



Imperial 2.0

Rebooting the College's web presence to reach a growing global audience of mobile users

... CENTRE PAGES



FESTIVAL FOR ALL

Third Imperial Festival proves huge hit with record numbers

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SAVVY SCIENCE

Dr Ling Ge on boosting enterprise and public engagement

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SAFETY SAGE

Ian Gillett, Safety Director, retires

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EDITOR'S CORNER

Digital wonder

Do you remember those tentative steps when you first dipped your toes into the World Wide Web? For me it was finding literary criticism on a novel I was reading at school and I guess for many others too it was [learning something new](#). Of course, we've all now become blasé about doing everything from grocery shopping to sharing gossip online. But I can still – just about – recall that initial sense of wonder at the limitless potential. The web continues to evolve and that [feeling of wonder](#) was re-kindled recently when I started downloading books, magazines and apps to the palm of my hand on a tablet. As one of the foremost science institutions in the world Imperial has a wealth of incredible things to share – and partly for this reason, the College's website is being re-designed to better deliver information and services to a variety of digital devices (centre pages). This way we can reach a wider audience and better support current and prospective students and staff.

ANDREW CZYZEWSKI, EDITOR

Reporter is published every three weeks during term time in print and online.

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Renewed drive for equality in UK science

Imperial has joined a campaign led by the Chancellor to boost participation in technology and engineering careers among women.

The 'Your Life' initiative brings together government, business, professional bodies and leading educational institutions who are all working to improve opportunities for women in science, technology, engineering and maths (STEM). The scheme was launched by Chancellor George Osborne at the Science Museum on 7 May.

As part of the campaign Imperial has pledged to: extend its outreach work into primary schools throughout the country; include a greater element of creative design in engineering courses starting in 2015; develop and promote the careers of women in technology and

engineering through inspirational role models; and improve and increase Imperial's recognition for promoting gender equality through Athena SWAN Charter awards.

Professor Debra Humphris, Vice Provost (Education) at Imperial, said: "We want to help shatter myths and change perceptions about women in STEM. It's fantastic to get the Chancellor's backing for these goals.

“We want to help shatter myths and change perceptions.”

“Meeting this challenge will not be easy. It will require a concerted effort throughout the College. But it will be worth it. Creating an environment where women enjoy greater opportunities in engineering and technology is good for all of us, as educators, researchers or beneficiaries of this work.”



Boost for metamaterials research

The Engineering and Physical Sciences Research Council has invested £2.5 million to advance metamaterials development, with a five-year project headed by Imperial.

Metamaterials are man-made materials that have unusual properties not seen in nature, which could have a range of real-world applications. Using metamaterials in optics has already produced the possibility of an invisibility cloak and the concept could even be applied to seismic waves to cloak buildings from vibrations caused by earthquakes.

Imperial, the University of Liverpool and Liverpool John Moores University will work to take these ideas further and progress theory and application with other potentially transformative metamaterials.

Professor Richard Craster, project lead and Head of the Department of Mathematics said: "This is an unusual and novel grant in metamaterials as it is centred on mathematical theory with considerable input from the Department of Physics, where metamaterials were originally developed. This will provide unique insight and access to cutting edge ideas from physics that mathematicians can turn into solid rigorous theory. Conversely theoretical advances from mathematics can be fed directly and swiftly back into experiments and design."

Universities and Science Minister David Willetts added: "Advanced materials is one of the eight great technologies of the future with the potential to propel UK growth. This investment will help us to develop further applications for metamaterials and reap the benefits of advanced materials for the wider UK economy."

Toumazou named among Europe's top inventors

Professor Christofer Toumazou (Electrical and Electronic Engineering) is one of fifteen pioneering inventors who have been named as finalists in the European Inventor Award 2014.

The award, which attracted 300 entrants, is Europe's highest distinction for inventors across the world, honouring those whose inventions have made a major contribution towards social, technological and economic progress.

Professor Toumazou, the only UK finalist is distinguished for his work in developing innovative silicon technology and integrated circuit design for electronic devices. He is credited with developing a range of medical devices such as the digital plaster, which monitors patient vital signs in the comfort of their home.

Professor Toumazou is nominated for an award in the Research category – one of six categories of award. There is also a Popular Prize, which enables supporters and friends of Professor Tomazou to take part in the online vote and help decide who will win in this category.

The prizes, regarded as Europe's 'Oscars' for technology and innovation, will be presented by the European Patent Office (EPO) at a gala ceremony in Berlin on 17 June.

Members of royal houses, presidents, ministers and high-level representatives of the worlds of business, research and industry have attended previous ceremonies, attesting to the prestige of the European Inventor Award, which is in its ninth year.

—COLIN SMITH, COMMUNICATIONS AND PUBLIC AFFAIRS



Award celebrates history of the Blackett Lab

The Blackett Laboratory, home of the Department of Physics, was designated an historic site by the European Physical Society (EPS) last month.

The prestigious recognition is bestowed by the EPS (a not-for-profit association of physicists) upon sites in Europe that hold national or international significance to physics and its history and was commemorated with the unveiling of a plaque by Imperial physicist Professor Tom Kibble.

The Blackett Lab, which has housed the Department of Physics since its completion in 1961, joins the National Physical Laboratory at Bushy Park as one of only two such recognised sites in the UK so far. It was selected by the EPS for its role as the home of pioneering advances in the fields of theoretical and experimental physics over the past five decades including in particle physics, quantum physics and ultrafast laser development.

The building was the site of Mohammed Abdus Salam’s work on the unification of the weak and electromagnetic forces for which he was awarded the Nobel Prize in 1979, as well as Professor Tom Kibble’s work which defined the mechanism by which gauge bosons acquire mass via the Higgs field.

Professor John Dudley, President of the EPS, said: “The advances made at the Blackett Laboratory have impacted on all fields of physics, and the laboratory continues today to produce results at the highest level and to turn out exceptional young physicists.”

The occasion was marked with a lecture by Professor Antonino Zichichi – President of the World Federation of Scientists and former student of Professor Patrick Blackett – who spoke on Blackett’s life and work, from his contribution to the field of operational research during his time as a naval officer to his vital roles in the discovery of the subnuclear universe and in the promotion of scientific culture.

—JONATHAN NARCROSS, COMMUNICATIONS AND PUBLIC AFFAIRS

Imperial partners with London Stock Exchange to offer enterprising education

Some of the UK’s most promising entrepreneurs will have access to an innovative new business education programme at Imperial.

The ELITE programme, a partnership between Imperial College Business School and the London Stock Exchange, provides support for high growth Small and Medium Enterprises (SMEs).

Skills and Enterprise Minister Matthew Hancock launched the inaugural ELITE event and welcomed the first 20 ELITE company CEOs to the scheme.

He said: “Innovative, imaginative and inspiring small businesses are essential for the British economy and it is part of the government’s long term economic plan to ensure that they have the right environment to grow. Programmes such as ELITE that offer access to high quality education, advice and support will help businesses scale up in the right way.”

The launch was hosted by Professor G. ‘Anand’ Anandalingam, Dean of Imperial College Business School and Xavier Rolet, CEO of the London Stock Exchange.

Professor Anandalingam said: “This partnership with the LSE will enable us to share Imperial’s academic expertise with the founders and executives on the frontline of business innovation. We look forward to helping equip the first ELITE company CEOs with the tools they need to take their businesses to the next level.”

The ELITE programme is a two year programme designed by Imperial College Business School, which will provide company founders, CEOs and executive teams with a tailored portfolio of business support tools, education services and access to a select group of more than 50 business advisory and investment partners.

—MAXINE MYERS AND ANDREW SCHEUBER, COMMUNICATIONS AND PUBLIC AFFAIRS

in brief

Quartet of new Fellows

Fellowship of the Royal Society has been granted to four scientists at Imperial this month. The researchers – who work on HIV, solar cells, nuclear fusion and an enzyme that “changed the planet” – have been elected to join the ranks of the UK’s most eminent scientists as part of the 2014 election of 50 new fellows. Professors Amanda Fisher, Jenny Nelson, Steven Cowley and Bill Rutherford are recognised for their contributions to science and are now permitted to use the letters FRS after their name.



Clockwise from top left: Professors Amanda Fisher, Jenny Nelson, Steven Cowley and Bill Rutherford

Reader comment

“ Ian Gillett is someone who realises people’s potential as well as letting their natural abilities come forward. It has been a pleasure working with him and he will be sorely missed.”

IAN SMITH, HEALTH & SAFETY TECHNICIAN, COMMENTS ONLINE (SEE PAGE 10)

Top tweet

Jenna Stevens-Smith @J_DoubleS

Finally my chatting to taxi drivers about #bioengineering has paid off. My driver from a few weeks ago brought his daughter along to #impfest





Business School research ranks global enterprise

The UK has slipped from sixth to ninth place in the 2014 Global Entrepreneurship and Development Index (GEDI), according to research from the Business School carried out in association with George Mason University, the London School of Economics and the University of Pécs.

The researchers suggest that entrepreneurial aspirations in the UK are holding back performance.

In the study of the UK and 119 other countries across the world, the team analysed data from more than 3,000 highly skilled individuals with business ideas, alongside data describing how well each country supports entrepreneurial activity.

They found that Britons were less likely to choose entrepreneurship as a career path because they had a wealth of employment options available to them. This made them reluctant to leave secure, well paid jobs for the uncertainty of starting up a business.

This is in comparison to countries such as the US and Australia, ranked first and second, respectively in the list, where highly skilled individuals with innovative ideas are more likely to set up businesses despite the risks.

Co-author Professor Erko Autio (Business School) said: "Enterprising people who are highly skilled should be encouraged to see setting up their own business as an exciting alternative to full-time employment. However, our report shows that many still crave the security of full-time employment.

"Entrepreneurship creates social benefits that extend beyond the individual, such as job creation, increasing competition and enhanced economic dynamism. Our report pinpoints areas that the government can focus on to help aspiring entrepreneurs make the leap from the safety of a well-paid job into what they may feel is riskier territory."

—MAXINE MYERS, COMMUNICATIONS AND PUBLIC AFFAIRS

Pushing boundaries at graduation 2014

Imperial students received their degrees in front of 6,000 friends, family and supporters, over three ceremonies in the Royal Albert Hall on 7 May.

The largest Postgraduate Awards Ceremonies in the College's history saw 2,700 new graduates join an international network of 170,000 alumni.

Addressing graduands, President & Rector Sir Keith O'Nions said: "Each of you has been at the frontier of your subject. You have pushed, tested and in many cases moved the boundaries of knowledge and achieved a new level of understanding."

Honorary doctorates were awarded to alumnus Mr Koh Boon Hwee, who as Chairman of Singapore's Nanyang Technical University has spearheaded education developments including the



Lee Kong Chian School of Medicine established jointly with Imperial, and Professor Dudley Brian Spalding FRS, FRAE, retired Professor of Heat Transfer, in recognition of his pioneering research into Computational Fluid Dynamics. Imperial College Medals were presented to Dr Rodney Eastwood, former College Secretary, for his outstanding contributions to the life and work of the College, and alumnus Mr Rajive Kaul, Chairman of Indian conglomerate the Nicco group, for his work as President of the Imperial College Alumni Association of India.



Twitter shines light on NHS hospital care

Patient tweets to NHS hospitals provide valuable insight into their experiences of care, according to new research.

The Imperial study, published in the journal *BMJ Quality and Safety*, looked at 200,000 tweets sent to NHS hospitals over one year. Around 11 per cent gave information about patients' experiences, of which more than 70 per cent of the tweets were positive, with patients often describing how staff had treated them with care and compassion. However, patients also used twitter to complain and report poor care and mistakes that had been made by medical staff.

Dr Felix Greaves (School of Public Health), lead author on the study, said: "Hospitals should be listening to what patients say on Twitter. It provides a new route for the NHS to understand what patients experience in hospital, and for hospitals to improve the care they provide."

"It is clear that some hospitals are engaging with their patients on Twitter, but others seem to be paying it little attention. Hospitals should be taking the conversations on Twitter seriously; the short human stories in each tweet can give hospitals different insights into their patients, compared with what we can learn through more traditional 'big data' analysis."

—FRANCESCA DAVENPORT, COMMUNICATIONS AND PUBLIC AFFAIRS

media mentions



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www.imperial.ac.uk/media/jointsignup



The edible water bottle

THE INDEPENDENT ▶ 25.04.14

Imperial students have created an edible water bottle, with the potential to put an end to the waste created by the billions of plastic containers thrown away each year, *The Independent* reports. To make the bottle, the students gave a frozen ball of water a gelatinous layer by dipping it into a calcium chloride solution. However, as the membrane is only as thick as a fruit skin it makes transportation difficult. "This is a problem we're trying to address with a double container," said Rodrigo García González who created 'Ooho' with fellow students Pierre Paslier and Guillaume Couch (all Mechanical Engineering).

Tsunami hit prehistoric Atlantis

BBC NEWS ▶ 01.05.14

A prehistoric 'Atlantis' in the North Sea off the East coast of England may have been abandoned after being hit by a 5m tsunami 8,200 years ago, Imperial research shows. The wave was generated by a catastrophic subsea landslide off the coast of Norway. Analysis suggests the tsunami over-ran Doggerland, a low-lying landmass that has since vanished beneath the waves. "It was abandoned by Mesolithic tribes about 8,000 years ago, which is when the Storegga slide happened," Dr Jon Hill (Earth Science and Engineering) told the *BBC*. "The impact would have been massive – comparable to the Japanese tsunami of 2011."

Rich could pay to have brighter babies

DAILY MAIL ▶ 05.05.14

Breakthroughs in IVF could 'threaten our humanity' by prompting parents to demand designer babies, Professor Lord Robert Winston (Medicine) has warned in the *Daily Mail*. The fertility pioneer said that he feared a time when

the rich could alter the appearance and ability of children by tinkering with their genes. "The age of eugenics is one that we don't think of as being important now," he said, adding: "In a world where there is conflict, where there is shortage of resources, shortage of water, shortage of food, climate change, there is a real risk that we could see that kind of attitude in our humanity occurring again."

How the war was won at home

SUNDAY TELEGRAPH ▶ 04.05.14

The First World War is often portrayed as men caught in the chaos of the trenches. Now, ahead of the centenary of the war's outbreak this summer, a new book *Our Land at War*, provides a comprehensive portrait of the domestic war effort. The author, Professor Nick Bosanquet (Bioengineering) told the *Sunday Telegraph*: "We forget about the huge efforts made by those at home. There is a stereotype of helpless victims driven to the slaughter but, on the wider Western Front stretching back to the UK, a whole generation rose to the challenge. The sheer quality of the home front machine was absolutely critical to victory."

awards and honours



BUSINESS

Economics gong for Gann

Professor David Gann CBE, Imperial's Vice President (Development and Innovation), has won the 2014 Tjalling C Koopmans Asset Award. Previous recipients include Nobel laureates Daniel Kahneman, Robert Merton and Robert Engle. Presented at the Asset International Conference at Tilburg University in the Netherlands, the award acknowledges Professor Gann's "significant contributions to the field of economics and his everlasting efforts to connect universities with businesses."

ENGINEERING

Computing students innovate to win

Two PhD students from the Department of Computing have been announced as winners of UK Qualcomm Innovation Fellowships. Patrick Snape from the Visual Information Processing Group and Hanme Kim from the Robot Vision Group, won two of just three fellowships in the annual competition which attracts the most innovative PhD students from across Europe. The winners each pocket £10,000 as well as the chance to be mentored by researchers based at Qualcomm Research's Cambridge location.

COLLEGE

Eliza joins Order of the Garter

Imperial's Chair, Baroness Eliza Manningham-Buller, has been appointed to the Order of the Garter by Her Majesty the Queen. The honour can only be bestowed on 24 living 'companions'

and is given to those who have held public office, contributed to national life or served the sovereign personally. Baroness Manningham-Buller was director general of the Security Service, known as MI5, from 2002 until her retirement in 2007. She became Imperial's 11th Chair in 2011, leading the College's Council, its governing body.

NATURAL SCIENCES

Young scientist on top

Dr Marina Kuimova (Chemistry) was been awarded the International Union of Pure and Applied Physics (IUPAP) Young Scientist Prize in recognition of her exceptional achievement in the field of Biological Physics. The prize of €1000 and a medal will be presented at the 8th IUPAP International Conference of Biological Physics in June in Beijing, China, where Dr Kuimova will give an invited lecture on her research.

Malaria research targets mosquito sperm banks



Malaria kills over 650,000 people every year

Researchers have discovered a way of reducing the fertility of malaria-carrying mosquitoes, potentially providing a new tactic to combat the disease.

Anopheles gambiae mosquitoes are the main transmitters of malaria, which affects around 200 million people every year. The females mate only once during their lives. They store the sperm from this single mating in an organ called the spermatheca, from which they repeatedly take sperm over the course of their lifetime to fertilise the eggs that they lay.

Sperm have to stay healthy whilst they are in storage, so that they are viable each time the female uses them to reproduce. The new research reveals that the sperm are partly protected by the actions of an enzyme called HPX15, which seems to eradicate potentially damaging molecules called free radicals. When the researchers interfered with HPX15 in female *A. gambiae* mosquitoes in the laboratory, the females fertilised fewer eggs and therefore produced fewer offspring.

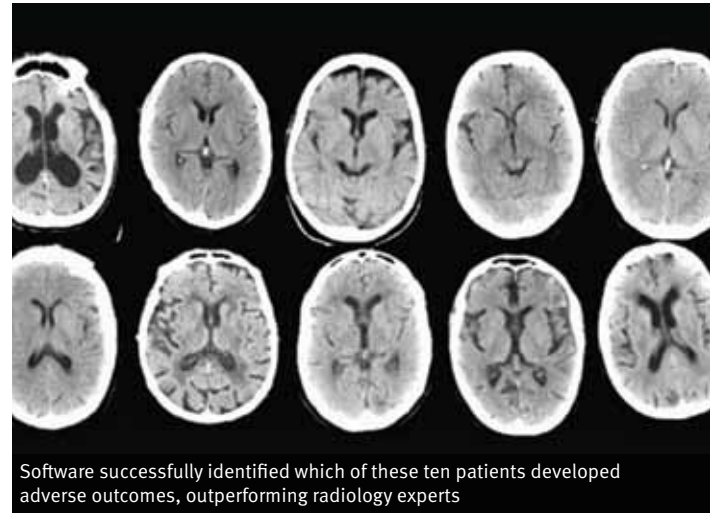
The researchers believe that their insight could ultimately lead to a new weapon in the fight against malaria by reducing the number of malaria-carrying mosquitoes in circulation.

“There is no single magic bullet for tackling malaria, but making mosquitoes less fertile could provide us with a valuable weapon against the disease.”

Dr Robert Shawn (Life Sciences), one of the lead authors of the research, said: “We need to find new ways of tackling malaria, partly because mosquitoes continue to evolve ways of resisting our efforts. We are interested in cutting the numbers of malarial mosquitoes by impairing their ability to reproduce, and our new study suggests a way that we might be able to do this. There is no single magic bullet for tackling malaria, but making mosquitoes less fertile could provide us with a valuable weapon against the disease.”

The researchers caution that although they have managed to disable HPX15 in mosquitoes in the lab, they don't yet have a way of replicating this in wild mosquitoes. The next step for this research is to think about how to prevent activation of HPX15, directly or indirectly.

—LAURA GALLAGHER, COMMUNICATIONS AND PUBLIC AFFAIRS



Software successfully identified which of these ten patients developed adverse outcomes, outperforming radiology experts

Airport technology aids difficult decisions in stroke treatment

A new computer program could help doctors predict which patients might suffer potentially fatal side-effects from a key stroke treatment.

The program, which assesses brain scans using pattern recognition software similar to that used in airport security and passport control, has been developed by researchers at Imperial.

The most effective treatment for stroke is intravenous thrombolysis which effectively thins the blood; however, it can cause brain bleeding in about six per cent of patients, which often worsens the disability and can even be fatal.

Clinicians attempt to identify patients most at risk of bleeding on the basis of several signs assessed from brain scans. However, these signs can often be very subtle and human judgements about their presence and severity tend to lack accuracy and reliability.

In the new study, researchers trained a computer program to recognise patterns in the brain scans that represent signs such as brain-thinning or diffuse small-vessel narrowing, in order to predict the likelihood of bleeding.

They then pitted the automated pattern recognition software against radiologists' ratings of the scans. The computer program predicted the occurrence of bleeding with 74 per cent accuracy compared to 63 per cent for the standard prognostic approach.

Lead author Dr Paul Bentley (Medicine) said: “For each patient that doctors see, they have to weigh up whether the benefits of a treatment will outweigh the risks of side effects. Having the best possible information on which to base our decisions is vital.

Our new study is a pilot but it suggests that ultimately doctors might be able to use our pattern recognition software, alongside existing methods, in order to make more accurate assessments about who is most at risk and treat them accordingly.”

The group is now planning to carry out a much larger study to more fully assess the potential of the program.

—FRANCESCA DAVENPORT, COMMUNICATIONS AND PUBLIC AFFAIRS



Stroke

Stroke affects over 15 million people each year worldwide. Ischemic strokes are the most common and these occur when small clots interrupt the blood supply to the brain. The most effective treatment is called intravenous thrombolysis, which injects a chemical into the blood vessels to break up or ‘bust’ the clots, allowing blood to flow again.

Dietary fibre's anti-appetite properties unlocked

New research has helped unpick a long-standing mystery about how dietary fibre suppresses appetite.

An international team of researchers led by Imperial identified an anti-appetite molecule called acetate that is naturally released when we digest fibre in the gut. Once released, the acetate is transported to the brain where it produces a signal to tell us to stop eating.

The research confirms the natural benefits of increasing the amount of fibre in our diets to control over-eating and could also help develop methods to reduce appetite. The study found that acetate reduces appetite when directly applied into the bloodstream, the colon or the brain.

“The average diet in Europe today contains about 15g of fibre per day,” said lead author Professor Gary Frost (Medicine). “In stone-age times we ate about 100g per day but now we favour low-fibre ready-made

meals over vegetables, pulses and other sources of fibre. Unfortunately our digestive system has not yet evolved to deal with this modern diet and this mismatch contributes to the current obesity epidemic. Our research has shown that the release of acetate is central to how fibre suppresses our appetite and this could help scientists to tackle overeating.”

Using positron emission tomography (PET) scans, the researchers tracked the acetate through the body from the colon to the liver and the heart and showed that it eventually ended up in the hypothalamus region of the brain, which controls hunger. Acetate then accumulates in the hypothalamus, eventually triggering a series of chemical events leading to the firing of special neurons known to suppress appetite.

This is the first demonstration that acetate released from dietary fibre can affect the appetite response in the brain. The research also showed that when acetate was injected into the bloodstream, the colon or the brain it reduced the amount of food eaten by mice.

—FRANCESCA DAVENPORT, COMMUNICATIONS AND PUBLIC AFFAIRS



We eat less than a quarter of the fibre we did in the stone age



Dietary fibre

Dietary fibre is found in most plants and vegetables but tends to be at low levels in processed food. When fibre is digested by bacteria in our colon, it ferments and releases large amounts of acetate as a waste product. The current study analysed the effects of a form of dietary fibre called inulin which comes from chicory and sugar beets and is also added to cereal bars. Using a mouse model, researchers demonstrated that mice fed on a high fat diet with added inulin ate less and gained less weight than mice fed on a high fat diet with no inulin.



Droplet chemistry allows for sophisticated, multi-step reactions

“We have developed a method for controllably injecting new reagents into the flowing droplets, greatly expanding the palette of materials that can be produced.”

Go with the flow for advanced materials

Imperial scientists have developed a new technique for carrying out multiple-step chemical reactions to improve production of high-quality, high-performance advanced materials for new plastic electronics such as flexible computer screens and affordable solar panels.

The technique allows chemists to do multiple-step reactions inside tiny droplets in a flowing stream – a process known as droplet chemistry – and should make it possible to carry out more sophisticated chemical reactions than have previously been possible.

In droplet chemistry, the reaction solution flows as discrete droplets inside a second liquid that it cannot mix with. This prevents channel-fouling as the droplets are kept away from the walls of the reactor by the other liquid.

The small size of the droplets also improves the uniformity of the reaction, leading to a better quality product.

One of the lead researchers Adrian Nightingale, then a postdoctoral researcher in the Department of Chemistry, said: “When arteries become blocked the whole circulatory system can quickly fail, with fatal consequences. Similarly, when the tubes we use in flow chemistry become blocked, flow reactors fail and production stops. Droplet-based chemistry eradicates this problem, but previously it could only be used for very simple, single-step reactions where all reagents were present in the droplets from the outset. Here we have developed a method for controllably injecting new reagents into the flowing droplets, greatly expanding the palette of materials that can be produced.”

In the new research, the scientists have introduced a third phase, a gas, alongside the two liquids to establish an even spacing between the droplets and so ensure that each one receives the same dose of the added reagent.

—GAIL WILSON, COMMUNICATIONS AND PUBLIC AFFAIRS

Grand digital designs

Rebooting the College's web presence to reach a new global audience of mobile-savvy-users

Wednesday 12 March this year marked – perhaps rather arbitrarily – the 25th anniversary of the world wide web. It was on this day in 1989 that Tim Berners Lee, a British computer scientist working at CERN in Geneva, wrote an inauspicious memo to his boss titled: “Information Management: A Proposal.”

Looking back it's hard to believe how far the web has come and in fact it's hard to imagine modern life without it. What is perhaps even more difficult to comprehend is that the web is still in its infancy. It took only seven years from the first web pages in 1991 for the web to be used by a quarter of the American population. That compares with 46 years for electricity, 35 years for the phone and 26 years for television.

Imperial's own website has become a critical part of the College's infrastructure and mission – at least as important as our physical buildings and space. It's often the first point of contact for our future students and an essential part of their studies once they arrive. For academic staff it's a way of showing others their research work and forging links with those in industry and academia worldwide.

As the web has evolved, though, so too has our own website and the panel opposite shows just how far we've come. But cyberspace never stands still and preparations for the latest College-wide re-design are now entering their final stages, with full launch starting later in the year.

New digital threads

As the panel shows all too well, digital designs can start to look dated very quickly; but the primary reason for refreshing is actually a much more

practical one, reflecting a shift in the way people use the internet.

The majority of visitors to Imperial's website come from a desktop computer, but that is changing quickly. In 2013 there were 22.9 million desktop visits, representing an 8% rise from the previous year. By comparison there was an 85% rise in mobile and tablet use with 2.8 million visits. “You don't get to decide which device people use to access our website – they do,” says Head of Digital and Creative Media, Pamela Agar (Communications and Public Affairs).

It's clear that to reach the greatest possible audience globally, Imperial's website must cater for users on a range of devices. That means having what is referred to as a ‘responsive design’ – where the site adapts to the viewing environment it finds itself in. In practical terms that means fluid grids and flexible images whose size is set in relative rather than absolute dimensions.

That will have a direct effect on the hundreds of editors who add and modify website content on a regular basis and who have already been involved in initial testing. “Right from the start of the project we've carried out extensive user testing, making sure that our designs are intuitive and provide the right experience for our audiences,” says Sean Conner (Engineering), Faculty Web Officer. That has involved ‘click tests’ where participants are asked to find a certain piece of information in prototype designs; one-on-one interviews; and focus groups. “All our usability findings have been used to update and revise our templates. It's a cyclical process that we repeat over and over, to ensure any changes work as intended,” Sean adds.

Imperial College website timeline

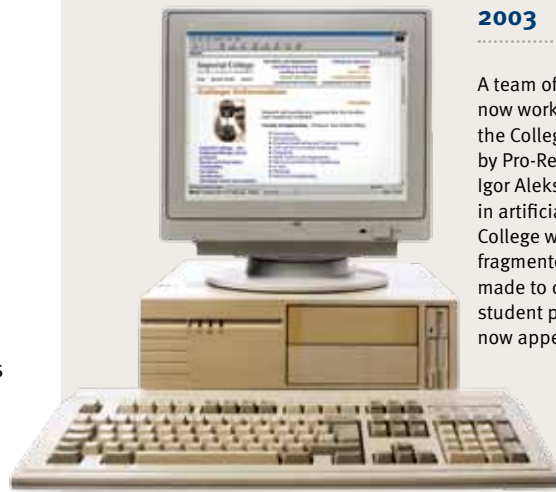
1996

Lord Oxburgh is Rector of Imperial as the College's first homepage goes live in 1996 with Mike Chamberlin from the Centre for Computing Services and Glen Masters from the Alumni Relations Office coding those first pages. However, the College's web presence is fragmented across numerous servers, with different departments and academic groups creating their own sites independently.



2003

A team of six College staff now work on developing the College's websites led by Pro-Rector Professor Igor Aleksander, an expert in artificial intelligence. College web presence still fragmented, but early efforts made to centralise. The student prospectuses also now appear online.



2007

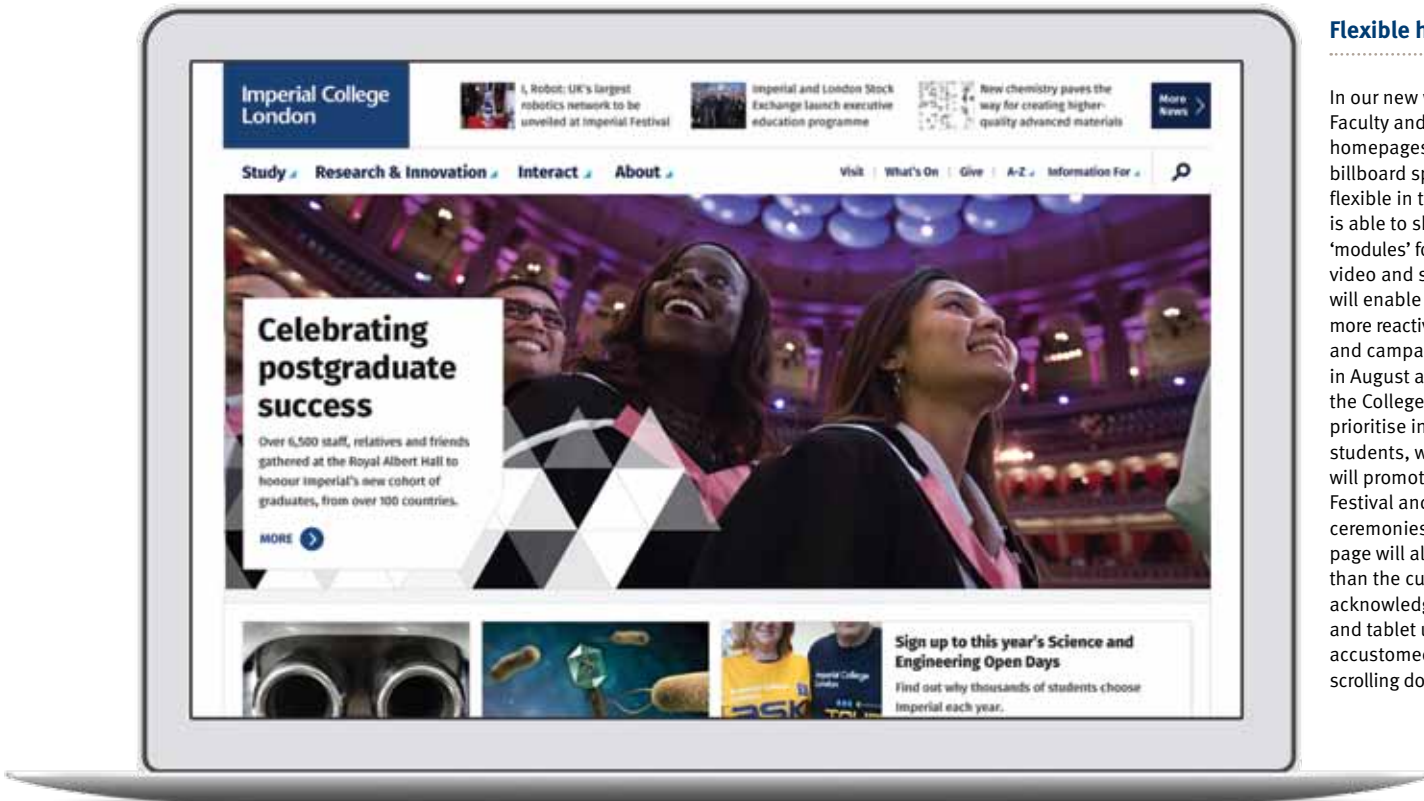
By 2007 a team from ICT and the Communications Division co-locate and work together to grow the College's website, taking responsibility for the coding and content, respectively. The website now has a common design, branding and navigation across the majority of pages and sub sites.



2008

Under Rector Sir Richard Sykes, the College's web team commissions and works with a professional agency to design a new and modern website. By integrating with the Oracle Portal content management system implemented in 2003, there is less need for specialist coding knowledge to update pages.





Flexible home

In our new website the College, Faculty and Departmental homepages will have more billboard space, which will be flexible in the type of content it is able to show – with distinct ‘modules’ for news, information, video and social media. This will enable the pages to be more reactive to current events and campaigns – for example in August and September the College homepage might prioritise information for new students, while in May it will promote the Imperial Festival and graduation ceremonies. The new home page will also be longer than the current design, acknowledging that mobile and tablet users are accustomed to vertically scrolling down for more content.

On the move

Content inside the individual ‘modules’ is created just once in simple forms, then the layout and styling is adjusted automatically for the particular device being used in a truly responsive web environment. Editors must therefore focus on the quality of content and not rely too much on previewing the final output in a desktop environment. Fortunately there are even more tools for our web editors to use features without intimate coding knowledge.

“Responsive design sounds simple, but it requires a different mentality and different way of thinking about the content you put in and how you put it in.”

– Pamela Agar, Head of Digital and Creative Media



More information about the project and details of the next forum for College web editors can be found on the Web Redesign pages: imperial.ac.uk/webredesign



TAKE A BOW

Ian Gillett retires, after 24 years as Safety Director

There are but a few genuinely larger than life characters at Imperial, who need little in the way of introduction.

Even if you're new to the College and have never spoken to Ian, you will know him as the imposing figure, always decked out in a loud bow tie, often with a camera in hand.

"I started wearing bow-ties when I was 25 and it took me 20 minutes to tie my first one," he says.

"Since then I've only worn a conventional tie once, when I was best man at my friend's wedding. Although, after that, he was best man at my own wedding, so of course I made him wear a bow tie."

Among the favourites in his extensive collection is a specially commissioned silk number, hand painted with safety signs.

Fashions aside, Ian says eccentricity and standing out is one important pillar of being safety director — that and having great powers of persuasion backed up by an intimate and in-depth knowledge of safety legislation.

That was just one of the lessons Ian says he learned from his predecessor and mentor Gordon Hargreaves, Imperial's first ever Safety Director. Gordon died suddenly in 1989 whilst out walking in the Lake District, leaving Ian, who was Assistant Director at the time, to take up the mantle.

"It knocked me for six. I was really saddened by it because I almost saw him as a father figure." Ian's time at Imperial goes back significantly further though, starting as an undergraduate chemistry student in 1971. As President of the Chemical Society, Ian sat on the Department Safety Committee, and then the College Safety Council. It was during this time he developed the relationship-building skills that would stand him in good stead for his later career — first as a Health and Safety Executive (HSE) inspector, then Assistant Director and Safety Director at Imperial.

He sees his role as an enabler rather than an enforcer — working with academics to do new things, within the scope and spirit of legislation.

"We're surrounded by people who are passionate about what they do and so therefore they care. That makes my job easier.

"All in all, it's been tremendous working at Imperial. I've been involved with everything from a nuclear reactor centre (at Silwood) through to a farm (at Wye) as well as biological labs, high power lasers and earthquake tables. It's just so varied."

Among Ian's proudest memories are becoming a Fellow of the Institute of Safety in Technology and Research and also helping to establish a new safety course and qualification — the National Examining Board in Occupational Safety and Health (NEBOSH).

Of course, Ian will be remembered not only for his work role, but his varied and diverse interests in classical music, vintage cars and most of all photography.

Although he has been taking photographs since he was a boy, his hobby stepped up to another gear when London Fashion Week came to College in September 1997, hosted on the Queen's Lawn.

"Of course I had to come along and say: 'you can't do this, you can't do that, it's too noisy, etcetera.' But I let it go ahead on the condition I could take a few pictures!"

In later years he went on to take official photographs for the production company that runs the event. He's now photographed all manner of events including Henley Regatta, Varsity basketball and motorsports.

Ian's passion for photography and art is something he's now hoping to develop further as he heads into

retirement. Once his wife, who is a GP, joins him in a few years' time they hope to go travelling, living a month at a time in the great cities of Europe, including Rome, Venice and Paris.

Still, Ian says he will almost certainly be returning to Imperial, hopefully helping with some of the safety training that he helped to pioneer.

"It's ingrained in me; I'm not going to be able to walk away from health and safety."

“I started wearing bow-ties when I was 25, after reading that they were coming back in fashion and it took me 20 minutes to tie my first one.”



Ian's photographs from an Imperial fashion show (top) and Varsity rugby (bottom)

inside*

story

mini profile

Ling Ge

Dr Ling Ge (Chemistry) is manager of the Imperial-hosted EPSRC UK National Service for Computational Chemistry Software. She is also actively involved in public engagement, science writing and promoting entrepreneurship through activities such as the recent Virgin Media Business 'Three New Things' challenge, which she helped to judge.



Tell us about the challenge?

The aim is basically to unearth game-changing digital innovations that could transform the way we live and work. I was asked to help judge submissions from start-up companies.

And the winners?

Well, it was all about space, sun and shoes! The overall winner was a new company called Three Over Seven that has developed software to scan your feet in 3D using a smartphone in order to deliver bespoke, 3D-printed shoes to your door within 24 hours. One of the runners-up is giving out free solar packs in Africa then charging for use while the other is aiming to drive down the cost and weight of micro satellites ('cubesats').

Why are challenges like this important?

As researchers at universities it's partly our job to come up with innovative technology; but although we may be

bursting with great ideas, we can't always translate them into profitable business ventures. Challenges like this can help bridge the gap.

Any other exciting events recently?

I took part in the Public Attitudes to Science Study 2014, sponsored by the Department for Business Innovation and Skills. For a day I was acting as the face of science in Trafalgar Square talking to people from all walks of life about topics such as nanotechnology and quantum computing. Their passion and imagination went far beyond anything I expected. Also, as a recipient of a 'Women of the future' award I was invited by the Speaker of the House of Commons, John Bercow, to a reception at the State Rooms and Speaker's House, which was an eye-opening look at parliament and the political process.

—ALIYAH KOVNER FOR COMMUNICATIONS AND PUBLIC AFFAIRS



Through the keyhole

Undoubtedly one of the most important advances in clinical surgery over the past few decades has been the development of minimally invasive – or 'keyhole' – surgery. By avoiding the need for large entry incisions in patients' bodies it reduces the risk of complications and improves recovery and scarring.

At an event at the Royal Institution last month, members of the public had the chance to learn more about how surgeons operate using keyhole surgery, with live simulations and demonstrations from Professor Roger Kneebone and Dr Fernando Bello (both Surgery and Cancer).

In the first demo, the team simulated a coronary angioplasty – a procedure routinely performed to unblock the main artery serving the heart through the insertion of a stent. Roger explained that the surgeon uses X-ray imaging to navigate the catheter holding the stent threading it through from a small cut in the leg or arm.

He emphasised how it relies on good hand-eye coordination and knowledge of the human anatomy, essentially knowing the route to get there – akin to travelling from Westminster to St Paul's on the London underground, using a tube map.



The second demonstration showcased Natural Orifice Transluminal Endoscopic Simulator (NOTES), a method pioneered at Imperial and currently being evaluated by surgeons. This allows "scarless" abdominal operations, for example with an endoscope used to retrieve a gallbladder through the mouth. The surgeon can introduce instruments such as grasper, clipper or scissors by feeding them through the endoscope tubing.

Following the lecture, the public had the chance to try their hand at state-of-the-art surgical simulators designed to help train new generations of specialists. There were seven interactive stations, staffed by engineers who have developed new technologies such as ultrasound-guided needle punctures, augmented reality and even a virtual reality surgical environment that uses the Oculus Rift hardware platform.

—SAM HIEW, MEDICINE



From left to right: the Research Zone; pupils from the schools event; and a group tour of the Hamlyn Centre for Robotic Surgery

Imperial Festival delivers science-themed fun on record scale

With sporadic bouts of lashing rain and gleaming sunshine, the weather was almost as diverse as the exciting array of talks, performances and activities on show at the Imperial Festival 2014 on Friday 9 May and Saturday 10 May.

Over 12,000 visitors descended on the South Kensington Campus for what was the third and largest Imperial Festival – all made possible by the efforts of over 400 volunteer researchers, support staff and students.

New for 2014 was the first ever dedicated schools event, which saw 100 students from primary and secondary schools local to Imperial book places to take part in a series of workshops and interactive displays linked to curriculum topics. The event

was put together to give students a taste of the Festival before it opened to the general public and to give them an insight into the research that goes on at the College.

The Festival also expanded into several new locations, including the hugely popular Robot Zone in the Sir Alexander Fleming Building; the Workshop Tent offering hands-on activities such as uncovering the secrets of the materials all around us; and the Light Zone which featured research from Imperial's physicists, including an invisibility cloak, thermal camera and optical illusions.

As well as satisfying visitors' appetite for science, music and dance, there was an expanded food offering as Imperial's catering team were joined for the first time by farmers' market

stalls, ensuring no one left hungry.

Visitors shared their Festival experiences by posting tweets, which were displayed live on large screens around campus with the #impfest hashtag being used nearly 900 times.

Festival Director Natasha Martineau (Communications and Public Affairs) paid tribute to the efforts of all staff and students who got involved: "It was amazing to witness the College transformed, and very encouraging to see so many people enjoying themselves. I am very grateful for the seemingly unlimited support that everyone gave us."

If you came to the Festival it would be great to hear your thoughts on it, please visit: imperial.ac.uk/festival/feedback

“It was amazing to witness the College transformed, and very encouraging to see so many people enjoying it.”



INVENTOR'S CORNER

Uncovering a stealthy killer

Professor Simon Taylor-Robinson and Dr Nimzing Ladep (both Medicine) are part of a small team developing a new device to detect liver cancer.

What do you consider to be the biggest challenge with liver cancer?

STR: In parts of the developing world, liver cancer, linked to Hepatitis B infection, kills nearly four times as many people as HIV/AIDS. This is mostly because the cancer is hard to detect. When it is detected, it is already advanced and therefore usually untreatable.

How are you tackling these issues?

STR: We set off to develop a urinary dipstick capable of not only identifying, but also tracking liver disease and cancer progression. After our initial studies in Nigeria and Egypt where we identified some promising biomarkers for the disease, we secured a substantial EU fund to test, track, and in some cases, treat 13,000 people across Gambia, Senegal, and Nigeria.

NL: With the larger study we wanted to expand on the original approach and refine the choice of biomarkers carried forward. Not only were there more data, but we applied a new analysis method, to verify and study the molecules in greater detail. We now have a panel of three biomarkers.



Liver cancer is a major problem in parts of the developing world

Individually, they wouldn't work, but together they perform much better than current tests!

How would your dipstick method compare with existing approaches?

NL: The technology required to detect liver cancer, namely ultrasound and blood analysis, is not practical or possible in most rural African settings. Even if they were affordable, they are not very reliable in inexperienced hands. We want to create something cheaper, better, and easier to use. What is truly versatile about our project is our approach: instead of just diseased and healthy groups, we focused on the high risk and diseased populations. This way, we were able to detect patterns within liver cancer and identify a core set of molecules that truly represent its biochemistry.

—DAVID BARRETO IAN, IMPERIAL INNOVATIONS

For help in finding a commercial application for your research visit: bit.ly/YQZ1Vi

Student blogger Emma
Icy neutrinos



Recently I have been reading about a cool (quite literally) science lab called 'IceCube.'

It's a 1km³ neutrino detector deep underground in the South Pole. Down there the ice is clear and bubble-free due to incredibly high pressure, and also pitch-black so that the Cherenkov radiation signature given off by the decay products of the neutrinos can be detected. Thousands of individual detectors were pushed into the ice using a hot water drill.

To pass the time at the South Pole the scientists have a gym and run out from a sauna into the snow (with or without clothes) to 'join the three hundred club' and experience over 300 degrees Fahrenheit of temperature variation. Who says scientists don't know how to have a good time?



Marking Mental Health Awareness week

A series of events and workshops highlighting wellbeing and mental health issues at Imperial marked Mental Health Awareness Week, which ran from 12–15 May.

Organised jointly by the Equality and Diversity Unit, the Learning and Development Centre and Occupational

Health, the diverse range of events includes drop-in meditation sessions, wellbeing workshops, and a cake decorating competition based on the 'Depressed Cake Shop' concept – colourful cakes decorated in grey icing to represent depression and other mental illnesses.

The week also saw Imperial make a public commitment to ending the stigma around mental health, with the signing of the Time to Change Pledge.

Leyla Okhai, Equality and Diversity Manager, said: "Even though mental

health problems, particularly anxiety disorders, are extremely common, many of us struggle to talk about it. This week is about raising awareness of mental health issues and helping to reduce the stigma. We want to encourage the College community to think about small changes they can make to improve their own mental wellbeing and ways that they can contribute to cultivating a supportive working environment for colleagues."

—DEBORAH EVANSON, COMMUNICATIONS AND PUBLIC AFFAIRS

“This week is about raising awareness of mental health issues.”

Imperial Olympian bows out on scientific and sporting high

It's safe to say Adam Scholefield is not your average postdoc scientist. Although the Olympic water polo player says he officially retired from the sport after London 2012, he still cuts an imposing figure, especially with his new Olympic rings tattoo etched into his substantial upper arm.

As it happens, Adam was persuaded to make a return to the pool recently for the Commonwealth Water Polo Championships in Glasgow in April, helping England to their first ever gold in the event.

"I really didn't think I would be able to fit the training in with my research work, but in the end it came together and it was a great result," he says, adding that having the Ethos pool and gym so close by helped him to get match fit.



Adam with his research colleagues

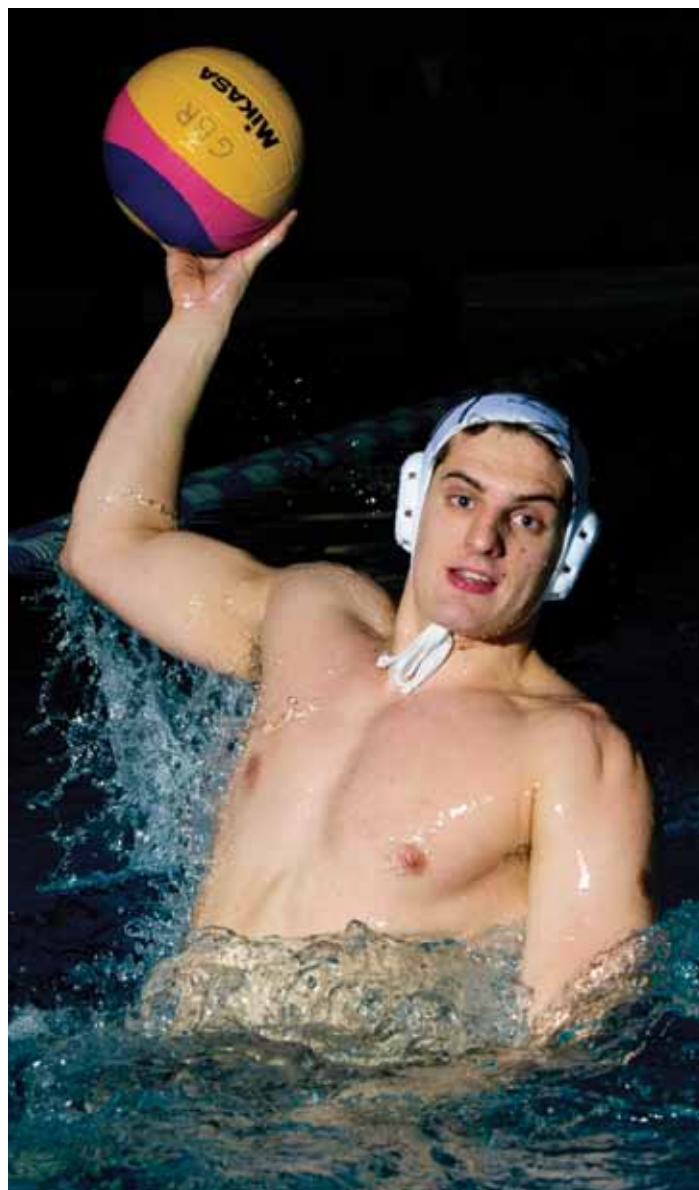
Adam played water polo professionally for six years, culminating in his tenure as vice-captain for the GB men's water-polo team at the London 2012 Olympic Games. Oh, and he also found time to get a MEng and a PhD in Electrical and Electronic Engineering, handing his thesis in last year.

Adam is now fully focused on his research on image processing and credits supervisor Dr Pier Luigi Dragotti for keeping him on track over the years.

"He went out of his way to construct a PhD project and working arrangements that allowed me to do both my studies and sport. He trusted me enough to take that gamble!" One avenue that has proven particularly fruitful for Adam is the technique of super resolution. In smartphones the quality of the captured image is limited by the compact dimensions – but by taking multiple images and combining them using clever post-processing you can achieve a better image.

Adam is set to leave Imperial in June to take up a postdoctoral position with EPFL in Switzerland in conjunction with start-up company Vidinoti, investigating ways to use light field cameras to enhance augmented reality technology.

It marks the end of an era in London that holds many great memories of studying and sports – with two unforgettable weeks of 'craziness' as he puts it, in the Summer of 2012.



Although a tilt at the Rio Games in 2016 is unlikely, he's not ruling out a return to the Olympic arena someday – perhaps in a voluntary or coaching position.

"Watching the Winter Olympics in Sochi earlier this year kind of brought it all back how amazing it was; in some ways you don't appreciate it fully at the time when it's happening."

“I really didn't think I would be able to fit the training in with my research work.”

long
service

Staff listed below celebrate anniversaries during the period 01 May – 31 May. The data is supplied by HR and is correct at the time of going to press.

20 years

- Neil McLennan, Identity and Access Management Analyst, ICT
- Geraldine Coy, Deputy Head of Security, Security Services
- David William Palmer, Security Officer, Security Services
- Jo Philpott, Accounts Payable Assistant, Finance Division
- Brian Kelly, Assistant Building Manager, Estates Division

30 years

- Jim Culverhouse, Technician, Department of Life Sciences

40 years

- Richard Chater, Senior Research Officer, Department of Materials

Welcome new starters

Dr Paul-Michael Agapow, Public Health
Mrs Stella Ajoku, NHLI
Miss Funmi Ayoola, Business School
Dr Jayashree Bagchi Chakraborty, Medicine
Dr Violeta Balinskaite, Public Health
Dr Ioannis Bantounas, Materials
Dr Jonathan Ben-Artzi, Mathematics
Miss Kate Bench, Education Office
Dr Francois Blanquart, Public Health
Miss Lina Brazinskaite, EEE
Mr Daniel Brewer, Climate KIC
Dr Andreas Broedel, Life Sciences
Ms Vittoria Bussi, Mathematics
Miss Hannah Butterfield, Surgery & Cancer
Mr Mate Car, Public Health
Mrs Katherine Carpani, Education Office
Ms Heather Cartledge, Public Health
Dr Subhojit Chakraborty, Bioengineering
Mr Dalton Coker, Surgery & Cancer
Dr John Collins, Life Sciences
Mr Jamie Condliffe, School of Professional Development
Mr Christopher Cooling, Mechanical Engineering
Dr Luca Cornetti, Life Sciences
Dr Emiliano Cortes, Physics
Mr Andrew Crook, Faculty of Medicine Centre
Mr Christopher Davie, Physics
Miss Gemma Dawkins, Education Office
Mr Fayaz Dudhiya, Medicine
Dawn Duodu Mulenga, Faculty of Medicine Centre
Ms Jacqueline Edge, Faculty of Engineering
Mrs Sarah Edwards, NHLI
Ms Oleksandra Fedina, NHLI
Ms Judy Fernandes, Public Health
Dr Tristan Fletcher, Medicine
Mrs Deborah Folkes, Faculty of Medicine Centre
Mr Stephen Ford, Faculty of Medicine Centre
Mrs Victoria Garland, Physics
Dr Joshua Giles, Mechanical Engineering
Mrs Laura Gnata, ESE
Mr James Goldsmith, Library
Mrs Antonia Goodyer, College Headquarters
Dr Vivianne Goosens, Medicine
Dr Goli Haidari, Medicine
Ms Julia Harte, Registry
Dr Thomas Headen, Chemical Engineering
Mr Gareth Hedges, Business School
Ms Erika Helms, International Office
Dr Denis Horlait, Materials
Dr Eleni Iacovidou, Centre for Environmental Policy
Miss Stacey Jennings, Public Health
Ms Anna Jerve, Life Sciences
Miss Sophie Kathirgamanathan, Medicine

Miss Jubeda Khatun, Chemical Engineering
Dr Jane Khayesi, Business School
Mr Andrew Kilpatrick, Finance
Dr Kiyoung Kim, Computing
Mrs Beata Klejevskaia, Chemistry
Miss Emiljana Krali, EEE
Dr Kevin Leong, NHLI
Dr Jongseok Lim, Physics
Ms Yiyuan Liu, Medicine
Mr Daniel Mapp, Development
Ms Julie McQueen, Surgery & Cancer
Dr Miguel Migano Hipolito de Jesus Oliveira, ICT
Mrs Michaela Miller, Medicine
Ms Caroline Minor, ICT
Mr Khalid Mirza, EEE
Mr Miroslav Mladenov, Medicine
Ms Christina Morris, EEE
Ms Emma Morrison, Education Office
Dr Bagus Muljadi, ESE
Miss Lenka Navratilova, NHLI
Dr Laura Nolan, Life Sciences
Dr Edmund Noon, ESE
Mrs Emma Pallett, Faculty of Natural Sciences
Dr Antonio Pantaleo, Centre for Environmental Policy
Mr Stergios Papantonis, Physics
Mr Rhys Parfitt, Physics
Dr Imran Patel, Materials
Dr Gabriel Piedrafito, Life Sciences
Mr Daniel Plant, Mechanical Engineering
Dr Andreas Poulos, Chemical Engineering
Mr Andrew Preater, Library
Mrs Hayley Protheroe, Medicine
Dr Carmine Putignano, Mechanical Engineering
Miss Kathryn Quigley, Medicine
Dr Phyllis Quinn, Surgery & Cancer
Dr Steven Ridge, NHLI
Dr Hannah Rigby, Civil and Environmental Engineering
Dr Markus Ritzefeld, Chemistry
Mr Pawel Rycerz, Mechanical Engineering
Ms Yuly Sandoval Mora, Accommodation
Mr Taofik Sangonuga, Student Union
Mr Ioan Sferlea, Faculty of Medicine Centre
Mr Peter Shadbolt, Physics
Dr George Shirreff, Public Health
Mr Arun Shivalingam, Chemistry
Professor Martin Siegert, The Grantham Institute
Mr Dilshan Silva, Computing
Dr Charanjit Singh, NHLI
Dr Kristyna Sovova, Surgery & Cancer
Miss Lauren Stephens, Medicine
Dr Naresh Susarla, Chemical Engineering
Miss Franciska Szikszai, Accommodation
Mr Clive Taylor, Computing
Ms Jacquie Ujetz, NHLI
Mrs Palvi Varsani, Faculty of Medicine Centre
Mr Brian Vermeire, Aeronautics
Dr Spyridon Vernardis, Chemical Engineering
Dr Charles Vriamont, Chemistry

Ms Lan Wang, Aeronautics
Dr Benjamin Williams, Mechanical Engineering
Dr Rachel Wodarski, Surgery & Cancer
Dr Di Wu, Computing
Miss Keren Yeboah, Medicine
Mr Vijaykumar Zala, Medicine
Dr Seth Zenz, Physics
Mr Teng Zhang, Mechanical Engineering
Ms Kuangyi Zhang, Mechanical Engineering

Farewell moving on

Dr Cristobal Aguilar Gallardo, Chemical Engineering
Dr Eduardo Aguilar Pelaez, EEE
Miss Tressa Amirthanayagam, Surgery & Cancer
Miss Sarah Atkinson, Business School
Dr Fouad Ballout, Physics
Dr Ryan Bayliss, Materials
Dr Samuel Bayliss, EEE
Mr Samuel Bott, ICT (5 years)
Mr Jack Caswell, Life Sciences
Mr Stanford Chen, Surgery & Cancer (5 years)
Dr Wonjae Choi, Mechanical Engineering
Dr Hassanul Choudhury, Life Sciences
Dr James Coakley, Materials
Mr Andrew Codling, ICT (8 years)
Miss Keshia Collins, EYEC (7 years)
Dr Sanjan Das, Life Sciences
Dr Kees de Hoogh, Public Health (14 years)
Dr Julia Denes, Surgery & Cancer
Dr Jennifer Dougan, Chemical Engineering
Dr Antonio Fernandez-Dominguez, Physics
Dr Maximilian Habibi, NHLI
Dr Chris Haley, Development and Corporate Affairs (7 years)
Dr Paul Holloway, Medicine
Professor Sir. Hoskins, The Grantham Institute (6 years)
Dr Neveen Hosny, Chemistry
Miss Farhana Hussain, NHLI
Mrs Maria Infante Ibanez, Student Union
Miss Riela Jones, Life Sciences
Mr Rajesh Kalia, ICT (13 years)
Dr Tahereh Kamalati-Buluwela, Faculty of Medicine Centre
Mr Philip Kent, Student Union
Dr Paul Kirk, Life Sciences
Ms Emilie Kottenmeier, Public Health
Mrs Olga Leonova, Medicine
Miss Ilona Lewicka, Faculty of Natural Sciences
Dr Dafydd Lloyd, Surgery & Cancer
Dr Thiago Lopes, Chemistry
Mr Jose Lourenco, Public Health
Dr Charlotte Manisty, NHLI
Miss Jessica Martin, Surgery & Cancer
Miss Melissa McLune-Boylund, EYEC (6 years)
Dr Christopher Minas, Clinical Science

Mr Sam Morris, Communications and Public Affairs
Dr Quang-De Nguyen, Surgery & Cancer (8 years)
Dr Tessa Ogden, Business School (6 years)
Mr Flannan O'Mahony, Chemistry
Dr Alexander Papadopoulos, Life Sciences
Ms Jennifer Parks, Faculty of Medicine Centre
Mr Pavan Parthyally Narasimhareddy, ICT
Miss Clare Pearson, Public Health
Dr Gowsihan Poologasundarampillai, Materials
Dr Amandine Prelat, ESE
Miss Sophie Price, Materials
Miss Emma Punch, NHLI
Miss Valeria Pupella, Bioengineering
Dr Anil Rao, Computing
Mr Jack Reichhold, Student Union
Mr Chris Roberts, ICT (16 years)
Mr Brian Robertson, Health and Safety (18 years)
Mrs Anu Sadasivan Pillai, NHLI
Miss Jonata Sakalauskaite, Catering Services
Mr Patrick Scarff, Registry
Dr Bob Schroeder, Chemistry
Mrs Paula Smith, Business School
Dr Shufang Song, Chemical Engineering
Mr Anuj Tewari, ICT (6 years)
Miss Jag Thind, ICT (10 years)
Miss Emmanuelle Thinon, Chemistry
Mr Jonathan Tinnacher, Outreach
Dr Oleg Tolmachov, NHLI
Dr Tina Toni, Life Sciences
Ms Mihaela Tudor, Catering Services
Mr Paul Urquhart, ICT (6 years)
Miss Reva Vaze, Bioengineering
Dr Jamie Vera Vera Rojas, Medicine
Dr Ivo Vlaev, Surgery & Cancer (5 years)
Mr Duo Wang, Chemical Engineering
Mr Mark Weber, Finance
Mr Nathan Whittaker, Finance
Mr Peter Wilcox, Estates Division
Miss Hannah Wood, Physics
Miss Rachel Yan, NHLI
Ms Agnieszka Yongue, Surgery & Cancer

retirements

Mrs Piera Brambilla, Physics (37 years)
Mr Philip Cunningham, ICT (42 years)
Mr Ian Gillett, Health and Safety (26 years)
Mr John Morland, ICT (28 years)

This data is supplied by HR and covers staff leaving the College during the period 8 April–31 May. 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.



15 MAY ▶ PUBLIC TALK

Partial differential equations: A journey from micro to macro

For generations, scientists have been trying to find a way to fully describe the collective behaviour of free-moving objects as diverse as gas molecules, charged particles, bacteria

and fish. The challenge lies in portraying their interactions at all levels: from the microscopic scale, such as between individual molecules; to large 'macroscopic' phenomena like the patterns made by shoaling fish. Find out how partial differential equations (PDEs) help solve such problems at the inaugural lecture of Professor José Antonio Carrillo de la Plata (Mathematics).



21 MAY ▶ PUBLIC TALK

The random universe

Scientists point telescopes at the sky and record pictures of what they detect, then use such measurements to build and refine cosmological models. Despite the seeming randomness of the data, they have built up detailed theories, requiring exotic forms of

matter and energy, well beyond what those telescopes can observe directly. In his inaugural lecture, Professor Andrew Jaffe (Physics) will discuss how observations from the Planck Satellite have revealed that the Universe has been expanding for 14 billion years and constitutes only a few per cent of all the mass and energy in the Universe.

19 MAY ▶ PUBLIC TALK

Delivering an efficient electricity system

A debate about meeting the challenges of decarbonised electricity with Gareth Evans, Ofgem

31 MAY ▶ EXTERNAL

Rationality and drugs

Professor David Nutt (Medicine) talks about evidence-based approaches to drug policy at the HowTheLightGetsIn Festival



9-15 JUNE ▶ EXTERNAL
Universities Week

Help UK universities celebrate their research at this week of exhibits. Knit a blood vessel and chat with researchers from the NHLI at Imperial's Blood Lines stand. #UniWeek #IdeasForLife

11 JUNE ▶ PUBLIC TALK

The electron revolution in propulsion

Hear about the challenges of combining gas turbine and superconducting electrical technologies for future aircraft propulsion, with Dr Colin Smith, Rolls Royce at the Gabor Lecture

11 JUNE ▶ PUBLIC TALK

Going brown or getting greener?

Find out about the role of the terrestrial biosphere in climate change, and how vegetation and soil are expected to respond in the future. Inaugural lecture of Professor Jon Lloyd (Life Sciences)

12 JUNE ▶ PUBLIC TALK

Passion, parasites and people

Professor Deborah Smith OBE, Pro-Vice Chancellor for Research at the University of York gives the annual Athena Lecture



22 MAY ▶ PERSPECTIVES IN EDUCATION

Adding value beyond credit

Dr Sue Rigby, Vice-Principal, University of Edinburgh, discusses awards and innovative learning

2 JUNE ▶ PUBLIC TALK

Big data: A revolution that will transform how we live, work, and think

Imperial College Business School and Data Science Institute distinguished guest lecture with Viktor Mayer-Schönberger, University of Oxford

03 JUNE ▶ PUBLIC TALK
Energy Futures Lab annual lecture 2014

Dr Wolfgang Epple, Director of Research and Technology at Jaguar Land Rover, discusses automotive product development

5 JUNE ▶ PUBLIC TALK
Nanochemistry

Legendary chemist Professor George Whitesides, Harvard University, talks about his pioneering research, including biophysics, micro- and nanotechnology, and science for developing economies at the Bagrit Lecture

10 JUNE ▶ PUBLIC TALK

Café scientifique

An opportunity for patients and public to discuss chest pain with researchers from Imperial and Royal Brompton & Harefield NHS Foundation, including Dr Ranil de Silva (NHLI)

10 JUNE ▶ IMPERIAL BUSINESS INSIGHTS

A railway fit for the future

Richard Parry-Jones, Chairman, Network Rail, shares his vision of railways that generate and spread prosperity

take note

Don't get tongue-tied on holiday!

Enrol for summer term evening language classes in the Centre for Co-Curricular Studies. Different abilities catered for in Arabic, Japanese, Russian, Mandarin Chinese as well as modern European languages and English conversation for non-native speakers. There is also an arts course in creative writing.

For full details on how to enrol visit: bit.ly/QAERvh



MEET THE READER



David Larbie, Engineering Technical Assistant, Estates

What are you doing in the picture?

I'm in the heating, power and data distribution service underground tunnel network at the South Kensington Campus conducting a tour for the alumni guests at the Imperial Festival 2014.

What would you do if you were Editor of Reporter for the day?

I would definitely introduce a 'Then and Now' section showing images of buildings around the campuses; how they are now and how they were several decades ago. I like historical pictures and seeing how things have evolved (or stayed the same) over time so this would be a good feature for me.

Who would be your cover star?

My cover star(s) would be the engineers of the Estates Engineering Team based at the South Kensington Campus. They have a wealth of knowledge and experience spanning across various disciplines within Building Services Engineering. As an aspiring engineer, having the chance to shadow and learn from them is proving to be an impeccable feature for my development.

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

Stay in the loop

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

