



International flavour

How international students helped revamp the
College's lunches ... **CENTRE PAGES**



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EDITOR'S CORNER

Comfort food

As the weather takes a chilly twist, many of us instinctively seek out warming and hearty food to satisfy our hunger. Some scientists suggest that's because we're after the **feel-good hormone serotonin**, which is stimulated in the brain by starchy carbohydrates. But the associations we make with food are just as important as how it nourishes and tastes to us: the 'comfort dishes' we crave as adults are often those that we grew up with, and which take us **back to our roots**. This month as the students flooded back they were greeted by the new South Kensington Campus' restaurant – the **Queen's Tower Rooms** – where staff and students can eat freshly cooked traditional cuisine that reminds us of home, wherever that may be. The aromas coming from the sizzling woks are enough to transport us far away from the rain and the cold or, at the very least, away from our lab benches and desks. See pages 8–9 to find out how 16 students helped to revamp the venue and inject authenticity into the menu.

EMILY ROSS, EDITOR

Reporter is published every three weeks during term time in print and online at www.imperial.ac.uk/reporter. The next publication day is 5 November. Contact Emily Ross: reporter@imperial.ac.uk +44 (0)20 7594 6715

Academic promotions announced

From across the College's Faculties of Natural Sciences, Engineering and Medicine, as well as the Business School and Department of Humanities, 100 academics have been promoted with effect from 1 October 2009 and now hold a new title of senior lecturer, senior research fellow, reader or professor.

The title of professor is reserved for an individual who has achieved international standing and demonstrated international leadership in their relevant subject or profession. The announcement includes 27 new professors.

Imperial's new Professor of Physics John Tisch (pictured right), who specialises in developing laser technology, describes what he likes about his role at the College: "I really enjoy the intellectual freedom that I have – it's a great job for an enquiring mind. I love that process of thinking up an experiment (often jogging around Hyde Park on my lunch breaks) and then seeing that take shape in the lab. Then, the process of tackling the problems and analysing the data with my PhD students and post-docs. And then there's the thrill you get when you reach a breakthrough,

knowing that you've added to our understanding of the natural world at some fundamental level."

—ABIGAIL SMITH, COMMUNICATIONS



"I really enjoy the intellectual freedom that I have – it's a great job for an enquiring mind"

To watch videos with three of the new professors and one senior lecturer, visit: www3.imperial.ac.uk/news/academicpromotions09

Look up a lichen in the name of cleaner air

Open Air Laboratories (OPAL) launched its national air survey on 29 September. The project aims to find out more about the impact of air quality all over England by inviting the public to investigate lichens growing on trees in their local area, and to count black 'tar spots' on the leaves of sycamore trees.

The survey has been developed with experts from the British Lichen Society and is one of several projects being led by Imperial scientists as part of the wider OPAL initiative. OPAL has been awarded a grant of £11.7 million by the Big Lottery Fund to inspire a new generation of nature enthusiasts.

Lichens are plant-like organisms that form when a fungus and algae develop together. They have been known as clean air indicators since the last century when acid rain caused lichens to dis-



appear in our towns, cities and beyond. Now they are returning and can be found all year round in urban areas and the countryside, and on a variety of surfaces from tree bark to park benches and pavements. Recent research has identified that some lichens

thrive on air pollution whilst others are highly sensitive to it. This means they can be used to indicate what air quality is like today.

OPAL Community Scientist, Dr Emma Green (Life Sciences), said "The OPAL air survey aims to expand the wealth of research that already exists about the air we breathe here in the UK. Information collected by the public will help us to build an even more detailed picture of our changing air quality and, ultimately, will help scientists trying to find out what effect such changes are having."

—DANIELLE REEVES, COMMUNICATIONS

Anyone can take part in the survey. A free survey pack, which includes a guide and workbook, can be downloaded from www.opalexplornature.org

Imperial College
London

calling all
global health
researchers



Help us build a complete picture of the global health research being carried out across the College. If your research contributes to improving health in low- and middle-income countries or in disadvantaged UK populations, please complete a questionnaire for Imperial's Institute for Global Health.

To fill in the questionnaire visit:
<http://bit.ly/3orXLt>

Faculty of Medicine

New academic structure published



A new academic structure for the Faculty of Medicine and appointments to new senior roles were announced earlier this month, following a three month consultation period, which ended on 30 September.



In place of the existing divisional structure, from 1 January 2010 the Faculty of Medicine will be made up of the Institute for Clinical Sciences, the Kennedy Institute of Rheumatology, the National Heart and Lung Institute, the Department of Medicine, the Department of Surgery and Cancer and the School of Public Health. The Department of Surgery and Cancer will be headed by Professor Jeremy Nicholson (pictured top), the Department of Medicine by Professor Gavin Screaton (pictured second from top) and the School of Public Health by Professor Elio Riboli (pictured second from bottom).



The new structure also sees the creation of the post of Director of Education, held by Professor Jenny Higham, formerly Head of Undergraduate Medicine (pictured bottom).

Professor Sir Anthony Newman-Taylor, Deputy Principal of the Faculty of Medicine, who led the consultation, said: "I'm aware that this has been a difficult time for all in the Faculty of Medicine, and I'm very grateful for the patience and professionalism that has been shown during the past three months. I'm pleased that we now have a new structure that puts us on a strong footing for the future, and we will be working hard to make the transition as smooth as possible."

—ABIGAIL SMITH, COMMUNICATIONS

Both the new structure and a close of consultation document are available online at: www.imperial.ac.uk/medicine. Background on the new appointments can be found in the College notice at: www3.imperial.ac.uk/news/medappointments09

Junior Research Fellows take up their posts

The first cohort of top early-career researchers taking up Imperial's new Junior Research Fellowships were welcomed to the College in the week of 8 October.

The Fellowships will give outstanding scientists three years free from teaching and administration plus a competitive salary and laboratory support costs to enable them to establish their own scientific path. The scheme also aims to help scientists make the difficult leap from postdoctoral researcher to lecturer.

The new Fellows will be exploring issues such as how galaxies form and how to use organic solar cells to generate cheap, long-term energy. They have been chosen from over 200 applicants from across the world and they

will start in their new roles over the next three months. Half of the researchers are already working at Imperial and half are joining the College after working at other institutions, including the University of Oxford and Stanford University.

Each Fellow is being supported and mentored by a senior researcher at the College, who will advise them on developing their career and the mechanics of establishing and furthering research programmes.

One of the new Junior Research Fellows from the Department of Life Sciences is Dr Andrea

Jimenez Dalmaroni. Over the course of the Fellowship she will be using techniques from theoretical physics to study how living cells reorganise their internal 'scaffolding', known as their cytoskeleton, in response to constraints

in cell geometry.

Commenting on her Fellowship she said: "The Junior Research Fellowship at Imperial is a wonderful opportunity for me to fully develop my independent research career and to make a smooth transition towards further advanced research fellowships and a permanent research position."

"[This] is a wonderful opportunity for me to fully develop my independent research career"



in brief

THE rankings

Imperial has risen one place to fifth, joint with Oxford, in the 2009 Times Higher Education-QS World University Rankings, published earlier this month. The College is also placed second in Europe and sixth in the world for engineering and IT, third in Europe and 10th in the world for natural sciences, and third in Europe and 17th in the world for life sciences and biomedicine.

The full rankings can be viewed online at: www.timeshighereducation.co.uk/WorldUniversityRankings2009.html



New Google search engine

A new and improved search engine for the College website using Google Search Appliance was launched on 25 September. All searches for information on web pages within the College's content management system are now operating through Google. The teams from ICT and Communications that worked to select and implement the new search engine hope it will enable all users of the College website to find the content they are looking for efficiently.

High ranking for MSc

The Business School has come 33rd in the world and fifth in the UK for its MSc degree in Management, in the latest *Financial Times* rankings. The tables also place the Business School first in the world for entrepreneurship, fifth for corporate strategy and 10th for general management.

"I think almost every academic would tell you that the biggest impact that they will have on society, if they're pragmatic about it, is through their graduates."

—PROFESSOR ANTHONY BULL, NEW DIRECTOR OF UNDERGRADUATE STUDIES IN THE DEPARTMENT OF BIOENGINEERING AT IMPERIAL.

Hear the full interview including comments on the emerging discipline of bioengineering and why it might be changing the laws of cricket in October's edition of Imperial's monthly magazine podcast: www.imperial.ac.uk/media/podcasts

Imperial College Healthcare NHS Trust

Trust launches new online consultant directory

On 12 October the Trust launched a new online directory for consultants, meaning that people looking for consultant information are never more than one or two clicks away from the information they need. The directory has been developed in conjunction with healthcare research consultants, Dr Foster. Each consultant's web page includes details of NHS experience and private practice areas of expertise, education, training and research interests, and a photo of the consultant.

—IMPERIAL COLLEGE HEALTHCARE NHS TRUST PRESS OFFICE

For more information email: web@imperial.nhs.uk
To sign up to the directory, visit:
www.consultantguide.imperial.nhs.uk

The second wave of swine flu

The Department of Health's predictions suggest there will soon be an increase in cases of swine flu. In response, the Trust's emergency planning team is closely monitoring daily flu attendances and admissions and looking for indications of when the second wave of swine flu will begin.

The team has run two flu exercises with the Trust Board Directors. Experience and knowledge gained from these has been shared within the clinical programme groups to strengthen our Trust-wide plans.

All flu plans will be published on the Trust intranet *The Source*.

—IMPERIAL COLLEGE HEALTHCARE NHS TRUST PRESS OFFICE

For more information, contact the Trust's flu team:
flu@imperial.nhs.uk

Tribute to the late Harvey Flower

On 6 October, the Department of Materials hosted the inauguration of a piece of art created in memory of the late Professor Harvey Flower, whose untimely death in August 2003 was a great loss to the College and the scientific community.

Professor Flower was a world expert in materials for the aerospace industry, and the metallurgy of titanium, aluminum and their alloys, in particular.

The event was attended by over 40 of Harvey Flower's friends, colleagues and family members, including his wife, Gladys, his daughter, Ellie, and granddaughter, Abigail. Mrs Flower unveiled the artwork which will be displayed in memory of her husband – a rainbow-coloured composition consisting of a set of anodised titanium tubes entitled *The Colours of Titanium*. The work was designed and made by Lynne Bartlett, a post-graduate student at the Central Saint Martin's College of Art and Design and a maker of titanium jewellery, who worked with Professor Flower to characterise the microstructures of the surfaces of the oxidised alloys.

Professor Flower joined the Department of Materials at Imperial in 1967 as a PhD student and was subsequently appointed lecturer in 1972, reader in 1984 and was made

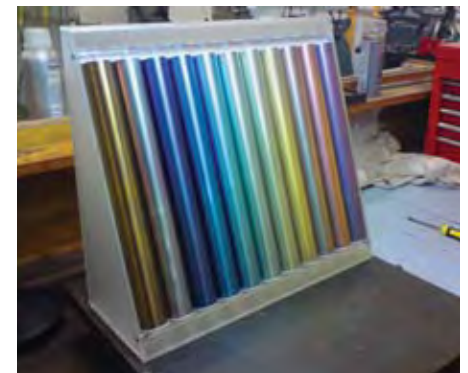
Professor of Materials Science in 1992. Over the course of his career he also acted as Deputy Head of Department, Director of Research, and Director of Postgraduate Studies.

Speaking at the event, Professor

John Kilner, BCH Steele Chair of Energy Materials, who worked closely with Professor Flower, described how his colleague's outstanding contributions to the science and technology of titanium led to a clearer and fuller understanding of

the metal and its alloys. He said: "Harvey was the heart of the Department – he was a true scholar and his scientific inquiry, wise insight and impish sense of humour is sadly missed."

"Harvey was a true scholar and his scientific inquiry, wise insight and impish sense of humour is sadly missed"



The Colours of Titanium will be mounted later this month in the entrance area to the Harvey M. Flower Microstructural Characterisation Suite on the lower ground floor of the Royal School of Mines on the South Kensington Campus.

Imperial maths students sweep the board at science 'Oscars'

Three Imperial students who graduated from the MSci Mathematics course this year made it to the national finals of the SET (Science, Engineering and Technology) awards – Britain's awards for science and technology undergraduate research projects.

Melissa Turcotte (pictured), who finished her four-year MSci Mathematics degree at Imperial this summer, was named as the winner of the Laing O'Rourke Award for the best mathematics student at a glittering Oscars-style ceremony at London's Intercontinental Hotel on 25 September 2009. Alastair Litterick and Daniel McNulty were runners up.

Their category saw the College's student

mathematicians beating competition from all of Britain's leading universities to secure the three finalist places.

"I'm delighted to have won when so many outstanding students from around the UK were nominated"

The award was granted to Melissa for her dissertation project, supervised by Professor John Elgin, in which she found a new solution to a partial differential equation that models the behaviour of a water wave on a canal – an equation that has been extensively studied previously. Since leaving the College she has taken up a consultancy role at BAE Systems.

Melissa, who will graduate at the College's forthcoming Commemoration Day ceremony in the Royal Albert Hall on 21 October 2009, said: "I'm delighted to have won when so many outstanding students from around the UK were nominated

– it's great to be recognised by the SET Awards and I would like to thank my supervisor, Professor John Elgin, for all his support."

Dr Lynda White (Mathematics) said: "We're all very proud of Melissa's achievement. That all three finalists were from Imperial is testament to the outstanding quality of the work carried out in our Department – both by the students themselves and the staff who teach them."

—DANIELLE REEVES, COMMUNICATIONS



media mentions

—AMNA SIDDIQ, COMMUNICATIONS



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www.imperial.ac.uk/media/jointsignup

THE INDEPENDENT ▶ 18.9.2009

Long path to normal economy, warns economist

Although there have been signs that the UK economy is growing again, there is a long way to go before it gets back to normal, Professor David Miles (Business School) tells *The Independent*. "This is going to be a protracted period of return to a more normal level of activity," he comments. "The day we get to a year-



on-year growth rate of 2.5 per cent which is the long-run growth rate is not the day when we can say, 'Wow, we got through this all. We're absolutely back to normal'." On the topic of unemployment figures, Professor Miles adds: "If you ask the question: 'when will growth return to a level when, say, unemployment stops rising?', I fear that's a little bit further down the road, and I think that's a more realistic definition of coming out of recession."

REUTERS ▶ 25.9.2009

Meat eaters reassured about brain cancer risks

A study in the *American Journal of Clinical Nutrition* suggests that adults who love their meat do not have a heightened risk of the most common type of malignant brain tumour, despite theories to the contrary. The study looked at links between brain tumours called gliomas and people's intake of meat and compounds called nitrosamines. Among the nearly 238,000 men and women who took part in the studies, just 335 were diagnosed with gliomas at some point, and the study found no link between participants' meat intake and risk of developing the disease. Lead researcher Dr Dominique Michaud (Epidemiology, Public Health and Primary Care) told *Reuters*: "As always with results from one single study, we need to be cautious with interpretation."

CNN.COM ▶ 24.9.2009

Is swallowing the future of surgery?

Micro machines are the future of surgery, according to CNN.com, which visits the Royal College of Surgeons' Sci Fi Surgery exhibition.



Amongst the displays are prototype microbots designed to be swallowed and self-assembled in the body, and pill cameras that are swallowed to provide images of the digestive system. Dr Mihailo Ristic (Mechanical Engineering) told CNN: "We are trying to produce complex machines to replace surgical tools, which are hand tools. It's like when industry moved from a chisel and hammer to machine tools."

THE TIMES ▶ 27.9.2009

Discovery of dark matter may win Nobel prize

A group of physicists are hoping to discover dark matter, thought to make up 95 per cent of the mass of the universe, deep inside a Cleveland mine, reports *The Times*. The UK group working at the Boulby Underground Laboratory will switch on their Zeplin-III machine at the same time that CERN fires up its Large Hadron Collider to search for the elusive particle. Whoever discovers dark matter is likely to win a Nobel prize, but Professor Jim Virdee (Physics), a leading CERN scientist, said he did not see it as a race: "What is important here is the science."



awards and honours

REGISTRY

Careers website of the year



On 10 September the Imperial Careers Advisory Service website won the Careers Website of the Year award at the Association of Graduate Careers Advi-

sory Services biennial conference. The award is given to the university careers service whose website demonstrates good design and ease of navigation, links to existing high-quality resources, uses original material and is imaginatively marketed and regularly evaluated. www.imperial.ac.uk/careers

ENGINEERING

Engineering award for innovator Mark Sanders

Mr Mark Sanders received the Design Engineer of the Year prize at the British Engineering Excellence Awards, held earlier this month. Mr Sanders, who is a visiting tutor on the Innovation Design Engineering MSc course run by Imperial and the Royal College of Art, received the honour for his inventions, which

include folding bicycles and one-touch automatic can-openers.

NATURAL SCIENCES

Kibble wins theoretical particle physics prize



Emeritus Professor Tom Kibble (Physics) is one of six recipients of one of the most prestigious prizes in his field: the 2010

American Physical Society's J.J. Sakurai Prize for Theoretical Particle Physics. The annual prize recognises and encourages outstanding achievement in particle theory and is sponsored by the family and friends of the late Jap-

anese-American particle physicist and theorist J.J. Sakurai.

ALSO...

Smith shortlisted for innovator of the year

The Chief Executive of Imperial College Healthcare NHS Trust and Principal of the Faculty of Medicine, Professor Stephen Smith, has been shortlisted for the Innovator of the Year award in the NHS leadership awards. The winner will be announced at a ceremony on 25 November.

Bradley to give the next Bakerian lecture

Professor Donal Bradley FRS (Physics) has been selected to deliver the Royal Society's premier lecture in the physical sciences – the Bakerian Lecture – in March 2010.



Master gene that switches on disease-fighting cells identified

The master gene that causes blood stem cells to turn into disease-fighting 'Natural Killer' (NK) immune cells has been identified by scientists, in a study published in *Nature Immunology* on 15 September. The discovery could one day help scientists boost the body's production of these frontline tumour-killing cells, creating new ways to treat cancer.

Imperial researchers, along with UCL and the Medical Research Council's National Institute for Medical Research, have 'knocked out' the gene in question, known as *E4bp4*, in a mouse model, creating the world's first animal model entirely lacking NK cells, but with all other blood cells and immune cells intact. This breakthrough model should help identify the role that NK cells play in autoimmune diseases, such as diabetes and multiple sclerosis.

Some scientists think that these diseases are caused by malfunctioning NK cells that turn on the body and attack healthy cells, causing disease instead of fighting it. Clarifying NK cells' role could lead to new ways of treating these conditions.

The researchers behind the study hope to progress with a drug treatment for cancer patients which reacts with the protein expressed by their *E4bp4* gene, causing their bodies to produce a higher number of NK cells than normal, to increase the chances of successfully destroying tumours.

Lead researcher Dr Hugh Brady (Life Sciences) explains: "If increased numbers of the patient's own blood stem cells could be coerced into differentiating into NK cells, via drug treatment, we would be able to bolster the body's cancer-fighting force without being faced with donor incompatibility."

— DANIELLE REEVES, COMMUNICATIONS

Small increase in hospital mortality rates in first week of August

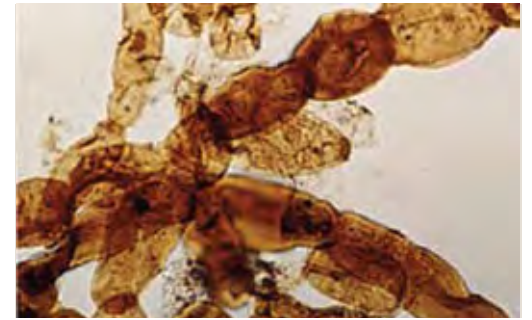
People admitted to English hospitals in an emergency on the first Wednesday in August have, on average, a six per cent higher mortality rate than people admitted on the previous Wednesday, according to research published in *PLoS One* on 23 September.

Newly qualified junior doctors start their new positions in NHS hospitals in England on the first Wednesday in August. The authors of the study, from the Dr Foster Unit and the Department of Acute Medicine at Imperial, say the excess mortality rates may be linked to this influx of newly qualified doctors but more research is needed before they can draw any firm conclusions.

The study, which was supported by Dr Foster Intelligence and is the biggest study of its kind, looked at data for almost 300,000 patients admitted to hospitals in 175 NHS Trusts between 2000 and 2008. Researchers in the UK and the US have previously carried out smaller studies looking at the effect on mortality rates of junior doctors starting work but the results have often been inconclusive.

Dr Paul Aylin, the senior author of the study from the Dr Foster Unit at Imperial, said: "Our study does not mean that people should avoid going into hospital that week. This is a relatively small difference in mortality rates, and the numbers of excess deaths are very low. It's too early to say what might be causing it. It might simply be the result of differences between the patients who were admitted," added Dr Aylin.

— LUCY GOODCHILD, COMMUNICATIONS



New ancient fungus funding

Tiny organisms that covered the planet more than 250 million years ago appear to be a species of ancient fungus that thrived in dead wood, according to research published on 1 October in the journal *Geology*.

The researchers behind the study, from Imperial and other universities in the UK, USA and The Netherlands, believe that the organisms were able to thrive during this period because the world's forests had been wiped out. This would explain how the organisms, which are known as *Reduviasporonites*, were able to proliferate across the planet.

Researchers had previously been unsure as to whether *Reduviasporonites* were a type of fungus or algae. By analysing the carbon and nitrogen content of the fossilised remains of the microscopic organisms, the scientists identified them as a type of wood-rotting fungus that would have lived inside dead trees.

Fossil records of *Reduviasporonites* reveal chains of microscopic cells and reflect an organism that lived during the Permian-Triassic period, before the dinosaurs, when the Earth had one giant continent called Pangaea.

“Ironically, the worst imaginable conditions for plant and animal species provided the best possible conditions for the fungi to flourish.”

Geological records show that the Earth experienced a global catastrophe during this period. Basalt lava flows were unleashed on the continent from a location centred on what is present day Siberia.

Professor Mark Sephton, one of the authors of the study from the Department of Earth Science and Engineering, said: "Our study shows that neither plant nor animal life escaped the impact of this global catastrophe. Ironically, the worst imaginable conditions for plant and animal species provided the best possible conditions for the fungi to flourish."

— COLIN SMITH, COMMUNICATIONS

New trial to assess sleep apnoea treatment in elderly patients



A new trial to assess the most effective way of treating elderly people for a common sleep disorder is being launched at Imperial, thanks to a £1.5 million research grant from the National Institute for Health Research's Health Technology Assessment programme.

The trial will look at the treatment of obstructive sleep apnoea hypopnoea syndrome (OSAHS), the third most common respiratory disorder after asthma and chronic obstructive pulmonary disease. OSAHS affects two to four per cent of middle aged people and 20 per cent of people aged over 65.

People with OSAHS temporarily stop breathing when they are asleep, because of a blockage in their upper airway, which wakes them up. As a result, they are often tired during the day. They can also develop high blood

pressure and memory problems, because they wake up frequently and often have low levels of oxygen in their blood. The most commonly used treatment for OSAHS is called continuous positive airway pressure (CPAP) and it involves keeping the patient's airway open by using a machine with a mask that pushes air into the mouth and nose.

Dr Mary Morrell (NHLI), who is coordinating the trial with colleagues in Edinburgh and Oxford, said: "Our previous research has shown that older people with OSAHS have a smaller surge in blood pressure compared to younger people when they wake up from sleep. This may mean that older OSAHS patients are less

likely to develop heart problems, but on the other hand we think OSAHS is more likely to affect memory in elderly patients. This trial will help us discover whether treatment will help to improve these factors and therefore the quality of life."

—LUCY GOODCHILD, COMMUNICATIONS

“This trial will help us discover whether treatment will help to improve the quality of life”

New computing tool could lead to better crops and pesticides

A new computing tool that could help scientists predict how plants will react to different environmental conditions in order to create better crops, such as tastier and longer lasting tomatoes, is being developed by researchers.

The tool will form part of the new £1.7 million Syngenta University Centre at Imperial, announced on 22 September, which will see researchers from the College and Syngenta working together to improve agricultural products.

Scientists are keen to develop new strains of crops, such as drought resistant wheat and new pesticides that are more environmentally friendly. However, in order to do this, they need to predict how the genes inside plants will react when they are subjected to different chemicals or environmentally friendly pesticides. Professor Stephen Muggleton (Computing), Director of the new Centre, says: "We believe our computing tool will revolutionise agricultural research by making the process much faster than is currently possible

using conventional techniques. We hope that our new technology will ultimately help farmers to produce hardier, longer lasting and more nutritious crops."

The researchers have devel-

oped a prototype of the new tool, which they are currently testing. It can analyse in a matter of minutes, instead of months, which genes are responsible for different processes inside a plant, and how different genes

work together. It uses a type of computer programming that relies on 'machine learning', a set of sophisticated algorithms that allows a computer to 'learn' based on data that it is analysing.

—COLIN SMITH, COMMUNICATIONS

"We believe our computing tool will revolutionise agricultural research by making the process much faster than is currently possible"



Rare meteorite find in Australian desert

Imperial researchers have discovered an unusual kind of meteorite in the Western Australian desert and have uncovered where in the solar system it came from, in a very rare finding published on 17 September in the journal *Science*.



Meteorites are the only surviving physical record of the formation of our solar system and by analysing them researchers can glean valuable informa-

tion about the conditions that existed when the early solar system was being formed. However, information about where individual meteorites originated, and how they were moving around the solar system prior to falling to Earth, is available for only a dozen of around 1,100 documented meteorite falls over the past 200 years.

The meteorite appears to have been following an unusual orbit, or path around the Sun, prior to falling to Earth in July 2007, according to calculations by the research team, which includes scientists from the Natural History Museum in London. The team believes

that it started out as part of an asteroid in the innermost main asteroid belt between Mars and Jupiter. It then gradually evolved into an orbit around the Sun that was very similar to Earth's. The other meteorites that researchers have data for follow orbits that take them back, deep into the main asteroid belt.

Dr Phil Bland (Earth Science and Engineering), lead author of the study, said: "We are incredibly excited about our new finding. Meteorites are the most analysed rocks on Earth but it's really rare for us to be able to tell where they came from. Trying to interpret what happened in the early solar system without knowing where meteorites are from is like trying to interpret the geology of Britain from random rocks dumped in your back yard."

—LAURA GALLAGHER, COMMUNICATIONS



An international flavour

Copper pots filled with curries, woks sizzling with exotic stir fries, and the buzz of conversation as chefs chat to staff and students whilst whipping up fresh crepes.

South Kensington's newest lunchtime venue – the Queen's Tower Rooms – is open for business. *Reporter* finds out how a group of international students helped transform the College's lunchtimes.

The Main Dining Hall (MDH) on the South Kensington Campus has been completely revamped and students have returned to a new facility called the Queen's Tower Rooms offering international food for staff and student lunches. The multipurpose space is also fit for conferences, music and dance clubs.

In June, the Commercial Services team worked with 16 students from 10 different countries to help shape the new dining facility and make it somewhere they would enjoy eating and socialising. The students chosen were a mixture of undergraduate and postgraduate students, representing a range of departments across the College. All the students were asked to complete an activity and food diary for two weeks detailing what they bought, what they ate out, and what they cooked for themselves.

The information helped to identify students' favourite meals and dining habits, how much they were able to spend on meals, what they liked and didn't like about the current outlets, and what cuisines they'd like to see more of. Jane Neary, Assistant Director of Commercial Services, was integral to the project. She says: "The students were encouraged to be open and honest about what they thought of our current venues. Their comments ranged from a dislike of large shared tables, a desire for modern furnishings more



“The feedback revealed that students wanted more authentic international meals.”

like the Central Library, to a frustration at the repetitive menu.”

The feedback also revealed that the students wanted more authentic, international meals such as Japanese fish that hasn't been fried or baked, tofu, Chinese and Halal options and Conji – a traditional Chinese breakfast made from rice. Students also wanted to have the option of having exotic vegetables such as pak choi, Chinese spinach and tung choi as food accompaniments instead of chips.

To expand the reach of the project, the Commercial Services team ran an online poll to find out exactly which cuisines would be popular in the new venue, and 330 home and international students participated. The poll revealed that the students' top choice

of cuisine was Italian (21 per cent), Indian (18 per cent), Malaysian (15 per cent) and oriental (12 per cent).

As part of the project, members of the Commercial Services team took students to their favourite restaurants within their budgets. These included high street outlet Nandos, as well as Japanese, Cypriot, Indian and Chinese restaurants.

“Visiting our students’ favourite restaurants was a real eye-opener for the team,” said Jane, “We found out exactly what the students liked about their favourite venues. For example, in the restaurants serving international food, students were able to converse with the chefs in their own language. We also learnt how important incentives were, such as providing a free drink with every meal – we have included many great ideas like this in the Queen’s Tower Rooms.”

After two weeks of working with the students, the team began to come up with a new vision for the restaurant. Jane says: “While the students all had different culinary requirements, they all favoured good value, healthy food cooked to order, a greater variety of cuisines and a comfortable facility to eat it in. Another thing which kept coming up was the importance of authenticity.

The architects and designers were integral to the refurbishment. Their brief was to develop an international food court that incorporated the drama of ‘theatre cooking’ where customers can interact with the chefs. The interior design had to be visually minimal and calm, with colour and life being provided by the visual connection to the Queen’s Lawn and the students occupying the space.”

“Visiting our students’ favourite restaurants was a real eye-opener for the team. We found out exactly what the students liked.”

Motivations

Jane explains the impetus for the complete overhaul. She says: “The MDH had been operating as an old fashioned ‘school meals’-style dining hall for many years. Feedback from the students revealed that the facility wasn’t their first choice for eating on campus, despite its prime location. Many of the other outlets were also bursting at the seams during the peak lunchtime period. In addition, other users such as the orchestras, choirs, clubs and societies didn’t feel the facility was meeting many of their needs.

“We worked with Richard Dickins, the Director of Music and ICU’s President of Clubs and Societies, to incorporate their requirements, in particular lighting and floor surfaces. Lighting was a big concern and our research showed that we would need at least seven different light-

ing settings so we could accommodate everything from formal candlelit dinners to orchestra lighting, which would need to run to the edges of the room.” The architects came up with a design which includes sliding and folding acoustic screens, allowing the space to be subdivided into three individual rooms, which can be used simultaneously.

Each room has storage space, so everything can be quickly and easily stowed away to convert the space from one event to another.

The Queen’s Tower Rooms opened their doors last week. The new menu includes English, Indian, Malay, Lebanese, Chinese, Italian and Greek food, as well as a salad bar and hot and cold deserts.

—EMILY ROSS AND ECE MENGUTURK, COMMUNICATIONS

The Queen’s Tower Rooms’ management team welcomes your feedback and suggestions on the new venue – please send your thoughts to Wendy Bowman: w.bowman@imperial.ac.uk



New chef on the block

Wong Kong Too

The restaurant menu has been developed by the College’s award winning chefs who have now been joined by Malaysian chef, Wong Kong Too, known as Kong. He speaks four different Chinese dialects and will be able to speak with international staff and students about their meal choices. Reporter met with Kong to find out more.

What is your previous experience as a chef?

My career as a chef began in Singapore where I worked at the Carlton Hotel for about 10 years. Since making the move to England I have been working at a number of restaurants in central London.

What kinds of food will you be serving?

I will begin with some well-liked dishes such as Thai green curry and stir-fried vegetables with oyster sauce. Keeping an eye on my guests’ responses will allow me to make changes to the menu. In the future I would like to introduce my personal favourite dish – Malaysian red curry.

What languages do you speak?

I come from a bilingual family and grew up in an area of Malaysia where many languages are spoken. Therefore I speak five languages: English, Mandarin, Cantonese, Malay and Hakka – a Chinese dialect that I picked up from my mother.



About the Queen’s Tower Rooms

The Queen’s Tower Rooms are located on Level 1 Sheffield Building, with a view across the lawn to the Queen’s Tower.

The menu varies day by day and according to seasonal changes, and aims to cater for all tastes. Halal and vegetarian options are also available.



The space can also be booked for events, and can accommodate up to 600 people for a standing reception or 400 for a sit-down meal.

The average cost of a staff meal in the Queen’s Tower Rooms is £5.50 for two courses with a drink. The Queen’s Tower Rooms are open between 11.45 to 14.15 during term time. The menu features dishes from countries including:

- China
- Italy
- Lebanon
- Malaysia
- Thailand
- United Kingdom



Creating futures

Encouraging black and Asian minority ethnic (BAME) school pupils to consider pursuing higher education is one of the key aims of Creative Futures – the four day event organised by the Equality and Diversity Unit held at Imperial this month.

Creative Futures was dreamed up by Dr Sunday Popo-Ola (Civil and Environmental Engineering) in 2006. Sunday explains that the idea for Creative Futures arose from his involvement with Imperial as One – the College's race and equality advisory group which encourages and supports BAME staff and students to advance their careers.

He says: "We have a great support network for BAME staff once they start at Imperial but I thought to myself: why not target school children and give them role models to aspire to? Why not prove to them that going to university and getting a job at a place like Imperial isn't out of their reach?"

The Outreach Department already specialises in school outreach activities and Sunday was keen to help extend the reach of the projects with Creative Futures. He says: "I wanted to reach school pupils who don't necessarily have academic parents and aren't aware of all the career avenues in science, medicine and technology."

Creative Futures brings 11-16 years olds from disadvantaged areas into the College to do a range of activities organised by researchers, PhD students, post-doctoral researchers and volunteer alumni. This year's events will include talks given by a number of people including the Rector, Lord Winston and Sir Steve Bullock, the Mayor of Lewisham. The pupils will also attend workshops on subjects ranging from engineering and satellite navigation to sound

waves and stem cells.

Each year Sunday runs a workshop where school pupils get to engineer a bridge made from drinking straws, spaghetti and marshmallows. He describes the activities: "Using everyday materials is one of the most effective ways of teaching the principles behind science and technology and showing children just how easy it is. Our aim is to build their confidence in their abilities and send them home excited about how do-able science and engineering are."

Sunday says that teaching isn't the main aim of the day – it is about giving the children a chance to experience the College environment. He says: "Hopefully giving school pupils this opportunity will encourage them to work harder to achieve higher grades. Our message

for the teachers who come along is that with a little support, university is a realistic possibility for these pupils."

“Our aim is to build their confidence in their abilities and send them home excited”

Christine Yates, Diversity and Equal Opportunities Consultant, is responsible for pulling together a team of staff and liaising with dignitaries and high profile champions for Creative

Futures. She says: "The event has increased from one engineering experiment in 2005, to five labs over four days. Pupils have a day of fun and learning supported by their teachers and Imperial's role models."

— EMILY ROSS, COMMUNICATIONS



A WORD WITH:

Dr Sara Rankin, workshop leader

Sara (NHLI) has been involved in Creative Futures for the last two years and leads a session on stem cells.

Describe the sessions you teach at Creative Futures

My group of postdocs, PhD students and I contribute to a two-hour session on stem cells. We explain what they are, what they have the potential to do and a bit about our research. We also take small groups over to our labs in SAF and show them researchers in action.

How do you ensure school pupils understand you?

We always use plain English and lots of analogies. For example, we compare working with stem cells to cooking – if you fry steak then you get a different end product to roasting it slowly in oven. Our practical experiments develop this idea as we let them add various 'ingredients' to stem cells, such as oxygen, temperature and acid, and see what happens.

What are you most looking forward to this year?

Working in the new Reach Out Lab at South Kensington is going to be great, as the facility gives us the opportunity to do more hands-on work in a controlled environment. The facility also looks really cutting edge and modern, and I think the children will really enjoy working somewhere so different from their normal teaching environment.

Why did you get involved with Creative Futures?

It's so important to be able to show that universities aren't exclusive places and that they are open to any child with potential. At the same time it is a lot of fun and unlike our normal working day where positive results take longer to achieve. Here you can immediately see the children's faces light up with understanding.

inside

story

mini profile

Steve Cook

Teaching Fellow and first year convenor for biology, Dr Steve Cook, on lecturing theatrics, helping students see the scientific light and falling into bins.



Have you always been interested in teaching?

I always thought I'd end up being a researcher but my mum and dad were both teachers and my grandfather was a head teacher, so my genes were definitely pulling me in this direction.

What drew you into teaching?

After my PhD I went on Imperial's INSPIRE scheme – teaching in schools alongside my research and teaching at Imperial. I got a satisfaction and buzz from teaching that I've never really lost. At the end of the scheme there was an opening for a lectureship in biology and I took it.

What motivates you in your job?

Students are interesting, funny and exasperating. When they arrive in the first year they can have strange ideas about what science actually is, but it's great when the penny drops and they start to realise it isn't about dry textbooks or stuff they need to memorise – it is an active culture of enthusiastic scientists that we hope they'll join.

What about when students ask you things you don't know the answer to?

As a teacher you want students to tear apart theories, to disagree with you, and essentially to be better than you – they have to be inquisitive or there is no hope for the future.

Describe your teaching style?

I'm really enthusiastic and perhaps a little theatrical. Once I got so carried away miming abortive initiation by RNA polymerase I managed to fall into a bin on the stage!

Why are you so enthusiastic about science?

It's the lack of certainty – it's a living, breathing subject which changes day by day. I can't imagine getting the same satisfaction from teaching anything else.

—EMILY ROSS, COMMUNICATIONS

www.imperial.ac.uk/safety/guidanceandadvice/biosafety/gm

inventor's corner

Turning waste into gold

Dr Geoff Fowler (Civil Engineering) is a Research Fellow and manager of the Department's Roger Perry Environmental Engineering Laboratory. His research specialises in methods to extract carbon black from waste tyres so the material can be recycled, leading to environmental benefits.

Recycling substantial quantities of carbon black would reduce the amount required through commercial production of the material, which involves energy intensive processes emitting significant volumes of carbon dioxide. Approximately 50 per cent of the carbon black produced in the world is used in tyre manufacturing and 48 million tyres are discarded each year in the UK alone.

Geoff comments on the potential for extracting carbon black from waste tyres: "Making these materials from waste is like making black gold – turning a worthless material into a valuable commodity."

Geoff's solution, patented by Imperial Innovations in 2008, is to use microwaves to break the bonds formed during a process called vulcanisation. This involves mixing rubber with other materials, such as sulphur, carbon black and

steel, to give tyres their robust properties. Once vulcanised, the bonds are extremely hard to break, but Geoff's simple yet ingenious idea uses the radiation energy produced by microwaves to physically separate the compounds, with minimal effect on other tyre components.



48 million tyres are discarded each year in the UK despite EU's Landfill Directive, which bans dumping used tyres.

Geoff's eventual aim is to create a commercial process for recycling pure carbon black. This would lead to significant savings in global carbon dioxide emissions and help solve the worldwide problem of tyre disposal.

—ANUSHKA WARDEN, IMPERIAL INNOVATIONS

www.imperialinnovations.co.uk

► SCIENCE FROM SCRATCH

As explained by Elizabeth Hauke, MSc Science Communication

Metabolism



Metabolism describes all the chemical reactions occurring within our bodies, keeping our cells and tissues functioning. Originating from the Greek (*meta-* meaning 'over' and *-ballein* 'to throw'), it has come to mean a process of change. In the context of our bodies, metabolism refers to the rate at which we are burning energy or calories, and this process is broadly controlled by the thyroid gland in the neck. Our metabolic rate changes constantly – it slows at night and speeds up in the day. Our metabolic rate is largely determined by genetics. Health or diet products that speed it up artificially can be really bad news for active organs like the brain and heart. One thing that we can do to burn more energy is have a hearty breakfast – this helps to kick the body out of the slower nocturnal metabolism into the calorie-burning day mode!

Is there a phrase you would like us to explain? ✉ Email the editor: reporter@imperial.ac.uk



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

Student blogger Anas on handing in his dissertation:

“This is as far as my journey at Imperial goes. It has ended – sigh! A huge relief as soon as I submitted the burden of dissertation. And a realisation of not being a student anymore (almost). Both these feelings were contradictory. If I am to quantify the amount of knowledge I have gained per year in life, the past year at Imperial will rank much higher than any previously... I am sure not many will disagree that student life is perhaps one of the best times of life, and being at Imperial just adds to this fun.”



blog SPOT

www.imperial.ac.uk/campus_life/studentblogs

Hammersmith's grand arrival

Professor Stephen Franks (SORA) reports on the first lunchtime concert on the Hammersmith Campus featuring its brand new Yamaha C3 grand piano.

“Culture has come to Hammersmith! The first of a series of lunchtime concerts was launched on 6 October in the main Wolfson lecture theatre. We were treated to a wonderful recital by the distinguished pianist, Charles Owen, who played a programme of Bach and Schumann. The first delight was the sheer sound of the new piano, which has a beautifully bright tone and sounds marvellous in that acoustic. The Bach Partita no 4 in D is a magnificent piece and was presented with great feeling, ranging from the dreamy lyricism of the Sarabande to the exciting virtuosity of the final Gigue. Schumann's Papillons was equally brilliant. What a start! The next concert is on Tuesday 27 October.

For more information on the afternoon concerts visit: www.imperial.ac.uk/arts/events

All hands on deck

At the beginning of September a team from the Graduate Schools at Imperial spent a day doing voluntary work at the Pirate Castle in Camden Town. The Pirate Castle is Camden's community boating project which promotes training and adventures on the Regent's Canal. The Imperial team spent the day clearing and preparing the new club room for use. This involved moving old furniture into storage areas, painting doors and woodwork, removing pipe lagging for painting, clearing office space and making the place safe for children.

If you are interested in volunteering please contact Petronela Sasurova: volunteering@imperial.ac.uk



From left to right: Iain Reid, Grant Danskine and Neil Mosley

Charity bike ride

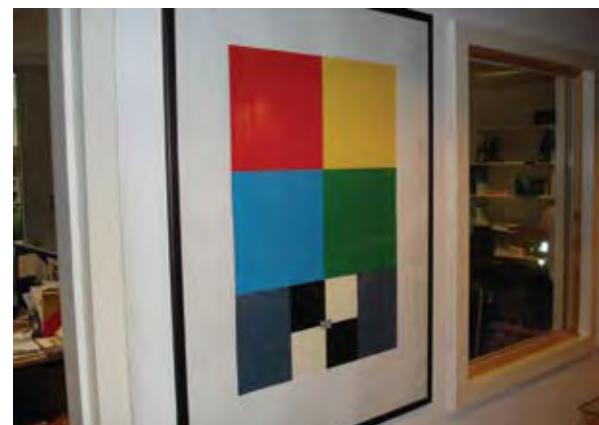
At the end of August, 12 Imperial staff members and two students took part in a 550-mile charity bike ride from Edinburgh to London to raise money for the charity Right to Play. The Imperial team has raised over £20,000 for this international humanitarian organisation that uses sport and play programmes to improve health, develop life skills, and foster peace for children and communities in some of the most disadvantaged areas of the world.

www.righttoplay.org.uk

Arty discovery at Chelsea and Westminster Campus

Philip Barlow, Senior Library Assistant at Chelsea and Westminster Hospital Library, reveals how they recently discovered a treasure in their midst.

“Chelsea and Westminster Hospital is well known for its use of art to enhance the patient environment, and has many arty gems around the hospital, some of which you can find in the library. Whilst tackling a new furniture delivery one day, we discovered that the delivery man was in fact Chris Gabrin, former photographer and music video creator! He is famous for his photographs of English rock and roll singer Ian Dury and his working partnership with artist Sir Peter Blake. Blake is best known for his design of the sleeve for the Beatles' album *Sgt. Pepper's Lonely Hearts Club Band*. The library staff got talking with Chris when he noticed an original Peter Blake print behind the issue desk – no one had any idea we had an original on our hands! Next time you are in the library come and see it for yourselves!”



Sci Fi surgery

The Hunterian Museum at the Royal College of Surgeons (RCS) has just opened its latest exhibition called **Sci Fi Surgery** which features a selection of robots from the present day back to the beginning of the last century. Professor Justin Cobb (SORA) who co-founded Acrobot, an Imperial spin-out company, writes about his part in the exhibition:

“Dreams come true if you work at them: that is the message of the RCS exhibition. Back in 1990, I approached Professor Brian Davies (Mechanical Engineering) with a clean sheet of paper, but a clear vision that the robotic technology that was taking over the manufacturing industry should be applied to our world of joint replacement. Eighteen years and £2.5 million later, via a series of progressively smaller and more func-

tional prototypes, we are now launching a product that has all the functionality of the earlier huge devices. Along the way, the project has had a number of important spin-offs: a pre-operative

One of Professors Justin Cobb and Brian Davies’ robots – the Acrobot Navigator.



Bloodbot (one of the exhibits at the Hunterian Museum) is a prototype robot for taking blood samples, developed by Dr Alex Zivanovic (Clinical Sciences) and Professor Brian Davies.

planning service, that allows surgeons to think in three dimensions, and an entirely new way of studying joint disease that only exists because with a robot, you can think at a level of detail and reliability that would be inconceivable using conventional X-rays. What is coming next? The robots of today and the software that runs them already allow people to relax knowing that their operations will be planned correctly and then performed exactly right every time. I see the next generation of robots being able to insert tiny partial joint replacements for patients – an operation which is performed as a day case. Now that is really a dream, for today anyway.”

Sci Fi Surgery is on at the RCS until 23 December.

course review



By course attendee Dr Aidan Rhodes
(Electrical and Electronic Engineering)

Career Confidence: owning your future

Why did you go on the course?

I have been working as a postdoctoral research associate since July 2008, researching energy policy and regulatory issues. My current contract ends in January, and I wasn't sure that staying in academia was the best option for me. Deciding to do something about this and explore my career options, I signed up for the Career Confidence course; a two-day course for postdocs organised jointly by Imperial, Oxford and Cambridge.

What did you learn from it?

So much information was given to me over the two days, I thought my head would explode! Each day featured a series of short and informal lectures given by people who had used their science PhDs and postdoctoral training to explore different career paths, ranging from industry to teaching, from law to science communication. These were followed by exercises in small and relaxed tutor groups, designed to help you explore and understand your skill set. These were really useful – I found that my PhD and postdoc work had given me a far greater range of skills than I had realised.

Who would you recommend the course to?

Anyone wanting to explore the range of opportunities open to them as a postdoc. It's easy to think that you're locked into the postdoctoral-lectureship-professorship career progression, even if you end up feeling it's not for you. As this course has shown me, there are many exciting opportunities out there.

For more information on this course visit: www3.imperial.ac.uk/staffdevelopment/postdocs1/workshops/future

Coldstream guards welcome Imperial's new cohort

On 6 October, a quintet from the Coldstream Guards – a regiment of the British Army – played in Beit Quad on the South Kensington Campus as part of Freshers' Week. Bandmaster Gregory Machin describes the Guards' association with the College:

“One of my remits is to forge new contacts and friendships with universities and colleges across the country with a view to identifying and occasionally employing up-and-coming musicians within our ranks. Earlier this year we got the opportunity to play alongside Imperial's wind

band. What started out as a reasonably small venture quickly grew into a large-scale event which raised enough money to create a Coldstream Guards Scholarship. This will enable a gifted student from Imperial to have music lessons at the Royal College of Music.

Since the event in January, we have striven to maintain links with the College and, as such, members of the band still regularly attend Imperial College Winds rehearsals, as well as supporting events such as



Freshers' week. We are looking forward to a longlasting and productive relationship with the College.”

obituaries



DR EMMANUELLE CARON

Dr Emmanuelle Caron, Senior Lecturer in Cell Biology (Life Sciences), passed away after a short illness on 8 July 2009 at the age of 42. Her colleagues in the Centre for Molecular Microbiology and Infection (CMMI) and the Faculty of Natural Sciences pay tribute.

“During her PhD in Montpellier, France, Emmanuelle studied the interaction between bacterial pathogens and

macrophages, and this became her lifelong interest. As a postdoc in 1998, she published a paper in *Science* showing that two phagocytosis pathways are controlled by different molecular switches. This publication achieved landmark status in the field of cellular immunology. She joined Imperial in 2002, and established a highly successful research group in the CMMI.

Emmanuelle was a dedicated scientist and teacher, and was revered by both undergraduate and postgraduate students. She made outstanding contributions that were marked by original concepts and science of the highest quality. She was an inspiring colleague to those in the CMMI and was well-known in the international community through the many collaborations and friendships that she made. Emmanuelle’s scientific career was on an upward trajectory and she was to be promoted to Reader in the month she died.

As well as being an outstanding scientist, she was a woman of enduring convictions in religion, ethics and politics. She was inspiring, genuine, enthusiastic, had a subtle sense of humour and was always surrounded by laughter.

She is survived by her parents, brother and sister, and will be remembered by her numerous friends and colleagues, both at Imperial and outside.”



PROFESSOR HARRY ELLIOT

Professor Harry Elliot CBE, FRS, member of the Department of Physics from 1953 until his retirement, died peacefully early in July 2009. Emeritus Professor John Quenby, who worked with him for many years, writes: “Harry Elliot came to Imperial with Professor Blackett from the University of Manchester to study the interaction of cosmic rays with the solar system. The origin of

these charged nuclei, moving nearly at the speed of light, remains a major question. Their products seen at ground level arise from many secondary processes. Harry devised a clever means of separating out effects of changes in the atmosphere from genuine changes in nearby interplanetary space. The space age advent enabled Harry’s group to mount particle and magnetic field detectors on UK and European spacecraft to directly monitor the energetic particle and plasma environment within the solar wind outflow from the Sun. Other X-ray, gamma ray and high energy cosmic ray projects were inspired by Harry’s clever, innovative and probing mind, especially the space mission, Ulysses, exploring over the solar poles. Distinguished committee service within the UK and in Europe enabled Harry to forge worthwhile and affordable programmes in space and astronomy. A spell as Deputy Director of the Physics Department and later as Head of the Computing Centre ensued. There are many associates who mourn the loss of his integrity, wit and intellect.”

long service

Reporter shares the stories of staff who have given many years of service to the College. Staff featured celebrate anniversaries during the period of 4 September–1 October. Data is supplied by HR and is correct at the time of going to press.

—EMILY GOVAN, INTERNATIONAL OFFICE

20 years

- Glen Underwood, Fitter (Estates)
- Louise Stanbury, Purchasing Advisor (Finance)
- Professor Jenny Nelson, Professor of Physics (Physics)
- Professor Chris Swan, Professor of Hydrodynamics (Civil and Environmental Engineering)
- Dr Xiangming Xiao, Computing Systems Technical Manager (Electrical and Electronic Engineering)

30 years

- Nick Davies, IT Support Analyst (ICT)
- Ibrahim Guirguis, Day Security Officer (Security Services)
- Professor Peter Cheung, Head of Department and Professor of Digital Systems (Electrical and Electronic Engineering)
- Professor Richard Kitney, Professor of Biomedical Systems Engineering (Bioengineering)
- Professor David Lane, Professor of Haematology (Investigative Science)
- Professor Nicholas Severs, Professor of Cell Biology (NHLI)
- John Ng Wing Wye, IT Support Specialist (ICT)

SPOTLIGHT

Professor Anthony Warrens (Medicine) 20 years

Professor Anthony Warrens began work at Imperial as a research fellow in 1989. Twenty years later, he holds the position of Professor of Renal and Transplantation Medicine and is head of the new graduate entry MBBS programme. Anthony says, “My role is a great combination of clinical work, teaching and research. I’ve got an active research programme and an active clinical life, so I am very fortunate I get to do lots of interesting things I enjoy.” Outside Imperial Anthony has responsibilities on two government committees: the Advisory Committee for Safety in Blood Tissues and Organs and the UK Donation Ethics Committee. Away from work Anthony enjoys spending time with his family and taking his son to watch the continuing tribulations of Tottenham Hotspur.

figuring it out

Last October the newly refurbished Central Library on the the South Kensington Campus opened its doors. One year on, has the library made the positive impact it intended? The library has kindly provided the information below.



930,933

The number of individual visits to the Central Library in the academic year 2008–09, compared to **666,620** visits in 2006–07*.

198,001

The number of library loans in 2008–09, compared to **182,496** in 2007–08.

1,090

The number of study spaces in the new library; there were only **666** study spaces in 2007–08.

264

The number of PCs available to students, compared to **114** the year before.

*As the Central Library was closed for refurbishment during 2007–08, visitation numbers for that academic year were not suitable for comparison.

mailbox

The legacy of Mike Reed

Despite the tragic and sudden death of Professor Mike Reed (Medicine) this April, our group is continuing to work hard on developing new treatment options for cancer under the excellent leadership of Dr Atul Purohit, Mike's friend and colleague for over 20 years.

The work of the team, and especially of Atul and Mike, has now been recognised by the Royal Pharmaceutical Society of Great Britain, which has awarded the prestigious GSK Industrial Achievement Award to Mike and our chemistry collaborator at Bath University, Professor B.V.L. Potter. This high profile award helps honour the memory of Mike and recognises the excellent work of the team he so sadly left behind. The award was presented on 9 September and Julie Reed, Mike's daughter, accepted it on Mike's behalf at the British Pharmaceutical Conference 2009, and Professor Potter presented a short lecture outlining the development of steroid sulphatase inhibitors by Imperial and the University of Bath.

I thought readers would be interested in this news, which is further recognition of Mike's achievements as recorded in the obituary run in issue 205.

DR SIMON NEWMAN, RESEARCH ASSOCIATE (MEDICINE)

If your letter is featured in Reporter you will win a cup of coffee and a sizeable piece of cake, courtesy of Catering Services: www.imperial.ac.uk/eatinganddrinking

✉ reporter@imperial.ac.uk
+44 (0)20 7594 6715

Welcome new starters

Miss Natasha Aaronson, Medicine
Dr Dana Abi Ghanem, Business School
Dr Maha Ahmed Shaikh, Business School
Dr Maruf Ali, Molecular Biosciences
Miss Shirin Ashraf, Medicine
Dr Consuelo Barroso Gutierrez, Clinical Sciences
Mr Christopher Bird, Management Training Scheme
Dr Edo Boek, Chemical Engineering
Professor Thomas Brand, NHLI
Miss Alice Brown, Biological Sciences
Dr Evgeny Buchbinder, Physics
Dr James Bull, Chemistry
Mr Tomas Bystron, Chemical Engineering
Mr Chris Cantwell, Mathematics
Miss Anne Chauveau, Cell and Molecular Biology
Miss E. Cheung, Physics
Dr Altannar Chinchuluun, Chemical Engineering
Ms Margarita Chli, Computing
Miss Ramona Ciobanu, Catering Services
Dr Abigail Clements, Cell and Molecular Biology
Dr Henrique Coelho, Clinical Sciences
Mr James Coles, NHLI
Dr Adriana Cornea, Business School
Mr Luke Dickens, Computing
Dr Silvia Diez-Gonzalez, Chemistry
Dr Iain Dunlop, Materials
Dr Julia Effertz, Humanities
Miss Ioanna Eleftheriadou, Medicine
Miss Gabriela Gomez Guillen, EPHPC
Mrs Lisa Grass, NHLI
Dr Sabina Hashmy, EPHPC
Dr Wayne Hayes, Mathematics
Ms Susannah Heck, Physics
Dr Simon Hepworth, Development and Corporate Affairs
Miss Ciara Hill, Catering Services
Dr Nicholas Hine, Materials
Mr Neil Hirst, The Grantham Institute
Mr Raymond Hu, Computing
Dr Heba Ismail, Kennedy Institute
Dr Andrea Jimenez Dalmaroni, Molecular Biosciences
Miss Eleanor Jones, NHLI
Miss Nazila Kamaly, SORA
Dr Kazuyo Kaneko, Kennedy Institute
Dr Rashed Karim, NHLI
Dr Sugata Kaviraj, Physics
Dr Wansu Kim, Mathematics
Mr Madhav Kishore, Medicine
Professor Norbert Klein, Materials
Professor Ralph Knoll, NHLI
Dr Aris Kountouriotis, EEE
Ms Alexandra Krieger, Chemical Engineering
Dr Siva Krishnadasan, Chemistry
Miss Juliane Kultz, NHLI
Mr Romain Lambert, Chemical Engineering
Dr Monica Lebron, Humanities
Mr Ewen Legg, SORA
Mr Georgi Lesov, Catering Services
Dr Christina Lo Celso, Cell and Molecular Biology
Dr David Lowe, Medicine
Dr James Lucietti, Physics
Dr Konstantinos Manolarakis, Mathematics
Mr Ronnie McGarth, Humanities
Miss Sara McSweeney, NHLI
Miss Nancy Messih, Business School
Mr Rodrigo Moreno-Serra, Business School
Dr Gerald Murtagh, SORA
Mr Panos Navrozdīs, EPHPC
Dr Bao Nguyen, Chemistry

Dr Samir Nuseibeh, NHLI
Mr Antonios Oikonomopoulos, Computing
Dr Robert Pace, Chemistry
Mr Thomas Pearson, Management Training Scheme
Ms Eleni Pefani, Chemical Engineering
Miss Elham Peyfoon, Molecular Biosciences
Dr Paul Pickering, Chemical Engineering
Mr Luis Pizarro Quiroz, NHLI
Dr William Proud, Physics
Dr Natasa Przulj, Computing
Miss Lucy Purcell, Centre for Environmental Policy
Ms Dinah Rahman, Molecular Biosciences
Mr Farzan Ramzan, EPHPC
Dr Laurence Reed, Neurosciences and Mental Health
Mr Pedro Rivotti, Chemical Engineering
Miss Rebecca Robey, Investigative Science
Mr James Robinson, Management Training Scheme
Mr Tim Ruthven, Business School
Mr Michal Rysz, Kennedy Institute
Dr Florian Sahr, Chemistry
Professor Eduardo Saiz Gutierrez, Materials
Dr Emma Salisbury, Medicine
Ms Shalini Santhakumaran, Medicine
Dr Jan Schluter, NHLI
Mr Paul Shearing, ESE
Dr Ioannis Skarmoutsos, Chemistry
Dr Gaby Slavcheva, Physics
Professor Peter Smith, Business School
Ms Hilary Smith, Humanities
Mr Rasmus Sorensen, Catering Services
Mr Peter Sowinski, NHLI
Mr Johannes Spinneken, Civil and Environmental Engineering
Dr Daniel Steiauf, Physics
Mrs Julie Talbot, College Headquarters
Dr Maniccam Thavarajah, SORA
Miss Debbie Tilley, Centre for Environmental Policy
Dr Nora Tusor, Medicine
Dr Linda Uruchurtu Gomez, Physics
Dr Aaron Vallance, Medicine
Miss Carmelina Vinci, Centre for Environmental Policy
Dr Stephanie Von Hinke Kessler Scholder, Business School
Mr Thomas Woodcock, Medicine
Mr Emmanouil Zacharakis, SORA
Dr Shaowei Zhang, Materials

Farewell moving on

Dr Mohab Abou Zeid, Physics
Miss Fariha Afgan, Medicine
Miss Catherine Ambrose, NHLI (6 years)
Mrs Insayah Anjarwalla, Investigative Science
Dr Eduard Antonyan, Physics
Mr Mark Atkinson, Accommodation Services
Professor David Balding, EPHPC (8 years)
Ms Alison Barnett, SORA (6 years)
Mr Daniel Barrowdale, Medicine
Dr Anthony Bastin, NHLI
Mr Shah Baten, Chemistry
Miss Charlotte Blunsdon, NHLI
Professor Aldo Boccaccini, Materials (9 years)
Dr Surajate Boonya-Aroonnet, Civil and Environmental Engineering
Dr Liz Carpenter, Molecular Biosciences (10 years)
Mr Kok Chan, NHLI
Dr Pierre Chantial, Physics
Dr Julien Chevallier, Grantham Institute
Dr Mohi Chowdhury, Medicine (5 years)
Ms Frances Clare, EPHPC
Professor Keith Clark, Computing
Miss Yvonne Collins, NHLI
Emeritus Professor Jean Connerade, Physics
Mr Trevor Corrithers, Medicine
Dr Jacob Davies, Mechanical Engineering (5 years)
Dr Jorge De Alba Gonzalez, NHLI
Mr Jozef Dobos, Computing
Dr Andreas Doering, Physics
Dr Emmanuel Dupont, NHLI (13 years)
Dr Jingyun Fan, Mechanical Engineering
Mr Joao Farinha Garcao Nunes, SORA
Dr Piers Gaffney, Chemistry (6 years)
Dr Alexandros Georgiadis, Physics
Dr Rachel Gomes, Earth Science and Engineering
Miss Debs Greek, Physics
Dr Cheryl Gregory-Evans, Neurosciences and Mental Health (11 years)
Dr Shalini Gupta, Materials
Miss Saumya Gupta, Medicine
Ms Sachiko Hamamoto, Humanities
Dr William Heaven, Computing
Dr So-Jin Holohan, NHLI
Mr Thomas Hope, SORA
Dr Elisabeth Hopman, EPHPC
Mr Asher Hoskins, Civil and Environmental Engineering (5 years)
Dr Hiroshi Iritani, Mathematics
Ms Katherine Jackson, Mechanical Engineering
Mrs Liz Jaggs, Development and Corporate Affairs (8 years)
Mr Adam James, SORA
Dr Arthur Jamshidi, EEE
Miss Virginie Jantou, Materials
Dr Jalini Joharntam, SORA
Mr Tom Johnson, Natural Sciences (7 years)
Mr Andrew Jones, Computing
Mr Mindaugas Juozapavicius
Mr Paul Kentish, ICT (37 years)
Miss Madeline Kirk, EPHPC (7 years)
Dr Mauritius Kleijnen, Molecular Biosciences
Dr Patrick Koppenburg, Physics
Mrs Karen Kruse, Humanities (6 years)
Dr Rob Lambert, Physics
Mr Anthony Lander, Library Services
Mr Chun Law, Chemistry
Professor David Limebeer, EEE (26 years)
Miss Ming Lok, Medicine
Professor Leon Lucy, Physics (11 years)
Dr Carolyn MacTavish, Physics
Miss Cara Magoolagan, Life Sciences
Mr Vincent Malachanne, Reactor Centre
Dr Nasser Malik, Kennedy Institute
Dr Philip Mallender, Chemistry
Ms Eleni Maniati, Medicine
Mr Adam Masters, Physics
Dr Simon Mathias, Civil and Environmental Engineering (5 years)
Dr Hikoro Matsui, SORA
Dr Angeliki Mavroidi, EPHPC (6 years)
Mr Maciej Mazurek, Cell and Molecular Biology
Miss Anronag Meeyai, EPHPC
Emeritus Professor Peter Meikle, Physics
Dr Shai Meiri, Biology
Miss Ingrid Meschede, NHLI
Dr Gabriele Mondello, Mathematics
Mr Samuel Mugar, Kennedy Institute
Dr Paula Munderi, Medicine
Dr David Munns, Humanities
Dr Maria Mycielska, Cell and Molecular Biology
Professor John Nelder, Mathematics (39 years)
Miss Ely O'Brien, Library Services
Dr Clemens Olbricht, Mechanical Engineering
Dr Danielle Paixao-Cavalcante, Medicine
Miss Sujata Parmar, Neurosciences and Mental Health
Miss Anthe Patrikios, EPHPC (7 years)
Miss Sarah Pawlett, Registry
Ms Monica Piercy, Business School
Mr Alex Pinder, Cell and Molecular Biology
Dr Elisabete Pinto, Medicine (7 years)
Mr Gowsihan Poologasundarampillai, Materials

Dr Rebecca Pouwer, Chemistry
Ms Michaela Ruhmann, Kennedy Institute
Dr Edward Saldana, NHLI
Mr Daniel Sardenberg de Souza Kohler, Catering Services
Dr Samantha Sathyapala, NHLI
Mr Kovilen Sawmynaden, Molecular Biosciences
Mr Nicholas Schofield, Sport and Leisure Services
Mr David Searl, Human Resources
Dr Robert Sewell, Physics
Miss Ruth Shanley, SORA
Mr Amardeep Singh, Computing
Dr Edward Smith, Chemistry (30 years)
Dr Sarah Stanley, Investigative Science (8 years)
Dr Russell Talling, Materials
Mr Arthur Talman, Cell and Molecular Biology
Dr Laura Thevenard, Physics
Ms Alai Urrutikoetxea Uriguen, SORA
Dr Prashant Valluri, Chemical Engineering
Professor David Websdale, Physics
Professor George Webster, Mechanical Engineering
Dr Yaobi Zhang, EPHPC

retirements

Dr John Allwright, Estates Division (34 years)
Professor Colin Atkinson, EEE
Dr Chris Barnett, Estates Division (14 years)
Mrs Sue Brookes, Estates Division (13 years)
Mrs Eve Burgess, Physics (12 years)
Mr Jose Diaz Couto, Medicine (36 years)
Mr Aiden Donnelly, SORA (17 years)
Mrs Esther England, Medicine (11 years)
Mr David Gentry, Business School (40 years)
Mr Robert Gussetti, Faculty of Natural Sciences (43 years)
Professor Andrew Holmes, Mathematics (38 years)
Professor Christopher Isham, Physics (33 years)
Mr Frank Kriwaczek, Computing
Professor David Lloyd Smith, Mathematics (26 years)
Professor Gareth Parry, Civil and Environmental Engineering (6 years)
Mrs Jan Preece, Security Services (7 years)
Ms Beverley Ricketts, Chemistry (5 years)
Mr Mick Rogers, Molecular Biosciences (48 years)
Mr Dick Sheppard, Chemistry (40 years)
Professor Rodney Sobey, Educational Quality Office (38 years)
Mrs Mary Symons, Computing (20 years)
Mrs Roma van Dam, ICT (31 years)
Mrs Dam Van, ICT (31 years)
Professor John Wood, International Office*

This data is supplied by HR and covers the period 13 September–3 October. It was correct at the time of going to press. Years of service are given where an individual has been a member of College staff for over five years. Asterisk (*) indicates where an individual will continue to play an active role in College life.

✉ Please send your images and/or 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.



4 NOVEMBER ▶ LECTURE

The world's nuclear future: built on material success

This year's Schrödinger lecture will be given by Dr Sue Ion FEng, Visiting Professor (Materials), and will focus on how the science and engineering of materials will be key to the

successful deployment and operation of a new generation of reactor systems and their associated fuel cycles. In our energy-hungry world, the future of electricity generation must meet the twin challenges of security of supply and reduced carbon emissions. The expectations for nuclear power programmes to play a part in delivering success on both counts grow ever higher.



11 NOVEMBER ▶ LECTURE

Multimodal and adaptive behaviour in insects and robots

The robust behaviours, specialised sensors and small brains of insects have been a

source of inspiration for efficient processing algorithms for sensorimotor control in robots. In this Department of Bioengineering seminar, Professor Barbara Webb, Reader in Informatics at the University of Edinburgh, will outline her recent work towards designing an insect brain control architecture for robotics.

21 OCTOBER ▶ LECTURE

Imaging neocortical microcircuit plasticity in the healthy and diseased brain

Dr Vincenzo de Paola (Clinical Sciences)

4 NOVEMBER ▶ LECTURE

22nd Schrödinger lecture – The world's nuclear future: built on material success

Dr Sue Ion FEng, Visiting Professor, Department of Materials

4 NOVEMBER ▶ LECTURE

Spatio-temporal primitives in the perception and modeling of emotional body movement

Professor Martin A. Giese, Department of Cognitive Neurology, University of Tübingen

11 NOVEMBER ▶ LECTURE

Mechanisms of neurotransmitter transport across membranes

Dr Lucy Forrest, Max Planck Institute for Biophysics

11 NOVEMBER ▶ LECTURE

Multimodal and adaptive behaviour in insects and robots

Professor Barbara Webb, Reader in Informatics at the University of Edinburgh

11 NOVEMBER ▶ EXHIBITION

Staff photo club exhibition

Nature and portrait

25 NOVEMBER ▶ LECTURE

Bone high strain rates: stochasticity vs. reasoning

Dr Peter Zioupos, Biomechanics Laboratories, Cranfield University

take note

Faculty of Natural Sciences outlook

The Faculty of Natural Sciences has just published its Research Outlook brochure, setting out its strategy, recent research highlights and current opportunities for collaboration. The publication is available for all staff to use at events and in meetings with external organisations.



To download a copy or to order hard copies visit: www3.imperial.ac.uk/news/researchoutlook

VOLUNTEERING

My memories volunteer

Project ID: 2249
Organisation: Age Concern Kensington and Chelsea
Date: from 23 Oct 2009
Time: term time, 14.00–16.00
Location: Sloane Square

Volunteers are needed to give support once a month to elderly people with memory difficulties or dementia in a café setting. Volunteers will assist in running activities, accompanying groups on outings, meeting and greeting, or making tea and coffee. All volunteers will receive training and any out of pocket expenses will be reimbursed. Age Concern Kensington and Chelsea (ACKC) is one of the major providers of services for older people in the Royal Borough. Thanks to volunteer services, ACKC is able to offer help to enable many older people to remain living at home for longer.



For more information

To take part in a scheme or to hear more about volunteering in general, contact Petronela Sasurova
☎ 020 7594 8141
✉ volunteering@imperial.ac.uk

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

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

PHOTO EXPO

In the first week of October, Eastside opened its doors to students for the first time – marking the end of the Eastside project. The new development includes three halls, a convenience store, restaurant and bar.



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

