



# Centenary celebrations

Queen bestows new charter for  
Imperial's birthday

 CENTRE PAGES



**HEALTH MINISTER**  
Professor Sir Ara Darzi  
appointed to the  
government

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**STAFF PARTY ROCKS**  
**SOUTH KENSINGTON**  
Roving reporters  
capture the day

PAGES 8-9

100 years of living science

# 100

## in brief

### New Paediatric Research Unit declared open

The Paediatric Research Unit, the UK's first unit solely devoted to paediatric clinical research, was officially opened on 9 July. The Unit is run by researchers from Imperial and St Mary's Hospital, and is based next to the hospital's paediatric wards in Paddington. Professor John Warner, Chair in Paediatrics, Head of the Department of Paediatrics at Imperial and consultant paediatrician at St Mary's Hospital, spoke at the opening. He explained that researchers should be designing therapies specifically for children and their problems, rather than scaling down treatments that were created for adults. "In many respects the make-up of children differs from that of adults:

they have different metabolisms; their organs are not as mature as adults'; and diseases can behave differently in children's bodies. To create the best therapies for children we need to include them in our research."



### New interim Head for SORA

Professor Mervyn Maze has become the Interim Head of the Division of Surgery, Oncology, Reproductive Biology and Anaesthetics from 1 July, following Professor Sir Ara Darzi's appointment as Parliamentary Under Secretary at the Department of Health (see page 3). Professor Maze is Head of Department of Anaesthetics, Pain Medicine and Intensive Care, Campus Dean for the Chelsea and Westminster Campus, and an Honorary Consultant Anaesthetist at Chelsea and Westminster Hospital. He will serve as Interim Head until the permanent arrangements for a new Head of Division are concluded. Professor Nagy Habib will succeed Professor Darzi as Head of Department of Biosurgery and Surgical Technology.

### Centenary podcast now available

Great figures from Imperial's past are brought back to life in the Centenary edition of the College's monthly podcast. July's podcast allows legendary and well-loved figures including Dennis Gabor and Eric Laithwaite to speak again about their work via archive recordings recently discovered by Colin Grimshaw of Communications. The podcast also offers an interview with the Rector, giving his perspective on Imperial's last 100 years and looking forward to what the future might hold.

► The podcast is available to download on the first working day of each month at [www.imperial.ac.uk/aboutimperial/pressoffice/podcasts](http://www.imperial.ac.uk/aboutimperial/pressoffice/podcasts)



## AHSC news

### • Have your say

The twelve-week consultation on the proposal to create an Academic Health Science Centre (AHSC) will close on 31 July. The response so far has been positive, with approximately 70 per cent of the comments received supportive of the idea. More views from staff are needed and there is still time to have your say. To register your opinion online, visit [www.ahsc.org.uk](http://www.ahsc.org.uk).

### • Positive response

Patient and Public Involvement Forums and Black and Minority Ethnic Forums, Friends meetings, staff meetings and public meetings have provided opportunities for over 1,000

people to ask questions and to express their views. A further 80 people packed into the joint overview and scrutiny committee meeting at Portcullis House.

### • Intranet update

Staff meetings have now been held across the campuses. Professor Steve Smith's presentation and all the questions and answers are on the consultation pages of the new AHSC intranet at [www.ahsc.org.uk/intranet](http://www.ahsc.org.uk/intranet).

### • Mission takes shape

A working conference was held for key clinical, managerial, teaching and research leads from across the three organisations at

Kensington Town Hall on 10 July. Delegates considered how to achieve the mission and goals of the AHSC.

### • AHSC appointments

The Joint Steering Group has agreed that senior posts in the AHSC will be for the integrated organisation and not specifically for the NHS or Imperial (following the same style as the joint Principal/Chief Executive role). Job descriptions, person specifications and an appointments process are being developed for executive appointments to the board, which will be responsible for setting the strategic direction for the AHSC from 1 October.

## New microscopy facilities in focus

Two new imaging facilities for looking at cells and molecules were officially opened by the Rector on 4 July. The £1.5 million facilities will provide researchers from across the College with leading-edge technology for imaging across a range of scales, from whole living organisms, down to the proteins inside cells.

The first new centre is called the Facility for Imaging by Light Microscopy (FILM) and is based in the Sir Alexander Fleming building. Led by the Faculty of Medicine's Professor Tony Magee, it contains eight powerful optical microscopes, which can magnify cell samples 2,000 times.

The second facility, designed to complement the work in FILM, is the Electron Microscopy Centre. Led by Professors Marin van Heel and Paul Freemont from the Division of Molecular Biosciences, this centre has five electron microscopes which can



Dr Raffa Carzaniga, Manager of the new Electron Microscopy Centre, uses one of the new electron microscopes which magnifies samples up to 500,000 times.

magnify samples by 500,000 times, down to a resolution of just one nanometre. This facility will allow researchers to see the 'ultra structure' of cells – meaning the molecules inside the cell. It will also be used by Imperial scientists to pioneer a new kind of imaging that bridges the gap between these nano-scale images of cell components and the 'big picture' imaging of the whole cell using light microscopy.

— DANIELLE REEVES, COMMUNICATIONS



# Imperial Professor made health minister

**Imperial's Professor Sir Ara Darzi has been appointed as Parliamentary Under Secretary at the Department of Health, it was announced on 29 June.**

Sir Ara currently holds the Paul Hamlyn Chair in Surgery at the College, is Head of the Division of Surgery, Oncology, Reproductive Biology and Anaesthetics (SORA), and is widely recognised as one of the UK's leading surgeons in the field of minimally invasive and robot-assisted surgery. He will retain his Chair at Imperial during his new parliamentary appointment and will maintain his research and clinical commitments, including the supervision of students. He is also an Honorary Consultant Surgeon at St Mary's and the Royal Marsden NHS Trusts and is expected to continue his research activities and give frontline care to patients for one day a week.

Sir Ara, who will become Lord Darzi of Denham when he is introduced to the House of Lords on 19 July, has been asked by Prime Minister Gordon Brown and Health Secretary Alan Johnson to lead a review of the NHS that will advise on how to meet the challenges of delivering healthcare over the next decade. Key areas he will examine are high quality joined-up services for those with long term or life-threatening conditions, and integrated care across primary and secondary healthcare providers.



*"My entire career has been dedicated to improving the health of patients. It is a great honour and privilege to be asked by the Prime Minister to continue that work for patients across the country."*

The review follows Alan Johnson's announcement that the NHS should be "clinically-led, patient-centred and locally accountable". It will involve patients, doctors, nurses and other practitioners, and it is his experience as a clinician that Sir Ara intends to bring to his new role. He said: "I come from the frontline and will remain on the frontline, working with and learning from the talented and committed people in the NHS. I will be taking their experiences and knowledge with me and will be their advocate at the heart of Government." Sir Ara will report his findings before the 60th anniversary of the NHS in July 2008.

Welcoming the appointment, the Rector said: "The Prime Minister has said that he wants to form a government of all the talents, and he could not have called upon a greater talent in healthcare to serve in his administration."

## Healthcare for London

Sir Ara was commissioned by the Government in September 2006 to review health services in London. His healthcare for London plan was published on 11 July and this 10-year vision states that the NHS needs to change if it is to meet the rising expectations of Londoners, improve the health of an expanding population, and provide value for money. One of his recommendations is the introduction of a network of 150 "polyclinics" across the capital, providing a complete range of services to meet all routine healthcare needs.

—ALEXANDRA PLATT, COMMUNICATIONS

## Rector presents prizes at annual Royal Regatta

In celebration of the College's Centenary, the Rector, Sir Richard Sykes, presented the prizes at this year's Henley Royal Regatta.

Unfortunately this year's event, held on 4–8 July, didn't see success for an Imperial team. The Imperial Prince Albert crew made a sterling effort in reaching the semi-finals, but lost by half a length to Goldie Boat Club. The University of London team went on to win the Cup.

In making the presentation the Rector praised the achievements of the winners, saying that there's no such thing as an easy race or an easy medal at the Henley Royal Regatta.

He underlined Imperial's deep bond with the event, and spoke of the "singular and guiding force" given by a team's coach. "At Imperial, we have been lucky enough to have figures like Charles Bristow, Chas Newens, and Bill Mason to lead our club. ...They each share one thing: they are inspirational figures. How else would students push themselves beyond their limits in events such as this?"

## Imperial shares a deep bond with the Regatta

### Row-past

Some of Imperial's oarsmen provided a spectacle in celebration of the College's Centenary when they performed a row-past at tea time on the Saturday of the Regatta. The two eights were the record-holding Ladies Plate eight of 1992

and Thames Cup crew of 1995, which contained three of the Sydney gold medal eight from 2000 – Luka Grubor, Simon Dennis and Louis Atrill, who started his rowing career at Imperial. Another crew member, Steve Ellis, became part of the Great Britain lightweight crew which won the World Championship gold in 1994. Imperial is the only club to hold three current full course records, the third being the Prince Albert, a record established in 2006.

—NAOMI WESTON, COMMUNICATIONS



The Rector presents the Prince Albert Challenge Cup at this year's Henley Royal Regatta.

# media mentions

—NAOMI WESTON, COMMUNICATIONS

THE DAILY TELEGRAPH ▶ 28 JUNE

## Leaning Tower of Pisa saved by engineers

After a £20 million project, the famous Leaning Tower of Pisa is no longer leaning quite as much. The tower has been straightened by 18 inches, returning it to its position of 1838. Professor John Burland (Civil and Environmental Engineering) was the only British member of the 14-strong rescue committee. He told *The Daily Telegraph*: “We have to pay homage to the extraordinary success of the very delicate task of saving a monumental symbol of our history and of our civilisation. Italy has at its disposal a cultural sensitivity and technical competence of the highest level.” The straightening work involved the extraction of around 70 tonnes of earth from the northern side of the tower, causing it to sink on that side. Professor Burland added: “It has straightened a little bit more than we expected, but every little helps.”



THE DAILY TELEGRAPH ▶ 10 JULY

## A kind of magic

As Potter-mania reaches fever pitch just days before the release of the final book in J.K. Rowling’s celebrated Harry Potter series, *The Daily Telegraph* asked whether the magic of Harry’s world can be reconciled with the rational world of science. In terms of creating Harry’s invisibility cloak, the *Telegraph* reported that research by Sir John Pendry (Physics) has shown how a cloaking device could work by making light waves flow around an object—just as a river flows undisturbed around a smooth rock. However, Sir John urged caution, saying: “It is one thing to have an overarching theory that says cloaks are possible, but another to manufacture and market one. A lot of hard work lies ahead.”

BBC NEWS  
ONLINE ▶ 4 JULY

## Tiny movements affect giant microscope

The new Titan transmission electron microscope at Imperial is providing an oasis of peace beneath the streets of London, according to the BBC. With a machine that is able to image individual atoms, even the vibrations caused by talking too loudly are enough to disrupt a sample under the microscope. When scientists are operating at such small scales, tiny shifts can appear huge. Because of this, the scientists working with the microscope talk in hushed, respectful tones. “If the sample drifts, it kills the experiment,” Dr David McComb (Materials) tells BBC News Online. When it is running at full power, the microscope will be used to probe everything from new materials for ultra-fast computers to tissue samples that may shed light on diseases such as Alzheimer’s.



THE GUARDIAN ▶ 9 JULY

## A wet and windy June

After four weeks of thunderstorms and flooding, the Met Office has confirmed that last month was the wettest June since records began, but says the weather is set to improve over the coming months. The Met Office explains that Britain’s changeable weather is down to its location, with the Atlantic on one side and a large continent on the other. Weather forecasting starts by taking a detailed measure of the current state of the atmosphere: scores of instruments on weather balloons, satellites and ground observatories around the country continuously measure sunshine, air pressure, wind direction and temperature. The numbers are then fed into a mathematical model run on a supercomputer. “They do lots and lots of simulations with slightly different initial conditions just to see the range of possible outcomes, called an ensemble,” Professor Ralf Toumi (Physics) told *The Guardian*. “From the ensemble they deduce the most likely outcome.”

### Sign up for Imperial news

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## Tanaka Centenary Alumni Reunion

The first ever Tanaka Business School Alumni Reunion took place on 12–14 July to celebrate the College’s Centenary year, bringing together over 150 alumni, staff and current students. Alumni travelled from as far away as Russia, Egypt, Brazil and India for the three-day reunion, which kicked off with an introductory networking session on 12 July.

The weekend’s events aimed to foster the alumni network and provide an opportunity for alumni to find out about developments at the Business School.

On Friday, high profile business leaders and alumni led debates around the theme of how global business challenges are driving

change, before a Centenary reunion party in the evening. The following day, alumni had the opportunity to learn specifically about the School’s cutting edge research and meet with key academic staff.

Nicola Pogson, Alumni Manager in the Business School, was delighted to be welcoming alumni back in the College’s Centenary year. She said: “One of our strengths as a School is the strong links that tie our alumni together. We’re delighted to get this opportunity, not just to greet our graduates, but also to give something back to them, in the way of cutting edge research and informed debate on the future of business.”



The atrium is transformed into a red wonderland for Tanaka Business School’s alumni reunion party.

Above all, we’re looking forward to chatting to our alums and seeing how their experience at the School has coloured their careers since then.”

—NAOMI WESTON, COMMUNICATIONS



# Hawking joins world's leading physicists at symposium

Some of the world's leading physicists gathered at Imperial at the beginning of the month for the 13th International Symposium on Particles, Strings and Cosmology. Over 200 delegates from around the world attended more than 100 talks by renowned scientists including Professor Stephen Hawking and Nobel prize-winner Professor Gerard 't Hooft.

The last day of the symposium saw a special day of public talks in honour of the late Nobel Laureate Professor Abdus Salam, who came to Imperial 50 years ago. Professor Salam won the Nobel Prize in Physics in 1979 for his work on 'Electro-Weak Theory', which is part of scientists' efforts to provide a unified description of the four fundamental forces of nature.

The conference also brought together experts from



three distinct areas of physics: particle physicists, who study the elementary particles that make up matter and radiation; string theorists, whose model of physics is built on one-dimensional extended objects called strings; and cosmologists, who use observations and mathematical tools to analyse the universe as a whole. The aim of the event was to encourage beneficial collaboration across these distinct disciplines and to promote the exchange of ideas.

Although many of the conference's speakers and

delegates were theorists, a significant proportion of the event was also dedicated to the major forthcoming experiments in these fields. Speakers addressing these issues included Imperial's Professor Tejinder Virdee, international spokesman for the CMS experiment at CERN, which hopes to detect new particles when the Large Hadron Collider particle accelerator is activated in 2008.

Dr Arttu Rajantie, Physics, the Chair of the symposium's organising committee, said: "I'm delighted that such an eminent list of speakers took part in this event, and I hope that many new links and opportunities for collaborative work were developed here at Imperial over the course of the symposium."

— DANIELLE REEVES, COMMUNICATIONS

## Physicist picked to deliver Royal Society lecture

Professor Martin Plenio from the Department of Physics has been chosen to deliver the Royal Society's 2008 Clifford Paterson Lecture. Professor Plenio will speak about the opportunities emerging from his group's research into information theory and quantum physics, and explain how fundamental research currently being carried out is paving the way for the quantum computers and quantum communication devices of the future.

Professor Plenio said: "Although the broad remit of the lecture is engineering, quite a large number of previous speakers have been physicists too. The research I do could well be termed 'quantum engineering' and certainly bridges the gap between these two disciplines."



He explained that lectures like this give researchers the important opportunity to communicate the very latest ideas emerging in science, and shared his hope that communicating his work may inspire more young scientists to consider a career in research. He added: "What's more, I often find that when I have to re-examine my work to prepare for a talk like this, it provokes a new and deeper understanding of the topic for me."

The annual Clifford Paterson Lecture was endowed by the General Electric Company Limited in 1975 in honour of Clifford Paterson, who undertook the creation of the GEC Research Laboratories in 1919. He was elected a Fellow of the Royal Society in 1942.

— DANIELLE REEVES, COMMUNICATIONS

## awards and honours

### Russian energy research award

Chemical engineer Geoffrey Hewitt is one of only three winners of Russia's energy science awards, bestowed by President Vladimir Putin last month, for his research into the physics of heat. The awards are presented annually by the Global Energy Foundation in recognition of work on energy efficiency, heat conservation, alternative energy sources and new power-generation technologies. Professor Hewitt shares the prize of 30 million roubles (approximately £580,000) with energy researchers from Russia and Iceland.



### First prize for postgrad in granulation poster competition

Imperial postgraduate Mansoor Ansari won first prize in a poster competition judged on both scientific merit and presentation skills at the University of Sheffield last month. The competition formed part of the Third International Granulation Workshop, which aimed to investigate granulation, one of the least understood solid processing steps. Mansoor is a final year Chemical Engineering PhD student, supervised by Dr Frantisek Stepanek.

### Japanese prize for Professor Mace

Research on conservation, biodiversity and extinction risk by Professor Georgina Mace has been recognised with the award of the prestigious 2007 International Cosmos Prize. Professor Mace, Director of Imperial's NERC Centre for Population

Biology, wins the 40 million yen prize for her work on global environmental changes and their potential impact on biodiversity and people.



### Correction/clarification

The interview with Professor Costas Pantelides on page 5 of issue 179 of *Reporter* incorrectly stated that PSE company sales have increased annually by two per cent over the past four to five years. This should in fact have read twenty per cent.

## Gene linked with childhood asthma identified

Imperial research gives hope for new therapies

Imperial researchers have identified a gene that is strongly associated with a risk of developing childhood onset asthma, the most common chronic disease of childhood in the UK. The findings were published online in *Nature* on 4 July.

Asthma affects one child in seven in the UK, but until now the combinations of genetic and environmental factors that cause it have been poorly understood.

In the genetic study of more than 2,000 children from Germany and the UK, the scientists established that genetic markers on chromosome 17 altered the levels of a new gene called ORMDL3, which was at a higher level in the blood cells of children with asthma than in those without. The results of the study suggest that the disease-associated version of the gene increases the risk of having asthma by 60–70 per cent.

Dr Miriam Moffatt of the National Heart and Lung Institute, who is one of the first authors of the study, explained how the research will further knowledge of the disease: "These novel findings do not explain completely how asthma is caused, but they do provide a further part of the gene-environment jigsaw that makes up the disease. We and our colleagues are currently preparing even bigger studies to find other genes of smaller effect, and to relate these to environmental factors that protect against asthma. Our eventual aim is to be able to prevent the disease in susceptible individuals."

— LAURA GALLAGHER, COMMUNICATIONS



## Aphids create 'bomb' to fight predators

Cabbage aphids have developed an internal chemical defence system which enables them to set off a mustard oil 'bomb', says new research published in the journal *Proceedings of the Royal Society B* on 11 July.



The study shows for the first time how aphids use a chemical found in the plants they eat to emit the deadly burst of mustard oil, which kills, injures or repels predators, such as ladybirds. This saves the aphid colony from attack, although the individual involved usually dies in the process.

Dr Glen Powell from the Division of Biology is one of the paper's authors. He explained: "Our study seems to show that aphids that develop wings cease to store

this chemical in their blood as they mature, as they don't need the mustard oil 'bomb' to defend themselves from predators when they can just fly away. This is a great example of the way in which a species provides an ingenious method of protecting itself, whatever the circumstances."

When the aphids feed on cabbages, they consume chemicals called glucosinolates, which are then stored in the aphids' blood. In the event of a predator attack, the glucosinolates in the blood come into contact with an enzyme called myrosinase, produced by the aphids, catalysing a violent chemical reaction which releases mustard oil.

— DANIELLE REEVES, COMMUNICATIONS



## Fight against diabetes could be helped by targeting new molecule

The fight against diabetes could be helped by Imperial research published on 6 July in the *Journal of Biological Chemistry*. College scientists have found that targeting a newly discovered molecule could enhance the body's ability to produce insulin, the principal hormone that regulates the uptake of glucose. If the body does not produce enough insulin, this can cause diabetes.

The molecule in question is a microRNA known as miR124. The researchers found that miR124 inhibits the production of insulin in the pancreas by controlling how several genes are expressed in the body's beta cells, which secrete insulin.

DNA encodes proteins via an intermediate messenger known as RNA, which is then 'translated' to create different proteins. MicroRNAs bind to and inhibit the translation of selected messenger RNAs. They block the synthesis of

the encoded proteins, which interferes with processes carried out by cells.

The researchers believe that if drugs could be developed to suppress the action of miR124 and related microRNAs in people with diabetes, this could enable more insulin to be produced, helping to combat the condition.

Professor Guy Rutter from the Division of Medicine, one of the authors of the research, said:

"Such findings may be useful in the fight against a disease which affects more than 5 per cent of the population"

"Scientists only discovered the importance of microRNAs a few years ago. Discovering that this particular microRNA plays a fundamental role in

the control of insulin production is exciting, and may allow us to develop new tools to treat diabetes. Such findings may be

useful in the fight against a disease which affects more than 5 per cent of the population and whose incidence is growing yearly."

— LAURA GALLAGHER, COMMUNICATIONS





# Scientists steal the show at summer exhibition

Imperial scientists were out in force at this year's Royal Society Summer Science Exhibition, an event that showcases the best of UK science, engineering and technology. Of the 23 interactive exhibits on show, four featured Imperial's research. During the four days of the event, held 2–5 July, more than 4,000 people took the opportunity to explore the exhibition.

## Imperial's surgeons a cut above the rest



Dr Roger Kneebone and his team from SORA gave the public a chance to see how good a surgeon they could be at the exhibition, thanks to virtual surgery techniques developed at Imperial.

The procedures, using simulation technology invented to improve surgeons' training

and performance without risk to patients, allowed visitors to perform part of a virtual keyhole operation on a simulator that looks like an anaesthetised patient. Using real surgical instruments they were also able to stitch a wound and remove a fatty lump from under the skin, known as a lipoma, on actors who were wearing a strapped-on prosthetic model.

Simulation is widely used, but the College team has pioneered the use of the combination of actors and models, and putting computer simulators in a realistic setting.

## Ear 'ere, are you an athlete?

Visitors were able to try out intelligent miniaturised body sensors which are being developed by Professor Guang-Zhong Yang and colleagues from the Department of Computing. The sensors, which are placed in the ear, can monitor athletic performance, tailor training programmes to the individual's physical abilities, and modify the programme as the athlete improves.

The unique design of the sensor and its signal processing power, inspired by the semicircular canals of the inner ear, mean that the sensor is highly sensitive, easy to wear, and non-intrusive. The device allows the detection of a range of indicators including the walking cycle, steady and



unsteady movement, acceleration, and spinal and joint shock wave transmission.

Traditionally, the measurement of athletic performance is undertaken in laboratories, but it is difficult for these methods to replicate the exact physical and mental environment of the athlete during competition. The team hope their sensor will revolutionise this process.

## Build a better BioBrick

A stand demonstrating the brand new science of 'synthetic biology' gave visitors the chance to see how scientists and engineers are proposing to make counters, sensors, calculators and other devices out of living bacteria.



Posters and interactive computer displays described how pioneering researchers at Imperial are modifying DNA which is then put into E. coli bacteria cells to make living devices that do not exist in the natural world. Visitors also had the chance to mimic the work of the researchers by moving Lego

'BioBricks'—representing strands of DNA that instruct a cell to behave in a certain way—around a giant replica E. coli cell that had been chopped in half. Professors Richard Kitney, Department of Bioengineering, and Paul Freemont, Division of Molecular Biosciences, organised the exhibit and are leading the Imperial team which has already successfully produced a bacterial oscillator and is working on a bacterial NAND gate—both of which are vital components of a basic computer.

## Explosive sun exhibit leaves others in the shade



Scientists from Imperial, including Dr Steve Bradshaw from the Department of Physics, and collaborators from other British universities ran an exhibit explaining what happens when there is an immense eruption known as a Coronal Mass Ejection (CME) on the sun.

When CMEs occur, a mass of particles weighing roughly the same as Mount Everest is launched out into space. If a CME occurs in the direction of the Earth, the particles can cause significant problems to the electrical systems of spacecraft and satellites in orbit around the planet. Some CMEs have also been known to affect electrical power lines on Earth.

The stand featured three-dimensional videos and posters describing the journey of a CME from its initiation on the sun to its arrival at the Earth, and models of the satellites scientists use to observe them.

► For more information on these stories visit: [www.imperial.ac.uk/news](http://www.imperial.ac.uk/news)



# Staff party rocks South Kensington Campus

Staff gathered to celebrate Imperial's 100th birthday in style at the Centenary Staff Party on 11 July.

There was something to suit everyone's tastes, with the food on offer ranging from a civilised afternoon tea to a sizzling barbecue. Ears were also offered a treat with Prince's Gardens hosting a selection of live music reflecting the last 100 years. Out and about at the party the Reporter team caught up with some of the 3,900 staff enjoying the afternoon...

## A laid back Sunday afternoon on Dalby Court

Competitive streaks were on display on the croquet lawn, just one of the activities available on Dalby Court, which also hosted golf putting and bowls. With staff from Physics and Materials battling for success using their new-found mallet skills, there was some discussion among the colleagues over who was winning the match, but Dr Ben Wood, Physics, claimed to be in the lead. The group compared the area to a concrete seaside and were keen to see the party atmosphere return to Imperial in the future. Dr Julian Jones, Materials, said, "We should be doing this every year."

Nearby the Faculty of Medicine finance team relaxed

to the soothing tones of jazz after enjoying the fun of the fair, part of the Edwardian experience set up on the Queen's Lawn. Katy Sargeant and Sonia Hinze, Faculty of Medicine, won their collection of cuddly snakes on the darts and 'shoot the ring' stalls.

## Going back in time on the Queen's Lawn

Staff from ICT were also determined to win a cuddly toy by knocking down a tower of 10 tin cans using three balls. Shilpan Patel came close but with two cans still standing at the end of his turn couldn't claim the prize. Despite this disappointment, he and colleagues Richard Fearn and Paul Urquhart spoke highly of the day. Richard said, "Imperial is so big and it's difficult to meet staff from across the departments. Today's party is a great chance to chat to different people and is superb value. I wouldn't mind paying if we could run this event again."

Joe McGovern and Ed Da Silva were found enjoying an afternoon off from distributing post on the South Kensington Campus. Joe said, "This event shows the College's appreciation for its staff and is a fantastic opportunity for staff across the organisation to bond."

While queuing for cream tea outside the marquee, the Rector shared his thoughts on the party. He said, "Everyone I've spoken to is having a fantastic time and today has engendered a great sense of community. The different areas – Prince's Gardens, the Queen's Lawn and Dalby

Court – have worked so well and have offered something for everyone. We can't wait another hundred years to do this again."

## Prince's Gardens rocking through the ages

With the sun out, Prince's Gardens was the perfect venue for a range of bands celebrating the last 100 years. Acts ranged from the Charleston Chasers, playing music from the 1920s, to Fake That, a tribute to Take That, who stormed the charts in the 1990s. Soaking up the atmosphere in Prince's Gardens, Research Fellow Dr Dan Brett from the Department of Earth Science and Engineering commented: "The best thing about today is seeing all the faces from the College who you are not familiar with – it makes you realise how huge the organisation is." He added: "I have been here 10 years and it is an excellent place to do serious science."

– REPORTER TEAM

Congratulations to the winner of the Xbox 360 and games:  
Mrs Jean Bolger  
Project Management Office



XBOX 360

Generously donated by:

Microsoft  
**Research**

## 100 years of music

Pictured from top-bottom, Charleston Chasers, The Fab Beatles, Fake That and an Elvis tribute act kept feet tapping at Prince's Gardens.



To watch a film of the party visit [www.imperial.ac.uk/centenary/staffparty](http://www.imperial.ac.uk/centenary/staffparty)





Left to right:  
Dr Matt O'Donnell, Materials, Dr Ben Wood, Physics, Dr Julian Jones and Dr Gavin Jell, Materials, on the croquet lawn.



Dr Naheed Alizadeh, INSPIRE and the Rector put their best foot forward and started the dancing.



Katy Sargeant and Sonia Hinze, Faculty of Medicine Finance Team, won cuddly snakes on the darts and 'shoot the ring' stalls.



Paul Urquhart, Shilpan Patel and Richard Fearn, ICT, enjoy the fun fair.



### Vital party statistics

- 3,900 Total attendees
- 953 Attendees from non-South Kensington Campuses
- 6463 Bottles of beer
- 1745 Glasses of Centenary Wine
- 1228 Cans of drink
- 241KG Stir fried noodles from the Wok Stop
- 1742 Burgers served from the BBQ
- 813 Marshmallow and strawberry skewers dipped in chocolate



Staff enjoy a cream tea on the Queen's Lawn.

Prince's Gardens rocked through the ages with a range of live music from the last century.



# Royalty gathers to celebra



Staff and students lined the route between the IBE and Main Entrance with some being lucky enough to meet The Queen.



The Rector introduces Her Highness Sheikha Mozah Bint Nasser Al-Missned of Qatar to The Queen.

The Centenary of the foundation of the College was celebrated on 9 July with a ceremony in the presence of Her Majesty The Queen and His Royal Highness The Duke of Edinburgh.

The Queen and Duke opened the College's new Institute of Biomedical Engineering before taking part in an honorary graduation ceremony that saw the first ever Imperial degrees awarded to five distinguished figures, including His Royal Highness The Duke of Edinburgh.

The ceremony followed the bestowal of a Royal Charter by Her Majesty The Queen that declares the College an independent university in its own right after its withdrawal from the University of London.

The visit cemented a long-standing relationship between the UK's Royal Family and Imperial. The College stands on land purchased with the profits of Prince Albert's Great Exhibition of 1851 in fulfilment of his vision for a centre of science and culture in South Kensington.

The Rector, speaking on the day, said: "It was Albert's bold vision that created this hub of culture and science in South Kensington... Albert's imagination; his pioneering spirit;

his determination to pursue progress against the odds were characteristics that set the tone for Imperial at the outset and still play a huge part in its continuing success."

Other honorary graduates recognised on the day were Her Highness Sheikha Mozah Bint Nasser Al-Missned of Qatar, Dame Vivien Duffield, Mrs Lily Safra, and Professor Winston Wong (see page 13 for further details of our new honorary graduates).

– ABIGAIL SMITH, COMMUNICATIONS

► To watch a RealPlayer video stream of visit: [www.imperial.ac.uk/news](http://www.imperial.ac.uk/news)

*"It was Albert's bold vision that created this hub of culture and science in South Kensington"*





# te Centenary

## IBE opened by The Queen

The latest developments in robotic surgery and personalised healthcare technology were demonstrated for Her Majesty The Queen when she officially opened the Institute of Biomedical Engineering during her visit last week.

The royal party, which included His Royal Highness The Duke of Edinburgh and Her Highness Sheikha Mozah Bint Nasser Al-Missned of Qatar, was hosted by Director of the Institute, Professor Chris Toumazou.

The party viewed the Institute's work on personalised healthcare and wireless sensors, which will allow patients to be discharged from hospital earlier than is currently possible while still receiving continuous monitoring.

The royal party also visited the Institute's robotic surgery suite. These robots give surgeons the clinical and technical capabilities of open surgery but allow them to operate through tiny incisions, making patient recovery time much



Research Associate, Dr Anna Radomska and IBE Director, Professor Chris Toumazou show the Royal visitors around the IBE faster. Professors Guang Zhong Yang and Sir Ara Darzi led the demonstration.

—ABIGAIL SMITH, COMMUNICATIONS

Research Associate, Dr Anna Radomska and IBE Director, Professor Chris Toumazou show the Royal visitors around the IBE

## Queen Elizabeth II meets Queen Victoria

Her Majesty The Queen unveiled a marble statue of Queen Victoria as part of her visit last week. The statue is located in the College's Main Entrance and was commissioned by the University of London to mark both Queen Victoria's Golden Jubilee in 1887 and the Jubilee of the Charter which she granted for the foundation of the University.

The artist, Sir Joseph Edgar Boehm, was Sculptor in Ordinary to Queen Victoria, who sat for him several times for the work.

The statue was originally located in Burlington Gardens, the former University of London building, and was unveiled there by Edward Prince of Wales in 1889.

**The statue was originally unveiled by Edward Prince of Wales in 1889**

The statue first arrived in South Kensington when the University moved to the Imperial Institute, located where the Queen's Lawn is now.

Upon the University's relocation in 1936 and the subsequent redevelopment of the area by Imperial, the statue remained there. It left its most recent home at the bottom of the Queen's Tower and underwent a week long conservation process to restore it to its former glory, before the unveiling.

—ANNE BARRETT, ARCHIVES AND CORPORATE RECORDS





# Independent Imperial College London awards its first degrees



Clockwise: Students Tomasz and Bartosz Koprowski and Ashley Brown watch the royal visit.

## Staff and students take part in Royal visit

Staff and students gathered in the Main Entrance and on Dalby Court to watch the royal visit.

Bartosz and Tomasz Koprowski, second year Electrical Engineering students, were in the Main Entrance. Bartosz said: "It's very exciting to see The Queen. It's fantastic that the College has such a good relationship with the Royal Family." Tomasz added: "It makes us even more 'Imperial' than ever!"

Ashley Brown, second year PhD student in Computing, member of the Union Council, and editor of *Live!*, Imperial's student news website, said of the day: "It's great to be here at such an historic time in Imperial's history. Hopefully technology developed here will allow me to still be here for the next Centenary celebrations!"



The Queen addressed guests in the College's main entrance as she bestowed the College its new Charter.

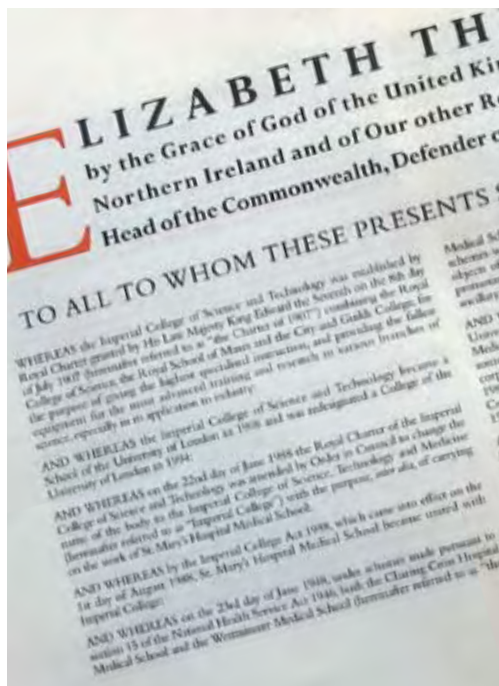
Rector, Ladies and Gentlemen,

It is a pleasure to be here today to bestow upon the College its new Charter, 100 years after it received the original. It has been a century of great achievement, and my thanks go to all the people, the staff and the students, whose work over the decades has enabled Prince Albert's vision to flourish. You now face the future as an independent institution and, as we are seeing today, have the privilege of awarding your own degrees.

Imperial was founded with the intention that it should support British technology and industry in the face of international competition. You have certainly fulfilled that aspiration. Today you renew your mission of applying your learning, discoveries and innovation to meet the changing needs of society, industry and healthcare. You will also, of course, continue to carry out the important task of educating the young people who will become the future inventors, discoverers and leaders of business and society. By discharging this academic mission, you play a vital role in supporting this country's position on the world stage.

I warmly congratulate you on reaching this notable milestone and wish you continuing success for your next 100 years.

## Royal Charter declares Imperial a university in its own right



The bestowal of the new Royal Charter is the final and most vital part of Imperial's journey to independence.

The Charter establishes Imperial College as a university in its own right, grants it the power to award degrees, and also sets out the role and mission that it is charged with fulfilling. Echoing the College's founding Charter of 1907, it states:

"The Objects of the University shall be to provide the highest specialised instruction and the most advanced training, education, research and scholarship in science, technology and medicine, especially in their application to industry."

The new Charter, which is written on vellum and was granted by The Queen under the Great Seal, came into effect on 8 July, 100 years to the day after the founding Charter first established the College.

Jon Hancock, Head of Central Secretariat and one of the people responsible for producing the new Charter, says:

"Although it may not be the most exciting read ever, the new Charter is an extremely

important document for Imperial, as everything the College does and everything it stands for flows directly from the powers and objects set down in it."

Before the Charter could be passed, the team had to consult with, and gain the approval of, various bodies up to and including the Privy Council. "It was quite a job to get everything ready and approved in time and we were always aware that, with the Centenary getting closer and closer, this was our most important task this year," said Jon. "It was a great relief when we finally received confirmation that everything was approved and sealed. Collecting the Sealed Charter from the Palace of Westminster on the same day that Gordon Brown became Prime Minister was also quite an experience."

—ABIGAIL SMITH, COMMUNICATIONS

► View the full document as a PDF at [www3.imperial.ac.uk/portal/pls/portallive/docs/1/18517696.pdf](http://www3.imperial.ac.uk/portal/pls/portallive/docs/1/18517696.pdf)







## Introducing Imperial's first honorary graduates

### Professor Winston Wong

Professor Winston Wong has an enviable career in business and is founder of both the GRACE THW Group and Grace Semiconductor Manufacturing Corporation in China.

Professor Wong gained a PhD in Physics from Imperial before joining Nan Ya Plastics, the world's largest secondary plastics processor, based in Taiwan. He joined as a Superintendent in 1979 and was appointed Senior Vice President in 1993.

As Chairman and Chief Executive of the GRACE THW Group, Professor Wong has injected his own brand of energetic leadership, vision and spirit. The Group, which specialises in electronic materials and plastics, had revenue last year of almost \$900 million dollars.

Throughout his career, Professor Wong has kept close links with Imperial. He is a Visiting Professor in the Institute of Biomedical Engineering and sponsors the Chair in Biomedical Circuits. He also co-founded Future Waves Ltd, a successful spin-out company, providing some of the world's lowest power digital radio broadcast semiconductor chips.

### Mrs Lily Safra

Mrs Lily Safra is a hugely distinguished philanthropist, who has applied her energies to advancing scientific research into diseases that affect millions around the world.

She chairs The Edmond J. Safra Philanthropic Foundation, founded by her late husband to support projects across education, science and medicine, as well as religion, culture and humanitarian relief.

Both personally and through the Foundation, she funds research into Parkinson's and Alzheimer's diseases, multiple sclerosis, AIDS and cancer. She is a board member of The Michael J. Fox Foundation for Parkinson's Research and the founder of The Edmond and Lily Safra Children's Hospital.

Mrs Safra supported the construction of The Edmond J. Safra Family Lodge for patients and their families at the National Institutes of Health near Washington D.C.

She has funded many neuroscience and genetics research programmes including The Edmund J. Safra Global Genetics Consortia initiative, which works to improved understanding of Parkinson's disease.

### Dame Vivien Duffield

Dame Vivien Duffield has been happy to follow in her father's footsteps; the millions of people who have benefited from this choice have cause to be happy also. For Dame Vivien's father was Sir Charles Clore, one of Britain's most successful post-war businessmen and a celebrated philanthropist.

Following Sir Charles' death in 1979, Dame Vivien assumed chairmanship of the Clore Foundation and later started her own foundation. The two foundations merged to become the Clore Duffield Foundation and, in the last five years alone, the Foundation has donated and pledged more than £22 million to education, health, social welfare and the arts.

At Imperial, the Clore Duffield Foundation's support led to the creation of the Clore Lecture Theatre and the Foundation has also generously contributed to the Department of Mathematics Library.

In recognition of her wide-ranging charitable work she was awarded the CBE in 1989 and the DBE in 2000.

### Her Highness Sheikha Mozah Bint Nasser Al-Missned

Her Highness Sheikha Mozah Bint Nasser Al-Missned has played a pivotal role in educational and social reforms.

For the past 12 years she has chaired the influential Qatar Foundation for Education, Science and Community Development, inspired by the Emir of Qatar. In 2003 the Qatar Foundation established Education City, a prototypical university of the future bringing together campuses of international universities to share research and community-based ventures.

Her Highness' influential role in education is not just limited to reforms in Qatar. For the past four years she has been UNESCO's Special Envoy for Basic and Higher Education, helping to improve the quality and accessibility of education worldwide. In 2003 she established the International Fund for Higher Education, dedicated to reconstructing institutions of advanced learning in Iraq.

Two years ago Her Highness was invited to join the High Level Group of the United Nations Alliance of Civilizations, which is working to combat extremism.

### HRH Prince Philip, Duke of Edinburgh

HRH Prince Philip, Duke of Edinburgh is patron or president of some 800 organisations, many of which reflect his interest in science, technological, education and the environment.

He is the Senior Fellow of the Royal Academy of Engineering, in which role he recently presented the prestigious MacRobert Award for innovations and engineering to Imperial spin-out company Process Systems Enterprise.

He is a former President of the British Association for the Advancement of Science, and has a longstanding commitment to the City and Guilds, acting as its President since 1951. Within this role he presents the annual Prince Philip Medal to people who have displayed outstanding individual achievement in the areas of science, technology and industrial development.

Undoubtedly the charity most closely associated with him is the Duke of Edinburgh Award scheme. Since its launch in 1956, the award has helped six million young people – including many from Imperial – discover new skills, interests and talents.

—WENDY RAESIDE, COMMUNICATIONS

# Farewell to University of London

Rodney Eastwood has been the Director of Strategy and Planning since 2002. Over the past 18 months he has led the project which saw Imperial withdraw from the University of London on 8 July 2007, its 100th birthday. Reporter's Alexandra Platt met up with him at the staff party to find out what Imperial's status as an independent university means to the College.

**What is the history of our collaboration with the University of London?** Imperial became one of the University of London's constituent colleges in 1929 and has been awarding its degrees since 1908. At the time the University of London had a reputation for being particularly forward thinking – for example, they were the first University to accept female students and offer engineering qualifications.

**Why have we chosen to leave?** The College has debated leaving the University for a long time. Since the mid-1950s there has been much less reason to remain a member due to the change in funding arrangements. Whereas previously funding came to the College via the University, since the middle of last century Imperial has received this directly from the Government, making it a financially independent institution. There has also been less need to trade on the University of London name as Imperial has become more well known and highly respected in its own right.

**What will change now we have our independence?** Students will now gain an Imperial qualification. I can think of no other organisation of our quality that gives other people's degrees, so I believe students will welcome

the chance to gain a degree directly from the institution that they have been committed to throughout their studies. Those who are already part way through their courses have been able to choose which degree they would like to receive. There are also financial benefits as Imperial will now have about half a million pounds to distribute throughout the College that until now was paid annually as a subscription to the University of London.

**What does Imperial's withdrawal mean to the University of London?** Many other colleges feel that they benefit from membership

of the University and have no intention of leaving. I wouldn't be surprised, however, if a few others felt that their own brand was strong enough to support a move away from the University too. It will be interesting to see what happens next.



Rodney Eastwood toasts Imperial's new status at the staff party.

## New academic dress

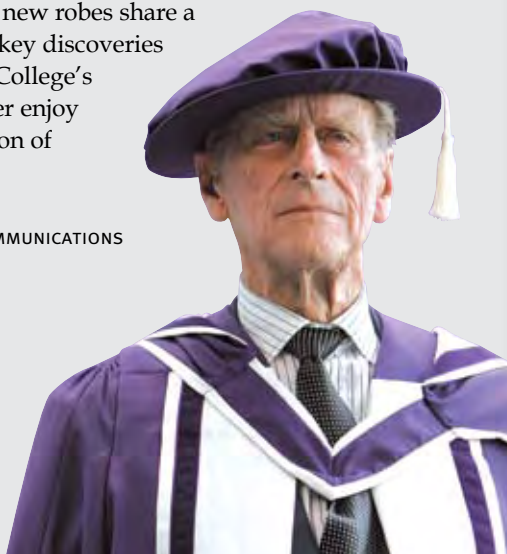
Following Imperial's independence as a university, graduates will no longer wear University of London robes. New academic dress for the College has been designed to reflect our own identity.

The theme of the dress is based on the colour of the dye mauveine, an intense purple aniline dye discovered by William Perkin. William joined the Royal College of Chemistry, which later became part of Imperial, in 1853, and went on to manufacture the dye and become founder of the British dyestuffs industry, one of the key advances of the Industrial Revolution.

Vernon McClure, Academic Registrar, said: "It is fitting that our new robes share a link with one of the key discoveries associated with the College's past, and I also rather enjoy the added connotation of Imperial Purple."

—ALEXANDRA PLATT, COMMUNICATIONS

HRH Prince Philip wearing Imperial College London's new academic dress.



### Why do we wear robes to graduate?

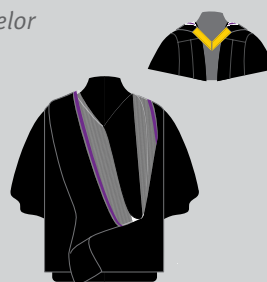
The robes our graduates wear today have their origin in the everyday dress of the Middle Ages, which consisted of a tunic and cloak and, to protect the head and shoulders, a hood.

The ancient universities in Europe began as communities of scholars and teachers in religious schools around great cathedrals or monasteries.

Students at the early European universities were clerics, who would have worn clothing similar to that of everyone else at the time, but whose attire was distinguished by being long and closed. As fashions in the world changed, the church and universities retained their cloaks, which became the main item of academic dress.

See below for Imperial's new robes.

#### Bachelor



#### PhD



#### Master



#### Doctor of Science





# Bringing the past to life

100 years of living science

100

Announcing the D-Day landings with a pie protest and falling in love with a fire engine are among the fond memories our staff and students have of Imperial's first 100 years.

The memories are being shared with the College community and beyond on our Centenary website – [www.imperial.ac.uk/centenary/memories](http://www.imperial.ac.uk/centenary/memories) – and include contributions from almost every decade. Some of the anecdotes are included below. To submit your own story, which could be featured on the Centenary website front page, email [centenary@imperial.ac.uk](mailto:centenary@imperial.ac.uk) or write to the Centenary Communications Team, Level 4, Faculty Building, South Kensington Campus.

## Iris Pritchard-Davies

Administration, City and Guilds, 1940s

"I worked for a professor of aeronautical engineering. At that time we had air raids – we used to take shelter by ducking under the space of a roll-top desk... which I shared with Professor Hill. He was very formal and when the air raid siren went he would sort of stand aside, give a little bow and say "After you, Miss Kent".

Towards the end of the war, it was rumoured that there was going to be what they called D-Day when Britain sent troops ashore to liberate Europe. Coincidentally, the students at Imperial had been very dissatisfied with the pies they were getting in the canteen produced by a

firm called Doubleday. It was very heavy pastry, more like cardboard with some 'splosh' in the middle, so they (the students) had a strike and made all these posters saying 'This is D-Day. This is D-Day'. Most extraordinarily, it coincided with the day of the invasion of the troops and so Scotland Yard turned up in full force to find out who had blown the gasket."

## Doug Wilcox

Royal School of Science, 1965–68

"I came to Imperial College keen to study physics but immediately fell in love, like so many innocents before me, with 'Jezebel' – a demanding, wicked painted lady, 33 years my senior. Forty years on, I find that some of her awesome vital statistics seem to still vividly hang in my memory. Could this Goddess's capacity for inhalation really have been 14 litres?

Her tappet clearances a quarter of an inch? Her appetite for fuel one gallon per token to spin up Kensington Gore? The feisty old girl must be pushing 95 by now, almost spanning this Imperial Centenary herself, but I believe she's still going strong.

For the uninitiated, 'Jezebel' is of course the veteran mascot of the Royal College of Science. She was born in 1916, a very early petrol-driven Dennis fire engine. Later, when her days were numbered, the Dennis company who spawned her kindly donated the old lady to the College. Without the continuing love and attention of all her student attendants, the old girl would surely have expired years ago."

## Hannah Gay

Chemistry 1958–64

"I was a chemistry student and once, when working in the inorganic practical laboratory, felt extremely tired, climbed onto the bench, lay down and went to sleep. Unfortunately, Professor Wilkinson chose

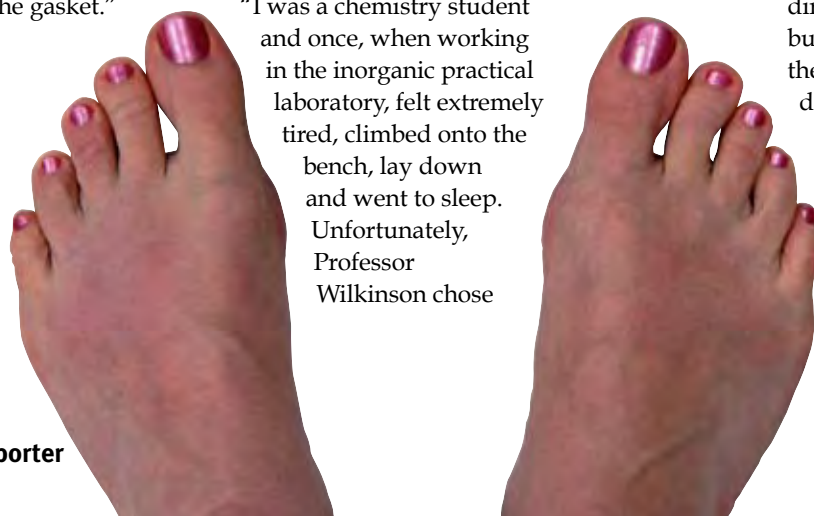


that moment for his weekly round of the lab and I was awakened by a roar followed by a series of expletives addressed more at the poor demonstrator than at me. The demonstrator was sitting at the front of the lab and had

not noticed that anything was amiss.

The shelves of reagent bottles above the benches obscured his vision. Apparently, Wilkinson at first thought that I was dead, perhaps poisoned, and was frightened by what he saw. But fear soon turned to anger – anger that should have been directed at me too, but was directed at the demonstrator alone. I have forgotten the demonstrator's name; if he reads this, I hope he will accept my apologies. Wilkinson was always friendly but never forgot the incident."

*...I was awakened by a roar followed by a series of expletives addressed more at the poor demonstrator than at me*



# 100 years of living science

1907



**1907** ▶  
**Imperial College of Science and Technology is formed** incorporating Royal School of Mines, Royal College of Science and City and Guilds College.



**1907** ▶  
The RSM, Imperial College and the Students' Union Buildings receive support from industrialists including diamond mine owners Sir Alfred and Sir Otto Beit.

1917



**1928** ▶  
**Sir Alexander Fleming** discovers penicillin, the first antibiotic.

**1919** ▶  
**Sir Richard Glazebrook** becomes the first Chair of Aeronautics in the UK.



**1928**  
The first recorded film footage of activities at Imperial is made at Morphy Day in 1928.

1927

1937



**1937** ▶  
**Sir Walter Norman Haworth** becomes joint winner of the Nobel Prize for Chemistry for groundbreaking work on ascorbic acid (vitamin C).

**1939** ▶ **World War II begins;** Wye College trains 180 members of the Women's Land Army.



1947

**1947**  
Imperial College acquires **Silwood Park** as a field station to provide a site for research and teaching in Biology.

**1949**  
Student newspaper **Felix** is launched.

**1950** ▶  
**Sir Henry Tizard**, Rector of Imperial 1929–42, serves as Chief Scientific Advisor at the Ministry of Defence, where he establishes the Flying Saucer Study to investigate the phenomenon of UFOs.

1957

**1957** ▶  
**Exploration Board** is set up to assist students who wish to travel and work on projects.



**1959** ▶  
**Helen Porter** is appointed as Chair of Plant Physiology, becoming the first woman professor at Imperial.



1967

**1968**  
**Linstead Hall**, originally known as New Hall, is opened—named for Sir Patrick Linstead, Rector 1954–66.

**1969** ▶  
**Professor Joan Woodward** is appointed Professor of Industrial Sociology and Director of the Industrial Sociology Unit.  
• The Imperial Institute is demolished and the **Queen's Tower** becomes a free standing campanile.



1977

**1977** ▶  
**The Huxley Building** on Queen's Gate accommodates the Department of Computing and the Department of Mathematics.

**1978**  
**Four year engineering course** begins, adding a year of study in industrial, social and economic studies.

**1980** ▶  
**Joint course** with the Royal College of Art in Engineering Design is established.



1987

**1985**  
**Honda Wind Tunnel** is opened to assist the Aeronautics Department in developing expertise in testing vehicle aerodynamics.



**1988** ▶  
**Imperial College of Science, Technology and Medicine is formed** through the merger of the College with St Mary's Hospital Medical School.



1997

**1997**  
**Imperial College School of Medicine** is formed, the product of a series of mergers with leading London medical schools.

**1998** ▶  
**Opening of the Sir Alexander Fleming Building**—headquarters for the College's medical and biomedical research.

**2001**  
**Entrepreneurship Centre** is launched for the teaching and practical application of entrepreneurial ideas.

2007



Imperial's talented staff and students have built a rich legacy of discoveries and advances in its first 100 years, and across these two pages is just a taste of their history. Visit the growing Centenary timeline at [www.imperial.ac.uk/centenary](http://www.imperial.ac.uk/centenary), and look out in the Autumn for a special publication highlighting Imperial's contributions to society. Send your suggestions of achievements to the timeline team at [centenary@imperial.ac.uk](mailto:centenary@imperial.ac.uk).



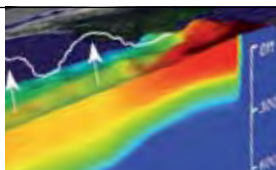
**1912** ▶  
**Martha Annie Whiteley** (Chemistry) becomes the first woman to hold a position on the teaching staff at the Royal College of Science. She goes on to found Imperial College Women's Association.



**1914** ◀  
**Outbreak of World War I** sees 300 students volunteer for service, joined by 60 staff members.

**1922**  
**George Ingle Finch** (Chemical Engineering) develops lightweight oxygen supply equipment used in Mallory's 1922 Everest Expedition.

**1924** ▶  
**Sir Gilbert Walker** discovers the Southern Oscillation—El Niño.



**1926**  
**The first student hostel** is opened in Beit Quadrangle. The original Students' Union building in the north of the quadrangle was designed by Sir Aston Webb and built in 1910–11.

**1931**  
**Alan Blumlein**, Imperial alumnus, invents stereo sound, one of the most important advances in audio engineering of the twentieth century.



**1932**  
**Sir Ralph Freeman**, an Imperial alumnus, is the chief designer and architect of the Sydney Harbour Bridge.

**1933** ▶  
**Boanerges** becomes the official mascot of the City and Guilds College Union after being bought for £40.



**1941** ▶  
**Imperial home guard platoon** is formed; 250 students pass through the Company during the war.



**1943**  
**Bruce White** (Electrical Engineering) directs work on the Mulberry Harbours, structures used in readiness for the Allies' D-Day landings.



**1943** ◀  
**Miss Letitia Chitty and Professor Alfred Pippard** study the effects of underwater explosions on submarines and the stresses on submarine hulls.



**1954** ▶  
**Sir Roger Bannister**, Imperial alumnus, makes sporting history as the first man to break the four-minute mile, in a time of 3 minutes 59.4 seconds.



**1955** ◀  
**Jez** is donated to the Royal College of Science Motor Club as its mascot.

**1960**  
**Clem** joins the Royal School of Mines as its motorised mascot.



**1973** ◀  
Imperial alumnus and emeritus professor **Sir Geoffrey Wilkinson** is awarded the Nobel Prize for Chemistry for his discovery of the 'Wilkinson Sandwich'.



**1976** ◀  
**Pimlico Connection** is launched as a scheme for Imperial engineering students to assist with science teaching in local schools.

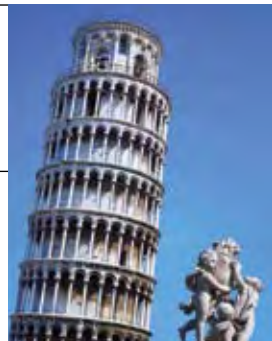
**1982** ▶  
**Janet Vida Watson**, Chair in Geology, co-produces the first comprehensive coverage and understanding of the Outer Hebrides, and becomes the first woman President of the Geological Society of London.



**1984** ▶  
Imperial alumnus **Captain Marc Garneau** becomes the first Canadian in space, aboard Space Shuttle Challenger mission STS-41G.



**1993**  
**Professor Averil Mansfield** becomes the first female Professor of Surgery in the UK.



**1995** ◀  
**John Burland**, Emeritus Professor of **Soil Mechanics**, helps prevent the Leaning Tower of Pisa from toppling over.



**1996** ◀  
Imperial wins **University Challenge** for the first time.

**2002**  
**Schistosomiasis Control Initiative** is established—to date it has given 39 million treatments for schistosomiasis and soil-transmitted helminths.

**2006**  
**Prince Albert Challenge Cup**  
Imperial becomes the only university to donate and name a trophy at Henley Royal Regatta—and then becomes the first team to take the new Cup home.

**2007** ▶  
**Imperial College London** celebrates its Centenary.



# A Capital **IDEA**

The College hosted the annual IDEA League sports event on 13–15 June, which saw 100 students from TU Delft, ETH Zurich, RWTH Aachen and Imperial competing in a range of sporting activities.

In the contest, which included Taekwondo, fencing, badminton and a fitness challenge, Imperial and RWTH Aachen teams were neck and neck all the way. In the end, with only half a point difference, Aachen claimed first place, leaving Imperial to a worthy second. ETH Zurich came third and TU Delft came fourth. An awards presentation dinner was held on 14 June in a marquee on the Queen's Lawn, attended by the Rector and Deputy Rector as well as some of the event's sponsors and other guests.



The London Challenge was the final aspect of the event, offering some light relief after the rigours of the main competition. The challenge was designed to give visiting participants a chance to see some of the capital's famous sights. Students from across the institutions were split into 16 teams and had to visit ten key locations in the city, including Buckingham Palace, the London Eye and Nelson's Column. The teams were given a clue at each location to help them identify an international sports personality, with the first team to name all ten declared the winners.

The event will be hosted by ETH Zurich next year.

— NAOMI WESTON, COMMUNICATIONS

► For more information visit [www.idealeague.org](http://www.idealeague.org).  
For the full story and a chance to watch a RealPlayer video of the event, visit [www.imperial.ac.uk/news](http://www.imperial.ac.uk/news)



## Obituaries

**Professor Denis Melrose** • Dr Mitchell Lewis (Department of Haematology, Faculty of Medicine) was a good friend of Professor Melrose, who sadly died on 2 July, aged 86. He writes: "Denis, a Fellow of Imperial College, was for many years a distinguished cardiac surgeon at Hammersmith Hospital, where he was one of the pioneers of cardiovascular surgery. He went on to develop the first heart–lung machine in the UK, which was constructed at the Hammersmith workshop. In 1955, he and his colleagues, using potassium citrate and then potassium chloride, succeeded in stopping the heart safely in anaesthetised dogs on the heart–lung machine.

Subsequent experiments established optimum concentrations of potassium chloride to stop the heart, and ways of preserving the heart while starved of blood. This was achieved by bathing the heart in a solution of precise concentration of various salts and reducing the temperature to below 28 degrees Celcius.

This 'cold cardioplegia' is used routinely today in open heart operations. The respect of his colleagues is apparent, with a ward named after him at the Hospital. When he retired, Professor Melrose and his wife went to live in Ibiza, and it was there that he died."

► The Editor is pleased to accept brief appreciations in remembrance of colleagues, reserving the right to edit these before publication. Please email [a.platt@imperial.ac.uk](mailto:a.platt@imperial.ac.uk)

## celebrating long service



### 45 years

**Emeritus Professor Robert Spence** • Senior Research Investigator, Electrical and Electronic Engineering

### 30 years

**Mr Simon Stoner** • Technician, Mechanical Engineering  
**Mrs Doris Abeysekera** • Personal Assistant, Mathematics

### 20 years

**Mrs Helen Lipinski** • Retinopathy Grading Centre Manager, Investigative Science  
**Mr Shahid Hanif** • Technician, Physics  
**Mr Simon Webb** • Payroll Assistant, Finance  
**Mrs Karen Jones** • ICIS Administrator, Human Resources  
**Dr Linda Moran** • Research Associate, Neurosciences and Mental Health  
**Mrs Dawn Fairhurst** • Purchasing Administrator, Finance

Staff featured will be celebrating anniversaries during the period 14 July–31 August. Data is supplied by HR and is correct at the time of going to press.



## welcome new starters

Mr Gino Abdul-Jabbar, Student Residences  
 Mr Hossein Afghah, Student Residences  
 Dr Quentin Anstee, Medicine  
 Miss Irum Aslam, SORA  
 Dr Rekha Badiger, NHLI  
 Mr Prasana Balakrishnan, Student Residences  
 Ms Ines Baptista, Chemical Engineering  
 Mr Philip Bates, Physics  
 Mr Faizan Bhojani, Student Residences  
 Ms Hafiza Bibi, EPHPC  
 Miss Carina Blythe, Faculty of Medicine  
 Dr Joseph Boyle, Investigative Science  
 Dr Philip Bream, Bioengineering  
 Professor Robert Brown, SORA  
 Miss Karen Bunday, NMH  
 Ms Ines Cabrita, NHLI  
 Dr Qiong Cai, ESE  
 Ms Sandra Cantilena, NHLI  
 Miss Jolly Chan, Student Residences  
 Mr Charlie Chao, Student Residences  
 Mr Peng Chen, Student Residences  
 Dr Alvin Chua, Physics  
 Professor Bart Clarysse, Business School  
 Mr Kofi Danso, Student Residences  
 Miss Cate Dobson, Institute of Biomedical Engineering  
 Mr Nick Donkor, Student Residences  
 Dr Anne Doolan, Medicine  
 Miss Onyinyechi Duru, Student Residences  
 Mr Fergus Fitzgerald, Estates

Miss Eve Jaques, Development and Corporate Affairs  
 Mr Jehan Jayanetti, Computing  
 Mr Viren Jeram, Student Residences  
 Mr Afiq Kadir, Student Residences  
 Miss Inder Kaur, Student Residences  
 Dr Marcelo Kern, Biology  
 Mr Isaac Kim, Student Residences  
 Miss Angela Knight, Engineering  
 Mr Bartosz Koprowski, Student Residences  
 Mr Tomasz Koprowski, Student Residences  
 Mr Christopher Kurzeja, Student Residences  
 Mr Peter Kwok, Student Residences

► **Iwona Ryan**, PA to Imperial's Academic Registrar, Vernon McClure, and Deputy Academic Registrar, Nigel Wheatley, started at the College last month. She joins us from HLSP, an international consultancy group working to improve world health, where she worked for over three years, first as a Project Officer and then as PA to their International Director.



Mr Fabian Lacassie, Catering Services  
 Mr Chung Lau, Student Residences  
 Ms Agnes Lee, Chemistry  
 Mr Zhuoqun Li, EEE  
 Mrs Janet Lloyd, Library Services  
 Dr Fabrizio Lombardo, Cell and Molecular Biology  
 Mr Nico Lopez-Valle, Investigative Science  
 Miss Sophie Lubbock, Estates  
 Dr Martin Lukac, Division of Biology  
 Dr Alexandr Malijejsky, Chemical Engineering  
 Dr Nasser Malik, Kennedy Institute

Mr Leo Martins, Student Residences  
 Dr Andrea Meniconi, Chemical Engineering  
 Miss Marta Mlynarczyk, Student Residences  
 Ms Limon Nahar, Investigative Science  
 Miss Deborah Neesham, Student Residences  
 Mr Steven Nunn, Estates  
 Mr Jin Ooi, Student Residences  
 Ms Abiola Osho, Student Residences  
 Mr Borja Pena, Student Residences  
 Mr Damian Phelan, Student Residences

Mr Fernando Ramirez-Martinez, Physics  
 Mrs Susan Randall, NMH  
 Mr Paul Ratcliffe, Faculty of Medicine  
 Miss Natasha Rea, Student Residences  
 Ms Jennifer Rock, Engineering  
 Mr Khairul Rostani, Student Residences  
 Miss Sarah Rowell, Registry  
 Mr David Rowley, Student Residences  
 Mrs Iwona Ryan, Registry  
 Mrs Anitha Samsonroy, Medicine  
 Dr Henri Schildt, Business School  
 Professor Michael Schneider, NHLI  
 Mr Rak-Kyeong Seong, Student Residences  
 Miss Ruth Shanley, SORA  
 Mr Thushan Shanmugarajah, Student Residences  
 Mr Zhengguo Sheng, Student

Residences  
 Dr Sarah Shepley, Development and Corporate Affairs  
 Ms Agata Skrzecz, Student Residences  
 Miss Catherine Smith, Business School  
 Mr Colin Smith, Communications  
 Mr Niall Smith, Student Residences  
 Dr Yeong Soh, Materials  
 Dr Richard Starke, NHLI  
 Dr Christopher Stevenson, NHLI  
 Miss Yvonne Stewart, Biology  
 Mr Anil Sud, Chemistry  
 Miss Emma Sully, NHLI  
 Dr Kong Susanto, Computing  
 Ms Elfira The, Student Residences  
 Mr Jonathan Thristan, ICT  
 Mr Kenji Wakabayashi, SORA  
 Mr Dan Walter, Student Residences  
 Ms Ruth Walters, Centre for Environmental Policy  
 Dr Andrew Wandel, Mechanical Engineering  
 Miss Jia Wang, Student Residences  
 Mr Jianye Wang, Student Residences  
 Ms Le Wang, Student Residences  
 Ms Ana Wheelock, Business School  
 Miss Alison Williams, NHLI  
 Mr Jacek Winnicki, NHLI  
 Miss Ka Wong, Student Residences  
 Dr Michael Yee, Medicine  
 Miss Simone Young, NMH  
 Miss Chensi Yu, Student Residences  
 Ms Rongrong Zhang, Student Residences  
 Miss Yujie Zhao, Student Residences

## farewell moving on

Miss Alexandra Anderson, Cell and Molecular Biology  
 Miss Silvia Arango, Catering Services  
 Dr Francois Asseman, NMH  
 Dr Thomas Babbage, Security Services  
 Dr Natalia Bochkina, EPHPC  
 Dr Martial Boggio-Pasqua, Chemistry  
 Ms Victoria Carr, NHLI (6 years)  
 Dr Alexandros Charalambides, Mechanical Engineering  
 Ms Flora Christofi, NHLI  
 Dr Adrian Cootes, Molecular Biosciences (6 years)  
 Ms Sahar Dhillon, EPHPC  
 Mr Alan Doherty, Library Services  
 Mrs Rachel Emerson, Investigative Science (6 years)  
 Mr Kenneth Emmett, Catering Services  
 Ms Marilyn Evans, Bioengineering (30 years)  
 Dr Enrico Faggi, Chemistry  
 Dr Francisca Fernando, NMH  
 Ms Marika Fox, Library Services (5 years)  
 Dr Toby Gee, Mathematics  
 Dr Ivan Gentil, Mathematics  
 Mr Paresh Ghaghda, Computing  
 Dr Nelida Gormaz, Chemistry  
 Dr Sanjib Goswami, Aeronautics  
 Miss Lara Hayward, Library Services  
 Mrs Suzanne Henderson, Human Resources  
 Dr Andrea Hodgetts, Medicine (5 years)  
 Dr Jane Howard, Investigative Science  
 Dr Elodie Hudson, Biology  
 Mr Paul Hudson, Conference Office (7 years)  
 Dr Tom Johnston, EPHPC  
 Dr Varol Kaptan, EEE  
 Mr Graham Kirkwood, EPHPC  
 Dr Elisabeth Kugelberg, Investigative

Science  
 Miss Almaz Lakew, Catering Services (5 years)  
 Dr Chien-Sen Lim, Cell and Molecular Biology  
 Mr Michael Liu, EEE  
 Mrs Brenda Maher, EYE  
 Ms Joanna Mark-Richards, Faculty of Medicine  
 Mrs Alex Martin, Kennedy Institute  
 Mr Emmanuel Mazars, EEE  
 Mrs Wendy McGovern, Faculty of Medicine  
 Mr Anthony McKeown, Humanities Programme  
 Mr Alexander Montoya, Investigative Science  
 Mr Ian Moss, Investigative Science (29 years)  
 Mrs Emilie Mules, NHLI (8 years)  
 Miss Katie Mullard, NHLI  
 Dr Venkata Nemani, Physics  
 Mr Yash Patel, Computing  
 Ms Tonia Pereira, Security Services  
 Mr Mohd Rahim, Student Residences  
 Dr Bindumalini Raobaiakady, Medicine (8 years)  
 Ms Moira Read, SORA  
 Dr Tove Ringbom-Anderson, SORA  
 Mr Mathew Sargent, Investigative Science  
 Mr Arnaud Schmolinski, Catering Services (9 years)  
 Mr Richard Seoud, Aeronautics  
 Ms Robyn Sharman, Medicine (8 years)  
 Dr Gabriel Sitjes, Physics  
 Miss Kay Snelling, NHLI  
 Dr Emmanouil Spanoudakis, Investigative Science  
 Dr Rosen Tenchev, Aeronautics  
 Ms Ruth Tesfai, Catering Services  
 Mr William Vazquez, Physics  
 Dr Nicola Walters, NHLI  
 Ms Catherine Whalley, Strategy and Planning  
 Dr Alex Zivanovic, Mechanical Engineering (5 years)

## retirements

Mrs Janet Jones, Human Resources (27 years)\*  
 Ms Irene Kyriacou, ICT (29 years)  
 Mrs Shirley Noble, Library Services (18 years)  
 Mrs Julia Oliveira, Catering Services (27 years)  
 Mrs Valerie Phillips, Library Services (16 years)  
 Dr John Sheldrake, Business School (6 years)  
 Mr Chris Stafford, Mechanical Engineering (45 years)

This data is supplied by HR and covers the period 17 June–7 July. It was correct at the time of going to press. Years of service are given where an individual has been a member of College staff for over five years. Asterisk (\*) indicates where an individual will continue to play an active role in College life.

► **Colin Smith** joined the Communications Division as a Press Officer for the Faculty of Engineering earlier this month. He has previously worked in Australia, as a Senior Press Officer for local government, and in London as a Press Officer for the Independent Schools Council, an organisation that looks after private schools.



Ms Gaia Franceschini, Chemical Engineering  
 Mr Richard Getting, Registry  
 Mr Daniele Gianni, EEE  
 Mr Nicolas Gillet, Investigative Science  
 Miss Aisha Gloudon, Student Residences  
 Mr Michael Goddard, Faculty of Medicine  
 Mr Khushal Gohel, Student Residences  
 Mrs Ericka Goncalves, Student Residences  
 Dr Paul Goulart, Aeronautics  
 Miss Tian Gu, Student Residences  
 Dr Amin Hajitou, Medicine  
 Dr Jongin Hong, Chemistry  
 Miss Emer Hughes, Clinical Sciences  
 Mr Mohamad Jamal, Student Residences

◆◆◆ Please send your images and/or brief comments about new starters, leavers and retirees to the Editor, [a.platt@imperial.ac.uk](mailto:a.platt@imperial.ac.uk) who reserves the right to edit or amend these as necessary.

moving in. moving on.

## take note

### Walk this way...

The Sheffield walkway on the South Kensington Campus is being developed to supplement the Dalby Court regeneration project. As well as redecorating and cleaning the floors and sorting out the lighting and handrails, art will be installed based on the various notebooks that students use at Imperial. Each large piece of art will be a page of a different type, with some left blank for students to display posters. The project will be complete by the Autumn term.



### A Centenary thank you

As an acknowledgement of the College's appreciation of its staff, a special Centenary award of £100 (pro-rata for part timers) will be included in the pay packet at the end of our 'Birthday' month on 24 July.



### Blog update

Have you checked the Rector's blog recently? In the latest post to his online diary he thanks staff for the Centenary party held on 11 July. He writes: "Wednesday was a fabulous day to be a member of staff at Imperial. I had a great time at the party and know that everyone I spoke to did too. The South Kensington Campus came alive and the buzz brought home just how lucky Imperial is to have such great spaces."

► To read his other entries, sign up for regular alerts or just to leave a comment visit [www.imperial.ac.uk/rectorblog](http://www.imperial.ac.uk/rectorblog)



## Happy 100th birthday, Imperial College London!

► The celebration continues – visit the website for a full programme of events of our Centenary year: [www.imperial.ac.uk/centenary](http://www.imperial.ac.uk/centenary)

*Reporter* is published every three weeks during term time in print and online at [www.imperial.ac.uk/reporter](http://www.imperial.ac.uk/reporter).



*Reporter* will be back in the Autumn Term. Contributions are welcome (no more than 300 words). Please note the editor reserves the right to cut or amend articles as necessary. Information correct at time of going to press.

**Editor**  
Alexandra Platt  
Tel +44 (0)20 7594 6715  
email [a.platt@imperial.ac.uk](mailto:a.platt@imperial.ac.uk)

**Photography**  
Ian Gillett • Colin Wyman  
• Neville Miles



**Imperial Fun Fact** • "Every time I see an adult on a bicycle, I no longer despair for the future of the human race." – H.G. Wells, Imperial College alumnus and author of fantastical novels such as *The War of the Worlds*, *The Island of Dr. Moreau* and *The Invisible Man*

## classifieds

**To place a classified** *Reporter* includes a regular classifieds section. Please submit no more than 50 words to the Editor, Alexandra Platt, by email at [a.platt@imperial.ac.uk](mailto:a.platt@imperial.ac.uk) for a chance for your advertisement to appear.

The Editor reserves the right to edit advertisements as necessary.

## volunteering

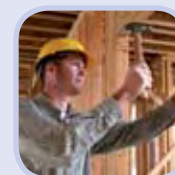
### Help build success in Liverpool

**Urgent project:** Construction Volunteers  
**Project ID:** 1936  
**Organisation:** Habitat for Humanity (Liverpool)  
**Time:** Mondays to Saturdays  
minimum 2 days with an overnight stay required  
**Location:** Liverpool

Liverpool Habitat for Humanity has been given 2.2 acres of land to build 32 homes over the next five years. Volunteers



are needed to help with building work. No previous experience is necessary and all personal protection equipment and health and safety guidance will be provided. People of all



backgrounds, races and religions are invited to build houses together in partnership with families in need. The organisation is in continual need of volunteers at the site and welcomes anyone who wishes to make a positive difference to this community. Imperial Volunteer Centre will pay travel expenses and accommodation costs for Imperial volunteers.

### **i** For more information

To take part in a scheme or to hear more about volunteering in general, contact Minna Ruohonen  
• 020 7594 8133  
• [m.ruohonen@imperial.ac.uk](mailto:m.ruohonen@imperial.ac.uk)

For full details of over 250 volunteering opportunities visit: [www.imperial.ac.uk/volunteering](http://www.imperial.ac.uk/volunteering)

Subscribe to the weekly newsletter by emailing: [volunteering@imperial.ac.uk](mailto:volunteering@imperial.ac.uk)