



Festival for all

Festival-goers share their experiences of
Imperial's big weekend ... **CENTRE PAGES**



**CAUTION:
CONTENTS HOT!**
Researchers
take a look
beneath the
Earth's crust
PAGE 6



GOOD FELLOWS
Royal Society
Fellowships
awarded to
three Imperial
scientists
PAGE 3



**COLLEGE
COMMUTE**
Examining
the travelling
habits of staff
at College
PAGE 10



EDITOR'S CORNER

Celebration

These last couple of weeks the Reporter inbox has been full to the brim with **awards, exciting events and news**. Three members of staff have received arguably the highest accolade that scientists in this country can achieve in becoming Fellows of the Royal Society (page 3). Among them one of our most prominent female scientists: Joanna Haigh, Head of the Department of Physics.

The College has worked hard to ensure **a level playing field for women** in research and this was reflected in an institution-wide silver Athena SWAN award (page 3).

The theme of celebration continued with an unusually sunny Postgraduate Graduation Ceremonies (page 2 and page 13) followed by the second **Imperial Festival**. Now, I witnessed some of the hard work and preparation that hundreds of staff had put in for months beforehand, so I expected it to be a noteworthy event. However, I wasn't quite ready for what an **incredible spectacle** it turned out to be. But don't take my word for it — turn to the centre pages to find out what festival-goers thought (pages 9–10).

ANDREW CZYZEWSKI, ACTING EDITOR

Reporter is published every three weeks during term time in print and online. The next publication day is 6 June.

Contact Andrew Czyzewski: reporter@imperial.ac.uk

Milestone for tropical disease campaign

A charitable organisation based at Imperial has given out its 100 millionth treatment for a debilitating tropical disease.

The Schistosomiasis Control Initiative (SCI) was established in 2002 to bring treatments to the poorest populations in Africa. Also known as bilharzia or snail fever, schistosomiasis is caused by a parasitic worm that lives and breeds in blood vessels causing malnutrition, anaemia and long-term effects on the bladder wall and the liver. Praziquantel, a medicine taken as a tablet, kills adult



worms in the body.

Over the last 11 years, SCI has helped ministries of health and education in 16 countries to map the distribution of the disease and offer treatments to people infected, especially school-aged children. This month, the total number of treat-

ments they have delivered has passed 100 million.

SCI's Director, Professor Alan Fenwick (School of Public Health), said: "I'm thrilled that we've reached this milestone and so proud of what we've achieved so far, but there are still too many children who are affected by diseases that can easily be treated. We hope to be able to eliminate schistosomiasis in at least some countries by 2020."

—SAM WONG, COMMUNICATIONS AND PUBLIC AFFAIRS

For information and donations visit: bit.ly/9xhpTv

Business and academic leaders honoured alongside postgraduates



Students and guests from more than 100 countries gathered on 1 May for the 2013 Postgraduate Graduation Ceremonies.

In the largest graduation event for postgraduates in the College's history, 2,600 graduands received their degrees in front of 5,000 friends, family and supporters, over three ceremonies in the Royal Albert Hall.

President & Rector Sir Keith O'Nions told the graduands: "As individuals you might think that your own efforts are a mere drop in the ocean, but the impact that 2,600 of you graduating today will have on the world will be enormous."

Alongside the postgraduates, honorary doctorates were conferred on renowned industrialist Sir John Parker, pioneering engineer Professor Dame Ann Dowling, leader in higher education and statistics Professor Sir Adrian Smith and distinguished mathematician Professor Tim Pedley.

At the ceremonies, Imperial College Medals were awarded to three people who have made an exceptional contribution to the College: economist and former Principal of the Business School Professor David Begg; alumnus and chairman of Friends of Imperial College Roderick Rhys Jones (Civil Engineering 1964); and founder of the Pimlico Connection student-pupil mentoring programme Emeritus Professor Sinclair Goodlad (Electrical and Electronic Engineering).

Mr Rhys Jones said of the award: "The College is such a powerhouse of energy, ambition and scientific progress that it is a privilege to be involved in helping to showcase its achievements to the public."

— ANDREW SCHEUBER, COMMUNICATIONS AND PUBLIC AFFAIRS

Imperial College
London

Imperial Car Club launched!

Staff and students can now access three low emission cars following the launch of Imperial Car Club yesterday. The cars can be used for business or leisure on a pay-as-you-go basis at a rate £4.50 an hour.

For further details and price information: bit.ly/18tm6zo

or email Victoria Stanger, Strategic Purchasing Advisor: v.stanger@imperial.ac.uk



Women in science awards

The College has been granted silver Athena SWAN status, one of only three universities to have ever received an institution-wide award of this level. Two departments also earned bronze awards.

The awards recognise Imperial's successful development of employment practices that further and support the careers of women in science, technology, engineering, maths and medicine.

President & Rector Sir Keith O'Nions said: "This is the result of a serious long-term commitment to gender equality at every level in the College. Our Departments of Mathematics and Medicine deserve special commendation for achieving departmental bronze awards.

"If we are to fulfil our potential as a global leader in science, we must continue to eliminate obstacles to career progression and create new opportunities for women."

“We must continue to eliminate obstacles to career progression and create new opportunities for women”

Professor Dot Griffiths, Chair of Imperial's Academic Opportunities Committee, said:

"The Athena SWAN committee has rightly recognised how far Imperial has gone in levelling the playing field.

"These awards help focus our minds on removing barriers, spotting opportunities and improving our understanding of the issues around women in science.

"Gender equality requires

hard work on a day-to-day basis. We intend to keep this up and build on Imperial's significant progress."

In conferring the award, the Athena SWAN panel were particularly impressed by initiatives including the prizes in every department named after distinguished Imperial female scientists, the College's annual Athena Lecture and networking event, the annual dinner for all academic women, lunches for all promoted women, receptions for all new award holders and the Imperial women's portrait series.

Each Imperial faculty has a committee devoted to discussing issues around – and taking action on – the recruitment, retention and promotion of academic women.

—ANDREW SCHEUBER, COMMUNICATIONS AND PUBLIC AFFAIRS

Haigh, Bloom and Darzi become Royal Society Fellows



Top to bottom; Professors Joanna Haigh, Sir Steve Bloom and Lord Darzi

An atmospheric physicist, an expert in the treatment of diabetes and obesity, and a pioneering robotic surgeon have joined the ranks of the UK's most pre-eminent scientists as part of the 2013 election of 44 new Fellows of the Royal Society.

Professor Joanna Haigh (Physics), Professor Sir Steve Bloom (Medicine), and Professor the Lord Darzi of Denham (Surgery and Cancer) are recognised for their contributions to science and are now permitted to use the letters FRS after their name.

Professor Haigh's research contributes to the understanding of climate variability by examining how the Sun's radiation is absorbed in the atmosphere.

"I am delighted to have been given this honour," said Professor Haigh. "I happily acknowledge the inspiration provided by colleagues and students, and also the practical support provided by senior academic staff, administrative staff (and the Early Years Education Centre!), that have enabled me to develop my career to this point."

Professor Bloom, a physician with a particular interest in endocrinology, commented: "It is a very pleasing honour for the entire team who have worked together over many years. The world pandemic of obesity causes great suffering, so there is much for us yet to do."

Lord Darzi holds the Paul Hamlyn Chair of Surgery at Imperial and is an Honorary Consultant Surgeon at Imperial College Healthcare NHS Trust and the Royal Marsden NHS Trust Hospitals.

"I am truly honoured and delighted to be elected Fellow of the Royal Society," he said.

"It is humbling to be amongst a group of such distinguished peers. I would like to thank my many colleagues for their help and support in all my endeavours."

—SIMON LEVEY, COMMUNICATIONS AND PUBLIC AFFAIRS

in brief



Alumni lounge opens

Alumni visiting the College can now drop by and relax in the new Alumni Visitor Centre,

near the Main Entrance of South Kensington Campus. Opened on 29 April, it offers visiting alumni a lounge, and a room with an LCD screen for presentations and videos that may be booked for alumni meetings. Facilities include complimentary tea, coffee and cold drinks, free Wi-Fi, newspapers and magazines, information about the College, as well as a left luggage facility.

Sir Mark returns as Honorary Distinguished Professor

Professor Sir Mark Walport has accepted appointment as an Honorary Distinguished Professor of Medicine at the College. The appointment is for the duration of Sir Mark's role as the government's Chief Scientific Adviser. Sir Mark had been the Director of the Wellcome Trust since 2003, and before that he was Professor of Medicine and Head of the Division of Medicine at the College.

Imperial delegation in China

President & Rector Sir Keith O'Nions is leading a delegation to China this week, where Professors Jianguo Lin, Yike Guo and David Gann are delivering lectures to alumni in Beijing, Shanghai and Hong Kong. At the Beijing event on 13 May, Imperial alumnus and President of Tsinghua University Professor Chen Jining said: "This is Sir Keith's third official trip, demonstrating that Imperial really cares about China. This relationship is good for Imperial, China and the world."

“The last time we saw similar levels of CO₂ in the atmosphere was about 4.5 million years ago when the world was warmer on average by three or four degrees Celsius.”

PROFESSOR SIR BRIAN HOSKINS, DIRECTOR OF THE GRANTHAM INSTITUTE FOR CLIMATE CHANGE, COMMENTING ON NEWS FROM THE MAUNA LAO OBSERVATORY IN HAWAII THAT THE CONCENTRATION OF CO₂ GAS IN THE ATMOSPHERE PASSED 400PPM.

Creative curriculums explored at Education Day

International insights, innovative teaching and the student perspective were all on the agenda at this year's Education Day on 22 April.

Over 150 staff were joined by Imperial College Union representation, head-teachers and speakers from both the College and as far away as Singapore.

Professor Debra Humphris, Pro Rector (Education) and Professor Andrew George, Director of the Graduate School and the School of Professional Development, welcomed guests to the annual event, now in its sixth year.

"Education, along with research is the core business of Imperial and our annual Education Day provides a focal point in the academic year," she said. "The event offers a chance for staff from across the College to come together to share good practice and

"The event offers a chance for staff to come together to share good practice and discuss ideas"

discuss ideas, as well as to hear the contributions of invited speakers."

The speakers offered insights on designing creative curricu-

lums from a range of perspectives. Dr Eryl Price-Davies (Professional Development) talked about Imperial Horizons, which provides courses ranging from business and professional skills to humanities and social sciences that students can study alongside their degree. Professor Peter Childs (Mechanical Engineering) presented work by students on the Master's course in Global Innovation Design run with the Royal College of Art.

Dr Anita Hall (Life Sciences), a senior teaching fellow attending the event, said: "Education Day gave me the perfect opportunity to set aside some time to think about my teaching and how best to improve it. I learnt about imaginative, enjoyable ways to engage students and met some new educator colleagues and friends."

—LUCY HANDFORD, COMMUNICATIONS AND PUBLIC AFFAIRS

Staff complete disability leadership course



Imperial has become the first institution in the higher education sector to run a unique development course designed for people with disabilities.

The Calibre Leadership Programme is designed to build the leadership skills of staff with disabilities and is also open to staff from other universities.

Twelve participants attended a series of interactive workshops between January and

April. As well as face-to-face sessions, other programme requirements included written assignments and group work.

Participants invited their managers to the final session on 29 April where they heard personal testimonies about the positive impact that Calibre has had.

Lucca Da Silva Junior (Security Services), Campus Receptionist, was among those to successfully complete the programme: "Not only did I learn a lot from the course, I learnt a lot from other people taking part. Calibre has helped me enormously, both professionally and personally, and I would recommend it to anyone at the College who may benefit."

Bernadette Gahan (Medicine), Library Assistant, also took part and said that the course provided: "A respectful and confidential environment in which I felt safe to grow."

—LUCY HANDFORD, COMMUNICATIONS AND PUBLIC AFFAIRS

For more information, visit the Equality and Diversity pages: bit.ly/YZ99qf or contact Leyla Okhai, Staff Disabilities Adviser: l.okhai@imperial.ac.uk

New frontiers

The Department of Physics, NASA and the US Embassy joined forces last month to give school students an insight into space research.

The Women in Space Science, Technology, and Engineering event on 18 April was aimed at students in Years 10 to 12 who are already studying, or considering studying A Level Physics – particularly female students, who are under-represented in the subject.

High profile female space scientists and engineers, including Nagin Cox from NASA's Jet Propulsion Laboratory and Professor Michele Dougherty (Physics) talked about their careers and what it's like to explore Mars and Saturn.

Nagin, a spacecraft systems engineer, discussed her work on the \$2.5 billion robotic rover Curiosity which touched down on Mars in August last year. "That's about as exciting as it gets for a robotic mission," she said.

Professor Dougherty gave a presentation on the Cassini spacecraft mission to Saturn, noting that she first glimpsed the planet from her father's telescope, aged 12.



Year 12 student, Elizabeth, from St Michael's School in Finchley, was one of 200 students who came to the event. "I especially liked Michele's talk about how magnetometry could be used to try and discover and learn things about planets and moons."

Asked if she might consider a future career in physics, Elizabeth said: "I didn't realise there was quite so much still to discover in space. There are so many different ways we can go into it, so there's a lot more options to consider."

—LUCY HANDFORD, COMMUNICATIONS AND PUBLIC AFFAIRS

Read more about events run by the Physics Outreach Office: bit.ly/P9sHso

media mentions

—MAXINE MYERS, COMMUNICATIONS AND PUBLIC AFFAIRS



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

Gene therapy offers new lease of life

THE INDEPENDENT ▶ 30.04.2013



The first attempt in Britain to treat heart failure patients with gene therapy is to begin within weeks, as part of a study aimed at improving the lives of up to a million people in the UK who suffer this debilitating and potentially fatal condition. “Once heart failure starts, it progresses into a vicious cycle where the pumping becomes weaker and weaker, as each heart cell simply cannot respond to the increased demand,” said Dr Alexander Lyon (NHLI), a consultant cardiologist at Royal Brompton Campus speaking to *The Independent*.

Born in the water? THE OBSERVER ▶ 27.04.2013

One of the most controversial ideas about human evolution is that our species arose as ‘amphibious apes’; losing our fur, starting to walk upright and developing big brains because we took to living the good life by the water’s edge. The theory’s supporters argue that our brain biochemistry is also revealing. “Docosahexaenoic acid (DHA) is an omega-3 fatty acid that is found in large amounts in seafood,” said Dr Michael Crawford (Medicine). “It boosts brain growth in mammals. That is why a dolphin has a much bigger brain than a zebra, though they have roughly the same body sizes. Without a high DHA diet from seafood we could not have developed our big brains.”

Electrifying Africa

THE SUNDAY TELEGRAPH ▶ 28.04.2013

Imperial alumni Chris Baker-Brian, Mansoor Hamayun and Laurent Van Houcke developed the core technology for their business, BBOXX – linking solar panels to a battery pack capable of powering a space up to the size of a small office – when they were students at Imperial, *The Sunday Telegraph* reported. “At the end of university, we had all this knowledge and thought we could use it to improve electrification rates in Africa,” says Mr Baker-Brian. BBOXX has opened a joint-venture factory in China and signed its first franchisee in DR Congo.

All three graduated in Electrical and Electronic Engineering in 2010.

Lies, damn lies and GDP

FINANCIAL TIMES ▶ 27.4.2013

The Office for National Statistics (ONS) is due to revise the way the national accounts are calculated – in particular gross domestic product (GDP). This raises the possibility that the chancellor might find a ‘triple dip’ reinserted into the figures or, if things go better, the current ‘double-dip’ recession washed away, according to the *Financial Times*. Professor Jonathan Haskel (Business School), who has helped the ONS with thinking on research and development, told the newspaper. “The R&D numbers have stayed relatively robust over the recession so that suggests you will get some effect on growth,” adding that if the ONS took a comprehensive view of intangible investment including design and branding, Britain’s growth in 2011 and 2012 could be revised 0.5 percentage points a year higher.

awards and honours

ESTATES

EcoCampus silver

The College has won a silver EcoCampus award for its work in establishing an environmental policy and system for managing and monitoring environmental performance. The EcoCampus scheme was set up by HEFCE in 2005 as a way to limit the higher education sector’s impact on the environment. It is a four-stage award process that eventually leads to ISO 14001 certification in environmental management. The project is managed by Sara Muir, Head of Energy and Environment, and Helen

Swanton, Environmental Officer (both Estates).

ENGINEERING

Prestigious grant to help tackle obesity

A project to create an implant to reduce appetite in obese patients received a new Synergy Grant from the European Research Council. The project at Imperial is one of two at the College, and only 11 across the entire European Union, to receive this funding. Professor Sir Stephen Bloom (Medicine) and Professor Chris Toumazou (Bioengineering) have been awarded over €7 million for the i2MOVE (intelligent implantable modulator of vagus nerve function for treatment of obesity) project.



MEDICINE

Medic wins Winston Churchill fellowship

Mr Kash Akhtar (Surgery and Cancer), a clinical lecturer in trauma and orthopaedic surgery, has won a travelling fellowship from the Winston Churchill Memorial Trust. These awards are to given to British citizens from all walks of life to travel overseas and bring back knowledge and best practice for the benefit of

their community. Mr Akhtar will be undertaking a project where he will visit centres of excellence in orthopaedic surgery in the USA.

NATURAL SCIENCES

Space leadership roles for academics

The UK Space Agency has appointed two researchers from the College to head two separate advisory committees. Professor Michele Dougherty (Physics) will chair the Science Programme Advisory Committee from 1 June, advising the agency on industry and potential spin-offs, science and society, and education and skills. Professor Mark Sephton (Earth Science and Engineering) chairs the Space Exploration Advisory Committee from 6 May.

Getting under the skin of Africa

Seismologists have created an accurate three-dimensional map of the Earth's structure 400 kilometres below the Afar Depression in East Africa.

The research could help to better understand how the Earth is reshaping at this dynamic region where two tectonic plates are pulling away from one another. In a few million years' time this process will cause Africa to split in two, creating an entirely new ocean and a continent.

"We call this process continental breakup and the Afar Depression is the only place in the world on land where we can study the final part of this process, which is really unique," said lead researcher Dr James Hammond (Earth Science and Engineering).

Dr Hammond's team used seismometers deployed across East Africa to record earthquakes from all over the world. Energy from these earthquakes travels through the Earth as sound waves and, much like a doctor



uses X-rays, we use these sound waves to build up 3D images of the Earth's structure below the surface.

They found that below the Afar Depression molten rock is present in small amounts and can work its way through the rock to the surface, as Hammond explains.

"Imagine a box with sand in it. If you poured water into the sand, it would slowly work its way

down and come out of the bottom of the box. Well, the molten rock in the Earth does a similar thing but, in this case, the molten rock is less dense than the surrounding rock and so it travels up along small gaps in the rock to the surface where it eventually erupts at one of the numerous volcanoes in the region."

—COLIN SMITH, COMMUNICATIONS AND PUBLIC AFFAIRS



Plate tectonics

The Earth's crust is divided into different sections called tectonic plates. These massive sheets of rock are continually being pushed around by movements in the mantle, shifting at a glacial pace, millimetre by millimetre, reshaping the Earth's surface over millions of years. In regions such as Asia, these plates slowly collide, pushing upwards to form the Himalayas. The movement causes large earthquakes such as that seen recently in China. In other places like Africa, the plates move apart, breaking up the continent. In East Africa, hot material rising from the interior of the Earth is responsible for Africa's unusually high elevation, which is on average 1.5 kilometres above sea level. The process also controls how oil is formed in East African river basins and is a vital factor in modelling how sea-levels will change, affecting our climate.

Antarctica's transition to ice world revealed

The emergence of mammals, such as whales and penguins, and the ecosystem of Antarctica can be traced back to when it was transformed into an icy world approximately 33.5 million years ago, according to new research.

An international team, led by Utrecht University and including researchers from Imperial, travelled to Antarctica on a research ship as part of the Integrated Ocean Drilling Programme, taking sediment cores from the sea floor.

Previous studies carried out by the team on these cores revealed that subtropical plants covered Antarctica approximately 53 million years ago. In this new study, the team focused on a segment of the core that shows a time in Antarctic history 20 million years later. It shows the climate gradually cooling until large ice sheets appear approximately 33.5 million years ago.

Dr Tina Van De Flierdt (Earth Science and



Engineering), who carried out the initial chemical analysis on the core samples, said: "This is a pivotal moment in Antarctica's history as it moves away from being a warm subtropical world to a frigid cold world. The final step of this transition happened quite abruptly and had a major impact on the ecosystem."

Notably, the researchers analysed fossilised microscopic marine plankton called dinoflagellates in the sediment cores.

"We believe that the sudden change in the ecosystem of the Antarctic waters, as indicated by the sudden appearance and dominance of these dinoflagellate species, was connected with the development of sea-ice conditions," said study author Sander Houben of Utrecht University. "This was not only critical for climate, but also for biology. Larger sea animals probably adapted their diet because the algal growth season became shorter and more intense,"

—COLIN SMITH, COMMUNICATIONS AND PUBLIC AFFAIRS

Sugary drinks carry diabetes risk

Drinking one extra sugar-sweetened soft drink a day can increase a person's risk of developing type 2 diabetes by 22 per cent, a new study suggests.

The findings come from a study led by Dr Dora Romaguera (Public Health) looking at consumption of juices, sugar-sweetened soft drinks and artificially sweetened soft drinks in 350,000 people in eight European countries.

They found that each 336ml sugar-sweetened soft drink – roughly one can – per day increased the risk of type 2 diabetes by 22 per cent. This increase in risk fell slightly to 18 per cent after accounting for total energy intake and body mass index (BMI), suggesting that the effect of sugar-sweetened soft drink on diabetes is not purely down to body weight.

People who drank more artificially sweetened soft drinks were also more likely to get type 2 diabetes, but this association appeared to be because participants with a higher BMI tend to drink more artificially sweetened drinks and are also more likely to develop diabetes.

Drinking pure fruit juice or nectar (diluted juices, sometimes with additives)

was not associated with diabetes risk.

A meta-analysis of previous studies, mainly in North America, found a 25 per cent increased risk of type 2 diabetes for each daily sugar-sweetened drink.

“The increase in risk of type 2 diabetes among sugar-sweetened soft drink consumers in Europe is similar to that found in studies in North America,” said Dr Romaguera. “Given that people are drinking more and more sugary drinks in Europe, we need to give out clear messages about their harmful effects.”

—SAM WONG, COMMUNICATIONS AND PUBLIC AFFAIRS



Type 2 diabetes

Diabetes is a lifelong condition that causes a person's blood sugar level to become too high. People with type 1 diabetes aren't able to produce insulin, a hormone that regulates blood sugar. In type 2 diabetes, which is much more common, the body doesn't produce enough insulin, or it doesn't respond properly to insulin. Diabetes can't be cured, but treatments can help patients to control their blood sugar levels. If it goes untreated, high blood sugar can damage nerves, blood vessels and organs, potentially leading to blindness, kidney disease or foot ulcers. Type 2 diabetes is most likely to develop in people over 40. People who are overweight or obese have a higher risk, as do people from South Asian, African-Caribbean or Middle Eastern ethnic backgrounds. Eating healthily and exercising can reduce your risk of developing type 2 diabetes.



“Herschel has found a rare example of a galaxy bursting with stars”

Growing galaxies

Astronomers have discovered an extremely distant galaxy that is expanding by more than 2,000 new stars each year.

This is the most active that astronomers have seen a young galaxy less than a billion years old and, since this discovery, they are rethinking some fundamental ideas about how galaxies form and evolve.

The newly discovered galaxy, known as HFLS3, appears as a faint red smudge in images from the European Space Agency's (ESA) Herschel space observatory. In reality, this represents the activities of a star-building 'factory', which is transforming gas and dust into new stars.

“This particular galaxy got our attention because it was bright and yet very red, compared to others like it,” says Herschel researcher, Dr Dave Clements (Physics).

HFLS3 has one of the highest

star formation rates astronomers have seen; over two thousand times faster than our own galaxy, the Milky Way.

According to current theories of galaxy evolution, galaxies as massive as HFLS3 should not be present so soon after the Big Bang.

Even at its young age of 880 million years, HFLS3 is already close to the mass of the Milky Way, with a mass of stars and star-forming material roughly 140 billion times that of our sun.

“With these observations, Herschel has found a rare example of a galaxy bursting with stars at a time in cosmic history when there were very few such galaxies,” says Göran Pilbratt, ESA's Herschel project scientist.

The team is continuing to comb the enormous dataset from Herschel looking for more examples of such extreme early galaxies.

—SIMON LEVEY, COMMUNICATIONS AND PUBLIC AFFAIRS

Festival for all

A look at the recent Imperial Festival in the words of those who came along

Over 10,000 people descended on South Kensington Campus on Friday 3 May and Saturday 4 May for the second annual Imperial Festival. Visitors were treated to an exciting array of talks, performances and activities – all made possible by the efforts of around 400 researchers and staff from support services. *Reporter* chatted with festival-goers around the site over the two days, and asked them how they ended up here and what they enjoyed most of all.

View of the people

NATASHA ▶ MYSTERIES OF THE MIND



“I took science very early on then went into psychology – working as a psychoanalyst for the NHS for 30 years. I was talking to the researchers at the neuroscience stand – it seems the brain is still a complete mystery! They’re making strides in understanding with things like **brain imaging** and MRI though; also the brain tissue work with Alzheimer’s, Parkinson’s and MS is really important. I’ve actually been most surprised by the engineering; there are so many different fields it crosses into now – for example the way they design those twisted stents for artery disease so the blood doesn’t clot.”

SHANE AND JESSICA ▶ COMEDY CAPERS



“We tend to go to a lot of events like this in the summer, but we hadn’t heard of Imperial Festival so we thought we’d drop by after work. We’re both secondary school teachers in South London: I’m an English teacher and Jessica is a history teacher, so we’ve not got any particular scientific knowledge – but there are plenty of things here to cater for the more casual observer. In fact we’ve just been to the **Science Comedy Collider** [with alumni Helen Arney and Adam Kay,

and Helen Keen] which was great. You wouldn’t have thought comedy and science would mix, but there were some funny gags!”

DAVID ▶ CREATURE FEATURE



“There are two reasons why I’m here: firstly both my kids have got an interest in science, and secondly my dad came to Imperial in the 50s and is here at an alumni reunion. I basically thought it’s a good way of seeing the grandparents without being bored! I’m very impressed with the whole thing – the interactive nature of it. I’m interested in science myself but in a slightly damaged way; my dad always wanted me to be a scientist but I wasn’t very good at it and so I did arts subjects instead. And now later in life I’ve found a repressed interest has come upon me, particularly in physics. For me though it always felt like a chore, for the kids it’s much livelier. They particularly liked the zoology **[Activity Tent]** where you could hold lizards and snakes but people are actually on hand to tell you how the animals function. The pop-up surgery [with Professor Roger Kneebone] was also good; although we were a bit disappointed it wasn’t a real person!”

LAWRENCE ▶ RACING GREEN



“My wife and I were passing by, and since I’m interested in science, scientific inventions and research, we decided to pop in and have a look at what you’re doing. I was particularly interested in the **electric motorcycle** [Racing Green] since I ride motorbikes myself. I think the situation with electric bikes is similar to electric cars in that there has to be improvements to the battery and weight, and that’s particularly crucial on a motorbike which relies on its light weight and agility. But that can be refined and worked on and that’s obviously what they’re working on here.”

Festival stalls sold over 3,000 meals and drinks. Proceeds from the sale of more than 160 Imperial T-shirts are going to the Rector’s Scholarship Fund.



AMIR AND TARIQ ► MEDICAL FUTURE



Amir (left): “I think we saw the advert in *ShortList* or *Time Out* and decided to check it out. Being a science teacher I’ve always had a keen interest in the subject, but I’m actually changing career now, I’m starting medical school, so to see all the medical research in the tent here is great too. The **chemical photography** stand was really interesting, looking at how to design drug coatings so that you can take your tablets in the morning and they slowly release during the day. Maybe that’ll be ready when I’m a doctor!”

Tariq (right): “I’m more interested in physics, the really far-out stuff like string theory, so there was something here on the physics of plasmas and how hot gases behave in the universe.”

Imperial family – Staff

Sara Budinis (Chemical Engineering) and Maria Barrera-Medrano (Mechanical Engineering), Early-stage researchers ► LEARNING CURVE



“We’ve come along on Saturday just to experience the festival but also hopefully to pick up some ideas – we’re working on a European project called Energy SmartOps and our funders have asked us to look for ways to communicate our research and think of activities for families. It’s interesting to see how **everything is interactive** – you can touch things and do simple experiments; I think that’s the key point. Maybe next year it’ll be us presenting something – let’s see!”

Simon Hepworth, Director of Corporate Partnerships ► FAMILY AFFAIR



“We were here last year as well, and we knew it was a good day out. It’s also a good opportunity to show the whole family where

“It made me very proud to see staff and students representing every single academic department, engaging with thousands of visitors in imaginative ways,”
Sir Keith O’Nions,
President & Rector

you work and what goes on here. So far, we’ve done the **Reach Out Lab** where we made some wiggly polymer worms; we’ve held a gecko and a bearded dragon and stroked a toad. It’s almost too popular this year; there are so many people here.”

Alumni

Dr Ponnampalam Linkeshwaran (Civil and Environmental Engineering 1998) ► LIFE ON MARS

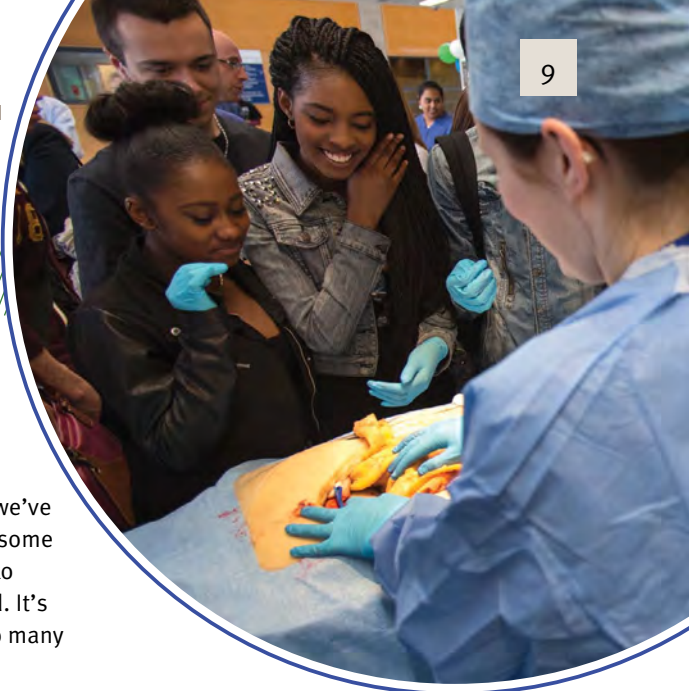


“It was an interesting talk [by Professor Sanjeev Gupta]. We’ve read about the **Mars Rover** in the news obviously, but I wasn’t aware that Imperial was involved. The researcher here seems to be at the heart of the mission, which is great. I think missions like that really capture the public’s imagination and also engage the younger generation. I think we’re going to take the kids to the lab now to make some of those polymer worms!”

William Wong (Management School 1998) ► MAKING CONNECTIONS



“I just was blown away that you can walk through this huge marquee sitting on the Queen’s Lawn and see the output of so many departments. I noticed that the students and researchers at the stands share one key thing: they’re very enthusiastic about their work and they’re really good ambassadors for the College, doing public engagement on the front line. They’re good at explaining rather abstract, complex things. For the alumni [at the Reunion] it’s also great for **networking and meeting people** – the badges are really quite useful as an ice-breaker; in Britain we are still rather reluctant at approaching people, I think!”



A record-breaking 1,300 alumni and guests registered for the Alumni Reunion

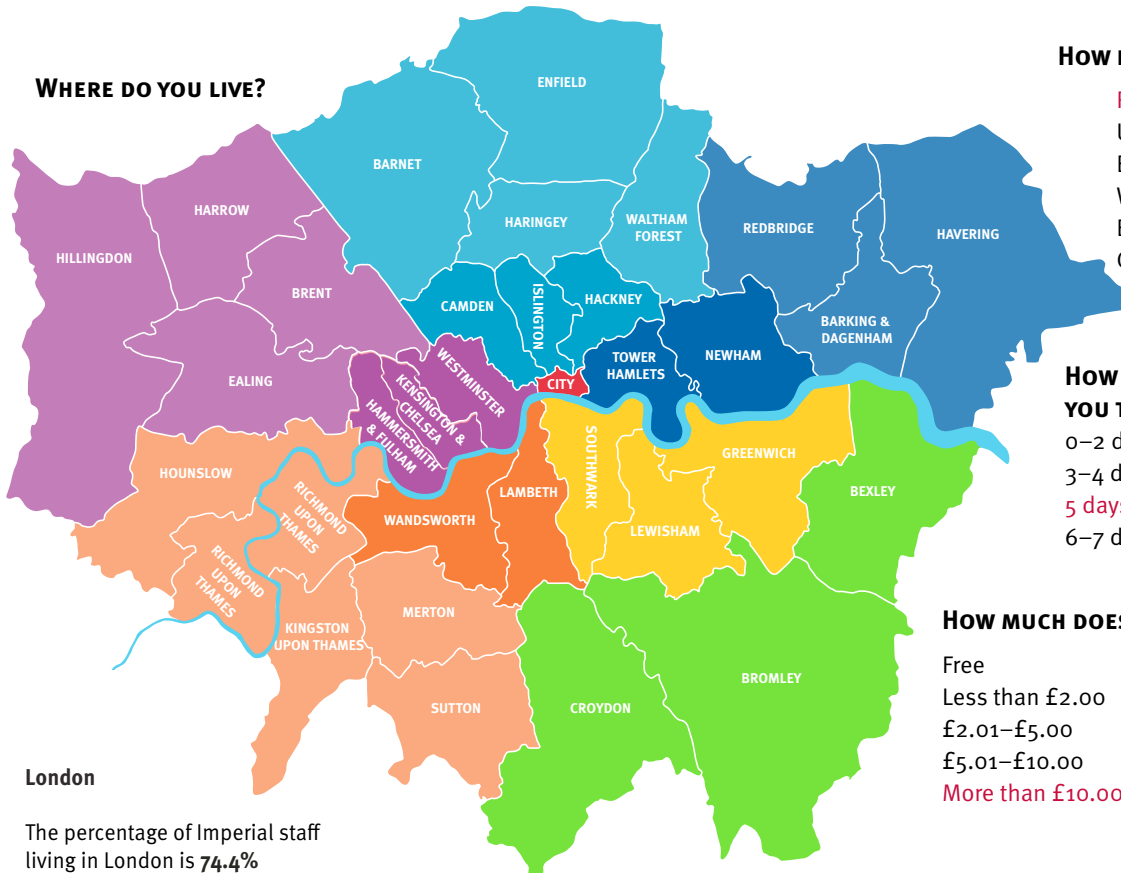


Your travelling habits

—SARA MUIR (ESTATES), HEAD OF ENERGY AND ENVIRONMENT

Staff and students were invited to complete the Energy and Environment team’s travel surveys in February 2013 with over 1,800 people contributing. The surveys give a picture of how staff and students travel to work and help the College to understand where changes and improvements to services are needed and whether current travel initiatives are effective. Following the 2012 survey we increased the number of bicycle parking spaces and introduced a trial bicycle pool scheme. The surveys also provide the data required to report travel statistics to the Higher Education Statistics Agency (HESA). From 2014 HESA will be requesting information on the College’s “Scope 3” carbon emissions – which encompasses emissions that organisations produce, but aren’t necessarily controlled by them, such as travel, supply chain procurement, waste and water.

WHERE DO YOU LIVE?



London

The percentage of Imperial staff living in London is **74.4%**

South West London

Inner: (Wandsworth and Lambeth)	14.8%
Outer: (Hounslow, Richmond upon Thames, Kingston upon Thames, Merton and Sutton)	8.3%

West London

Inner: (Hammersmith & Fulham, Kensington & Chelsea, Westminster)	17.6%
Outer: (Hillingdon, Harrow, Ealing, Brent)	5.1%

North London

Inner: (Camden, Islington and Hackney):	5.5%
Outer: (Barnet, Enfield, Haringey and Waltham Forest)	3.0%

City of London

	0.8%
--	------

East London

Inner: (Tower Hamlets and Newham):	3.9%
Outer: (Redbridge, Barking & Dagenham and Havering)	2.9%

South East London

Inner: (Southwark, Lewisham and Greenwich)	8.5%
Outer: (Croydon, Bromley and Bexley)	4.0%

Home counties and beyond

25.6% of staff live outside London, in the home counties and elsewhere in the UK and Northern Ireland.

Surrey	5.3%
Hertfordshire	4.1%
Berkshire	3.2%
Kent	3.1%
Oxfordshire	2.2%
Sussex	2.1%
Buckinghamshire	1.3%
Essex	1.2%
Cambridgeshire	0.8%
Bedfordshire	0.7%
Hampshire	0.5%
Wiltshire	0.2%
Elsewhere (UK and N.Ireland)	1.0%

HOW DO YOU TRAVEL TO WORK?

Rail	28%
Underground	26%
Bicycle	13%
Walk	13%
Bus	12.6%
Car/motorbike/taxi	8%

HOW MANY DAYS A WEEK DO YOU TRAVEL TO A COLLEGE SITE?

0–2 days per week	2.8%
3–4 days	15.8%
5 days	78%
6–7 days	3.8%

HOW MUCH DOES YOUR DAILY COMMUTE COST?

Free	15%
Less than £2.00	5%
£2.01–£5.00	22%
£5.01–£10.00	29%
More than £10.00	30%

ARE YOU ABLE TO WORK FROM HOME?

Yes	66%
No	34%

SARA’S COMMENT:

While nearly three quarters of Imperial staff live in the capital, with the majority in living in west and south west London, this survey also shows that some staff travel quite a distance to get to work, with over 25% living outside London in the home counties. 30% are spending more than £10 per day on transport, and 28% are using national rail for the largest portion of their commute. It’s interesting that a majority of staff do have the capacity to work from home, despite which, a massive 78% do visit the campuses five days per week. Thank you to all who completed the survey.

For the full set of results, please see: bit.ly/Y2bVg6

The statistics represented here are a selection based on the staff only sample of 1013 participants.

inside*

story

mini profile

David Gann

Professor David Gann CBE, the Business School's innovation strategy expert, has recently been appointed Vice President for Development and Innovation at the College.

What has driven your career to date?

I'm interested in ideas and how we apply them. I've always been interested in how things function and how they can work better. Ever since I was a kid I would take things apart – like my go-kart – and put them back together. My main interest is innovation strategy: exploring why and how innovation happens, the ways it continually transforms the world we live in, and how it can be managed.

What are the key challenges facing Imperial right now?

Firstly, we're dealing with significant economic upheaval and government science budgets cannot be taken for granted, so we have to continue to diversify our funding sources. The centre of gravity for global competition and collaboration is shifting from Europe and the US towards rising players in East Asia. We must continue to build links in the region. Technology is changing the nature of education and everything else that



we do. Digital technology and big data will be revolutionary for science, technology, engineering and medicine. It already is. We must be ready to adapt.

Finally, we've run out of space to grow in South Kensington. This is why we're building Imperial West, to forge

more strategic relationships and create more options for how we integrate technology, like the tools behind big data, into our research and translation work

“I've always been interested in how things function and how they can work better”

How do you relax outside of work?

My biggest passion is music. I'm a patron of Brighton Festival, England's largest multi-arts festival, and I go to the opera at Glyndebourne. I love gardening: we grow asparagus and keep bees in our garden in Hove. I also enjoy sport, namely exercising in the gym, walking, skiing and watching rugby.

—ANDREW SCHEUBER, COMMUNICATIONS AND PUBLIC AFFAIRS

Vivaldi virtuoso

At this year's Postgraduate Graduation Ceremonies on 1 May, undergraduate student Dmitri Olayzola-Thomaneck gave a breathtaking performance from Vivaldi's Recorder Concerto in C major. Currently in his second year of the BSc in Physics and Music Performance, Dmitri recalls the event.

“The first performance was exhilarating. I wasn't nervous, which is unusual. My reaction afterwards was different – I felt like shouting, I was so excited. It was a childhood ambition of mine to play in the Royal Albert Hall on recorder.

My parents came from Aberdeen to see me, and I knew some people who were graduating, so I got to play for them.

The movement I performed, chosen by Richard Dickins, Director of Music, was new to me, and was the hardest piece I've performed. It was a real privilege to be asked.

I play all the different sizes of



recorder, from garklein, which is 10cm in length, to subcontra bass, which is taller than a person. I also play viola, piano and sing tenor.

In the future, I want to bring greater recognition to recorder playing. Not everyone thinks it's a proper instrument, but actually there's a lot of tradition associated with the recorder, so I'd like to see that continue.”

—CAROLINE PREW, COMMUNICATIONS AND PUBLIC AFFAIRS

Watch Dmitri perform at *Flauto Dolce*, 24–25 June at the Royal College of Music: www.rcm.ac.uk/events/listings



► SCIENCE FROM SCRATCH

As explained by Stephanie McClellan, MSc Science Communication

How does the battery in my smartphone work?

Battery technology can essentially be traced back to the discovery of ‘animal electricity’ by Alessandro Volta and Luigi Galvani in the eighteenth century. They created an electric circuit consisting of two different metals connected in series to a frog's legs. In contemporary terms, the frog's legs acted as electrolytes – the source of the all important chemical reaction needed to produce the electrons to create a current. This possibly rather cruel experiment set the foundation for modern battery technology.

The most important development in battery technology in recent times has been the use of lithium ion (Li-ion) chemistry. Li-ion batteries are successful because of lithium's physical properties. Being third on the periodic table, it has the lowest density, greatest energy to weight ratio, and the highest electrochemical potential of all metals. This means that because lithium is highly reactive, it can store a lot of energy in its atomic bonds, giving Li-ion technology an advantage over traditional batteries. Li-ion batteries are therefore now commonly found in laptop computers, digital cameras, smartphones and even in some cars.

Manufacturers are continuing to improve battery technology, introducing new and enhanced chemical combinations to the market at a rapid pace. Large batteries could even be used in green communities to store energy from renewable generation, for later use when the wind isn't blowing or the Sun isn't shining.

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

blog
SPOT

Student blogger Richard on

Working nine to five... what a way to make a living:

Beginning this year, third year students in the Electrical and Electronic Engineering Department can opt to undertake a six-month placement in a sufficiently technical role as part of their degree. On 2 April, I started my six-month placement working in the technology arm of an investment bank. I've never worked in a financial institution before so this shall be an interesting experience. The first week has been filled with learning some proprietary programming languages. This next week I am looking forward to two days of financial and business training, which will give me an overview of the business area I'm in and the whole financial ecosystem.



www.imperial.ac.uk/campus_life/studentblogs

Working out for healthy minds

The College's Occupational Health Service and Sport Imperial ran a series of free activities as part of Mental Health Awareness Week from 13–19 May.

This year's campaign focuses on the theme of physical activity. According to the Mental Health Foundation, which is running the campaign, regular physical activity can increase self-esteem and reduce stress and anxiety. It can also play a role both in preventing and alleviating mental health issues.

“Regular exercise can boost self-esteem and help with concentration and sleep”

Events taking place at South Kensington Campus included meditation classes and occupational health drop-in sessions.

Claire O'Brien, Director of Occupational Health, said: “We demand a lot of ourselves – balancing work, studies and family life – yet very few of us talk about our mental health and well-being and fewer

still invest in it. Regular exercise can boost self-esteem and help with concentration and sleep. The great news is you don't need any special training or equipment to reap the rewards from going for a brisk walk at lunch time.”

Regular free activities offered by Sport Imperial include a running club that meets every Monday from 12.15–13.00 and Tuesday from 07.15–08.00, and group power-walking sessions every Wednesday from 12.15–13.00

Other services and support available for staff and students include free and confidential counselling for staff and their families; the Equality and Diversity Unit, the Disability Advisory Service and the Chaplaincy Centre.

—LUCY HANDFORD, COMMUNICATIONS AND PUBLIC AFFAIRS

For more information visit: www.imperial.ac.uk/occhealth

Imperial student crowned top science speaker

Regular attendees at Imperial's events might already be familiar with PhD student Leon Vanstone's (Aeronautics) brand of ebullient science communication – but he's now set to go global after winning the FameLab UK final last month.

FameLab was started in 2005 by Cheltenham Science Festival in partnership with NESTA, a charity that works to increase the innovation capacity of the UK. Now a worldwide competition run with the British Council, it has seen more than 5,000 young scientists and engineers participate in 23 different countries.

In the annual competition, scientists from across the UK compete to entertain and engage an audience about a scientific topic in only three minutes. Leon became the first engineer to win, beating off finalists from the University of Oxford, UCL and the



“Scientists from across the UK compete to entertain and engage an audience”

Wellcome Trust by describing the wonder of the Mars Rover landing safely on the surface of the red planet.

He will now go on to compete against FameLab winners from 20 other countries at the Cheltenham

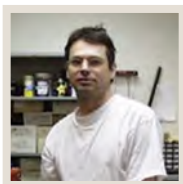
Science Festival in June.

Leon is a regular volunteer at the Reach Out Lab and also appeared as a 'soapbox scientist' at this year's Imperial Festival answering big science questions from visitors.

He said: “Obviously it was nice to win, although I was quite surprised as there were many strong acts that night. I'm looking forward to the Cheltenham Science Festival and hope to do some work with other FameLab finalists”.

Leon takes a prize of £1,750, part of which he must spend on a science outreach project. He is considering using the money to create a series of 'how to' videos, explaining what it takes to be a brain surgeon or a rocket scientist.

—KERRY NOBLE, COMMUNICATIONS AND PUBLIC AFFAIRS



INVENTOR'S CORNER

Future physio

Etienne Burdet is Reader in Human Robotics in the Department of Bio-engineering. His research integrates neuroscience and robotics to investigate human motor control and develop assistive devices for people whose movement is impaired, particularly those who have had a stroke.

Why have you focused on stroke patients?

Stroke is the leading cause of severe physical impairment in the developed world. After a stroke, most patients are brought to the hospital for therapy to get them mobile and discharged quickly; little training is performed with the upper limbs. However, we believe that this is vitally important for daily living and there is a real need for a home-based rehabilitation system.

How have you achieved this?

We've integrated robotic tools with a computer game interface to create a touchscreen table that responds to objects fitted with sensors that are placed on it. Patients are encouraged to repeat movements with these objects by interacting with a game on the table. For example, a patient might be asked to simulate an everyday task using our tools, such as opening a lid. We can then examine their performance and encourage them to repeat or change



An early prototype of Etienne's rehab platform

their movements. The tasks can be adapted to patients' capabilities and an affirmative system provides incentives to improve; we encourage the patient to independently solve a problem. Our system is affordable, comprehensive and easy to use.

What are the future applications?

This could potentially be used by anyone with an upper limb deficit caused by a neurological disorder. For example, we have some data from infants with cerebral palsy, who often have a weaker hand that they avoid using. We have developed toys with sensors that measure how the child moves and encourages them to use both hands to the point where the brain does this naturally, without prompting.

—KAILEY NOLAN, IMPERIAL INNOVATIONS

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

course review



By course attendee Dr Monica Marinescu (Earth Science and Engineering), Research Associate

Postdoc Development Centre pop-up workshop on EPSRC fellowships

Why did you go on the course?

I was at the beginning of my second year as a postdoc, and starting to define my career path. I was curious about fellowship opportunities and any behind-the-scene details.

What did you learn?

The one-hour course gave me a good overview of the categories of EPSRC (Engineering and Physical Sciences Research Council) fellowships, the timeframe of the process, and criteria for successful applicants and common pitfalls. It also provided a digested version of the EPSRC guidance document, with a set of links to other helpful resources. The Q and A session at the end was also very informative, as I heard the problems and worries other researchers have encountered at different stages along the application process.

How has it been helpful in your role?

The information gathered helps me establish a focus in juggling the different roles one has as a research associate. I have a clear idea about the breadth of skills I need to develop and the achievements I should target and by when, so that I can prioritise my activities.

VOX POP

Graduating Masters and PhDs share their thoughts on the big day

The first truly sunny day of the year after an unusually cold spring conspired to make the Postgraduate Graduation Ceremonies 2013 particularly memorable. Reporter caught up with graduands around campus and asked them how they were feeling on the big day and about their plans for the future.



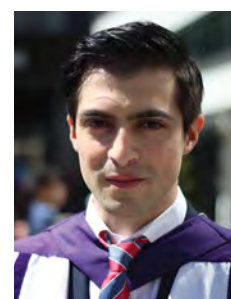
— it's a good blend between business and technical expertise."
EGWONO KELVIN OKPOKO, PHD CHEMICAL ENGINEERING

"It's a fantastic experience to be here and I think it's one that I will cherish for a really long time. I've got a job back home in Nigeria working in the chemical industry as a strategy analyst



lishing group, and I'm planning to complete a Vogue diploma there."
ANFISA BULGAKOVA, MSC STRATEGIC MARKETING

"To have graduation at the Royal Albert Hall is just amazing, it's so beautiful. At the moment I'm moving towards fashion. I'm taking a course at Condé Nast College, part of the large pub-



DOMENICO CORAPI, PHD COMPUTING

"I'm working for a bank in London at the moment but as for future plans I'm not sure, we'll have to see. My short-term plan is to become a British citizen; I'm actually taking the test tomorrow!"

obituaries



STRUTHER ARNOTT

Struther Arnott CBE FRS, Visiting Professor and Senior Research Fellow at Imperial, died on 22 April aged 78. Professors Naomi Chayen and John Squire (Surgery and Cancer) pay tribute to an exceptional scientist.

Struther made his name contributing to research that revealed the structure of DNA whilst working in the lab of Maurice Wilkins (a 1963 Nobel laureate alongside Watson and Crick) at King's College. He developed new models to analyse X-ray diffraction patterns of fibrous polymer structures. He was a pioneer in this regard and was particularly known for his ability to visualise how DNA sequences might arrange themselves to interact with proteins and drugs.

In 1970 Struther moved to Purdue University in Indiana, USA, becoming Head of Biological Sciences and later Vice-President for Research and Dean of the Graduate School. He returned to the UK in 1986 to become Principal and Vice Chancellor of the University of St Andrews, which flourished under his leadership. He became a Visiting Professor at Imperial in 2000, based in the Sir Alexander Fleming Building, and was known for his work with students in the Faculties of Medicine and Engineering respectively.

As a colleague and friend, Struther would invariably light up a room with his presence and was always fun to be with. He was interested in people, knowledgeable in a very wide range of topics and generous in helping others, whatever their status or background. For him it was never a burden.

It was a privilege to know Struther and he will be greatly missed.

long
service

Staff featured in this column have given many years of service to the College. Staff listed below celebrate anniversaries during the period 1 April–30 April. The data is supplied by HR and is correct at the time of going to press.

20 years

- Professor Martin Allday, Professor of Virology and Cell Biology, Department of Medicine
- Mr Mark Brookes, Receipt and Despatch Assistant, Faculty of Medicine Centre
- Dr Philip Ramsden, Principal Teaching Fellow: Cross-Curricular Maths, Department of Mathematics

30 years

- Phillip Ramsdale, Senior Supervisor Groundsman, Sport and Leisure Services

40 years

- Professor David Chadwick, Professor, Department of Chemical Engineering

SPOTLIGHT

Phillip Ramsdale, Senior Supervisor Groundsman, Sport and Leisure Services
30 years



As a groundsman at Harlington I've met many well-known people down the years, particularly working with Chelsea Football Club. They used the ground as a training facility until 2005, after which Queens Park Rangers FC took over. We also had the England rugby team train here under Martin Johnson. The College has changed quite a lot in 30 years. It's much more commercially orientated than when I first arrived. On the whole I have enjoyed working at Imperial and they have been a good employer. I'm now looking forward to retiring in just under two years' time.

Hack for victory

The term 'hacker' might conjure up negative connotations of disruption and fraud, but hacking hardware and software also has the potential to improve, and even save, lives.

This was demonstrated at the Hackathon event, which hosted over 100 computer programmers, developers and technologists at Imperial from 19–21 April, as part of the Urban Prototyping (UP) Festival.

In one challenge, programmers were given access to data from the Hampshire and Dorset Fire Brigades to help them develop digital technologies that could keep firefighters safe. Currently there is no system for firefighters to detect temperature surges – a serious cause of death on duty.

Temperatures can rise hundreds of degrees in seconds if a fire is hit with a blast of air, for example, when a window bursts. The risk has increased as body protection has become more effective, since firefighters are less able to

sense sudden temperature changes.

A group of hackers called 'Team Fire' developed a computer program for a sensor that could fit neatly inside a firefighter's helmet, monitoring temperature surges during a fire. Vibrating when it detects a rapid fluctuation in temperature, the sensor would alert the firefighter, so that they could make quick exit from the building.

Other finalist projects included a mobile app to coordinate information between emergency services and citizens in real time. The app was designed to address the challenge of slow information gathering during crisis situations, such as riots or floods.

Commenting on the Hackathon, Research Fellow Dr Catherine Mulligan (Business School), who helped coordinate the event, said: "The ideas that came out from the Hackathon were really inspiring and exciting. This is just an example of how the UP Festival can harness

"The Festival can harness some of the public's most innovative ideas and see them come to life"



some of the public's most innovative ideas and connect them with the funding opportunities available to see them come to life and make a difference to society."

—MAXINE MYERS, COMMUNICATIONS AND PUBLIC AFFAIRS

The Urban Prototyping Festival runs until 26 June:
<http://uplondon.net/>

Welcome new starters

Ms Carmen-Sorina
Agarafinei, Accommodation

Ms Folake Akinduro,
Life Sciences

Dr Jordan Ang,
Bioengineering

Mr Alistair Appleby,
Educational Quality

Ms Yulia Bizyukova,
Accommodation

Mr Stephen Blake,
Business School

Miss Katie Chappell,
Surgery and Cancer

Mr Erik Chavez,
Business School

Ms Shin-Yi Chiou,
Surgery and Cancer

Miss Shanas Choudhury,
Bioengineering

Miss Coreen Cole, EYEC

Ms Suzanne Cooney,
Computing

Mr Michael Cutler, NHLI

Miss Punam Dahya, NHLI

Mr Mark David,
Surgery and Cancer

Dr Kengo Deguchi,
Mathematics

Dr Amutha Devaraj,
Materials

Mr Luke Dunning,
Life Sciences

Mrs Izabela Glegola-
Madejska, Life Sciences

Dr Krishma Halai, NHLI

Dr David Holland, ICT

Mr Nik Ilukkumbure, ICT

Dr Rachel James, Medicine

Mr Xavier Jeanbourquin,
Chemistry

Dr David Johnson,
Computing

Miss Emilie Karafillakis,
Public Health

Mr Angelos Kassianos,
Public Health

Ms Mary Kavanagh,
Faculty of Medicine

Dr Bernadette Khoshaba,
Public Health

Miss Nicole King, Medicine

Dr Allan Kiprianos, NHLI

Dr Mindaugas Kirkus,
Chemistry

Dr Jozsef Kophazi,
Mechanical Engineering

Miss Ruth Lismore-Burns,
Faculty of Medicine

Miss Samina Malik,
Surgery and Cancer

Mr Jared Marklew, Chemistry

Miss Deborah McElroy,
Surgery and Cancer

Ms Hortencia McKechnie,
Medicine

Miss Alex Moore,
Faculty of Medicine

Miss Tahmila Nahar,
Materials

Mr Peter Newton,
Mechanical Engineering

Ms Judy O'Connor,
Clinical Sciences

Mr Abdul Oyede, Medicine

Dr Greg Parston,
Surgery and Cancer

Mr Pavan Parthyally
Narasimhareddy, ICT

Dr Kirti Patel,
Faculty of Medicine

Dr Stevin Pramana,
Materials

Dr Mays Raheem,
Public Health

Mr James Robinson, Finance

Miss Gintare Rutkauskaitė,
Medicine

Dr Zahid Sattar, NHLI

Mr Nicholas Sen,
Clinical Sciences

Miss Sylvia Sheppard,
Estates

Miss Jennifer Simmonds,
EYEC

Dr Cephas Small, Materials

Dr Hannah Taylor, Medicine

Miss Samantha Taylor,
Surgery and Cancer

Mr Marios Tomazou,
Life Sciences

Dr Lorainne Tudor Car,
Public Health

Mr Feng Wang,
Mechanical Engineering

Dr Hiroko Yaguchi, Medicine

Dr Corin Yeats, Public Health

Dr Xiaotian Zhang, EEE

Dr Siyang Zuo, Computing

Farewell moving on

Mr Alan Jones (34 years),
Estates

Mr Martin Agombar,
Faculty of Engineering

Dr Bashar Ahmad, EEE

Dr Roxana Alexandrescu

Dr Carmelo Andujar
Fernandez, Life Sciences

Mr Steve Annett, Physics

Dr Alberto Artola,
Bioengineering

Mr Edward Bennett, Catering

Mr James Brash,
Clinical Sciences

Dr Hugo Bronstein,
Chemistry

Dr Rey Carabeo (5 years),
Life Sciences

Ms Bianca Donges, NHLI

Miss Alexa Duff, Medicine

Miss Philippa Egan,
Business School

Dr Avgoustinos
Filippoupolitis (5 years), EEE

Dr Daniela Gamberini,
Business School

Dr Helena Gardiner (16
years), Surgery and Cancer

Ms Julaiha Gent (6 years),
NHLI

Ms Cecilie Hansen,
Research Office

Ms Raunaque Hasnat,
Public Health

Mr Ben Henderson
(10 years), ICT

Dr Shuxin Hou,
Chemical Engineering

Mr Anthony Hughes,
Security Services

Dr Ali Khat, EEE

Dr Polyxeni-Margarita
Kleniati, Chemical
Engineering

Dr Jacqueline Leslie,
Public Health

Dr Ilaria Marigo, Medicine

Miss Marta Mauri, Medicine

Mr Donald McLachlan,
Sport and Leisure

Dr Alexander Miras,
Clinical Sciences

Dr Themistoklis
Prodromakis, EEE

Dr Katia Ruggero, Medicine

Dr Iulia Salaoru, EEE

Mr Franco Tembo, Catering

Mr Russell Watson,
Business School

Dr Jingyue Zhao, NHLI

This data is supplied by HR
and covers the period 9 April–
29 April. 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.

Wanted: new art from staff and students

Running from 8 May–31 May at the Blyth Gallery, *Unsung* is an exhibition that showcases 14 different works of art by fourth year medicine students taking the medical humanities course. Pictured is *An Inconceivable Truth* by Chao Kowa, exploring the postcode lottery of NHS provision of *in vitro* fertilisation therapy in the UK.

The Blyth Gallery is currently seeking new art from staff and students to display in upcoming exhibitions. Tutor and curator at Blyth, Mindy Lee, is offering free personalised guidance and support in developing creative ideas. The deadline for applications is 3 June with results in July.

For more information visit: bit.ly/JoLgyv





24 MAY ▶ PUBLIC LECTURE

Imperial College Business School research exhibition

Did you know the research carried out at Imperial College Business School is used in the development of healthcare systems, infrastructure, government policies and major

industries? The effect of our research extends far beyond the realm of the classroom, and through it we shape the lives of millions of people in the UK and internationally. This drop-in exhibition will digitally showcase the leading research projects carried out by the Business School, including hedge funds, entrepreneurship, risk and insurance, and health management.



28 MAY ▶ PUBLIC LECTURE

The doctor will sense you now

Doctors have always taken measurements from patients to aid in diagnosis and monitor their treatment. Recent advances in engineering and measurement science are now allowing us to develop a new type of clinical

measurement where tissue health is tracked in real time. Professor Martyn Boutelle (Bioengineering) uses his inaugural lecture to explore how to build biomedical instrumentation, the challenges of using it in the operating theatre and the intensive care unit, and what to do with all the data obtained.

20 MAY ▶ PUBLIC LECTURE

Global health innovations: products, policy and platforms

Dr Julio Frenk, Dean of the Harvard School of Public Health



21 MAY ▶ PUBLIC LECTURE

Myocardial contrast echocardiography: a technique comes of age

Professor Roxy Senior (NHLI)

23 MAY ▶ MUSIC

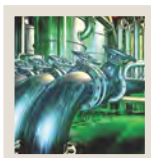
Lunchtime concert

Mengyang Pan (piano)

23 MAY ▶ PUBLIC LECTURE

Molecules on best behaviour

Professor Claire Adjiman (Chemical Engineering)



23 MAY ▶ PUBLIC LECTURE

Imperial Business Insights

Gabriele Duesberg, Vice-President, JP Morgan

28 MAY ▶ SEMINAR

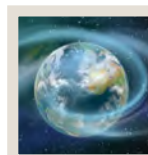
Linking DNA variation to changes in gene expression

Professor Douglas Higgs, University of Oxford

29 MAY ▶ PUBLIC LECTURE

Heavenly turbulence

Professor Tim Horbury (Physics)



30 MAY ▶ PUBLIC LECTURE

Materials at their limit

Professor John Dear (Mechanical Engineering)

4 JUNE ▶ SEMINAR

Mining the gap – three Royal School of Mines benefactors: Alfred Beit, Otto Beit and Julius Wernher

Anne Barrett, College Archivist and Corporate Records Manager

4 JUNE ▶ PUBLIC LECTURE

Unveiling the secrets of the universe

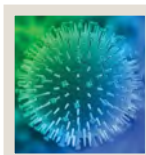
Professor Jim Virdee (Physics)



21 MAY ▶ SEMINAR

Using viruses to enhance the efficacy of tumour-specific T cells

Professor Cliona Rooney, Baylor College of Medicine, Houston



take note

College Cafe

South Kensington Campus has a brand new place to eat – the College Cafe – offering handmade sandwiches from the carvery, freshly made smoothies from the juice bar and boutique espresso – a new range of coffee. Accessible from the Main Entrance and Dalby Court, it is open Monday to Friday 08.00–18.00.



MEET THE READER



Hailey Smith, HR Administrator, Human Resources Division

What are you doing in the picture?

I'm waiting for the Imperial College Staff Choir to start. We are a group of singers from all over the College, of mixed ability and experience, who like to get together and sing a really wide and fun selection of music! We meet every Wednesday at 13.00.

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

I would send out some roving reporters to investigate the wonderful staff clubs that have sprung up throughout the College, such as the knitting and photography clubs. The Support Services Social Committee also runs get-togethers like lunchtime walks in Hyde Park.

Who would be your cover star?

It would have to be the choir's conductor, Christina, and pianist, Robin. Both are undergraduate students and dedicate so much of their own time and enthusiasm to teaching us to sing.

—CALUM MACLEOD FOR COMMUNICATIONS AND PUBLIC AFFAIRS

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