300 student brands selling nationally and the top selling Tesco lines in London, to identify the top selling products that matched our students' needs. We have barely changed the products since we opened the Essentials shop, as it appears to sell exactly what the students and local residents want.



One of the most enjoyable parts of Jane's role is working with her team.

What do you enjoy most about your role?

The team I work with – they just keep getting better and better! Commercial Services have been awarded Customer First, the national standard for customer service, the chefs have won the University Caterers Organisation TUCO challenge, *Ethos* won the Flame Award for the best educational fitness club and sports centre. We have attained various sales and marketing awards and are 17th in the British Universities and Colleges Sport (BUCS) championship, as well as top for sport in London. I'm proud that so many in the team have been recognised for their success.

What do you do to retain your contribution and team?

We have numerous forums to try and get everyone's views on the projects we are engaged in, and encourage staff to feel part of their division and proud of working for Imperial. This year we are having an 'Oscars' night for Commercial Services, where we have 12 different nomination categories to recognise both individual and team achievement.

What has been Commercial Services' biggest achievement since you started in your role?

This year, for the first time, we have made a surplus of £1.6 million from our external commercial activities. Approximately £1 million of this has been reinvested in refurbishment of the gym, Beit Hall, social and residential space at Silwood Park Campus and remedial work on a number of other halls. The rest of the 2010–11 year end surplus has been transferred to central College funds.

What does 2012 have in store for Commercial Services?

Our key priorities will be to develop long-term relationships with higher education and industry, and hosting delegates from the Japanese and Swiss Olympics teams to support the games, which will give summer 2012 a real cultural flavour. As well as representatives from these nations, over 400 police officers will be staying at Imperial during the Olympics and using our facilities.

What is on your wish list for next year?

We would like to create more space for the College community to interact socially, especially postgraduates. The JCR and Queen's Tower Rooms are geared towards undergraduates and the SCR attracts staff, but taught postgraduates don't really have a place to call their own. We would like to change that, providing a catering and social space that could be open out-of-hours and at weekends. In addition to this, we are working on a longer-term strategy to improve the undergraduate accommodation offering.

inside*

story

mini profile

Themistoklis Prodomakis

Dr Themistoklis Prodomakis (Electrical and Electronic Engineering) speaks to *Reporter* about harnessing the power of memristors and their role in the next generation of intuitive computers.



What are memristors?

Memristors, or memory resistors, are an experimental technology, nanoscopic in size, which can be used in silicon chips to process information.

What are the advantages of memristors over current silicon chip technology?

One of the advantages of memristors, compared to normal transistors used in silicon chips, is that they are smaller, which means that more memristors can be fitted into a chip to increase processing power. Computers would also be more sustainable if using memristors because they need less energy to process information.

How are you using memristors in your research?

Working with researchers in the Institute of Biomedical Engineering, we are building a computer platform that mimics how a part of the brain functions. Each memristor will act like a synapse, which link neurons in our brains, to help process information to carry out complex tasks.

What is the ultimate aim of the project?

Current computers are very good at solving mathematical problems but are not very good at solving problems intuitively in the way that humans can. By using memristors to mimic how neurons operate, we hope to mimic how the brain processes information, which will allow computers to be far more intuitive for users.

How could this technology be used in the future?

Memristive networks, where millions of memristors are processing information, could be applied to solve problems that computer networks currently struggle to do effectively, such as face recognition. We could also use memristors to mimic how the brain works to understand brain-related diseases. For example, memristive networks might be used to model how a brain with epilepsy will respond to various treatments before medication is administered to a patient to improve their treatment.

—COLIN SMITH, COMMUNICATIONS AND DEVELOPMENT

Silwood bee harvest

On 11 August a group of staff and students, who have been working on a beekeeping project on the South Kensington Campus since June, travelled to Silwood Park Campus to help with their annual honey harvest. Daniella McManamon, Project Assistant in Facilities Management, describes the process of honey extraction:



“It took 12 people and a day of hard work to extract and jar the honey. The bees can smell the honey from a great distance and, given the opportunity, they would come to reclaim it, so you have to be careful. A bee’s defensive strategy – the sting – is an effective one and one that, unfortunately, a few of us fell victim to.

A key part of the process is removing the ‘supers’ – the parts of the hive which contain only honey – from the rest of the hive and transporting them to a bee-free area. Each super contains about seven frames, each heavy with honey. With a kitchen knife, the wax caps are sliced from each frame revealing the rich and sticky filled comb beneath. Each ‘capped’ frame is then placed in a motorised extractor which spins

the honey out from the frames until it flows from a tap at the bottom of the machine, through a sieve and into large tubs. The golden contents of the tubs are then poured into jars and

boxed for distribution to a lucky few.

There are currently seven active hives at Silwood but that number varies each year, with some colonies failing to survive the winter and others swarming. The suc-

cess of the hives is down to the efforts of Professor John Mumford and Dr Jon Knight (both Centre for Environmental Policy) who have been maintaining and developing the hives over the years.”

The honey from the South Kensington Campus hives will be available from next summer. To get involved with the beekeeping project please contact: esoc@imperial.ac.uk

“The bees can smell the honey from a great distance and, given the opportunity, they would come to reclaim it”

► SCIENCE FROM SCRATCH

As explained by Pippa Goldenberg, MSc Science Communication



Supersymmetry

Supersymmetry, or SUSY, is a particle physics theory that suggests all the particles that we know exist have a ‘superpartner’ particle. These are expected to have more mass than their counterparts but, most importantly, they have a different quantum property called spin, which occurs in nature in fixed units. For example, the superpartner of an electron, which has a spin with a half-number value, will have a spin with a whole-number value. This theory gives rise to a whole new set of ‘sparticles’ – supersymmetric particles – and doubles the total number of fundamental particles in physics. The sparticles are named similarly to the original particles, producing names such as squark, selectron and stoproton.

These supersymmetric particles have yet to be found, so their masses are unknown, but the lightest of them could also provide a candidate for dark matter. Dark matter is the only current explanation for the mass of all observed galaxies: our observations have revealed that they have far more mass than is actually measured.



IMPERIAL STUDENTS SHARE THEIR EXPERIENCES OF LIFE AT THE COLLEGE ON THE STUDENT BLOGGERS WEBSITE.

Student blogger Charlotte on the Great British Summer:

"It's been a good summer but maybe not as relaxing as I hoped for. And the weather! Oh. My.

God. I'm very, very disappointed UK.

Don't try to say, "well, what did you expect," because, frankly, I've seen better.

I've heard about better.

I expected a bit better.

I'm also feeling my

Swedish genes craving

sun. We might have long and dark winters up north, but it's compensated for by the ability to get some sun in the summer. The UK skipped that step this summer it seems, so despite it not being the most economic solution, I've booked a weekend trip to Barcelona."

www.imperial.ac.uk/campus_life/studentblogs

blog
SPOT

Love food, hate waste



Is it possible to only eat food where the waste or packaging can be disposed of in an environmentally friendly way? Jessica Adams (Communications and Development), pictured above, spent a week finding out just how green she really is.

"I'm pleased to report that there were many encouraging moments throughout my week of trying to be more sustainable, like my lunchtime salads containing vegetables from Brixton market and ingredients, like capers and tuna, which came in recyclable jars and tins.

"I'm pleased to report that there were many encouraging moments throughout my week"

Unfortunately, the week also contained some dismal failures, like the realisation that fruit and vegetables only 'count' as fully sustainable snacks if the pips, skins and cores are composted. Alas, I don't have a garden, my borough doesn't collect food waste from the street I live on and bringing smelly, decomposing food on the tube to the compost facilities on campus isn't my idea of an enjoyable commute.

Banana skins aside, the worst failure of the week occurred on Sunday morning. The smell of sausages sizzling over-rode my good intentions and the processed meat's non-recyclable packaging sat in the bin as a forlorn reminder of my lack of self-control.

What did I learn? That to make completely 'green' food decisions you'll

need more willpower, time and money than I've got. But remembering your reusable bag or buying your vegetables from a market is easy, and the more frequently you do it, the less guilty you feel about the

occasional imperfect sausage."

Read a daily summary of Jessica's adventure at: <http://bit.ly/lovefoodhatewaste>

cross culture



Harvest festivals in Russia

Mrs Marina Hall, Research Group Secretary (Computing), moved to the UK 10 years ago from one of Russia's Siberian cities, Tomsk. One of her most vivid memories of her childhood is of staying with her grandmother every summer for three months in a village called Batyrovo in the area of Altay, which Marina remembers as being small, friendly and close knit. She recalls the harvest festivals she experienced there, which were started by local villagers hundreds of years ago.

"Every summer one of the locals would mention to another that the harvest festival was due, so the word would get around and, soon after, the party would begin in the streets. There would be one huge table for everyone to bring along chairs, home-cooked food and special, extremely popular, home-made vodka called 'moonshine.'

There would be music and everyone would sing along to Russian songs. Fires would be lit when the evening drew in and the boys would jump over them following an old tradition. The women would go to each other's homes, and tea-leaf and palm readings were used to tell fortunes. Young girls would be told: "If you take your shoe and throw it, whichever direction it points in is where you will go to marry," and "at midnight, walk out of your door and ask the first man you see what his name is. That is the same as the name of the man you will marry."



A photo of me when I was a little girl.

The last harvest festival I attended was when I was 12 years old, and unfortunately the tradition has died as the older generations have passed away. I remember the village festivals fondly and when my son grows up I will tell him about the traditions, and I may even try to bring them back to the local villages in Russia."



About cross culture

Cross culture is a scrapbook for staff and students to fill with their local recipes, cultural traditions and experiences of moving from another part of the world to work or study at Imperial.

✉ To contribute to cross culture please send your ideas to reporter@imperial.ac.uk



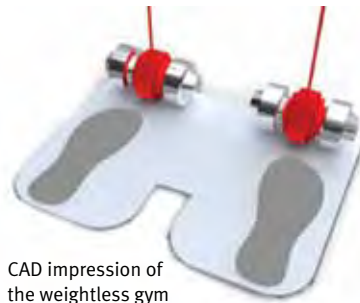
INVENTOR'S CORNER

Brake time

Yaroslav Tenzer completed a PhD in the Mechatronics and Medicine Group in the Department of Mechanical Engineering in 2010. He is currently a postdoctoral researcher at Harvard University in the USA but is back at Imperial applying the concepts behind his invention, which makes surgery simulations more realistic, to develop a weightless gym.

What have you invented?

In a virtual surgery environment, surgeons need the procedures they are carrying out to feel like they do when they are operating on the human body; the way to achieve this is by creating feedback from the simulators. Motors are normally used to provide the required effect but these can be unwieldy and potentially unstable and, therefore, unsafe. I realised I could design a semi-locking passive mechanism that could provide a smaller, more versatile solution. Over a few years we developed a prototype, patented the mechanism and named it the 'programmable brake'.



CAD impression of the weightless gym

How could it be used?

There are cases where a surgeon will need to inject something into a precise point in the body that may be hard to access. A robot with programmable brakes could restrict the surgeon's movement according to the point's location, providing a realistic experience.

Can you tell me about the new project you are working on?

I've teamed up with a group of MBA students in the Business School, who came up with the idea of using the programmable brake for a weightless gym to simulate common exercises, such as weightlifting and rowing. The mechanism enables programmable resistance for inward and outward strokes in a small device suitable for home use. User feedback is provided via a software-based interface to enhance motivation, similar to Wii Fit. So far, we have developed an alpha-prototype device.

<http://bit.ly/weightlessgym>



Creating opportunities for BME staff

As the College's race equality advisory group Imperial as One celebrates its sixth anniversary, Christine Yates, Diversity and Equal Opportunities Consultant (HR) reflects on her role and how the group has developed.

"I was employed by Imperial in 2002 with the aim to guide the College's response to the Race Relations Amendment Act in 2000. The Act came into force in the wake of the Stephen Lawrence Inquiry to formally recognise and tackle the problems of institutional racism.

Supporting Imperial as One is one of my key priorities, particularly promoting race equality initiatives with the aim of increasing the number of black and minority ethnic (BME) staff in management and leadership positions at Imperial. One of Imperial's achievements has been to establish a successful leadership programme for BME

staff called iLead which is run over five months and includes a two-day residential module. Each participant's manager attends a half-day session to discuss their role in giving staff every opportunity to succeed. Imperial as One has also run

Creative Futures workshops for the past five years – bringing state school pupils to Imperial with the aim of inspiring them to pursue higher education and to apply to Russell Group universities, which in the past may have seemed out of reach. Today we have no shortage of help from academics and students wanting to support and deliver workshops.

For me Imperial as One is about ensuring all our talent is used in the best way and that individuals at the College can flourish. I recognise the College has come a long way in the last six years but there is still a lot of work to do to achieve a level playing field for all."

Imperial as One is hosting a symposium on 4 October. To book your place contact: k.mistry@imperial.ac.uk

An Imperfect Storm



Peter Gillings, New Media Manager (Communications and Development) has just published his first book of short stories called *An Imperfect Storm*, available on Kindle. He speaks to *Reporter* about the inspiration for his stories and how he has juggled his day job with his writing.

"I came to the College in 1991 to temp part-time in the Finance Division, while I was doing an MA in Screenwriting at what was then the London College of Printing. I really loved the storytelling aspect of screenwriting but it's all about creating the framework for someone else to build

and animate, and I was keen to write the finished article. During my MA, I moved into the Communications Division to work on the Imperial website and, when I finished my course, I decided to stay on at the College.

I work from 8.00–16.00 at Imperial then head home and write from 18.00–19.30 every weekday.

An Imperfect Storm is a

collection of stories centred around the city and the sea. I've always been fascinated by the sea; I grew up near the seaside in Essex and spent time living in Jersey as a child. The wonderful thing about Kindle is that you can bypass getting an agent and someone to agree to publish it. I'm excited

to hear what people think about my stories.

For the full interview visit: <http://bit.ly/odBf23>



To download *An Imperfect Storm*, visit: <http://amzn.to/Gillings>

obituaries



SASHA GOGOLIN

Professor Alexander (Sasha) Gogolin (Mathematics) died on 19 April 2011.

Professor David Edwards (Medicine) pays tribute to his colleague and friend.

“Sasha was born in Tbilisi, USSR (now Georgia), in 1965, the only child of his parents who were both physicists. He joined the Mathematical Physics section of the Department of Mathematics at Imperial as an EPSRC Advanced Fellow in 1995 and went on to gain a Lectureship at the College in 2000. He was promoted to Professor in 2003.

Sasha made important contributions to theoretical condensed matter physics, particularly in the fields of low dimensional systems and quantum transport. This work is of increasing importance for understanding new structures like carbon nanotubes and small semiconductor devices. Sasha’s work stands out for the power of his mathematical analysis combined with his deep physical insight. He had a very individual style of working. Sometimes he worked alone, producing some highly original papers but much of his work was done collaboratively. Sasha was an excellent lecturer and was well-liked by the students.

Sasha was an avid reader and he liked nothing better than to enjoy his secluded garden in Ilford. He is survived by his wife, Svetlana, his daughter, Katarina, and his parents.”



PETER SEAL

Peter Seal, Chief Fire Officer (Facilities Management and Property Services), died on 8 July 2011. Dina Hudson, Security Support Services Manager, pays tribute to her colleague and friend:

“Following a 20-year career in the Berkshire and London Fire Brigade, from which he retired at the rank of Station Officer, Peter joined Imperial as a consultant in January 1996. In January 1998, he became a full-time member of the Fire Team as Leading Fire Officer and was made Chief Fire Officer in 2001.

Peter was well-known for his sharp dry wit and for being a gentle giant. Before he became ill, Peter was a very active member of the Facilities Management team and could be seen around the College’s buildings on a daily basis, meeting and making friends with many of the staff and students.

Outside work, Peter lived on a narrowboat and spent many painstaking hours doing it up.

He leaves his wife Sandie, daughter Kirstie, son Matthew and three grandchildren, on whom he doted.”

To share your memories of Sasha or Peter, visit: www.imperial.ac.uk/reporter

Great reception in Kuala Lumpur

On 9 August, 173 Malaysian alumni and guests arrived at the British High Commissioner’s residence in Kuala Lumpur for drinks with the Rector, Sir Keith O’Nions. Louise Birrell, Alumni Events and Marketing Manager (Communications and Development) reports on her experiences of the event.



“In April, a group from Communications and Development began planning a four-day trip for the Rector to three locations – Malaysia, Singapore and Hong Kong. All three countries have high populations of Imperial alumni and we wanted to give them the chance to reconnect with each other and the College at receptions hosted by the Rector.

This was one of the biggest overseas events I’d ever organised and one of the trickiest parts was the seven-hour time difference. When we arrived at work in the UK, our contacts in the Far East were already leaving, so a lot had to be organised by email.

The first stop on our trip was Kuala Lumpur, the capital of Malaysia. We were there during the month of Ramadan, when Muslims fast during daylight hours, so we timed the event carefully to start at 19.30, 20 minutes after the fast had broken at sunset. We organised bowls of dates for our guests as this is the food traditionally eaten to break the fast.



The British High Commissioner’s residence in Kuala Lumpur, where the alumni reception was held.

Sir Richard Sykes was the last Rector to visit Malaysia in 2007, so it was a big deal for the alumni community that the event was going to be hosted by Sir Keith O’Nions. The guests flocked towards the Rector like he was a celebrity – everyone wanted to talk to him.

For me it was really nice to speak to alumni face-to-face as I tend to speak to international alumni by email. They had many warm tales of their time at the College and listened intently to Sir Keith’s talk, in which he gave an overview of the latest developments back at the College. The event was held in conjunction with the Imperial College Alumni Association of Malaysia, which saw a 50 per cent rise in membership during the course of the night, so they were really pleased too. It was a great start to our trip.”

To see pictures from the event see: <http://bit.ly/alumniKL>



Artifact

In *Reporter* 232, published in April, Dr Dan Emmerson (Chemistry) reported on an event which saw staff and students from Imperial and the Royal College of Art team up to create science and engineering-inspired artwork harnessing the scientific and creative talent of both institutions. You can see the project’s results in an exhibition called *Artifact* in the Blyth Gallery, Level 5 Sheffield Building, until 29 September.

Welcome new starters

Mrs Margit Alexy, Business School
 Mrs Victoria Allen, Humanities
 Mr Raphael Assier, Mathematics
 Dr Giacomo Bacci, ESE
 Miss Emma Bailey, Bioengineering
 Dr Monika Bajorek, Medicine
 Mr Christopher Baker, ESE
 Mr Rodney Ball, Business School
 Mr William Ball, Physics
 Dr Rocio Banos Pinero, Humanities
 Dr Eleni Bazigou, Bioengineering
 Ms Ruth Bello, Civil and Environmental Engineering
 Miss Fiona Bibby, Medicine
 Mr Jude Bowyer, Physics
 Mrs Lesley Bravery, Finance
 Dr Didac Busquets Font, EEE
 Dr Damien Calay, NHLI
 Dr Gaelle Carrat, Medicine
 Dr Andrea Cavallaro, Materials
 Dr Edmond Chan, Public Health
 Dr David Chester, Life Sciences
 Mr Babu Choudhary, Computing
 Dr Andrew Comerford, Aeronautics
 Miss Julie Coyne, Business School
 Mrs Angela Dalrymple, Business School
 Mr Nayan Das, NHLI
 Mr Brian Daughton, Humanities
 Dr Charlotte Dean, NHLI
 Dr Pasquale Della Corte, Business School
 Miss Claire Dempster, Mechanical Engineering
 Dr Panagiotis Drymoussis, Surgery and Cancer
 Mr Edward Emmott, Medicine
 Ms Shannon Ewart, Life Sciences
 Ms Emanuela Falaschetti, NHLI
 Mr Alexander Finch, Physics
 Dr Bobbi Fleiss, Surgery and Cancer
 Dr Jean-Baptiste Fressoz, CHOSTM
 Miss Ana Garcia Diaz, Clinical Sciences
 Ms Corinne Gittens-Noel, Faculty of Medicine
 Professor Richard Green, Business School
 Mrs Sandra Griffiths, NHLI
 Dr Marc Gunter, Public Health
 Miss Kira Gurnam, Commercial Services

Mr Paul Harrop, Civil and Environmental Engineering
 Mr David Hoffmann, Physics
 Miss Charlotte Holloway, Public Health
 Mr Anthony Hunt, Bioengineering
 Miss Sabrina Jackson, Medicine
 Dr Antoine Jacquier, Mathematics
 Miss Claudia Jasmand, Business School
 Mr Farouk Jivraj, Business School
 Dr Jessica Jones Nielsen, Public Health
 Mr Anthony Jones, Medicine
 Miss Sarah Joyce, Environmental Policy
 Ms Christina Kabba, Medicine
 Mrs Matty Kara, Security Services
 Mr Morad Karimpour, Mechanical Engineering
 Dr Sujatha Kesavan, Surgery and Cancer
 Mr Costas Koufaris, Surgery and Cancer
 Dr Ioannis Kountouris, Environmental Policy
 Miss Katie Leung Pah Hang, International Office
 Mr Matthew Lilley, Physics
 Mr Liang Lu, Aeronautics
 Mr Samuel Macaulay, Business School
 Mr Francis Manu, Clinical Sciences
 Mr John Marinaro, Human Resources
 Dr Jad Marrouche, Physics
 Dr Ralf Martin, Business School
 Miss Stefani Menoikou, Medicine
 Miss Celeste Miles, Faculty of Medicine
 Mr Steven Millership, Clinical Sciences
 Dr Yuri Mishina, Business School
 Dr Brian Mitchell, Humanities
 Dr Michelle Moram, Materials
 Mr Rodrigo Moreno Vieyra, EEE
 Mr Leendert Nederveen, Public Health
 Professor Marco Pagano, Business School
 Dr Panayiotis Parpas, Computing
 Mrs Jana Pierron, NHLI
 Dr Shireen Quli Khan, NHLI
 Miss Mireille Rack, Environmental Policy
 Miss Kim Roche, Medicine
 Mr Marco Ruberti, Physics
 Ms Esa Saguyan, Medicine
 Dr Erik Santiso Borrazas, Chemical Engineering and Chemical Technology

Mr Siavash Saremi-Yarahmadi, EEE
 Mrs Michelle Sclanders, Surgery and Cancer
 Dr Melanie Scott, NHLI
 Dr Joanna Seiffert, NHLI
 Dr Andrey Shadrin, Medicine
 Mrs Lisa Sharpe, Surgery and Cancer
 Dr Lawrence Sheppard, Life Sciences
 Mr Robert Sherer, Human Resources
 Mr Karol Stankiewicz, Catering Services
 Mr David Swieboda, Medicine
 Dr Oleksiy Sydoruk, EEE
 Dr Christian Thomas, Mathematics
 Mr Akis Tsiotsios, EEE
 Mrs Karen Tune, Business School
 Mr Mark Tunnicliff, Life Sciences
 Dr Karine Vauchez, NHLI
 Mr Christopher Veysey, Humanities
 Dr Yang Wang, Public Health
 Mrs Victoria Wooster, Reactor Centre
 Professor Mike Wright, Business School
 Dr Chao Wu, Computing
 Miss Rachael Youren, Chemistry
 Mrs Marzieh Zamani, NHLI
 Dr Lakis Zervoulis, Business School
 Dr Hongbo Zhou, Medicine

Farewell moving on

Dr Hippolite Amadi, Surgery and Cancer
 Miss Rachel Amos, Medicine
 Dr Christopher Arrell, Physics
 Mr Ben Baumberg, Public Health
 Mr Jagmel Bharij, ICT (21 years)
 Ms Ruthie Birger, Public Health
 Dr Andrew Brown, Medicine (6 years)
 Mr Nicholas Brown, Library
 Mr Tim Burnett, Business School
 Dr Rosalyn Casey, NHLI
 Ms Kirsty Cashman, EYEC
 Mr Nilanjan Chaudhuri, EEE
 Dr Cora Cheung, Physics
 Mr David Chinn, Finance (7 years)
 Dr Jaeyoon Cho, Physics
 Miss Roisin Collins, Accommodation
 Mr Matthew Cowan, Library
 Mr Thomas Cox, Professional Development
 Mr Jason Curran, Medicine
 Dr Gwyneth Davies, NHLI
 Dr Maria De Iorio, Public Health (8 years)
 Dr Hugues de Lavallade, Medicine
 Miss Arminder Deol, Public Health
 Ms Sonia Dixon-Fairweather, Business School
 Mrs Paula Edwards, Finance
 Dr Cecile Evrin, Clinical Sciences
 Dr Gabriela Gomez Guillen, Public Health
 Miss Emily Govan, International Office
 Miss Miriam Goyder, Chemistry
 Dr Hatice Gunes, Computing
 Mr Mark Hahnel, NHLI
 Mrs Alison Harker-Smith, Faculty of Medicine (5 years)
 Dr Jane Hendy, Business School (5 years)
 Ms Zena Hira, Clinical Sciences
 Dr Candice Howarth, Environmental Policy
 Ms Siobhan Hughes, Medicine
 Ms Siobhan Hughes, Surgery and Cancer
 Dr Vivian Ikem, Chemical Engineering and Chemical Technology
 Mr Henry Ip, Bioengineering
 Dr Rossen Ivanov, Mathematics
 Dr Maria Kapsali, Business School
 Dr Joanna Kargul, Life Sciences (12 years)
 Mrs Azadeh Kia Kojouri, Medicine
 Dr Denis Kramer, Chemistry
 Mr Jimmy Kyaw Tun, Surgery and Cancer
 Dr Esther Leon, Life Sciences
 Miss Elodie Levasseur, Commercial Services
 Dr Qiang Liu, Computing
 Mr Pradeep Loganathan, EEE
 Mr Stephen Luckhurst, Human Resources
 Mr Daniel Maskell, Medicine
 Dr Catriona McGilvery, Materials
 Dr Nazakat Merchant, Clinical Sciences
 Dr Snjezana Miocic-Lazarevic, NHLI
 Mr Christopher Moss, Security Services
 Dr Jennifer Nekuda, Materials
 Dr Rhodri Nelson, ESE
 Miss Frances Nicholas, Accommodation
 Dr Xize Niu, Chemistry
 Dr Francisco Orozco Cano, Computing
 Dr Janice Pearce, Faculty of Medicine (10 years)
 Dr Jahnvi Phalkey, Humanities
 Dr Monica Pirani, Public Health

Mr Suman Prem, Catering Services
 Mr Stefan Prieske, Medicine
 Dr Dan Read, Physics (6 years)
 Dr Luis Rojo Del Olmo, Materials
 Dr Anna Rose, Life Sciences (5 years)
 Miss Elizabeth Sanchez Cao, Medicine
 Dr Jennifer Sattaur, Aeronautics
 Dr Jon Saunders, ESE (6 years)
 Dr Arezki Sedoud, Life Sciences
 Mr Joseph Shalhoub, Surgery and Cancer
 Dr Peter Spelt, Chemical Engineering and Chemical Technology (6 years)
 Mr Benjamin Stanier, Surgery and Cancer
 Ms Dianne Stilwell, Faculty of Engineering
 Dr Danail Stoyanov, Computing (5 years)
 Miss Christine Strachan, Accommodation
 Dr Kong Susanto, Computing
 Dr Tsing-Young Tang, Chemistry
 Dr Guy Thwaites, Medicine
 Dr Emile Touber, Aeronautics
 Dr Stephanie Traub, NHLI
 Dr Julie Trebilcock, Medicine
 Miss Alana Trollope, NHLI
 Miss Effrosyni Tsafa, Life Sciences
 Dr Antonin Vacheret, Physics (6 years)
 Dr Francois-Xavier Vialard, Mathematics
 Dr Alexander Webb, Medicine
 Dr Conghua Wen, Public Health
 Dr Anatole Wiik, Surgery and Cancer
 Dr Kit Wu, Medicine

This data is supplied by HR and covers the period 15 August–4 September. This data was correct at the time of going to press.

For 'Moving In, Moving On' covering the period 4 July–14 August visit the online supplement to this edition at www.imperial.ac.uk/reporter

✉ Please send your images and/or 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.



22 NOVEMBER ▶ PUBLIC LECTURE

What is life?

In the spring of 1943, Nobel Prize-winning physicist Erwin Schrödinger gave a series of lectures at Trinity College, Dublin. These lectures were subsequently published as the non-fiction science book *What is life?* Francis

Crick, co-discoverer of the structure of the DNA molecule, has credited the book as being the inspiration for his initial research. In the 2011 Schrödinger lecture, Nobel Prize winner and President of the Royal Society, Sir Paul Nurse, also takes inspiration from the book to ask "What can we now say about the nature of life?"



23 NOVEMBER ▶ PUBLIC LECTURE

Spies, secrets and science: reflections from the history of MI6

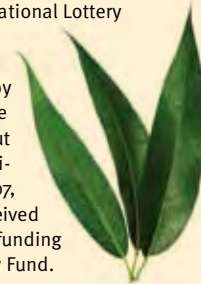
Author of the official history of MI6 and Professor of British History at Queen's University Belfast, Professor Keith Jeffery, presents the

second Vincent Briscoe Annual Security Lecture, hosted by the Institute for Security Science and Technology. Drawing on the history of MI6 over its first 40 years (1909–49), he will investigate the extent to which the profession of intelligence might be described as a science, and also explore the role of science itself in both the working and the targeting of British intelligence operations in peace and war.

take note

OPAL needs your vote

OPAL (Open Air Laboratories), a nationwide project led by Imperial, is through to the final of the National Lottery Awards 2011. The initiative encourages people to enjoy nature and generate scientific data about the state of the environment. Since 2007, the project has received over £13 million of funding from the Big Lottery Fund.



Cast your vote before 26 September by visiting: www.opalexplornature.org

23 SEPTEMBER ▶ PUBLIC LECTURE

Science Uncovered

Join Imperial researchers at the Natural History Museum



26 SEPTEMBER ▶ SEMINAR

Buildings – the debate heats up

Adam Hawkes, Earth Science and Engineering and Dr Mark Levine, Lawrence Berkeley National Laboratory

27 SEPTEMBER ▶ CONFERENCE

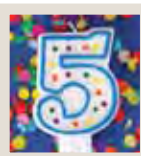
Managing university-industry centres

Various speakers

27 SEPTEMBER ▶ SEMINAR

Fifth anniversary of the London Centre for Nanotechnology

Speakers include Professor Sir Adrian Smith, BIS



27 SEPTEMBER ▶ CONFERENCE

How to succeed in science

Speakers include Philip Campbell, Editor, Nature

27 SEPTEMBER ▶ SEMINAR

MRSA transmission tracking: time to remove the blindfold?

Professor Sharon Peacock, University of Cambridge

5 OCTOBER ▶ PUBLIC LECTURE

The political economy

Ken Anderson, Managing Director, UBS



6 OCTOBER ▶ MUSIC

Lunchtime concert

Craig Ogden (Guitar)

13-14 OCTOBER ▶ CONFERENCE

Prostate Cancer Charity national conference

Various speakers

13 OCTOBER ▶ MUSIC

Lunchtime concert

Florian Uhlig (Piano)

19 OCTOBER ▶ PUBLIC LECTURE

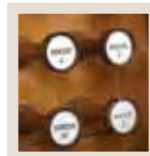
Adapting institutions to climate change

Sir John Lawton FRS, British ecologist and former professor at Imperial

20 OCTOBER ▶ MUSIC

Lunchtime concert

Andrew Lucas (Organ)



25 OCTOBER ▶ PUBLIC TALK

Your days are numbered: the maths of death

Comedians Timandra Harkness and Matt Parker

2 NOVEMBER ▶ PUBLIC LECTURE

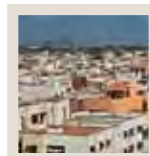
How we perceive and live with risk and uncertainty

Professor Gudela Grote, Eidgenössische Technische Hochschule Zürich

3 NOVEMBER ▶ PUBLIC LECTURE

Living with limits: growth, resources and climate change

Martin Wolf CBE, Financial Times



MEET THE READER



Dawn Redford, Teaching and Quality Officer (Business School)

What are you doing in the picture?

I'm at the Serpentine Gallery pavilion in Hyde Park on my lunch break. I've just got back from leave after getting married and I am slowly getting back into the swing of things. At the moment, I'm working on some lecture evaluation questionnaires and the induction day for all the new students starting at the Business School in September and October.

What would you do if you were editor of Reporter for a day?

I'd like to do a Sci Fi edition. I find it really interesting that the work students and academics do at Imperial means that science fiction could be science fact in the not too distant future.

Who would be your cover star?

If I did have a Sci Fi themed edition, then one of the Doctor Whos! Probably David Tennant or Matt Smith.

Want to be the next reader featured in Reporter? Send in a picture of yourself with a copy of Reporter in your location of choice to: reporter@imperial.ac.uk

Stay in the loop

✉ Visit www.imperial.ac.uk/events for more details about these events and others. To sign up for regular updates about Imperial events please email: events@imperial.ac.uk

