

REF 2014: Looking further

Imperial ranked top for global research impact

 **CENTRE PAGES**



HONOURABLE GENT

Professor Stephen Richardson speaks about his recent CBE

PAGE 8



BIG PRIZE

Chemical biology idea nets £20K in innovation competition

PAGE 2



LASTING LEGACY

New bursary for women scientists, thanks to alumna's fund

PAGE 10



EDITOR'S CORNER

Fruit of the labour

It was an unusually busy time for Imperial towards the end of last year. The [new College website](#) was successfully launched in early December – the first phase of a process to move some 3,500 web pages to a responsive template that will deliver content seamlessly to a range of mobile devices. That project has been two years in the making involving hundreds of staff. Then in mid December came the Research Excellence Framework (REF) results – also the culmination of [several years of work](#) in preparing the submission and many more in terms of the genesis of the research itself. This issue features a selection of REF case studies which gained the College the highest ranking among all institutions for the impact of its research (pages 4–7). The stories capture the [sheer diversity](#) of that impact – scientific of course but also economic, environmental and in some cases cultural. More case studies feature on the new website – a shiny window onto Imperial's achievements.

ANDREW CZYZEWSKI, EDITOR

Reporter is published every three weeks during term time in print and online. Contact Andrew Czyzewski: reporter@imperial.ac.uk

President of Singapore lays foundations of new Imperial & NTU medical buildings

The development of two new buildings for the Lee Kong Chian School of Medicine (LKCMedicine) was marked by the laying of foundation stones by the President of Singapore Dr Tony Tan Keng Yam Tan at a ceremony earlier this month.

The new buildings in Singapore, the Experimental Medicine Building located at Nanyang Technological University (NTU)'s main campus and the Clinical Sciences Building at the Novena Campus, will provide state-of-the-art facilities for students and researchers.

LKCMedicine was set up by Imperial and NTU in 2010 to address the country's healthcare needs. Its first 54 students were admitted in August 2013 and the new facilities will be home to the growing medical school, which is set to train annual cohorts of 150 future doctors.

President Tan, who visited Imperial during his State Visit to the UK, said he looked forward to seeing the School "make its mark on the world stage through state-of-the-art training of doctors who put patient care first and push the boundaries of care through multidisciplinary research."

Imperial's President Professor Alice Gast added:



"Today's ceremony celebrates the creation of modern facilities for our joint medical school in Singapore. Both new buildings harness new technologies and foster collaborative working between disciplines, which will be the hallmark of future advances in health."

The seven-storey Experimental Medicine Building will be completed by July 2015 while the 20-storey Clinical Sciences Building will open its doors in 2016.

Student ideas claim £20,000 prize in CDT Den 2015

Postgraduate students battled it out this month for £20,000 worth of development funding for their business ideas.

The Centre for Doctoral Training in Imperial's Institute of Chemical Biology hosted the 'CDT Den' – the Dragons' Den-style event where doctoral students pitched their business ideas to a panel of judges.

This year's final saw four teams, from an initial cohort of 17, pitch their ideas to the judging panel of Provost James Stirling; Professor Jackie Hunter, Chief Executive of BBSRC; Dr Alison Wall, Associate Director, Impact at EPSRC; and Paul Atherton, Founder of Nexeon – a company specialising in lithium-ion battery technology and first established at Imperial.

The winning team was 'FungiAlert', whose members Angela de Manzano and Kerry O'Donnely Weaver (pictured left and right, respectively) have created a device for the early detection of plant pathogens in fields, which could

help tackle global crop loss. As well as the cash prize of £20,000 provided by Imperial Innovations, the team will also receive entrepreneurial training and support from them as they further develop their idea.

"Luckily the panel believed in our idea as much we did – so we won!" said Angela. "We're quite shocked but very happy; the standard was very high," added Kerry.

Judge Dr Alison Wall said: "There were lots of good ideas, but we felt that with the £20,000 on offer, [FungiAlert] could really make it the next stage of prototyping. The 20K was added value for them."

Watch a video of the competition here: bit.ly/cdt-den



media mentions



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Recent deaths result of 'illogical drugs policy'

THE GUARDIAN ▶ 05.01.15

Professor David Nutt (Medicine) writes in *The Guardian* about a number of recent drug disasters in the UK, including the deaths of three men. "They all appear to have taken a drug called PMA. We presume that they did not know this and thought it was ecstasy (MDMA). PMA and its close relative PMMA have in the past few years re-emerged as a toxic surrogate for ecstasy and have been responsible for more than 100 deaths in the UK. The so-called 'success' in reducing MDMA production is just one of many examples of how prohibition of one drug leads to greater harm from an alternative that is developed to overcome the block."

Climate sceptic rebutted

THE INDEPENDENT ▶ 30.12.14

UKIP's energy spokesman Roger Helmer has claimed that the link between rising carbon dioxide levels and human activity is still 'open to question' adding in an interview with *The Independent* that predicted temperatures rises were 'grossly exaggerated' by scientists. Yet

the latest IPCC report found that 97 per cent of leading scientists are extremely confident that the atmosphere is warming and that humans are the main cause of the temperature increase. "As Roger Helmer is honest enough to admit, he is not a scientist – and frankly, it shows," said Professor Joanna Haigh, Co-Director of the Grantham Institute for Climate Change. "Nobody credible believes climate sensitivity is likely to be below 1degC and the extra CO₂ in the atmosphere is indisputably from fossil fuel combustion."

Gates foundation 'spending in wrong way'

BLOOMBERG ▶ 22.12.14

Over the past decade, aid groups such as the *Bill and Melinda Gates Foundation* have spent tens of billions of dollars battling deadly infectious diseases. Speaking to *Bloomberg News*, Professor Salman Rawaf (School of Public Health) an adviser to the World Health Organization said such groups "are doing more damage than good; I want the world to hear it. They're very generous... but they should move away from disease-specific funding into health-system strengthening." Many officials say spending billions of dollars to fight ailments



such as AIDS, malaria, and polio rather than supporting basic health services has left nations unprepared for epidemics like Ebola.

Driverless cars to be tested in UK

THE GUARDIAN ▶ 01.01.15

The future of motoring will accelerate into view this year in Bristol, Coventry, Milton Keynes and the London borough of Greenwich, *The Guardian* reports. The Greenwich trials – named the Gateway project – will involve self-driving shuttles being tested on closed roads and in simulation facilities. The project is led by the TRL with contributions from the Royal College of Art, Imperial College London and the University of Greenwich along with General Motors, the AA and RAC.

awards and honours

MEDICINE

Pioneering liver surgeon honoured



Professor Nagy Habib (Surgery & Cancer) has been elected by the board of the French Academy of Surgery as an 'honorary foreign member'. Professor Habib is a leading translational researcher on liver cancer and its treatment and a former Pro Rector (Commercial Affairs) at the College. He pioneered the first clinical trials for the use of adenovirus and plasmid gene therapy in the treatment of liver cancer and has invented interventional devices used in liver surgery.

ENGINEERING

YES they can

An team of Imperial PhD students from the Department of Materials has won an award at this year's Biotechnology YES Finals (Young Entrepreneurship Scheme) for best healthcare business plan sponsored by GSK. Their hypothetical business, InfectDetect, is a paper-based diagnostic test that differentiates between viral and bacterial infections and therefore cuts down on antibiotic use.



ENGINEERING

American Physical Society honours Kalliadasis



Serafim Kalliadasis, Professor of Engineering Science and Applied Mathematics in the Department of Chemical Engineering has been elected a Fellow of the American Physical Society (APS). APS fellows are honoured not only by recognition by their professional peers, but by the contribution to the field of physics via outstanding research, application and education of the subject. Election to APS Fellowship is limited to no more than one half of one percent of the total APS membership.

ENGINEERING

Industrial fellowships for postgrads

Four Imperial postgraduates, researching socially aware machines, smart paints, digital imaging and robotic technologies have won prestigious Industrial Fellowships, awarded by the Royal Commission for the Exhibition of 1851. Each Fellow receives a grant of £80,000, giving them the opportunity to progress their research, in conjunction with both an academic and a business partner. The awardees are Silvia Araguas-Rodriguez (Materials), Benjamin Chamberlain (Computing), Misty Haith and Mathew Holloway (both Mechanical Engineering).

REF 2014: LOOK BOOK

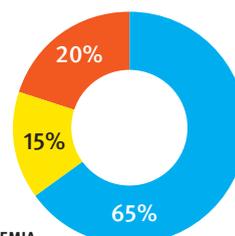
A detailed look at the numbers behind Imperial's successful research assessment results



The results of the Research Excellence Framework (REF) 2014 were announced on 18 December last year, showing that [Imperial has the greatest concentration of high impact research of any major UK university](#). We take a look at that success story through numbers, then delve into a selection of the research submitted to REF, which is having an impact on the wider world outside of academia.

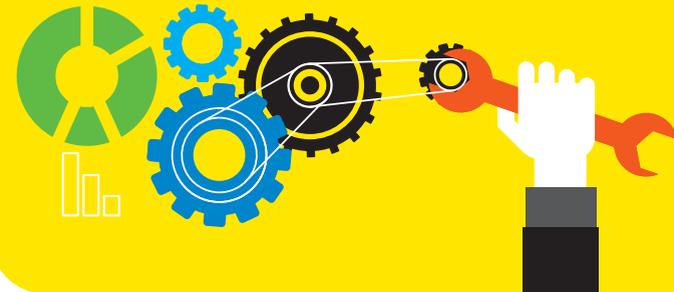


● RESEARCH OUTPUT
● RESEARCH ENVIRONMENT
● IMPACT OUTSIDE OF ACADEMIA



1ST

Ninety-one percent of Imperial research is classed as “world-leading” (46% achieved the highest possible 4* score) or “internationally excellent” (44% achieved 3*) – the highest proportion of any major university.



WHAT IS REF?

The Research Excellence Framework (REF) is the sector-wide approach to assessing research quality across institutions in the UK. These assessments take place around every six years – the previous one being RAE 2008. For the 2014 exercise each eligible member of academic staff submitted examples of research published between 2008 and 2013. The research was categorised according to the REF's Units of Assessment, covering 36 subject areas.

Expert panels judged submissions based on three factors – the quality of research output (assessed by peer review); the vibrancy of the research environment (which considered research strategy, infrastructure, income and degrees awarded); and the impact the research has had outside of academia.

The scores for each of these factors were expressed as the proportion of the submission that met pre-defined quality thresholds – from the highest 4* to 1*. So, for example, for the Mathematical Sciences subject area, Imperial achieved an Impact ‘profile’ score of 56% as 4*, 40% as 3*, 4% as 2* and 0% as 1*.

These factors were also combined to give an overall score for the subject areas – but with different weightings for each factor (see the pie chart left). So the overall profile score for Mathematical Sciences was 44% as 4*, 47% as 3*, 8% as 2* and 1% as 1*.



Imperial comes fourth out of all UK universities for 4* or “world-leading” research, behind LSE, Oxford and Cambridge.

4TH

WHY IS IT A BIG DEAL?

154

UK universities took part in the REF.

190,000

research outputs were reviewed by special panels.

52,000

Academics submitted research to the REF.

92%

of Imperial’s eligible staff, a total of 1,257 FTE, took part in the REF.

The REF’s new impact measure ranks Imperial’s research the highest of any major university.

TOP OVERALL FOR...

The two subject areas where Imperial achieved the highest score overall of any institution were:

- Civil & Construction Engineering
- Public Health, Health Services & Primary Care

TOP THREE OVERALL FOR...

Other subject areas where Imperial placed in the top three out of all institutions were:

- Aero, Mechanical, Chemical & Manufacturing Engineering
- Clinical Medicine
- Computer Science & Informatics
- Electrical & Electronic Engineering
- General Engineering
- Materials
- Mathematical Sciences

Unlike previous research assessments, REF 2014 included impact as an integral factor in the overall scores.

Academic staff from across the College were required to submit ‘Impact case studies’ detailing how their research has affected the world outside of academic. From the hundreds of excellent case studies submitted, we take a look at a selection, starting below and continuing overleaf.

CASE 1 // ENGINEERING

Tailored treatment



A FEW TOP HONOURS

Winner of European Inventor Award, European Patent Office, 2014

Best British Inventions, BBC Focus Magazine, 2009

Following the completion of the Human Genome Project (HGP) in 2003 it was hoped that healthcare would soon be transformed – with ‘personalised medicine’ tailored to each patient based on their underlying genetic code. While the sequencing technology used by the HGP has improved it has still not managed to find its way into routine clinical practice.

Work by the biomedical electronics team led by Professor Christofer Toumazou is helping to make that leap.

The team has developed a novel all-electrical approach to directly translate DNA code into digital information on a semiconductor chip.

Based on this technology, Professor Toumazou founded DNA Electronics (DNAe) as a spin-out from Imperial in 2003 to make compact point-of-care products to quickly recognize diseases and identify adverse drug reactions. The first application is in the management of bloodstream infections and sepsis – a major worldwide killer.

When sepsis is suspected, clinicians need to know the type of infection before administering the appropriate type of antibiotics. However, this usually requires remote laboratory analysis which can take days to complete, by which time, the patient’s condition can become much worse. DNAe’s Genalysis® test sequences the genetic code of the bacteria and can return an identification in around 2–3 hours.

“ Cancer Research UK does not often use the word ‘breakthrough’ but this is one of those rare occasions when I am going to.”

—Harpal Kumar, Chief Executive of Cancer Research UK, comments on the new screening approach



QUICK FACTS

3000

number of colorectal cancer deaths avoided annually by new screening approach

43%

the reduction in mortality from colorectal cancer among participants in the UK Flexible Screening Sigmoidoscopy Trial



CASE 2 // MEDICINE

Catching bowel cancer early

There are one million new diagnoses of colorectal cancer annually worldwide. It is the third most commonly diagnosed cancer and the second most frequent cause of cancer death in the UK – incurring costs to the NHS in excess of £1 billion annually.

Since 2006, screening for colorectal cancer was offered every two years for those in their 60s and 70s via a home test kit that can detect traces of blood in stools. However, this approach misses half of all colorectal polyps and cancer.

In 1993, Wendy Atkin, now Professor

of Gastrointestinal Epidemiology, set out the case for using a one-off flexible sigmoidoscopy test which examines the lower part of the colon. The idea was that polyps would be detected and removed before the development of colorectal cancer, reducing incidence and mortality rates.

This new screening approach was trialled in 170,000 people (the UK Flexible Screening Sigmoidoscopy Trial [UKFSST]). The trial showed that colorectal cancer incidence was reduced by a third and mortality by 43% after a single screening undertaken in men and women between ages 55 and 64.

With government backing, the entire screening strategy was rolled out in a national programme from 2013 and is expected to cover the entire population by 2016.



CASE 3 // BUSINESS

Managing mega projects

It's often said that Crossrail is the largest construction project in Europe – with 10,000 people working across more than 40 sites to build a route over 100km, that will deliver an extra 1.5 million people to within 45 minutes of central London. All at a cost of around £14.8bn.

Managing and delivering ‘mega projects’ like these on time and to budget is a science in itself. And it doesn't always go to plan. In the past, the UK construction industry was hampered by an

→ The Olympic Park, Crossrail, St Pancras Eurostar Terminal and Heathrow Terminal 5 are all examples of major construction endeavours that have benefited from a new approach to project management pioneered by Imperial College Business School



CASE 4 // NATURAL SCIENCES

Conserving history

In 1999 the Victoria and Albert Museum (V&A) took the difficult decision to remove the stunning Mazarin Chest – the centrepiece of its Japanese collection – from public display. The Chest, manufactured in Kyoto around 1640, is one of the most important examples of export lacquer in the world, but it was damaged and unstable and conservators feared that further preservation work was too risky.

Just around the corner at Imperial's South Kensington Campus, however, Professor Tom Welton's research into the interaction of solvent and solutes held the potential to transform the fortunes of the Chest, and conservation practices for similar artwork more widely.

A fortuitous encounter between Professor Welton and Shayne Rivers, a senior conservator at the V&A, led to a line of research that established empirically for the first time the solvents that could be used to conserve Asian lacquer without causing it damage.



The research also shed new light on the optimum techniques for applying solvent, pointing to the close relationship between chemistry and practice.

Ultimately that work allowed the Mazarin Chest to return to display at the V&A and travel to Japan and the United States for international exhibitions where it was viewed by over 200,000 people, adding to the some 3 million people who visit the V&A each year.



↑ This pivotal research is now universally recognized as changing the working practice of conservators and curators and is now well established in the teaching and mentoring of heritage organisations around the world, including the Getty Museum, the British Museum, and the Museum of Modern Art in New York.



isolationist approach, where firms often struggled to apply lessons learned from previous projects.

Tasked with overcoming these obstacles, the Innovation and Entrepreneurship Group at Imperial College Business School was given privileged access to four engineering design firms – Laing O'Rourke, Arup, Mace and BAA (now Heathrow Airport Holdings).

Based on their analysis, the group devised a new 'systems integration model', designed to enable firms to draw on past experiences and improve the management of mega-

projects. This has now been adopted by firms including Laing O'Rourke and has been applied to projects such as Heathrow Terminal 5 (2008) and the construction of venues and stadia at the London 2012 Olympic Park, completed ahead of time and on budget (2011).

The model was also used by Laing mostly recently on Crossrail, due to take its first passengers in May 2015. The legacy will continue even beyond that with lessons learned from Crossrail smoothly transferred to future mega-projects that will have a lasting impact on the UK economy.

From Space to Sneezes: Imperial impact in brief



FIRM FOUNDATIONS

The Department of Civil and Environmental Engineering has developed new pile foundation design tools to support deep water oil and gas platforms and offshore wind turbines – improving the safety and reducing the cost of these challenging projects.



SAVING SPECIES

Research and conservation work by the Life Sciences Department has helped the endangered Saiga antelope population rebound by 190%.



PEARLY WHITES

Imperial research into a special type of material called bioactive glasses led to the development of a new brand of additive toothpaste that may reverse early tooth decay.



COSMIC COMPASS

Manufacturers of space satellites are making use of a new a lightweight 'digital compass' developed in the Department of Physics that ensures satellites point in the right direction and don't drift from orbit.



GOODBYE SNEEZES

Imperial biotech spin-out company Circassia PLC, which is pioneering new treatments for hay fever and cat allergies, floated on the London Stock Exchange in 2014, raising £200 million.

An honourable gentleman

Professor Stephen Richardson, Associate Provost (Institutional Affairs), is a well-known and popular member of Imperial's senior team. He was recently awarded a CBE in the New Year's Honours list and led Imperial's successful REF submission from the outset (see pages 4–7).



Stephen taking a Chemical Engineering Design class

Firstly Stephen, congratulations on the CBE; you're not known for seeking the limelight but the honours body finally managed to track you down I guess?

Well somebody did! I received a letter from the Cabinet Office around five weeks ago, completely out of the blue. It was waiting for me on my desk at home; my wife saw who it was from and was very careful not to open it. I don't know when exactly the ceremony will be, presumably sometime before the Queen's Birthday Honours – hopefully when the weather is better!

Your CBE was for 'services to chemical engineering education and safety'. Do you still have much contact with students?

Because I underwent a heart operation around a year ago I had to hand over my main lecture course to a colleague – but I was asked to do a 'guest slot' just before Christmas, which was nice. In truth, it's the thing that I miss most. I find students invigorating; they ask all sorts of questions and challenge long-held assumptions we academics have about certain topics.

You joined the College as an undergraduate in 1969, rising to the very top management table, giving a terrific vantage point across 40 years of Imperial life. What stands out most in terms of the changes, and what has stayed the same?

The buildings have changed, but not unrecognisably so. One of the biggest changes is the tempo. I often pine for the days when you could go away and think about something for a month or just try something out before making a decision, but that's really quite hard now. These days we do a lot of 'running to stand still'. It was nice having that freedom in the past, but it was at tax-payers' expense of course and I think we're a leaner and better organisation now.



As one of the longer-serving members of the senior team do you bring a stabilizing influence? I'm not sure I'm a calming influence on anybody! But certainly I've got more historical memory than most people and that can be both a good and a bad thing. So someone might come up with an idea and I can say: "Well... this is what happened last time we tried it!" That's not a reason not to try it again of course, but the question might be: "has enough changed since the previous time out?"

The recent REF results were a great success for the College. I understand you were heavily involved with the submission in the early days?

Yes, in fact I was overseeing the process until I had to go into hospital to be zapped! I found REF – as well as academic promotions, which I oversee – to be an excellent way of learning about the College as a whole. You suddenly get this view of the entire College in one go and to see that is really interesting.

You were fondly described by your students as 'Machine-Gunner Richardson' on account of your fast-speaking delivery. Have you ever tried to slow yourself down when talking?

Actually I told them about that title – they plagiarised it! In 1989 I gave evidence at the inquiry into the Piper Alpha oil disaster, and the stenographers whose job it is to record testimony, found themselves struggling to keep up and so dubbed me 'Machine-gunner Richardson.' It's not so simple to slow down I'm afraid. I once gave a lecture at the Silwood Park Campus to students on a nuclear course and one of them asked if I could possibly speak any more slowly, and I said could, but then I probably wouldn't remember what the end of the sentence is supposed to be! For me I don't achieve lucidity by slowing down, there's just a fear of what comes next. I know it's regrettable, but you talk at the pace you think.

Talkin ‘bout a revolution

Professor Emeritus Keith Barnham – particle physicist turned photovoltaics researcher – has recently penned a popular science book about the solar energy revolution.

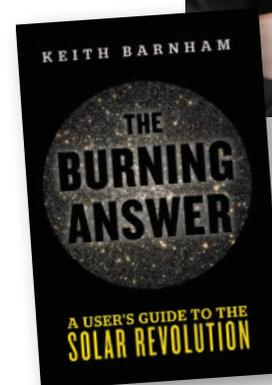
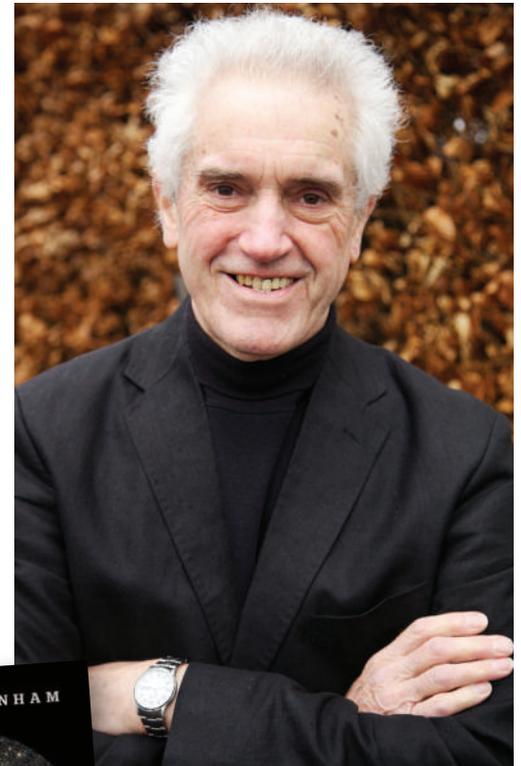
Keith Barnham seems something of a reluctant revolutionary. Unassuming and polite to a fault; yet brimming with zeal for his chosen field of photovoltaic research, whilst raging against misinformation spread by the fossil fuel and nuclear lobbies. At 71 he has finally gotten around to publishing his manifesto, titled *The Burning Answer: A user’s guide to the solar revolution*.

Keith takes a truly holistic approach to charting the solar revolution, covering the cosmological birth of stars, the quantum nature of light, the rise of silicon-based technology, the politics surrounding the energy debate and future directions for humanity. It’s an incredibly lucid read – something Keith credits to his poet wife Claire Crowther “who checked each word at least 13 times”. Meanwhile his use of analogies, describing electron orbits as an increasingly complex game of musical chairs (featuring a cameo appearance from Buzz Lightyear as a photon), is thanks to the influence of his four young grandchildren.

Keith’s own story has the pull of destiny about it. In 1979 he was working as a particle physicist at CERN, Geneva when he stumbled across a paper that was to change his life course. It set out a projected history of the world from 1979 to 2079 – dominated by struggles over resources and the environmental impact of fossil fuels.

“I was captivated, and drank in every word,” writes Keith. What really caught his attention though was one of the paper’s proposed solutions to these woes: a solar/hydrogen system for energy generation and distribution. “I decided there and then that I would switch my research career to solar, though it took a decade to complete the change,” Keith writes.

He established the Quantum Photovoltaics Group at Imperial in 1989, applying his knowledge of the behaviour of particles at the smallest of scales to improve the electrical efficiency of photovoltaic cells. Keith is still pursuing his ultimate goal of making solar fuel with others at Imperial including Professor Geoff Kelsall’s group in Chemical Engineering.



“I was captivated, and drank in every word...”

Students create new designs to improve the local area

Imperial student teams have designed new and innovative solutions to help tourists navigate the attractions of the South Kensington area.

The Mechanical Engineering students, studying the 3rd and 4th year Design, Art and Creativity Module, worked on the designs after the Department teamed up with the Exhibition Road Cultural Group (ERCG) – which includes the Science Museum, National History Museum, and the V&A as well as the College.

Each team was tasked with designing a mobile information unit provide a welcoming point of contact showcasing what South Kensington has to offer and helping visitors navigate the area.

The winning design, as judged by a panel of representatives from ERCG, was a mobile map and



Winning team (L-R): Doug Anderson, Annabel Felton, Alex Harrison, Ellis Hudson and Michael McCree

“Exhibition Road is an elegant area and we wanted to reflect that in our project.”

Winning team member
Annabel Felton

signage device that collapses into a hubless wheel that can be easily transported to locations around the area, dubbed ‘Revolution’.

Hawys Tomos (Mechanical Engineering), leader for the Design, Art and Creativity module, said: “The DAC module is designed to draw on the both the students’ engineering and artistic skills. It’s really exiting this year to have worked with the

ERCG to set the project brief in the heart of the local area.”

Tunnel vision

Imperial students have also been involved in a project to re-imagine the South Kensington Pedestrian Tunnel launched by the Royal Commission for the Exhibition of 1851 and the ERCG.

Student teams from the College, as well as the Royal College of Art and the Royal College of Music proposed concept ideas ranging from sympathetic restorations of the tunnel’s structure to the introduction of travelators and new music and performance spaces. The winning ideas will be taken forward to TFL for the next stage of the overall station improvement project’s design process.

— JON NARCROSS, COMMUNICATIONS AND PUBLIC AFFAIRS

long
service

Staff featured in this column have given many years of service to the College.

Staff listed celebrate anniversaries during the period 2 January–31 January 2015. The data are supplied by HR and correct at the time of going to press.

20 years

- Dr William Sheate, Reader in Environmental Assessment, Centre for Environmental Policy
- Professor Andrew Holmes, Professor of Microelectromechanical Systems, EEE
- Dr Karim Maghlaoui, Research Officer, Department of Life Sciences
- Dr Emil Lupu, Reader in Adaptive Computing Systems, Department of Computing
- O'Neal Copeland, Senior Research Technician, National Heart & Lung Institute

30 years

- Professor Chris Phillips, Professor of Experimental Solid State Physics, Department of Physics

SPOTLIGHT

O'Neal Copeland, Senior Research Technician, National Heart & Lung Institute
20 years

My journey at Imperial started on 2 January 1995 when I was based at the Guy Scadding Building at Hammersmith Hospital – shortly before the merger with Imperial. It's easy to forget how different things were at that time. For example it was before the integration of internet services and I remember having to procure lab consumables by phone and cataloguing all the items on paper order forms. I was very grateful for the introduction of ICIS. I have worked and collaborated with numerous colleagues forging relationships with undergraduates, PhD students, post docs, professors and other staff members. I still remain friends with individuals who left Imperial 15 years ago. Overall it's a great place to work, and it's been a privilege to be a part of this internationally renowned teaching and research institute for 20 years.



New bursaries to boost women in science

Imperial has launched an exciting new bursary scheme for women scientists thanks to the legacy of pioneering alumnus Dr Greta Stevenson.

The Stevenson Fund, named after its benefactor Dr Greta Stevenson, will provide three bursaries of up to £7,500 each year to women at the College studying Physics, Chemistry, Maths, Life Sciences and Geology to fund an international research placement with a leading female scientist at another institution.

Professor Debra Humphris, Vice Provost (Education) and Chair of the Stevenson Fund Panel said: "Greta Stevenson was an inspiration to many through her research, teaching and sporting activities. She broke glass ceilings and inspired many during her lifetime, and – through these bursaries – leaves a legacy of opportunity for the next



Dr Stevenson was a distinguished botanist, mountain climber and adventurer who led the first all-women party to ascend Mount Eamslaw.

generation of women in science.

"Thanks to Dr Stevenson's generous support we're able to offer these bursaries to inspire the next generation of female scientists, allowing them to broaden their academic horizons and carry out research abroad."

By financing the scholarships for international

collaboration the fund hopes to encourage reciprocal visits in the future building up international networks amongst female students and researchers.

— JON NARCROSS, COMMUNICATIONS AND PUBLIC AFFAIRS

Application forms can be found at bit.ly/greta-form and should be e-mailed to J.Ivison@imperial.ac.uk by 27 March

obituaries

TONY GODDARD



Tony Goddard, Professor of Environmental Safety in the Department of Earth Science and Engineering, died on 3 June 2014 aged 77. Professor Colin Besant (formerly Mechanical

Engineering) spoke at his memorial service and Reporter publishes part of his tribute below.

Tony's association with Imperial goes back some 50 years, having completed his PhD in the Nuclear Power Section of the Department of Mechanical Engineering. He went on to serve at the UK Atomic Energy Authority working as reactor physicist on light and heavy water reactors before returning to Imperial in the Department of Mechanical Engineering.

I particularly remember hearing Tony provide expert commentary for the BBC at the time of the Chernobyl Accident in 1989 – where he spoke with great clarity and balance. Though he remained convinced of the overriding necessity of nuclear power to society, that incident triggered

a real passion in him for ensuring its safety and he went on to become Professor of Environmental Safety in the Department of Earth Science and Engineering.

He played a leading role in the Research Council's initiative to maintain UK nuclear skills which has ultimately proved quite prescient in light of the UK's 'new nuclear' programme as part of the drive to reduce carbon emissions.

On a personal level, Tony was such a decent person with a high level of integrity in all matters. I never once saw him become angry; although we both often had to fight our corner in the Department once we became professors.

Many colleagues in the industry have also paid tribute to Tony, including Professor Andy Sherry, Director of the Dalton Nuclear Institute at the University of Manchester who said: "I found Tony to be a thoughtful and gentle man, well respected by the whole academic community and able to bring academics together to collaborate in research – no small feat."

Imperial owes its world-leading reputation to the hard work of its students and dedicated staff like Tony.

Welcome new starters

Mrs Alina Agaciak, Catering Services
 Dr Catarina Aires Fernandes, Computing
 Ms Sheila Akinlabi, Public Health
 Dr Kris Anderson, ESE
 Dr Athanasios Angelis-Dimakis, Centre for Environmental Policy
 Mr Thomas Angus, Communications and Public Affairs
 Miss Pearl Anteh, Campus Services
 Dr Jonathan Baker, NHLI
 Miss Laura Barkaway, Business School
 Mr Chris Barnes, Surgery & Cancer
 Mrs Juliane Benedit, Mechanical Engineering
 Dr Ivan Beretta, EEE
 Dr Mads Bergholt, Materials
 Dr David Bhowmik, Computing
 Miss Cynthia Bishop, Medicine
 Mrs Hanna Box, Medicine
 Mr Richard Brueton, Surgery & Cancer
 Dr Stefano Cacciatore, Surgery & Cancer
 Miss Ashley Campbell, Surgery & Cancer
 Dr Bonnie Chaban, Life Sciences
 Mr Merouane Cherid, Catering Services
 Miss Gosia Ciaciuch, Catering Services
 Miss Kelly Cowell, Sport and Leisure
 Ms Louise Cross, Medicine
 Dr Daniel Crow, ESE
 Ms Catherine Currie, Registry
 Dr Nathaniel Dahan, Mechanical Engineering
 Ms Hannah Daniels, Business School
 Dr Eduardo De Brito Lima Ferreira, Computing
 Mr Giancarlo De Canio, Security Services
 Mr John Demello, ICU
 Mr Stuart Dempster, Library
 Mr Neerav Dhanani, Public Health
 Mr Parus Dhanani, Estates Division
 Dr Tatiana Dimitriu, Life Sciences (Silwood Park)
 Mr Barrett Downing, NHLI
 Dr Jarryl D'Oyley, Chemistry
 Dr Anozie Ebiqbo, ESE
 Dr Peter Ellison, Mechanical Engineering
 Mr Michael Epstein, Mathematics
 Miss Cristal Ewers, EYEC
 Dr Judith Finegold, NHLI
 Mr Fabio Fisher, Life Sciences
 Mrs Sally Fouche, Faculty of Engineering
 Ms Leonil Francis, Sport and Leisure
 Dr Mark Friddin, Chemistry
 Miss Kimberley Frost, Catering Services
 Dr Vamsi Ganti, ESE
 Miss Pria Ghosh, Public Health
 Dr Shahzad Gishkori, EEE
 Dr Adam Gornley, Materials
 Mr Jason Gouveia, Climate KIC
 Miss Helen Green, Communications and Public Affairs
 Mr Daniel Green, Bioengineering
 Miss Daphne Guilford, Public Health
 Dr Gaurav Gupta, Mechanical Engineering
 Dr Moigan Hadi Mosleh, ESE
 Ms Katie Hall, Faculty of Medicine Centre
 Miss Nazia Hannan, Faculty of Medicine Centre
 Miss Miriam Harniess, Business School
 Ms Stephanie Harris, Faculty of Medicine Centre
 Mr James Hay, Public Health
 Dr Elizabeth Hayes, Public Health

Miss Elizabeth Haythorne, Medicine
 Mr Jani Heikkinen, Public Health
 Mr Pablo Higueru Caubilla, ESE
 Dr Long Hoang, NHLI
 Miss Rebecca Holmes, Surgery & Cancer
 Ms Jean Honeyball, Sport and Leisure
 Dr Jindui Hong, Chemical Engineering
 Mr Matthew Horton, Materials
 Miss Kate Humphreys, Public Health
 Mr Christopher Hutchison, Life Sciences
 Miss Constance Ito, NHLI
 Dr Arvind Iyer, Aeronautics
 Mr Desmond James, Security Services
 Mrs Patricia Jimenez, Catering Services
 Ms Toyosi Johnson, Faculty of Medicine Centre
 Miss Laura Jordan, Public Health
 Miss Golding Katie, EYEC
 Miss Zoe Kelly, Surgery & Cancer
 Miss Natasha Kerr, Business School
 Miss Steffi Klier, Surgery & Cancer
 Miss Magdalena Kloc, NHLI
 Mrs Angela Knight, Public Health
 Miss Gemma Knowles, Public Health
 Dr Navaratnarajah Kuganathan, Materials
 Mr Krzysztof Kurnicki, Catering Services
 Ms Kimberley Kuti, Catering Services
 Ms Blandine Labry, Public Health
 Ms Karine Larose, Library
 Dr Laura Larrimbe, Materials
 Dr Adam Laycock, ESE
 Dr Alice Ledda, Public Health
 Dr Koon-Yang Lee, Aeronautics
 Dr Jacob Lee, Medicine
 Miss Eli Liferova, Business School
 Ms Bernice Leung, Finance
 Dr Joanna Lewis, Public Health
 Dr Lucia Li, Medicine
 Mr Robert Lowther, ESE
 Ms Grace Ma, NHLI
 Ms Ellen Macfarlane, NHLI
 Dr Marilena Marinescu, Medicine
 Dr Foivos Markoulidis, Chemistry
 Mr Jowayne Marks, Accommodation
 Dr Yulia Melnikova, ESE
 Mr Grigorios Minas, EEE
 Dr Brian Mitchell, Computing
 Dr Pawel Mordaka, Life Sciences
 Miss Katherine Morris, Faculty of Medicine Centre
 Dr Kris Murray, Grantham Institute
 Dr Umar Niazi, NHLI
 Miss Kerry O'Donnolly Weaver, Chemistry
 Dr Christine O'Farrelly, Medicine
 Miss Blessing Otiye, Chemical Engineering
 Miss Kate Pajarillaga, ICU
 Dr Evangelina Pensa, Chemistry
 Miss Nicole Pettigrew, Faculty of Engineering
 Miss Adenike Phillips-Clarke, Sport and Leisure
 Ms Roberta Pierfederici, Grantham Institute
 Dr Ronny Pini, Chemical Engineering
 Dr Kanagaraju Ponnusamy, Medicine
 Dr Geraint Price, Public Health
 Dr Petar Radanilic, Centre for Environmental Policy
 Mr Mohammed Rasheed, Surgery & Cancer
 Dr Anna Regoutz, Materials
 Ms Jane Robinson, Faculty of Engineering
 Mrs Martina Rohr, School of Professional Development
 Dr Dylan Rood, ESE

Mrs Margaret Rood, ESE
 Dr Noelia Rubio Carrero, Chemistry
 Ms Wendy Salas, Sport and Leisure
 Mr Robert Sansom, EEE
 Mr Kadeem Seevakreedam, EYEC
 Dr Madhiha Shaikh, Public Health
 Ms Amber Sharick, Faculty of Engineering
 Dr Elisa Sicuri, Public Health
 Dr Natalia Smoktunowicz, NHLI
 Mr Mohammedreza Sohbati, EEE
 Ms Emma Stoakes, Business School
 Dr Marc Sturrock, Life Sciences
 Mr Prathiban Sureshkumar, Mechanical Engineering
 Mr Dennis Teck-Yong, ICT
 Mr Benjamin Testoni, Business School
 Mr Charles Thomas, Library
 Dr Tommaso Tosi, Medicine
 Miss Ijeoma Uchegbu, Surgery & Cancer
 Dr Iria Ullia Castro, Medicine
 Mr Richard van Arkel, Mechanical Engineering
 Ms Sarah van der Wal, Public Health
 Mr Christopher Waite, Life Sciences
 Dr Thomas Wall, Physics
 Dr Kinzhu Wang, Medicine
 Miss Anna Watson, Faculty of Medicine Centre
 Mr Gary Wheeler, Faculty of Natural Sciences
 Miss Annika Wilhelm, Medicine
 Mr Mark Wilkinson, Life Sciences
 Mrs Catherine Williams, Library
 Dr Garrick Wilson, NHLI
 Mr Peter Winskill, Public Health
 Mr Alexander Wray, Chemical Engineering
 Miss Hannah Yewbrey, Surgery & Cancer
 Ms Jenny Zelazowski-Schwarz, Security Services

Farewell moving on

Dr Rhys Algar, Bioengineering
 Dr Khalid Alhaj Abdalla, Civil and Environmental Engineering
 Dr Tristan Allwood, Computing
 Dr Heykel Aouani, Physics
 Dr Gerardo Aquino, Life Sciences (6 years)
 Mr Delfim Araujo Ferreira, Medicine
 Dr Elham Ashoori, Mathematics
 Miss Danielle Ashworth, Public Health
 Ms Jennifer Ayers, Surgery & Cancer
 Dr Matthew Aylott, Faculty of Engineering
 Miss Reda Bagdonaite, Catering Services
 Mr Sunit Bagree, Public Health
 Dr Anjali Bakhru, Business School
 Mr Samuel Bamigbade, Life Sciences (13 years)
 Mr Tim Barrett, Chemistry
 Dr Alastair Barrow, Surgery & Cancer
 Dr Richard Barton, Surgery & Cancer (14 years)
 Professor Miguel Bastos Araujo, Life Sciences (Silwood Park)
 Miss Cristina Beltrami, NHLI
 Mr Alexandre Betinardi Strapasson, Centre for Environmental Policy
 Miss Yogeshwari Bhadrana, NHLI
 Dr Mark Bilton, EEE
 Dr Sandra Bovens, Bioengineering
 Dr Konrad Bradley, Medicine
 Miss Lucy Brooks, Medicine

Dr Benjamin Brown, Physics
 Dr Gillian Brydson Young, Life Sciences
 Mr George Buckman, NHLI
 Dr Bronwyn Cahill, Physics
 Dr Alfredo Camara, Civil and Environmental Engineering
 Dr Ivan Campeotto, Medicine
 Dr Elliot Carr, ESE
 Dr Rufus Cartwright, Surgery & Cancer
 Dr Raphaele Castagne, Public Health
 Mr Edward Charmley, Physics
 Mr Po-Yu Chen, Computing
 Miss Alysha Chua, Life Sciences
 Mrs Rita Clode, Library (34 years)
 Dr Matt Coles, Chemistry
 Mrs Ruth Cooper, Library (34 years)
 Dr Luca Cornetti, Life Sciences (Silwood Park)
 Dr Tomas Correa, Mechanical Engineering
 Dr Rebecca Corrigan, Medicine (6 years)
 Miss Sandra Coulstock, Finance (8 years)
 Dr Anne Coumol, Physics
 Miss Jess Croker, Medicine
 Mr Anthony Crowther, ICU
 Mr Robert Cunliffe, Life Sciences
 Dr Vincenzo Curto, Computing
 Dr Rocco Cuzzilla, Medicine
 Dr Thibault Dairay, Aeronautics
 Ms Olivia Davenport, Communications and Public Affairs
 Dr Rhiannon David, Surgery & Cancer
 Mr Joao De Jesus Reis Lagarto, Physics
 Dr Derfogail Delcassian, Materials
 Mrs Maria Dickinson, Grantham Institute
 Miss Nadia Do Couto Francisco, NHLI
 Ms Jo Donkin, Registry
 Dr Luke Dunning, Life Sciences (Silwood Park)
 Miss Giuliana Durighel, Clinical Science (8 years)
 Ms Sophie Dymond, Sport and Leisure
 Mr David Ebert, ICT (9 years)
 Mrs Sarah Edwards, NHLI
 Mr Mohammed el Bhiri, Faculty of Engineering
 Ms Kirsty Ellinor, Registry
 Miss Sarah Fort, Public Health
 Dr Markus Fuhrer, Physics
 Dr Nicholas Fyson, Mathematics
 Mr Kavi Gakkhal, Medicine
 Dr Juan Gallo Paramo, Chemistry
 Mr David Garcia Munzer, Chemical Engineering
 Professor Gerard George, Business School (7 years)
 Dr Kaboutar Gholami Babaahmadi, Medicine
 Dr Charlotte Gower, Public Health (10 years)
 Miss Sally Gowers, Computing
 Dr John Grasvik, Chemistry
 Ms Christine Greig, Clinical Science
 Mrs Nicola Guirguis, Chemical Engineering (4 years)
 Mr Anil Gunesh, Medicine (6 years)
 Miss Paulina Gutierrez Cortes, Catering Services
 Dr Abderrahman Hachani, Life Sciences (8 years)
 Mr Andras Hajdu, Climate KIC
 Dr Mutsuo Harada, NHLI
 Dr Narumi Harada, Surgery & Cancer
 Ms Eleanor Harding, Development
 Ms Mary Harvey, Mathematics (7 years)
 Dr Takayuki Homma, Bioengineering
 Mrs Rukshana Hoque, Medicine
 Dr Danijela Horak, Life Sciences
 Dr Christine-Maria Horejs, Materials

Mr Mohammad Hormozi Sheikhtabaghi, Mechanical Engineering
 Mr Petr Hosek, Computing
 Dr Ilankoon Ilankoon, ESE
 Mrs Beth Janz, Surgery & Cancer (8 years)
 Dr Simon Jeffs, Medicine
 Miss Stacey Jennings, Public Health
 Dr Knud Jonsson, Life Sciences (Silwood Park)
 Dr Andreas Kafizas, Chemistry
 Dr Christos Kalamaras, Chemical Engineering
 Ms Nicole Kalas, Centre for Environmental Policy
 Mr Evripidis Karseras, EEE
 Mr Douglas Kelly, Physics
 Mr Raphael Kim, Life Sciences
 Dr Marianna Kyritsi, Surgery & Cancer
 Miss Folasade Labiyi, Chemical Engineering
 Dr Mark Larsen, Public Health
 Ms Nicole Lau, Civil and Environmental Engineering (11 years)
 Ms Maria Leal Sanchez, Public Health
 Mr Stewart Lee Loong, Public Health
 Miss Caterina Lepore, Business School
 Mr Charles Lescott, Faculty of Natural Sciences (14 years)
 Mr John Loughhead, Faculty of Engineering (11 years)
 Dr Yu Luo, Physics
 Mr Charles Luzzato, Aeronautics
 Dr Katrina Lythgoe, Public Health
 Ms Monika Mac, Civil and Environmental Engineering
 Mr Andrew MacLachlan, Chemistry
 Mr James Mardell, EEE
 Mr Luigi Marongiu, NHLI
 Dr John Marshall, Public Health
 Dr Stephen Matthews, Computing
 Miss Gemma Mills, Estates Division (8 years)
 Dr Olivier Moncorge, Medicine (6 years)
 Mr Dominic Moseley, Physics
 Mr Daniel Mott, Sport and Leisure
 Dr Mohammad Neishabouri, Computing
 Mr John-Pool Ng-Blichfeldt, NHLI
 Mrs Emma Nino-French, Surgery & Cancer
 Mr Stephen O'Farrell, Medicine
 Mr Juan Orjuela Mendoza, Centre for Environmental Policy
 Mr Abdul Oyede, Medicine
 Dr Bidyut Pal, Mechanical Engineering
 Dr Aniello Palma, Chemistry
 Mr Fernando Parra Garcia, Centre for Environmental Policy
 Mr David Parris, Finance (13 years)
 Mr Bhavish Patel, Chemical Engineering
 Dr Andrew Paterson, Surgery & Cancer
 Dr Monique Pereboom, Public Health
 Dr Rajika Perera, Medicine
 Dr Barbara Pernaute Lomba, NHLI
 Professor Stratos Pistikopoulos, Chemical Engineering (23 years)
 Dr Lucia Possamai, Medicine
 Miss Sally Preston Wells, Faculty of Medicine Centre
 Dr Jennifer Puetzer, Materials
 Dr Meysam Qadrdan, EEE
 Dr Rongshan Qin, Materials (5 years)
 Dr Xueping Quan, Life Sciences (Silwood Park)

Miss Vian Rajabzadeh-Heshejin, Public Health
 Mr Phillip Ramsdale, Sport and Leisure (31 years)
 Dr Masooma Rasheed, Life Sciences
 Dr Bonnie Razzaghi, Medicine
 Mr David Richards, Faculty of Engineering
 Dr Rob Richardson, Chemistry
 Dr Aindrias Ryan, Medicine
 Dr Habib Saadi, Public Health
 Mr Darren Sampson, Finance (13 years)
 Dr Siavash Saremi-Yarhamadi, EEE
 Mr Michael Schaub, Mathematics
 Dr James Serginson, Chemistry
 Miss Sue Sharp, ICT (29 years)
 Dr Donal Simmie, Computing
 Emeritus Professor Robert Sinden, Life Sciences
 Miss Fiona Singh, Faculty of Engineering
 Dr Nathalie Skrzypek, Physics
 Mrs Rachel Slade, Medicine
 Dr Michelle Sleeth, Surgery & Cancer
 Professor Morris Sloman, Computing (38 years)
 Mr Tiago Soares Cogumbreiro Garcia, Computing
 Dr Rachel Souhami, School of Professional Development (16 years)
 Mr Alan Styles, Reactor Centre
 Mr David Sunkersing, Public Health
 Mr Dominic Swift, Life Sciences (Silwood Park)
 Dr Daniel Sykes, Computing
 Ms Marta Szajna, Medicine (8 years)
 Mr Yad Tahir, Computing
 Dr Petros Takousis, Public Health (5 years)
 Dr CT Tang, Life Sciences (Silwood Park)
 Dr Iratxe Torre Martinez, NHLI
 Ms Argyro Tsipa, Chemical Engineering
 Miss Valerie Vaisier, Physics
 Dr Rajagopal Vellingiri, Chemical Engineering
 Dr Antoine Vernet, Business School
 Mr Stephen Voller, Climate KIC
 Dr Ulrich von Both, Medicine
 Dr Michael Waller, NHLI
 Mr Terry Wallington, Estates Division (29 years)
 Ms Susie Wen, Medicine
 Miss Christine Woodman, Finance (12 years)
 Miss Chantalle Woolner, Communications and Public Affairs
 Dr Shusen Yang, Computing
 Dr Yuxin Yang, Mathematics
 Mr Hao Ye, Civil and Environmental Engineering
 Miss Yue Zhang, Life Sciences
 Dr Xiaowei Zhao, EEE

This data is supplied by HR and covers staff joining the College during the period 4 December 2014 – 15 January 2015. This data was correct at the time of going to press.

 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.

moving in... moving on.



28 JANUARY, 18.45–22.00

Imperial at Science Museum Lates: Engineer with a beer

Explore the world of engineering at the Science Museum's monthly late opening event for adults only. Imperial staff will be demonstrating their research through activities including dancing robots, computer penguins, impact tests on crash test dummies,

and new materials made from waste products. Professor Jerome Gauntlett, Head of Theoretical Physics and consultant for the film 'The theory of everything' will also be talking about the contributions to science made by Stephen Hawking. Refreshments and pay bar available all evening.



12 FEBRUARY, 17.30

Hackers at the dinner table

We share the food and drink at our dinner table with many other organisms, some of whom make poor guests. Plant pathogens and pests infect food crops by hacking into the

information networks that control the plants' immune system. In his inaugural lecture, Professor Pietro Spanu (Life Sciences) will speak about how we can continue to keep unwanted microbes off our guest list.

23–30 JANUARY,
10.00–17.00

Becoming graphene

An exhibition of work in the College main entrance by Matthew Luck Galpin, artist in residence at the Department of Physics. Visitors are invited to meet the artist between 17.00–20.00 on 27 January 2015.

28 JANUARY, 18.00
Accelerating the transition to a fossil fuel-free future

Former government advisor, Sir David King, talks about the global need to turn away from our reliance on fossil fuels, at the Energy Futures Lab annual lecture. (Event full)



29 JANUARY, 12.00
Dissecting the wound microenvironment

Department of Bioengineering seminar with Dr John Connelly, from Queen Mary University of London, about chronic and non-healing wounds.

29 JANUARY, 13.00
Lunchtime concert

Andrew Zolinsky's piano performance to include works by Rachmaninoff and Rudolph Escher.



29 JANUARY, 18.30
Is the crisis in the Eurozone really over?

Imperial Business Insights Series lecture with Philippe Legrain, author, journalist and commentator on global economic issues.



29 JANUARY, 18.00
FONS Make-a-difference competition

Information session for staff and students about the Faculty of Natural Sciences annual challenge to develop a low-cost technology that will have an impact on society.

2 FEBRUARY, 14.30
IGHI student challenges competition

An interactive Dragon's Den-style event to find the winner of the Institute for Global Health Innovation annual student challenges competition.

5 FEBRUARY, 13.00
Lunchtime concert

The Coull Quartet play Jean Sibelius's String Quartet in D-Minor op. 56 (Voces Intimae).

7 FEBRUARY, 10.00
London International Development Conference 2015

Student-run conference focusing on the global aid agenda and the role of science and engineering in international development.

10 FEBRUARY, 16.30
The best engineering becomes invisible

The 40th annual Paviers' lecture delivered by Keith Clarke, Vice President of the Institution of Civil Engineers.



12 FEBRUARY, 12.30
Hypochondria in German

Dr Manya Elrick presents this Centre for Co-Curricular Studies seminar on hypochondria in the German language.



16 FEBRUARY, 17.30
How is Antarctica changing and why should we care?

Professor Martin Siegert, co-director of the Grantham Institute – Climate Change and the Environment, delivers his inaugural lecture about exploration and technology at the Antarctic continent

take note



Top ways to lighten the Winter blues

UNTIL 15 FEB 2015
Tuesday–Sunday, 10.00–18.00

Julio Le Parc exhibition

Argentinian artist Julio Le Parc transforms the Serpentine Sackler gallery with immersive installations and interactive games inspired by the theme of light. Free entry. Serpentine Sackler Gallery, West Carriage Drive, Kensington Gardens

THURSDAY 5 FEB 2015, 19:00
A bright night: technologies of affect

An evening of screenings, readings, talks and performances addressing light, happiness, affect and productivity in contemporary culture. Tickets £5/4. Goethe-Institut, Exhibition Road

19 FEBRUARY, 17.00–20.00
Lit up

Join Imperial researchers as they bring the science of light out of the shadows for an evening of light entertainment. Free and open to all.

DAILY 10.00–17.50
(last admission 17.15)
Open late the last Friday of every month

Wildlife Photographer of the Year exhibition

Celebrating its 50th year, this exhibition shows off the very best nature photography. Half price entry for Imperial staff. Natural History Museum



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